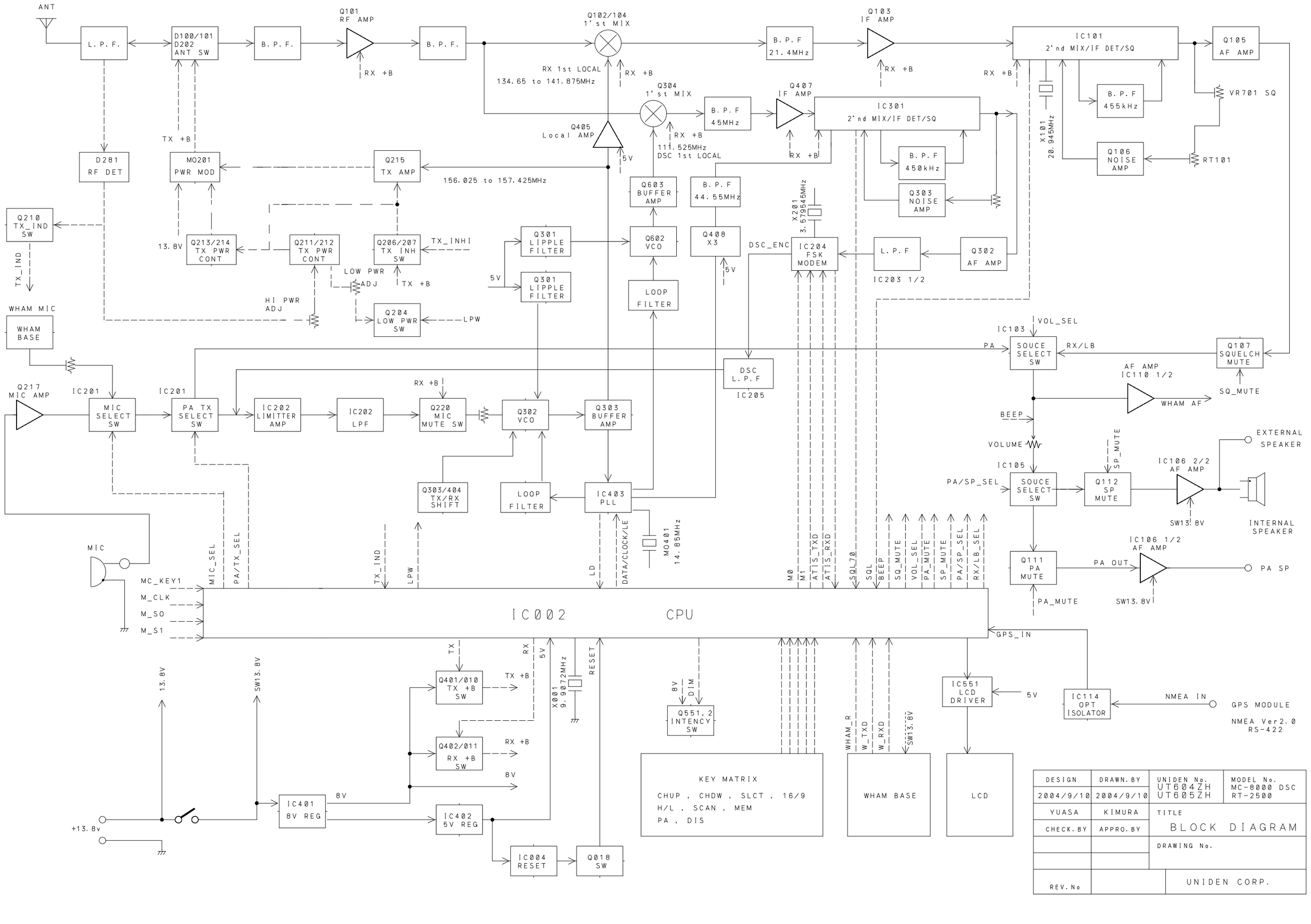
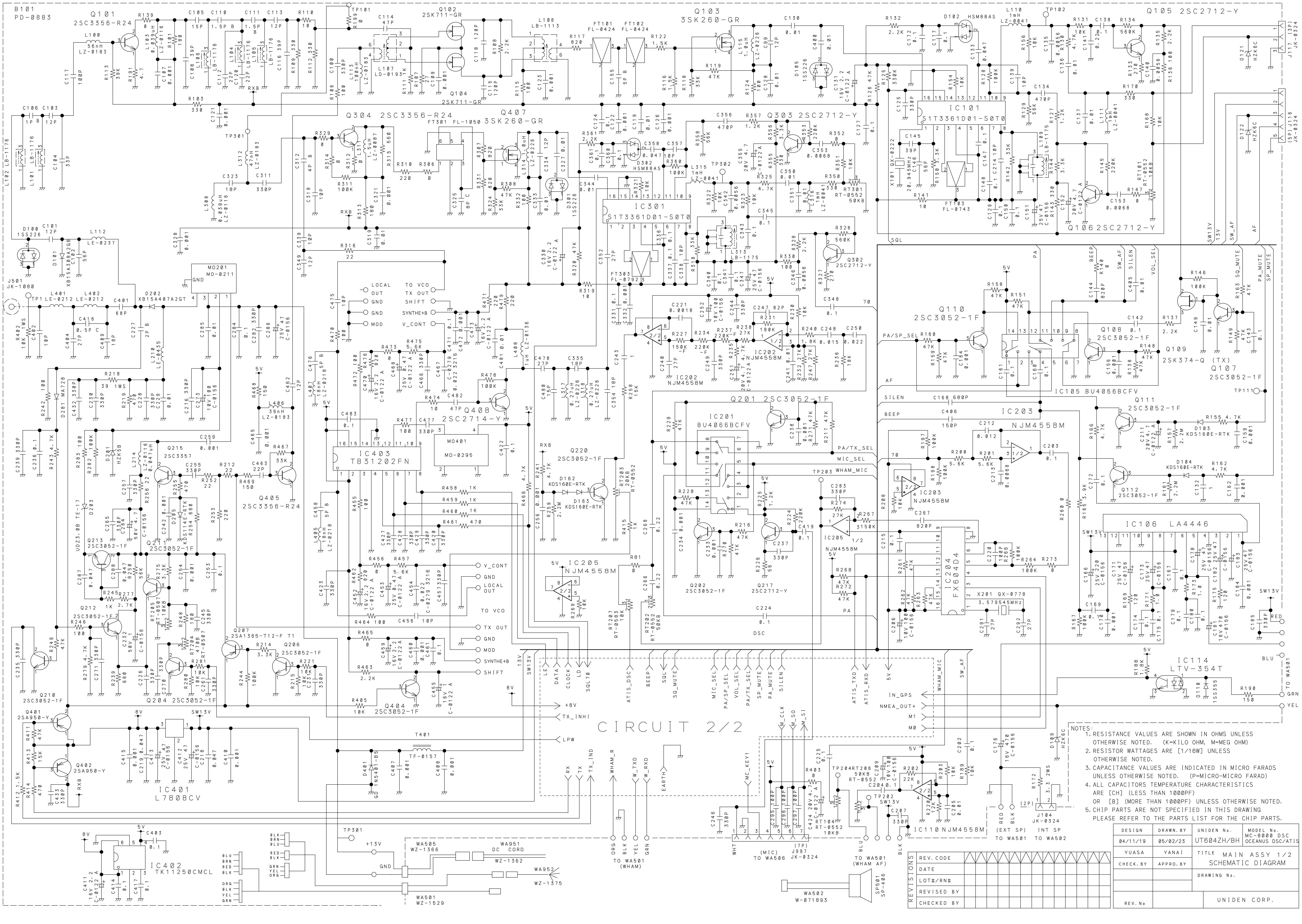
Service Manual
for
RT-2500

Jmc *Japan Marina Co., Ltd.*



DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
2004/9/10	2004/9/10	UT604ZH UT605ZH	MC-8000 DSC RT-2500
YUASA	KIMURA	TITLE	
CHECK. BY	APPRO. BY	BLOCK DIAGRAM	
		DRAWING No.	
REV. No		UNIDEN CORP.	



NOTES:
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K=KILO OHM, M=MEG OHM)
2. RESISTOR WATTAGES ARE [1/16W] UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P=MICRO-MICRO FARAD)
4. ALL CAPACITORS TEMPERATURE CHARACTERISTICS ARE [CH] (LESS THAN 1000PF) OR [B] (MORE THAN 1000PF) UNLESS OTHERWISE NOTED.
5. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.

REVISIONS	
REV. CODE	
DATE	
LOT#/RN#	
REVISED BY	
CHECKED BY	

DESIGN	DRAWN.BY	UNIDEN No.	MODEL No.
04/11/19	05/02/23	UT604ZH/BH	MC-8000 DSC OCEANUS DSC/ATIS
YUASA	YANAI	TITLE	MAIN ASSY 1/2 SCHEMATIC DIAGRAM
CHECK.BY	APPRO.BY	DRAWING No.	
REV. No		UNIDEN CORP.	

B101 PD-883

FOR PCB

REVISIONS	
	REV. CODE
	DATE
	LOT#/RN#
	REVISED BY
	CHECKED BY

Q10 2SC3052-1F

Q11 2SC3052-1F

Q12 2SC3052-1F

Q13 2SC3052-1F

IC2

M30625FGAGP

DE-4232

IC5

24LC32AT-I/SN

IC4

XC61CC4302PR/XC61AC4302PR

Q15 2SC3052-1F

Q18 2SC3052-1F

Q19 2SC3052-1F

J115 JK-0856 (20P)

NOTES:

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5. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.
6. CHIP CAPACITORS TYPE ARE [1608] UNLESS OTHERWISE NOTED.

DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
04/11/19	05/01/26	UT605ZH	RT-2500
YUASA	YANAI	TITLE	MAIN ASSY 2/2 SCHEMATIC DIAGRAM
CHECK. BY	APPRO. BY		
		DRAWING No.	
REV. No		UNIDEN CORP.	

Y552 YY-1518

DP551 DL-0273

Y551 YY-1518

WF551

WF-300 4-60-4(20)

REVISIONS											
	REV. CODE										
	DATE										
	LOT#/RN#										
	REVISED BY										
	CHECKED BY										

B551
PD-0859 1/3

J552
JK-0965
(20P)

1 LCD_CONT
2 LCD_MOD
3 5V
4 LCD_INH
5 LCD_CL
6 LCD_CE
7 LCD_DI
8 COL2
9 COL3
10 COL1
11 ROW3
12 ROW4
13 ROW2
14 ROW1
15 DIM2
16 DIM1
17 DIM3
18 +8V
19
20

COM1 S50 COM2 S49 COM3 S48 COM4 S47 S1 S46 S2 S45 S3 S44 S4 S43 S5 S42 S6 S41 S7 S40 S8 S39 S9 S38 S10 S37 S11 S36 S12 S35 S13 S34 S14 S33 S15 S32 S16 S31 S17 S30 S18 S29 S19 S28 S20 S27 S21 S26 S22 S25 S23 S24

IC551

NJU6433FD1
DE-3036

S16 S15 S14 S13 S12 S11 S10 S9 S8 S7 S6 S5 S4 S3 S2 S1
16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

S17 17 S18 18 S19 19 S20 20 S21 21 S22 22 S23 23 S24 24 S25 25 S26 26 S27 27 S28 28 S29 29 S30 30 S31 31 S32 32

33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
S33 S34 S35 S36 S37 S38 S39 S40 S41 S42 S43 S44 S45 S46 S47 S48

64 COM1
63 COM2
62 COM3
61 COM4
60 INH
59 MODE
58 DI
57 CL
56 CE
55 VLCD
54 VSS
53 VDD
52 OSC1
51 OSC2
50 S50
49 S49

C555 150P C556 150P C553 150P C561 150P C562 150P

R501 1K LCD_INH
R502 1K LCD_MOD
R503 1K LCD_DI
R504 1K LCD_CL
R505 1K LCD_CE

TP551

5V
LCD_CONT

R577 470
C559 0.47
C554 16V 1
C-0122A
R578 1.5K
R585 2.7K
R571 100K

IC552 NJM2904M
1/2

R568 1K
C565 0.1
R583 220K
R582 10K
C563 0.1
Q555
2SC3052-1F
R590 2.2K
RT551 RT-0569 33KB
C566 16V 1 C-0122A

R574 10K
C558 0.47
R573 470K
2/2
IC552 NJM2904M

D571 HSM88WK

DIM1
R575 1K
R572 100K

Q553
2SC3052-1F

R562 47K +8V
R564 1K
Q550
2SB1115-YL

R576 47K +8V
R565 1K
Q551
2SB1115-YL

Q556
2SB1115-YL
R586 47K
R587 1K

Q554
2SC3052-1F
R560 1K DIM2
R579 100K

Q557
2SC3052-1F
R588 1K DIM3
R591 100K

R557 270 1/10W R563 270 1/10W
R551 180 1/10W R552 180 1/10W R553 180 1/10W R554 180 1/10W R592 180 1/10W
R593 180 1/10W R594 180 1/10W R595 180 1/10W R596 180 1/10W R597 180 1/10W

LTST-S320KFKT-U X4
D563 R558 D566 R559 6.8
D564 R569 6.8
D551 R561 6.8 D553 R566 6.8 D555 R567 6.8 D557 R569 6.8 D559 R570 6.8
D552 D554 D556 D558 D560 6.8
LTST-C190AKT X10

COL1
COL2
COL3
ROW1
ROW2
ROW3
ROW4

CHUP CHDW SLCT
16/9 H/L MENU
SCAN MEM PA DIS

NOTES:
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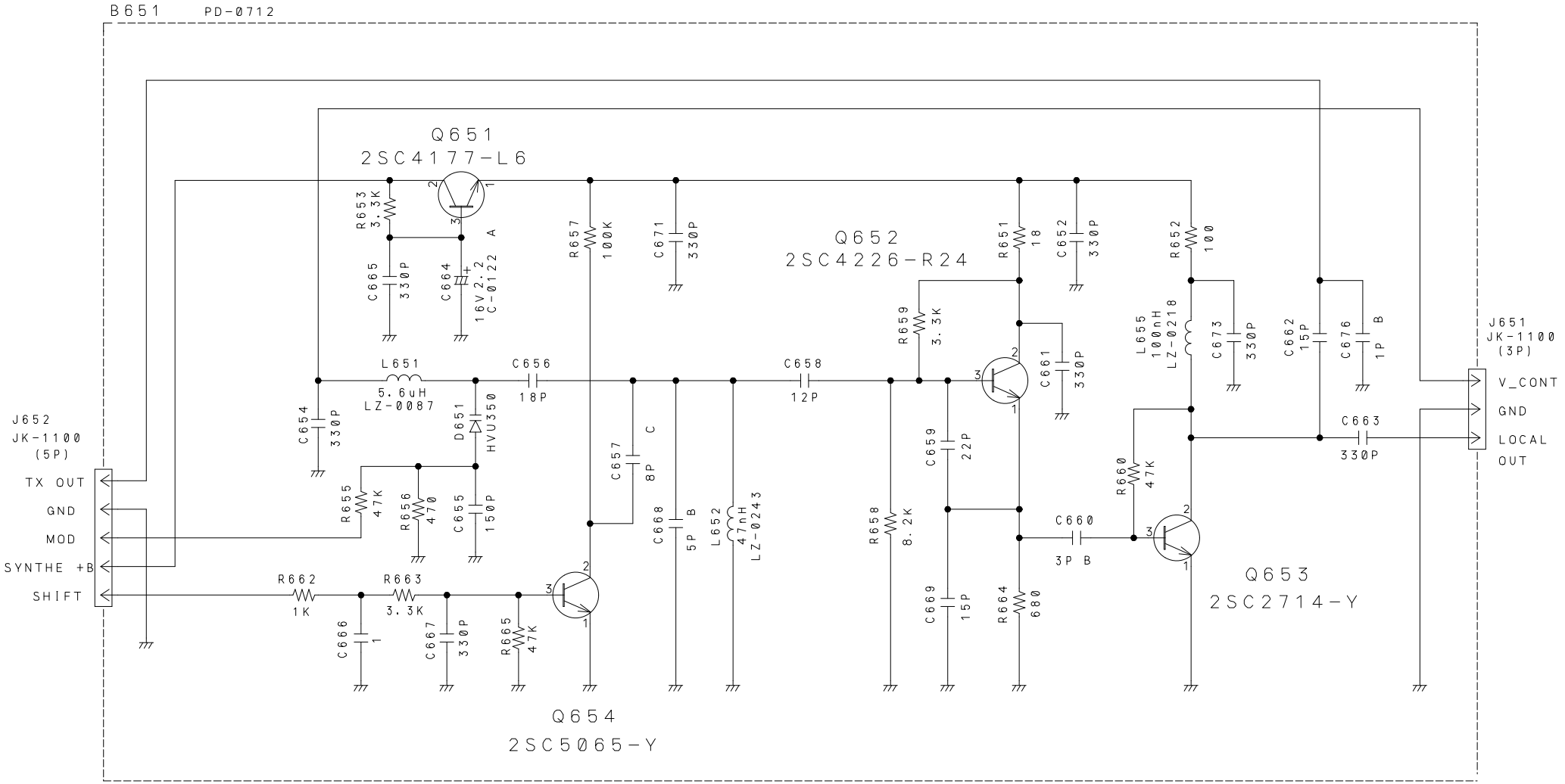
5. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.

DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
	05/01/26	UT605ZH	RT-2500
	YANAI	TITLE	FRONT ASS'Y SCHEMATIC DIAGRAM
CHECK. BY	APPRO. BY		
		DRAWING No.	
REV. No		UNIDEN CORP.	



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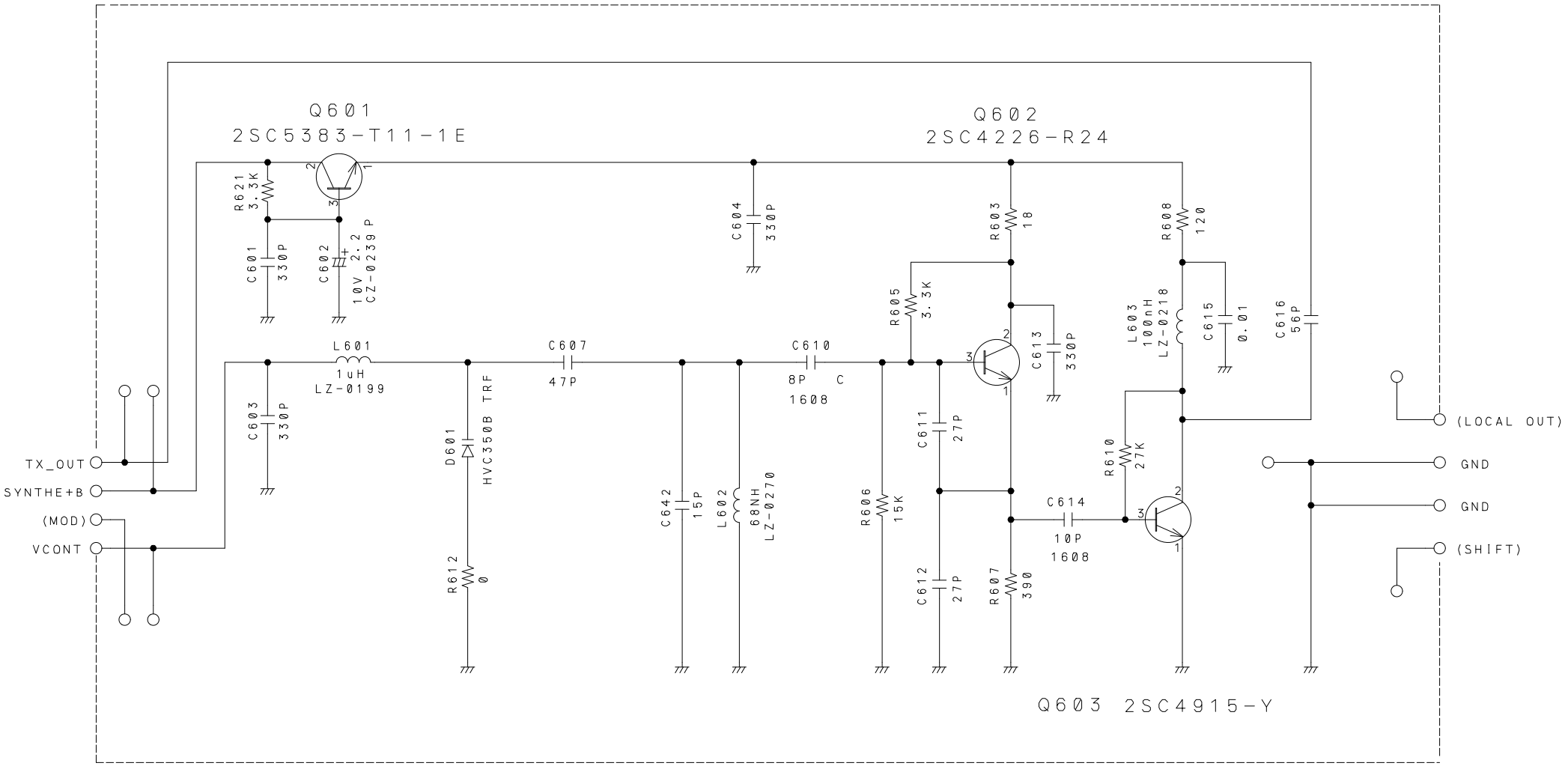
5. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.

REVISIONS												
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△
	DATE											
	LOT#/RN#											
	REVISED BY											
	CHECKED BY											

DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
04/11/19	05/01/07	UT605ZH	RT-2500
YUASA	YANAI	TITLE	VCO ASSY SCHEMATIC DIAGRAM
CHECK. BY	APPRO. BY		
		DRAWING No.	
REV. No		UNIDEN CORP.	

B621 PD-0857



NOTES:

1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K=KILO OHM, M=MEG OHM)
2. RESISTOR WATTAGES ARE [1/16W] UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P=MICRO-MICRO FARAD)
4. ALL CAPACITORS TEMPERATURE CHARACTERISTICS ARE [CH] (LESS THAN 270PF) OR [B] (MORE THAN 270PF) UNLESS OTHERWISE NOTED.
5. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.

REVISIONS												
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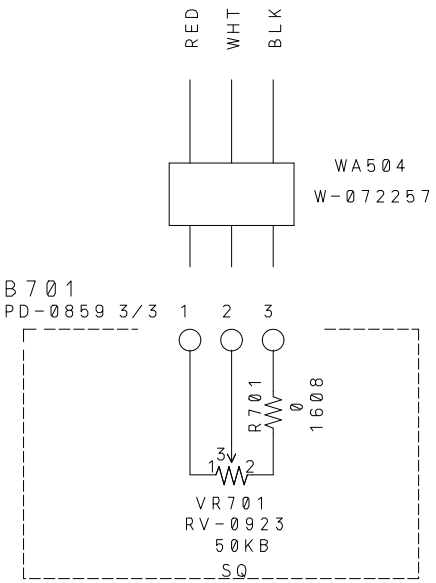
	DATE											
	LOT#/RN#											
	REVISED BY											
	CHECKED BY											

DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
04/09/10	04/12/22	UT605ZH	RT-2500
YUASA	YANAI	TITLE	DSCVCO ASSY SCHEMATIC DIAGRAM
CHECK. BY	APPRO. BY		
		DRAWING No.	
REV. No		UNIDEN CORP.	



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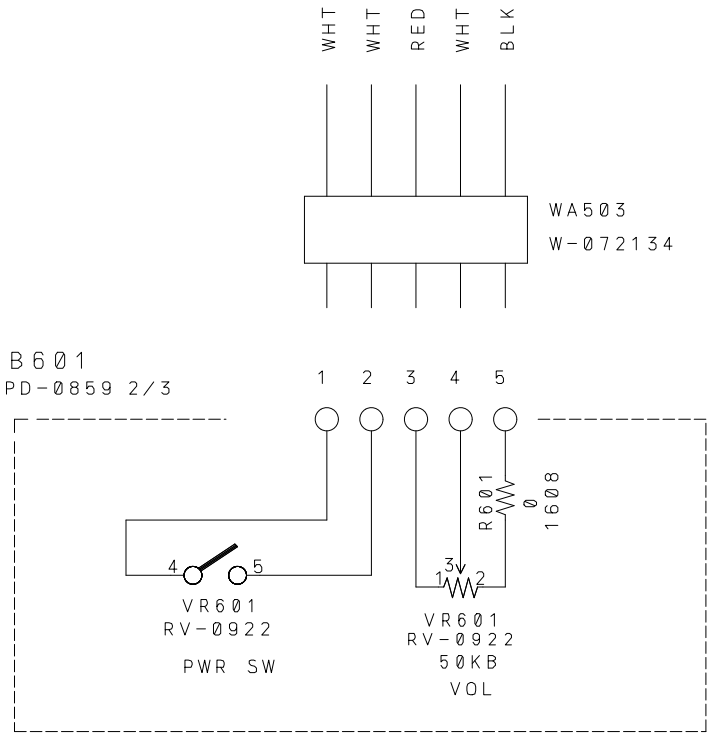
	DATE																			
	LOT#/RN#																			
	REVISED BY																			
	CHECKED BY																			

DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
	04/12/22	UT605ZH	RT-2500
	YANAI	TITLE	SQUELCH ASSY SCHEMATIC DIAGRAM
CHECK. BY	APPRO. BY		
		DRAWING No.	
REV. No		UNIDEN CORP.	



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	DATE																			
	LOT#/RN#																			
	REVISED BY																			
	CHECKED BY																			

DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
	04/12/22	UT605ZH	RT-2500
	YANAI	TITLE VOLUME ASSY SCHEMATIC DIAGRAM	
CHECK. BY	APPRO. BY		
		DRAWING No.	
REV. No		UNIDEN CORP.	

REVISIONS							
REV. CODE							
DATE							
LOT#/RN#							
REVISED BY							
CHECKED BY							

B801 PD-0879

MC901
MK-0519

C801 0.001
D801 HZK6C
R802 1.8K
C802 20V 4.7 A C-0122
R803 1K
R806 15K
V50
R805 0
R801 100
C807 330P
R807 10K
V33
R804 10K
R835 10K
IC801 TC74HC123AFN(ELPNE)
C809 0.001
C808 330P
C812 20V 4.7 A C-0122
R808 10K
R811 100
R812 100
R827 100
MIC
GND
PTT
+5V
M_CLK
M_SO
M_SI
WA506 WZ-1521

R841 10K
R842 10K
R816 10K
R817 10K
R818 10K
R819 10K
R820 10K
R821 10K
R822 10K
R824 10K
R826 10K

R813 1K
C813 330P
3
R814 1K
C815 330P
6
R815 1K
C817 330P
9

R829 1K
C814 330P
DW
R831 1K
C816 330P
SELECT
R833 1K
C818 330P
0

R830 1K
C819 330P
2
R832 1K
C821 330P
1
R834 1K
C823 330P
5

R837 1K
C820 330P
8
R838 1K
C822 330P
CLR
R839 1K
C824 330P
UP

R855 1K
C829 330P
MENU
R856 1K
C830 330P
7
R857 1K
C831 330P
4

R873 10K
R859 10K
R860 10K
R840 10K
R858 10K
C825 330P
C826 20V 4.7 A C-0122
C827 330P
C828 20V 4.7 A C-0122

IC802 TC74HC166AFN(ELF,M)
IC803 TC74HC166AFN(ELF,M)
R836 10K

R825 10K
R864 10
R869 10

R861 180
R862 180
R863 220
R865 180
R866 180
R867 180
R868 180
R870 220
R871 180
R872 180

D803 LTST-C190AKT
D804 LTST-C190AKT
D805 LTST-C190AKT
D806 LTST-C190AKT
D807 LTST-C190AKT
D808 LTST-C190AKT
D809 LTST-C190AKT
D810 LTST-C190AKT
D811 LTST-C190AKT
D812 LTST-C190AKT

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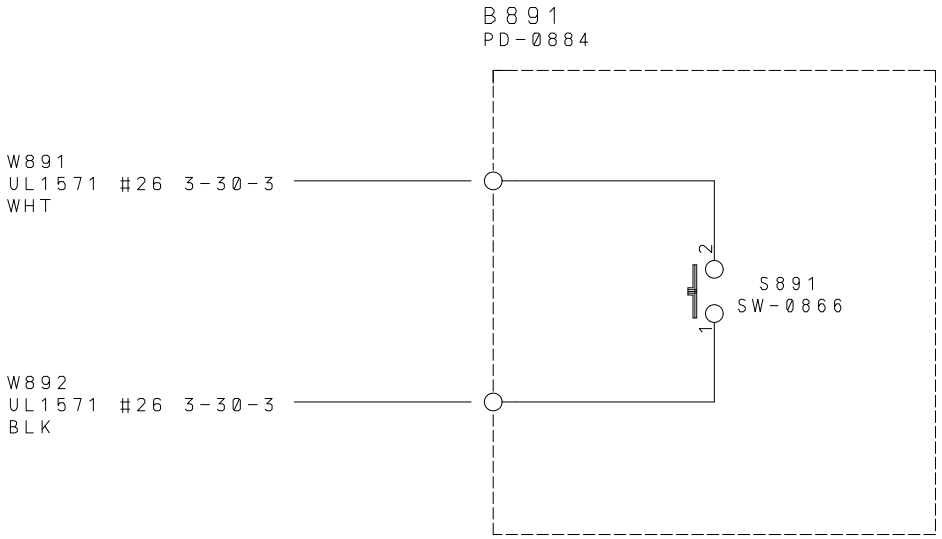
5. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING PLEASE REFER TO THE PARTS LIST FOR THE CHIP PARTS.
6. CHIP CAPACITORS TYPE ARE [1608] UNLESS OTHERWISE NOTED.

DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
04/6/22	05/01/25	UT604ZH/BH	MC-8000 DSC OCEANUS DSC/ATIS
YUASA	YANAI	TITLE	MIC ASSY SCHEMATIC DIAGRAM
CHECK. BY	APPRO. BY		
		DRAWING No.	
REV. No		UNIDEN CORP.	



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	REV. CODE									
	DATE									
	LOT#/RN#									
	REVISED BY									
	CHECKED BY									

DESIGN	DRAWN. BY	UNIDEN No.	MODEL No.
04/11/11	05/01/25	UT604ZH/BH	MC-8000 DSC OCEANUS DSC/ATIS
YUASA	YANAI	TITLE MIC SWITCH ASSY SCHEMATIC DIAGRAM	
CHECK. BY	APPRO. BY		
		DRAWING No.	
REV. No		UNIDEN CORP.	

動作仕様書

(OPERATION SPECIFICATION)

BUYER'S MODEL No.	: RT-2500
UNIDEN No.	: UT605Z
VERSION No.	: 1.04
ISSUED DATE	: '05/02/10
CATEGORY	: MRN
NAME	: M.SUZUKI/T.KOGURE

Uniden® Corporation

2-12-7 Hatchobori,Chuo-ku,Tokyo 104-8512

TEL 03-5543-2805

FAX 03-5543-2938

APRVD	CHECKED(E)	CHECKED(S)	CHECKED(M)	ISSUED

< CONTENTS >

Revision History

1. FEATURES

1.1. Contrast Adjusting

This feature will allow the user to change the contrast levels of the LCD.

1.2. Lamp Adjusting

This feature will allow the user to adjust the brightness level of the back lighting of the LCD screen.

1.3. Key Tone On/Off

Key Tone can be selected On/Off.

1.4. Alarm Clock

This feature can sound alarm at the time, which the user set up. However, this function cannot be used unless the GPS module is connected.

1.5. Directory

This function will allow the user to send Individual Call etc. Directory is the function to memorize the name and number of 20 other vessels.

1.6. Auto Channel Switch

This feature is to allow the user to disable the automatic channel change when receiving a DSC Call.

1.7. Position Reply

This item in the Setup Menu will allow the user turn on or off the automatic Position Reply that a vessel asks for the user position.

1.8. Channel Tag

This item in the Setup Menu will allow the user to change the normal channel tags (names).

1.9. MMSI

MMSI is the identification number of vessel. In case of state of emergency, an identification number is sent from a communication machine and rescue is requested from other vessels etc.

1.10. High/Low Function

This feature will allow the user to change output to set less than 25W or less than 1W.

1.11. STEP

This feature will allow the radio will step to the next channel that has been memorized for scan channel.

1.12. DSC Call

There are many technical requirements on how the radio must operate this function.
A detailed thing is described below.

1.12.1. Individual Call

This function will be used to send a message to individual vessel.

1.12.2. Group Call

This function will be used to send a message to group vessel.

1.12.3. All Ships Call

This function will be used to send a message to all vessels.

1.12.4. Position Request

This function will be used to send a request of reply of current position.

1.12.5. Position Send

This function will be used to send a current position.

1.12.6. Standby

This feature will allow the user to set unattended mode.

1.12.7. Call Wait

This function will allow the user to view a list of received calls.

1.12.8. Geographical Call

This function can be called to vessels these are present in specific area.

1.13. GPS Display

GPS Display is not displayed when having not connected the GPS module. If GPS module connected to a radio, the present latitude, longitude, date, and time will be displayed.

1.14. ATIS

This function is the automatic transmitter identification system.

1.15. U.I.C. (Hidden feature)

This feature can change the following 3 modes of operation; USA, INT and CAN.
This hidden feature is enabled when user is pushing and holding [HI/LO] & [SELECT]keys and turn on the radio.

2. DESIGN

2.1. FRONT DESIGN

This design has some difference from real thing.

2.2. TOP DESIGN

(None)

2.3. HAND MIC DESIGN

This design has some difference from real thing.

3. CONTROLS AND FUNCTIONS

3.1. FRONT Switch

3.1.1. [POWER/VOLUME] knob

Turns this radio on and off as well as adjusts the audio volume.

3.1.2. [SQUELCH] knob

Sets the point at which random noise on the channel does not activate the audio circuits but a received signal does.

3.1.3. [▲], [▼] key

[▲] is able to move up the channels. [▼] is able to move down the channels.

[▲] is able to move up an item of Menu. [▼] is able to move down an item of Menu.

3.1.4. [SELECT] key

An item is decided by pushing this key in Menu mode.

3.1.5. [MENU] key

Push this key to appear Menu Command. These options will control the following categories; DSC CALL, SETUP, and SYSTEM within each of these categories, there will be Submenu options that are outlined in the attached document.

3.1.6. [HI/LO] key

Push this key to change output power.

3.1.7. [16/9 /TRI] key

Pushing this key immediately recalls EMG 16CH from any location except 16CH. Next push this key to recall EMG 9CH. Pushing this key again reverts the radio to the previous select channel. Pushing and holding this key for 2 seconds will activate the triple watch feature.

3.1.8. [STEP/SCAN] key

Push this key to activate the step operation. Every time this key is pushed, the radio will step to the next channel that has been placed into Memory.

Pushing and holding this key for 2 seconds will activate the channel scan feature.

3.1.9. [MEM] key

Push this key to add the current channel to scanning memory. Pushing this key again, it will delete the channel from scanning memory. This key will press and hold, it is possible to select USA / International / Canadian mode. (Hidden feature)

3.1.10. [PA] key

Push this key to enable the PA(Public Address) feature. This key will press and hold, it is possible to select Inlandwater way / Seagoing mode.

3.1.11. [DISTRESS] key

Push this key to call an emergency. If it does so, a rescue signal will send towards a surrounding vessel.

3.2. MIC Switch

3.2.1. [PTT] key

This key will be pushed to send a transmission.

3.2.2. [▲] [▼] key

Same as P.10 [3.1.3 [▲], [▼] key].

3.2.3. [MENU] key

Same as P.10 [3.1.5 [MENU] key].

3.2.4. [CLR] key

Delete a character.

3.2.5. [SELECT] key

Same as P.10 [3.1.4 [SELECT] key].

3.2.6. TEN keys

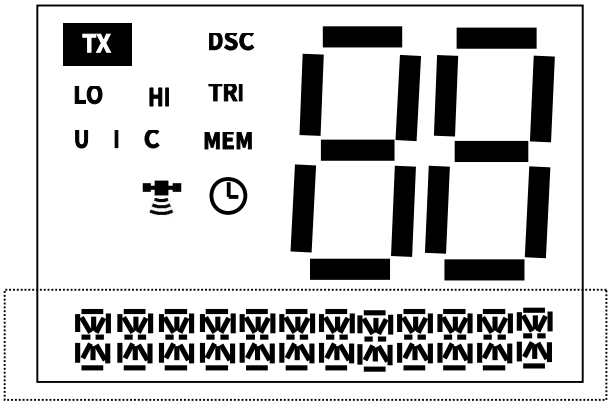
a) For Entry Channel No., GROUP/USER MMSI, and DIRECTORY menu

	1	2 ABC	3 DEF	4 GHI	5 JKL	6 MNO	7 PQRS	8 TUV	9 WXYZ	0
1 press	1	2	3	4	5	6	7	8	9	0

b) For Name data entry in DIRECTORY Menu

	1	2 ABC	3 DEF	4 GHI	5 JKL	6 MNO	7 PQRS	8 TUV	9 WXYZ	0
1 press	@	A	D	G	J	M	P	T	W	_
2 presses	-	B	E	H	K	N	Q	U	X	<Blank>
3 presses	=	C	F	I	L	O	R	V	Y	(
4 presses	/	2	3	4	5	6	S	8	Z	)
5 presses	<						7		9	’
6 presses	>									\
7 presses	+									0
8 presses	*									
9 presses	1									

4. LCD DISPLAY



This area is used for Channel Tag, Menu, and message of DSC, GPS.
These messages will continually scroll from right to the left.

4.1. ICON Detail

ICON	DETAIL
TX ("TX" Icon)	This icon is turned on during transmitting.
DSC	This icon will be displayed when the radio is in the DSC mode, including receiving DSC Call.
LO	This icon is turned on when the transmit power is a less than 1W output.
HI	This icon is turned on when the transmit power is a less than 25W output.
TRI	This icon is the mode that can receive EMG 16CH, EMG 9CH and current channel are scanning by turns.
WX	This icon is turned on (Blink) when Inlandwater way mode active.
U I C	U icon is turned on when the channel is in USA mode. I icon is turned on when the channel is in International mode. C icon is turned on when the channel is in Canada mode. Note : These icons indicate in U.I.C. (Hidden feature) function.
MEM	This icon is turned on when the current channel is a memory channel.
("ALARM" Icon)	This icon is turned on when the ALARM function is turned on.
	This icon (no waves) is turned on when GPS data is invalid.
	These icons are turned on when GPS data is effective.

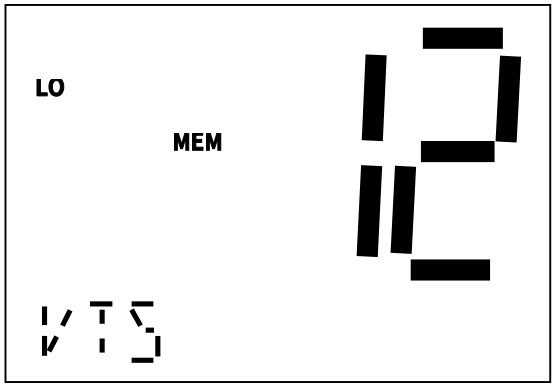
4.2. 14seg. Character Pattern

CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT
Blank		A		B		C		D		E		F	
CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT
G		H		I		J		K		L		M	
CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT
N		O		P		Q		R		S		T	
CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT
U		V		W		X		Y		Z		1	
CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT
2		3		4		5		6		7		8	
CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT
9		0		’		(		)		*		+	
CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT
-		/		<		=		>		@		\	
CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT	CHR	FONT
_													

5. OPERATIONS

5.1. POWER ON/OFF

This knob will be rotated in a clockwise direction in order to turn the radio on. Upon turning the radio on there will be a click feel and a Wake Up Tone with message of “RT-2500 > MMSI : XXXXXXXXX”. (XXXXXXXXX = User MMSI Data or “NO DATA”) As the knob is rotated clockwise, each volume level will have a click feel up to the maximum volume level. Upon turning on the radio, the channel displayed will be the last channel selected before the radio was turned off. The first time the radio is turned on, channel 16 will be selected.



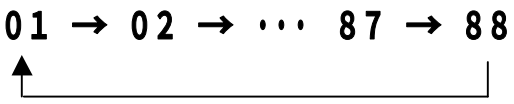
5.2. Channel Select

[▲] key is used to scroll up through the channels.

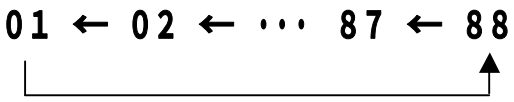
[▼] key is used to scroll down through the channels.

If either [▲] or [▼] keys are held down for an interval of 0.5 seconds, the channel display will quickly scroll in the direction of the appropriately held key. The radio will sounds Key Tone (Single) only when [▲] or [▼] keys was pushed.

<< [▲] key >>



<< [▼] key >>



User can select channel number by [TEN] Key and [SELECT] Key.

Example.

1 : Push [1] key.

2 : Push [2] key.

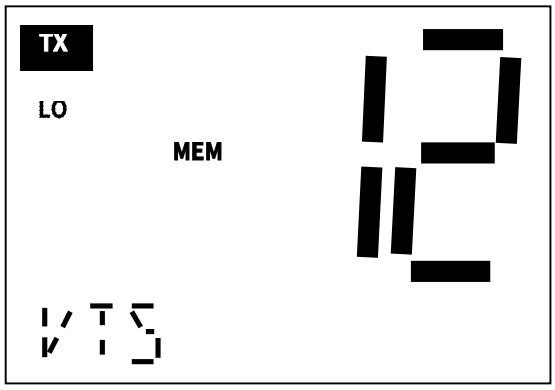
3 : Push [SELECT] key.

=> The channel number will change to “12”

Channel 70 is used DSC only, user cannot select channel 70.

5.3. Transmission

Push and hold [PTT] key, the “TX” icon on the LCD is displayed. While the user pushes [HI/LO] key while the radio has transmitted by low power, it is possible to output high power. Transmit time is limited to 5 minutes. “TX” icon and channel number blinks when transmit time is over 5 minutes. This prevents unintentional transmissions. (The radio cannot transmit on 15CH(USA) by [PTT] key.)



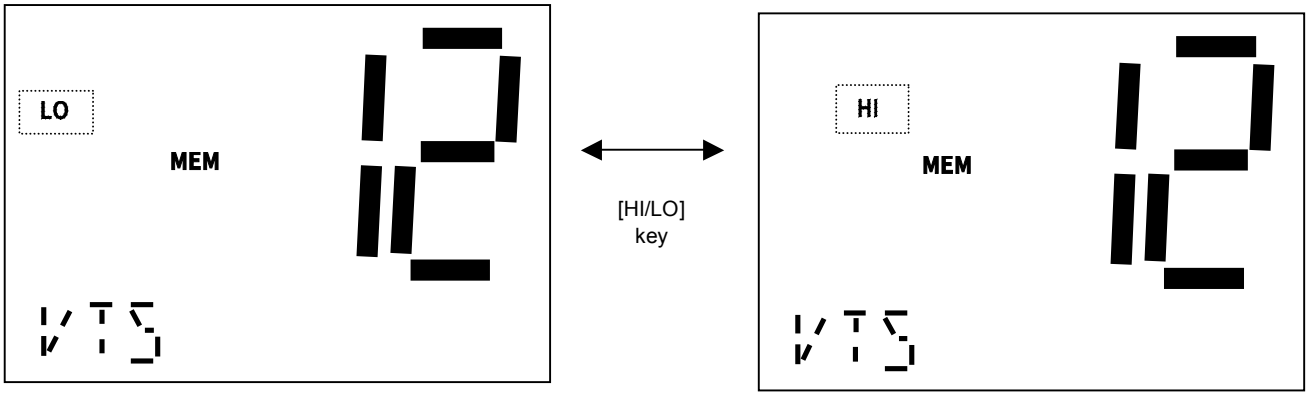
NOTE

The ATIS signal shall be transmitted at the end of each transmission. The end of a transmission is considered to be every release of [PTT] key.

When the radio is turned on while [PTT] key is held down, PTT Error Tone sounds, the channel indicator and “TX” icon blinks. All key except [HI/LO] key is not accepted during transmitting.

5.4. HI/LO POWER

Pushing [HI/LO] key will change the transmit output power for the currently selected channel from HI (less than 25W) to LO (less than 1W) or from LO to HI depending on the current setting. Push [HI/LO] key, turn on “LO” icon; the transceiver can transmit with less than 1W. Once again, if this key is pushed, it will change to “HI” icon, the transceiver can transmit with less than 25W. The radio can’t switch TX Power when it is scanning of SCAN mode.

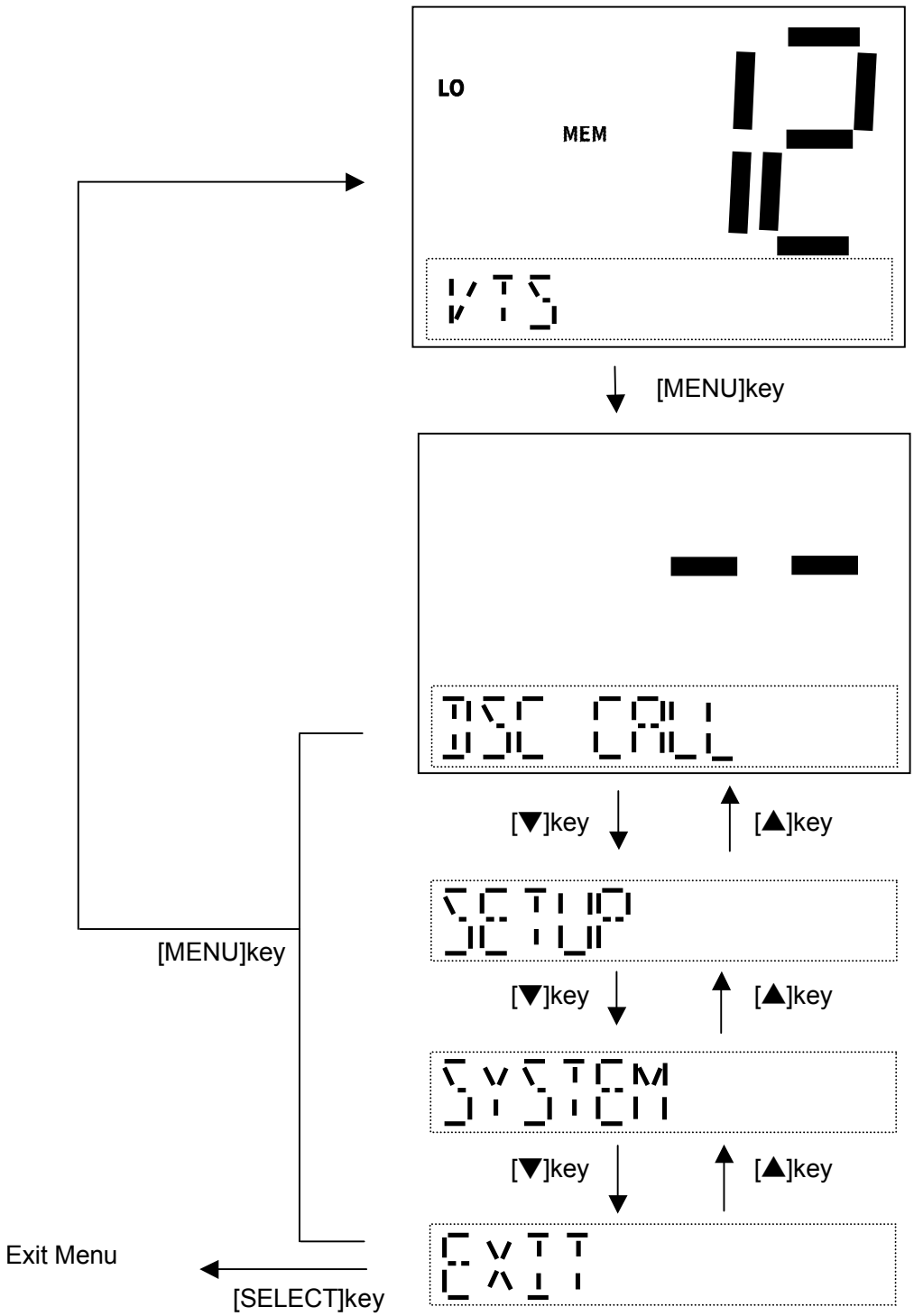


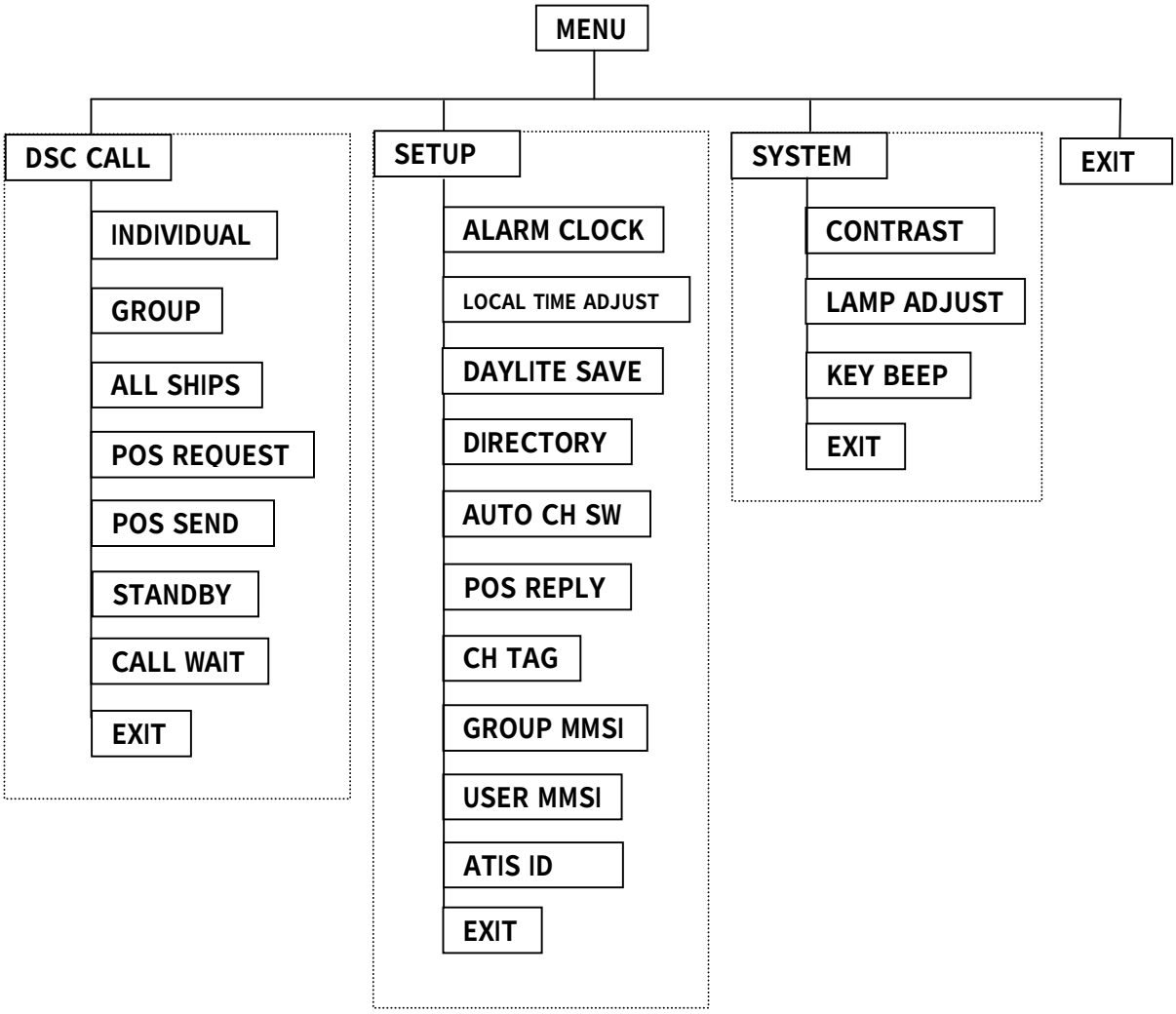
5.5. MENU

Push [MENU] key to change to Menu mode.

Next push [MENU] key to cancel from Menu mode.

These options in the Menu mode will control the following categories: DSC CALL, SETUP, and SYSTEM. [▼] key is used for scrolling down through the item of Menu. [▲] key is used for scrolling up through the item of Menu. [SELECT] key is used to select the item of Menu. [MENU] key is used to change up class of Menu.





NOTE

“POS SEND”, “LOCAL TIME ADJUST”, “DAYLITE SAVE” and “ALARM CLOCK” are not displayed in Menu when GPS module is not connected.

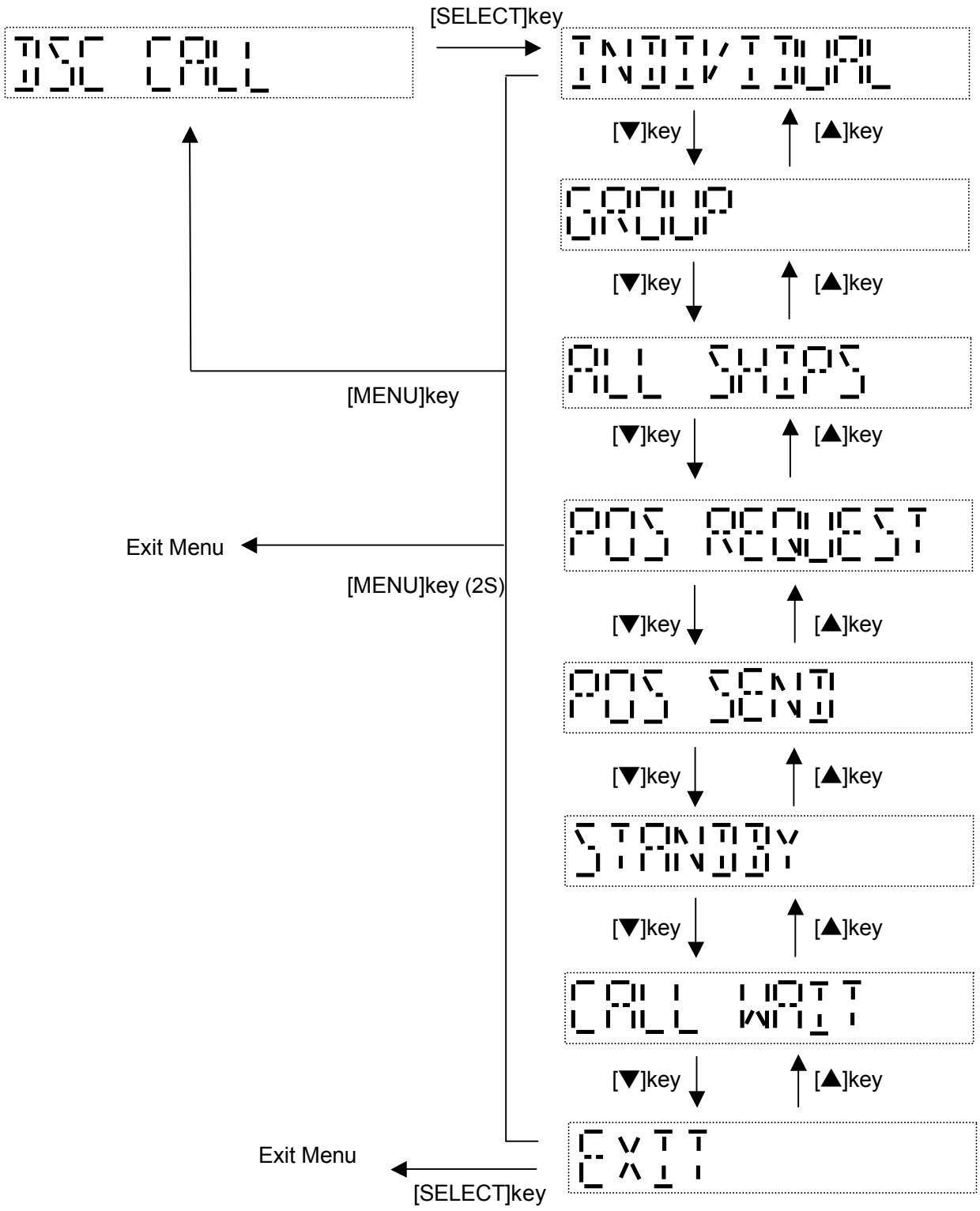
EMG mode, Scan mode and Triple watch are canceled when the radio enter MENU.

It will be canceled from MENU when the radio is transmitted and takes DSC Call.

When [DISTRESS], [PTT] key is pushed, it will be canceled from MENU mode.

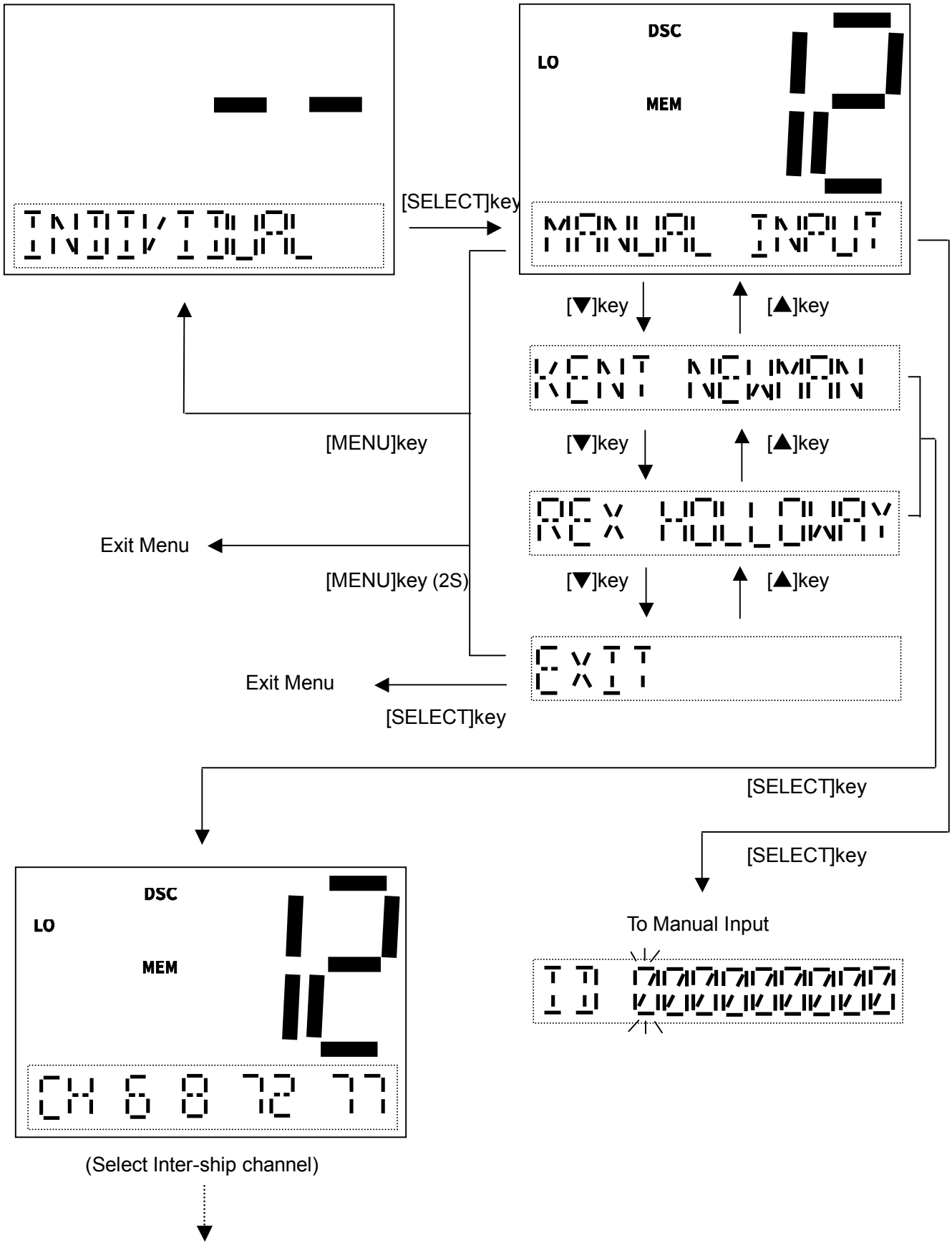
When Inlandwater way Mode, “INDIVIDUAL”, “GROUP”, “ALL SHIPS”, “POS REQUEST” and “POS SEND” are not selected. (Error Tone)

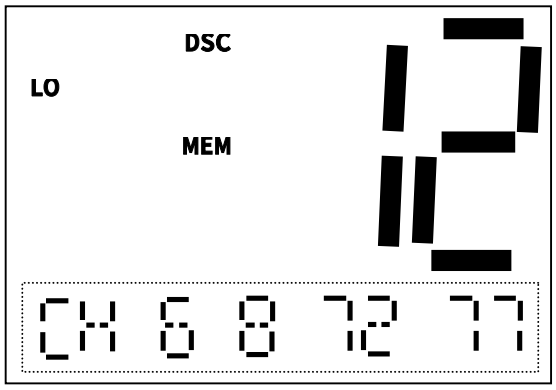
5.5.1. DSC CALL Menu



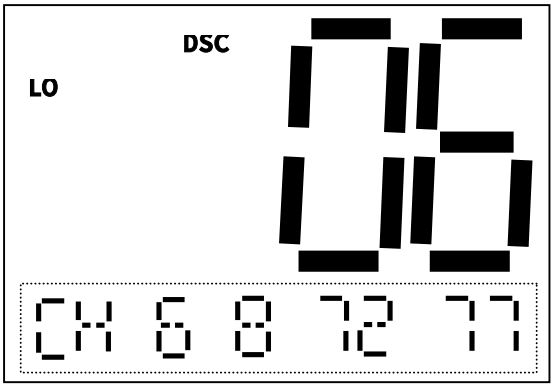
5.5.1.1. INDIVIDUAL CALL Menu

Example:

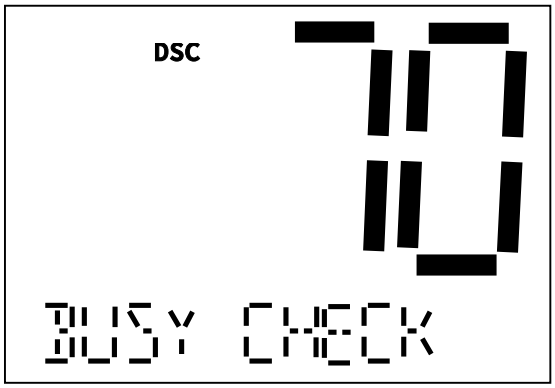




Example : [▲]key



[SELECT]key



Select Inter-ship Channel by [▲] or [▼]key.

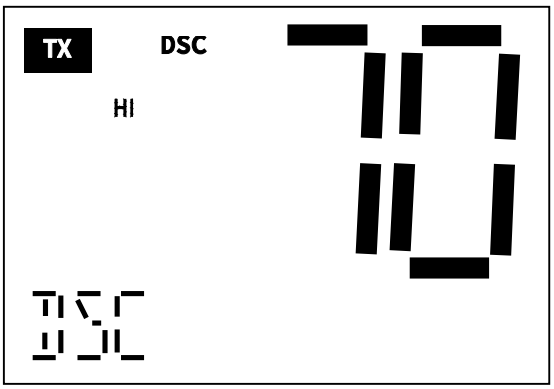
[▲]key :

Current CH -> 06CH -> 08CH -> 09CH -> 10CH -> 13CH -> 15CH -> 17CH -> 67CH -> 69CH -> 72CH -> 73CH -> 77CH -> Current CH

[▼]key:

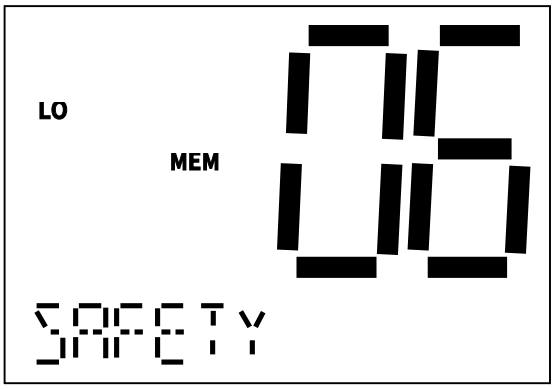
Current CH -> 77CH -> 73CH -> 72CH -> 69CH -> 67CH -> 17CH -> 15CH -> 13CH -> 10CH -> 09CH -> 08CH -> 06CH -> Current CH

Note : Group Call also is able to select inter-ship channel same as Individual Call.



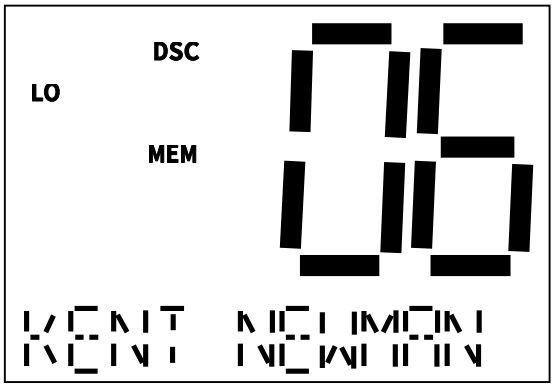
TX Power : High

Individual Call is sent with High Power.



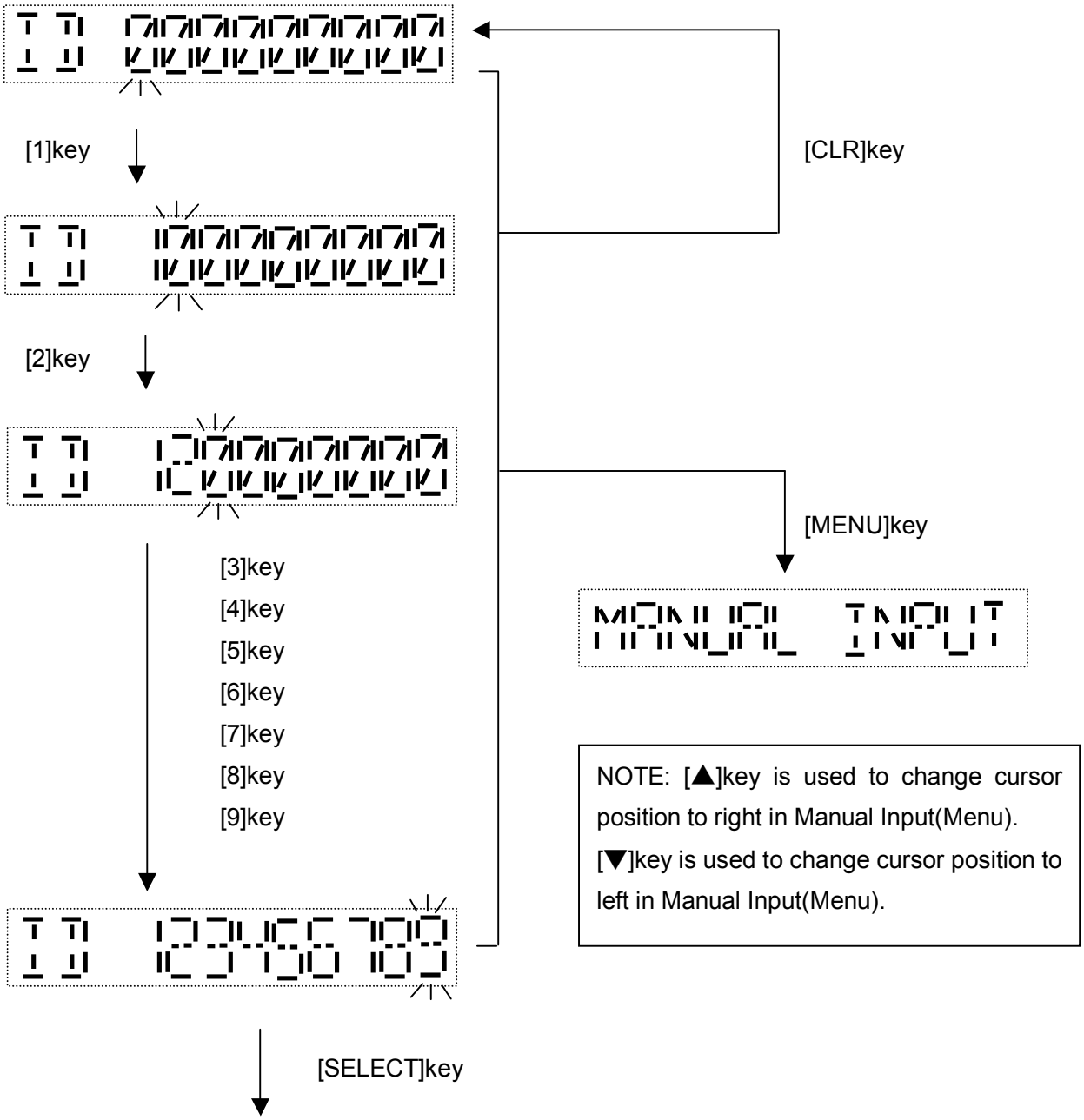
Return to idle screen.

Receive the ACK.



Manual Input (ID)

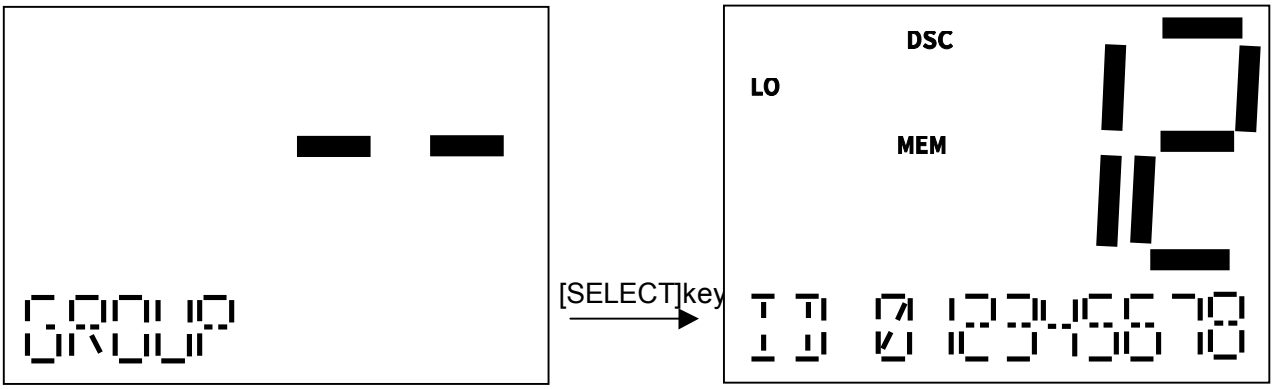
Example:



Select Inter-ship channel

5.5.1.2. GROUP CALL Menu

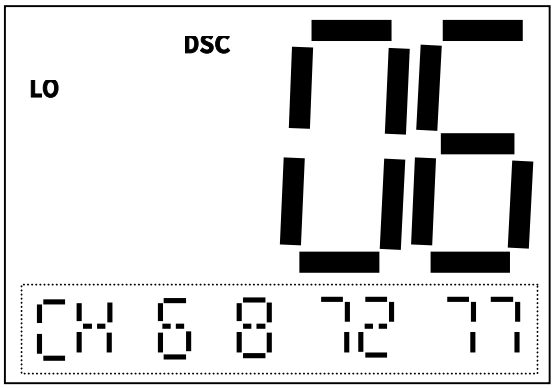
Example:



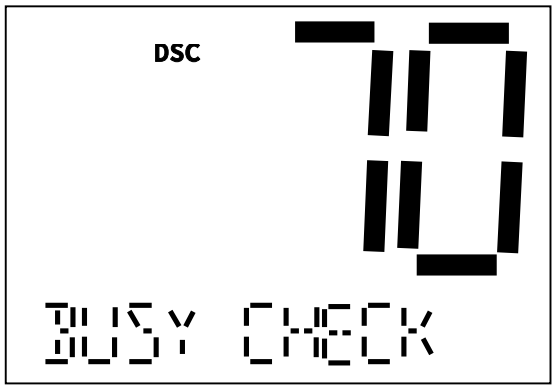
Select Inter-ship channel

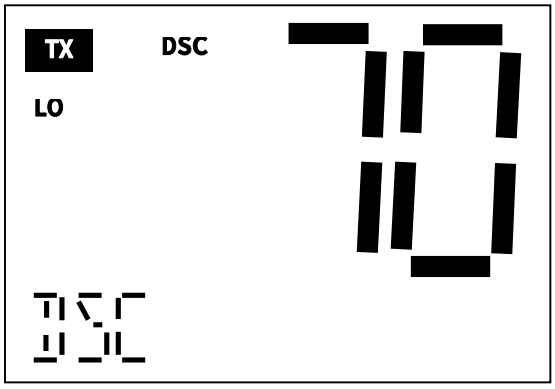
Select Inter-ship Channel by [▲] or [▼]key.
Same as [5.5.1.1. INDIVIDUAL CALL Menu].

Example : [▲]key

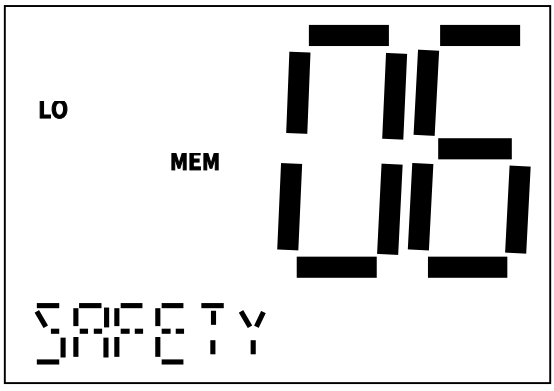


[SELECT]key





TX Power : Low

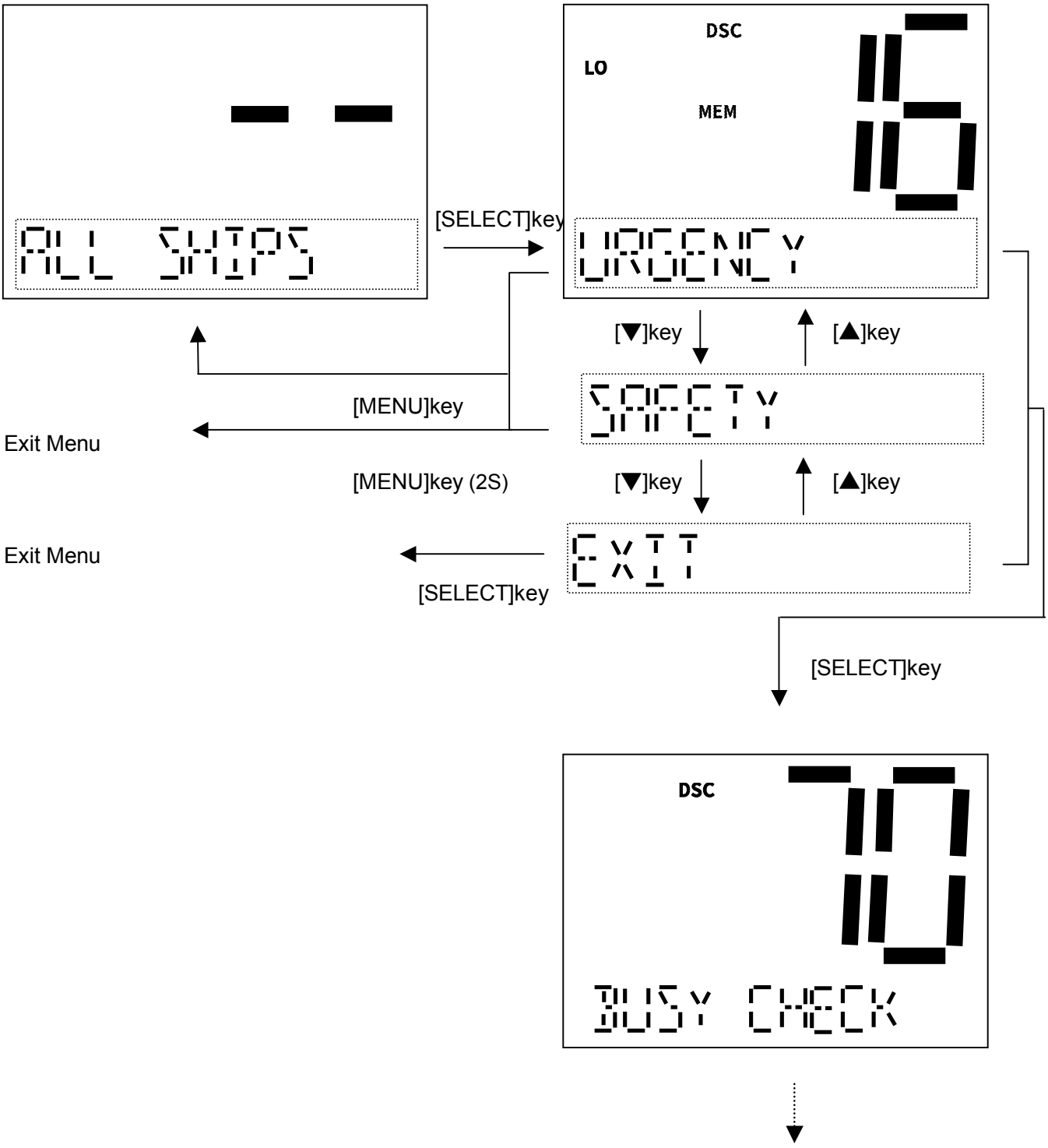


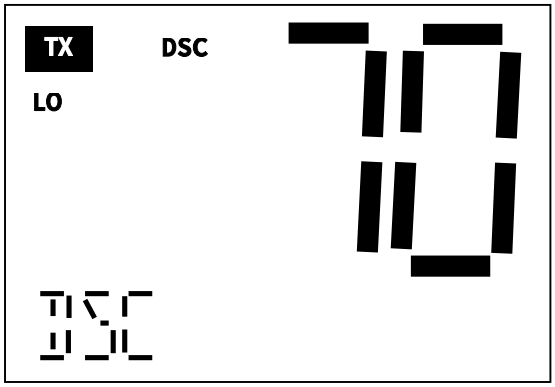
Return to idle screen.

Group Call is sent with Low Power.

5.5.1.3. ALL SHIPS CALL Menu

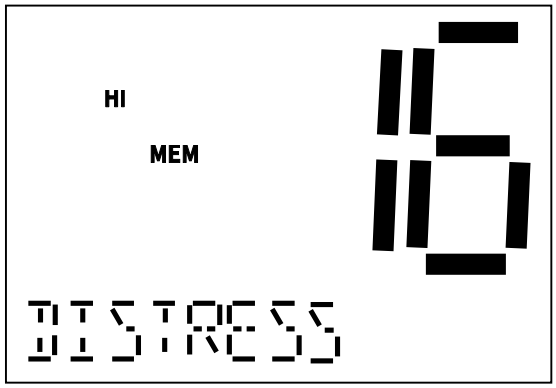
Example:





Routine : TX Power Low

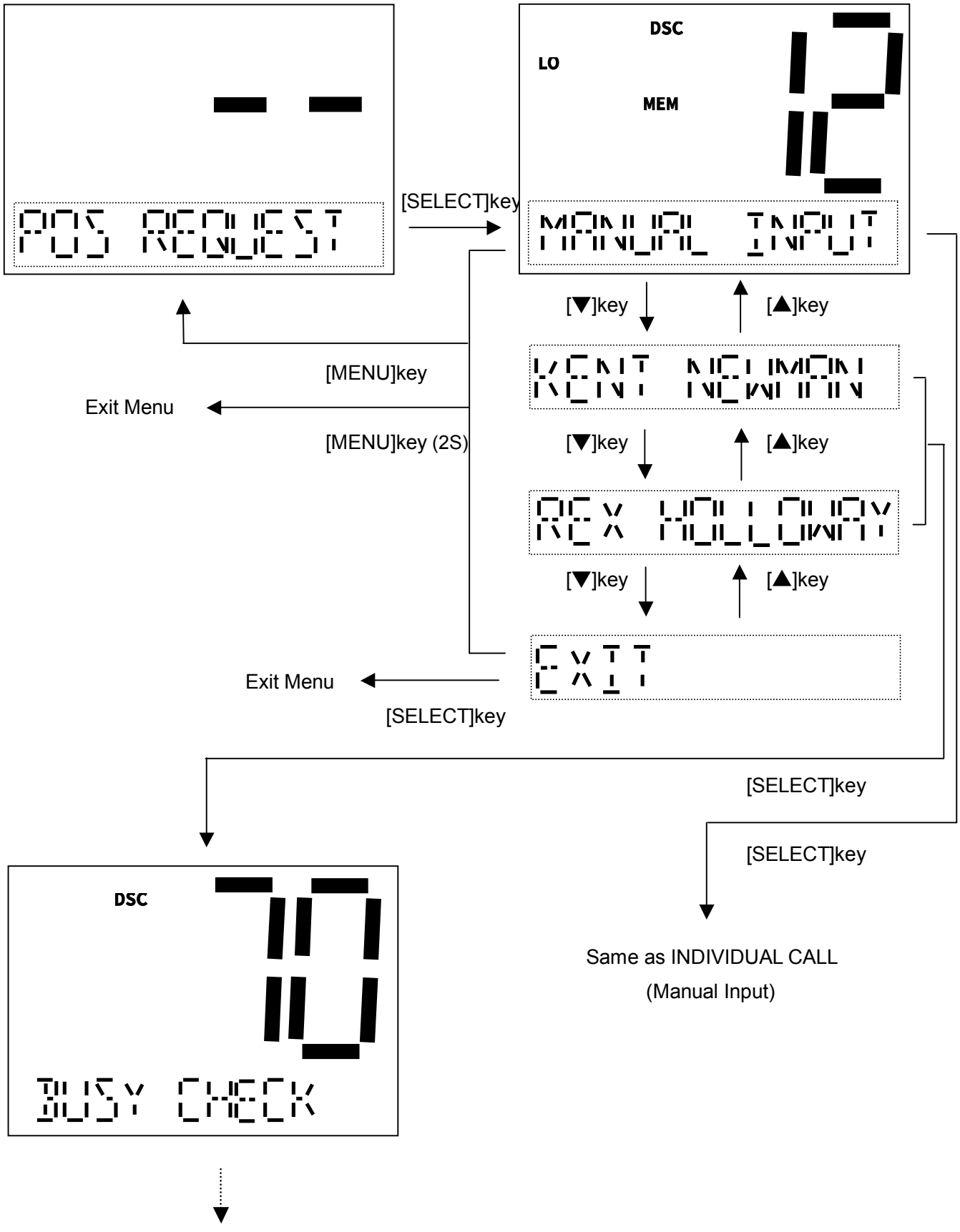
Other : TX Power High

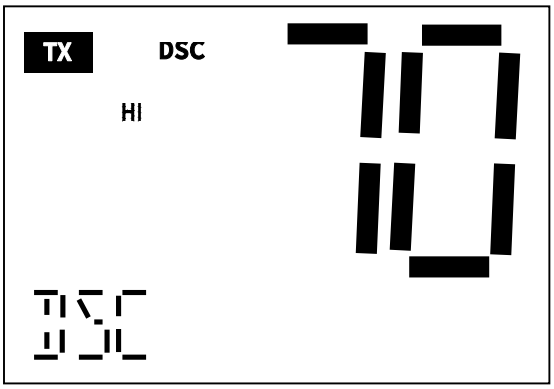


Return to idle screen.

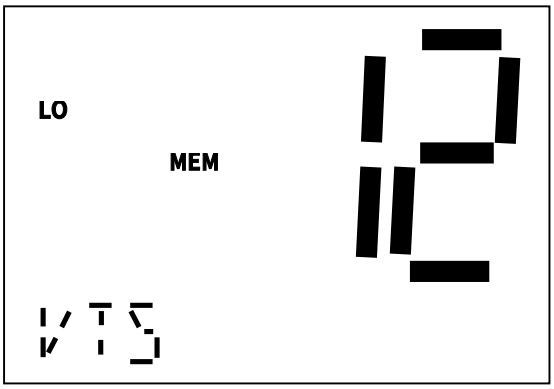
5.5.1.4. POSITION REQUEST CALL Menu

Example:



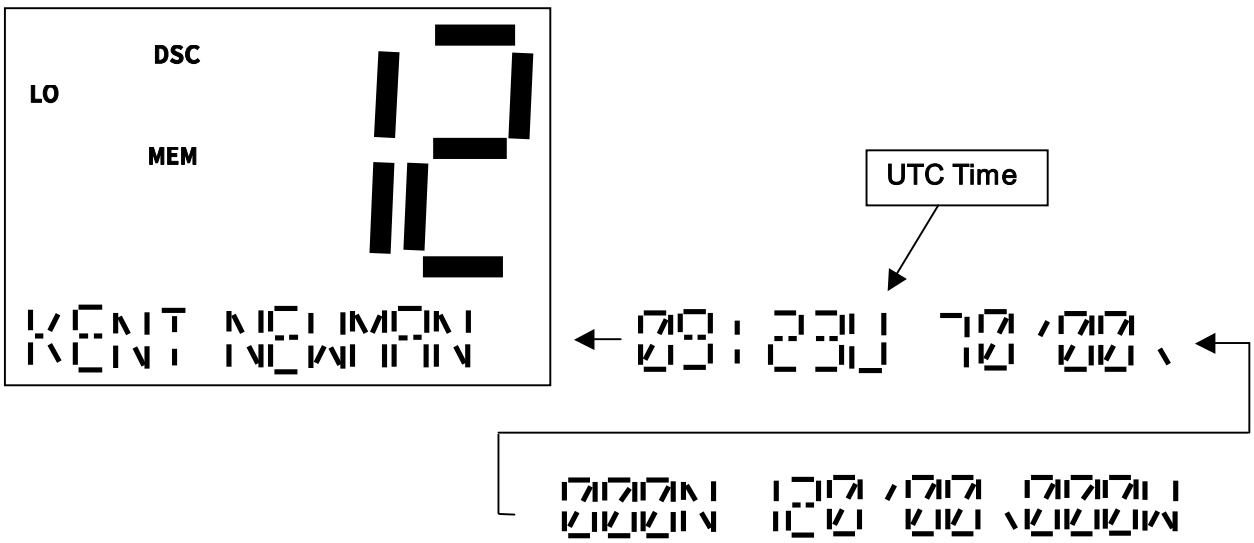


TX Power : High (Position Request Call is sent with High Power.)



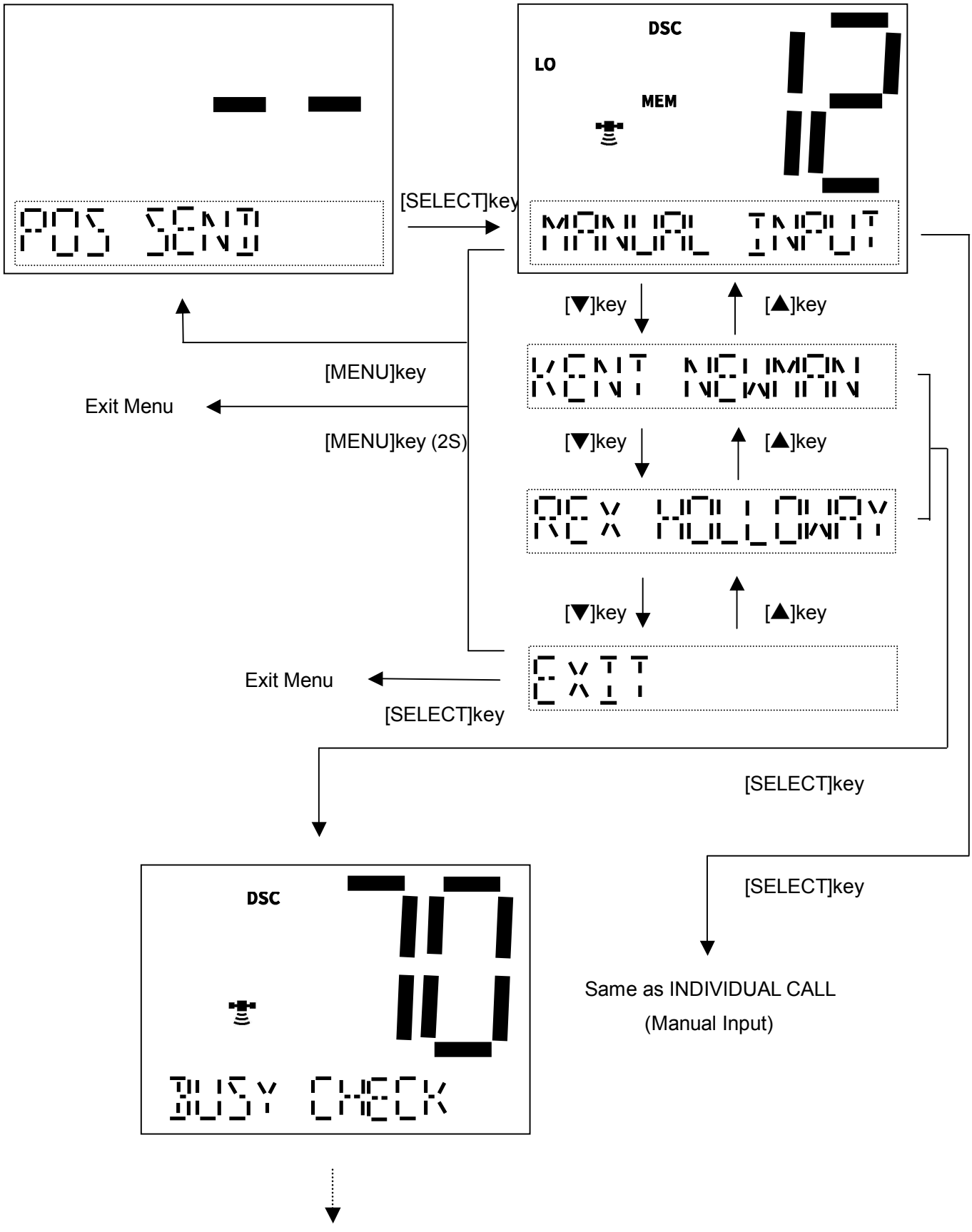
Return to idle screen

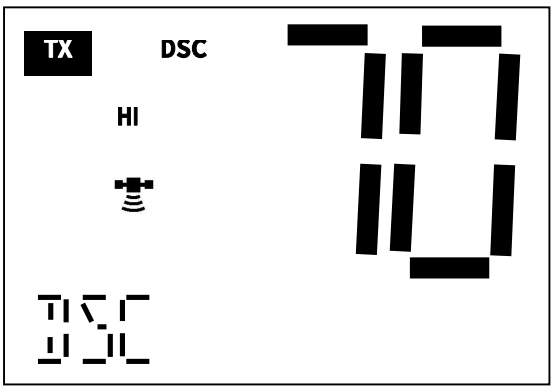
Receive the Reply.



5.5.1.5. POSITION SEND Menu

Example:



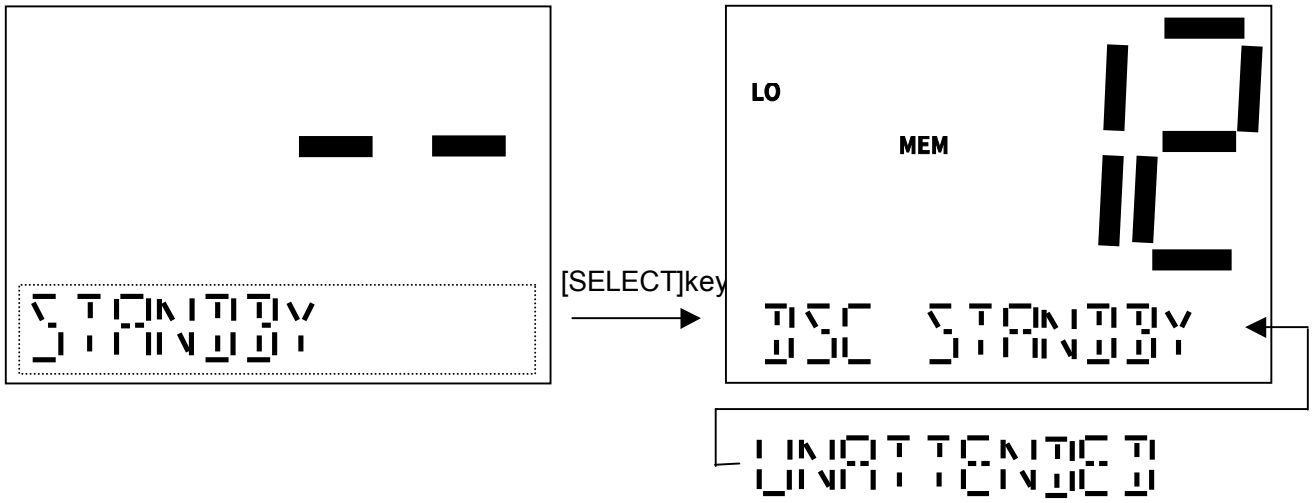


TX Power : High

Position Send Call is sent with High Power.

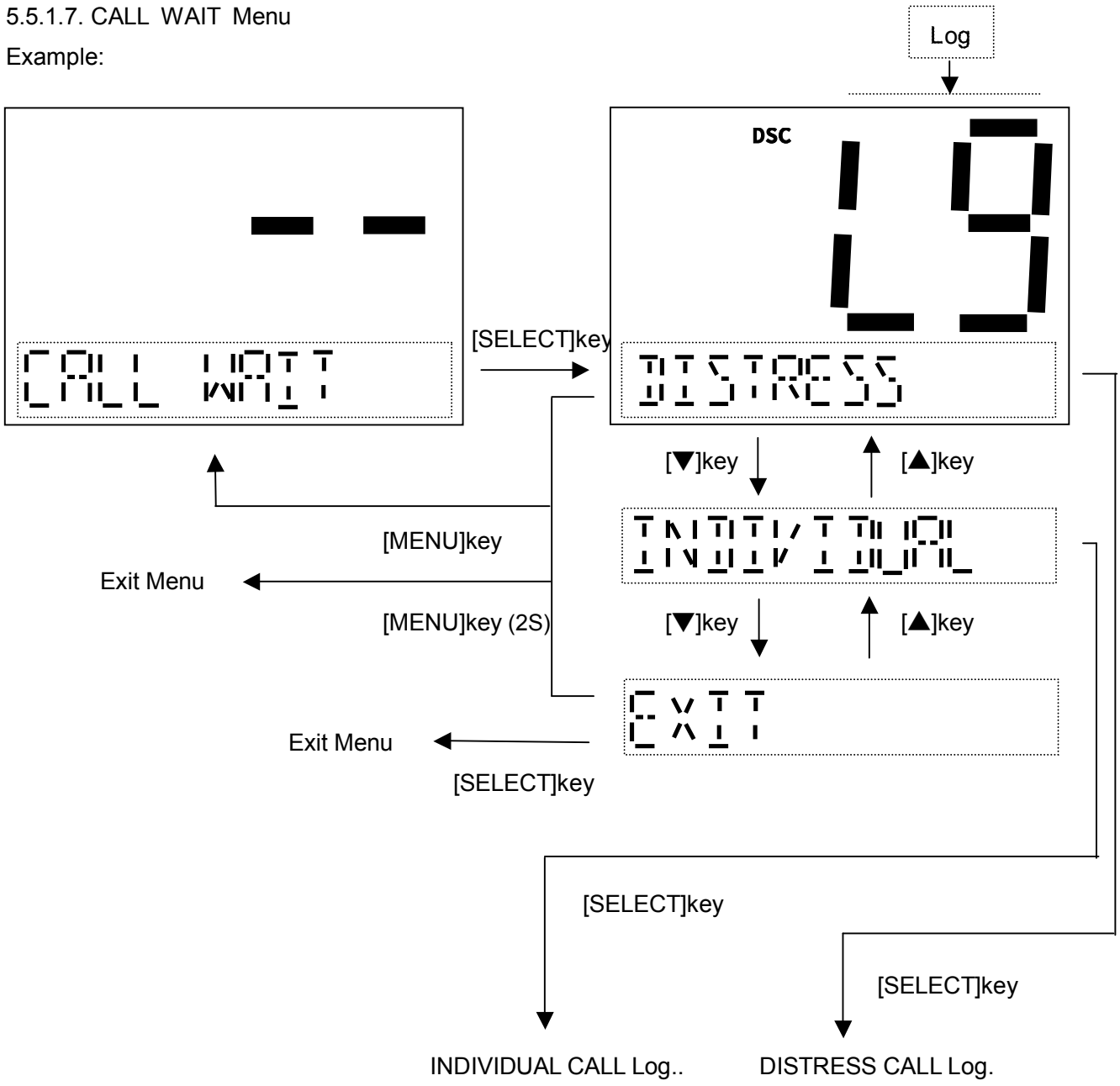
5.5.1.6. STANDBY Menu

Example:



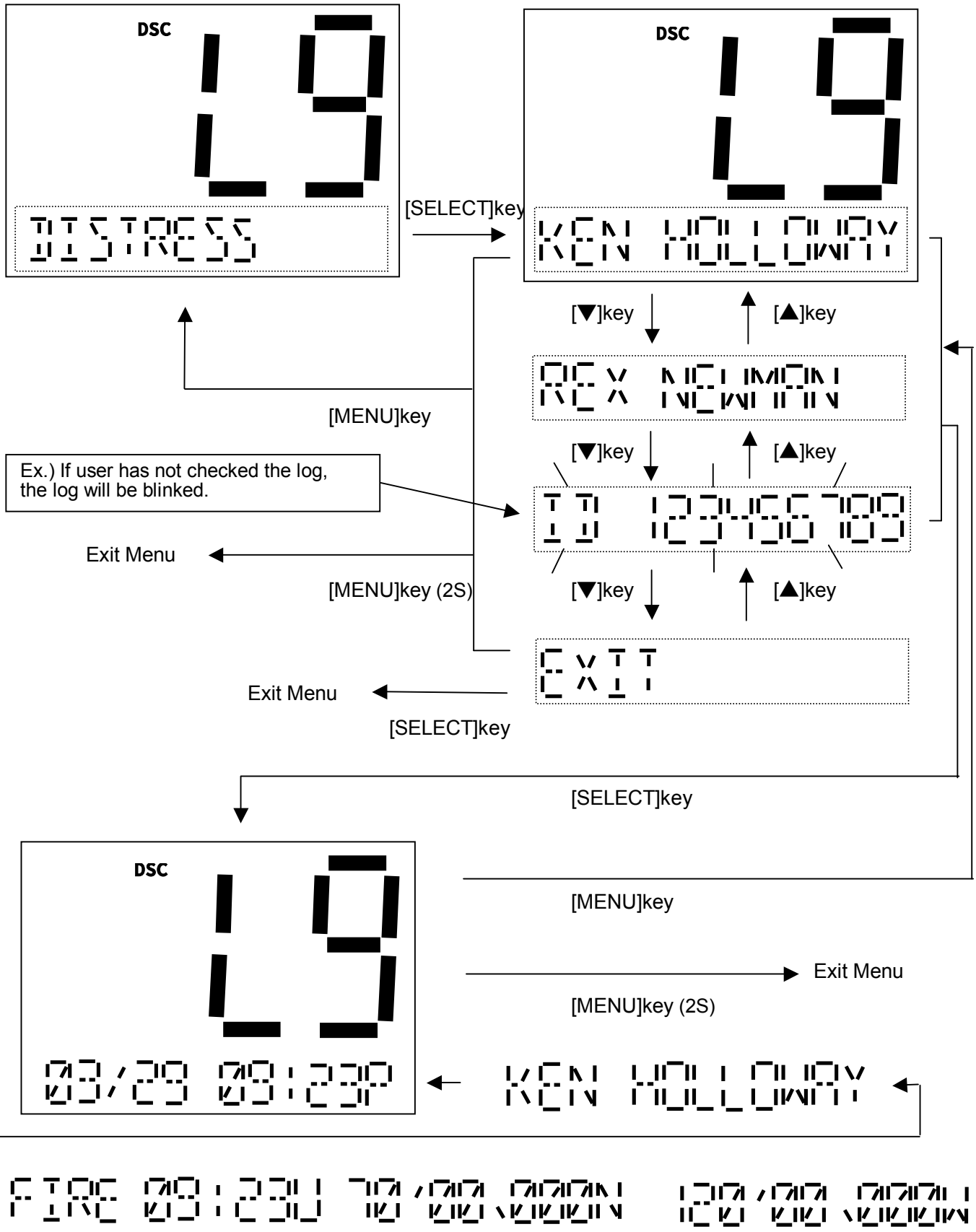
5.5.1.7. CALL WAIT Menu

Example:

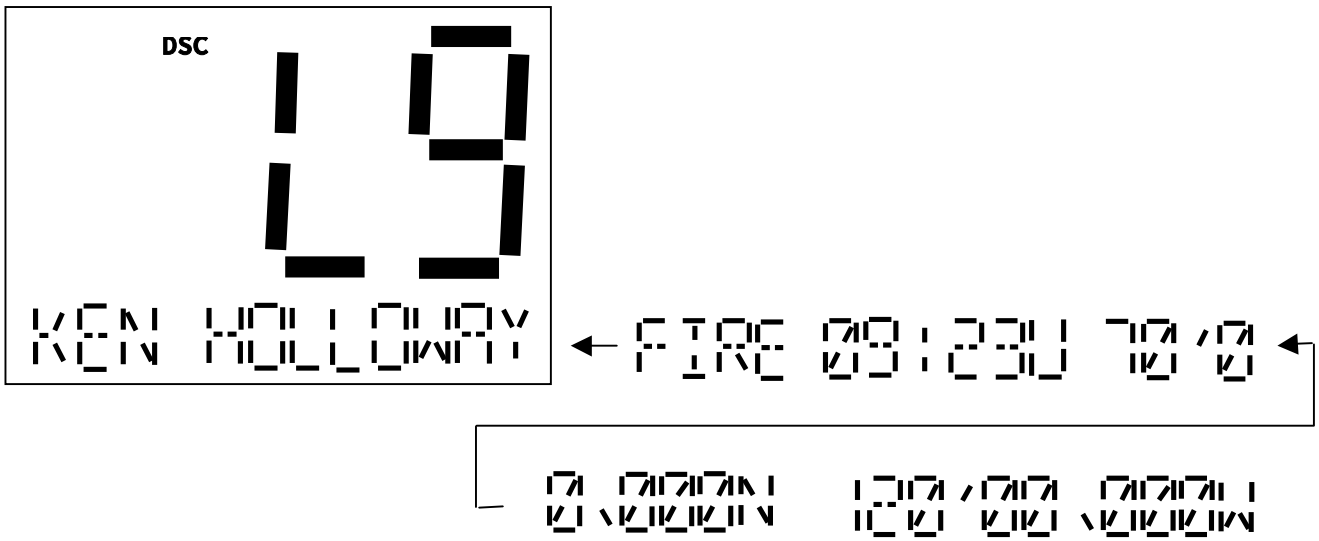


5.5.1.7.1. DISTRESS CALL Log. Menu

Example:

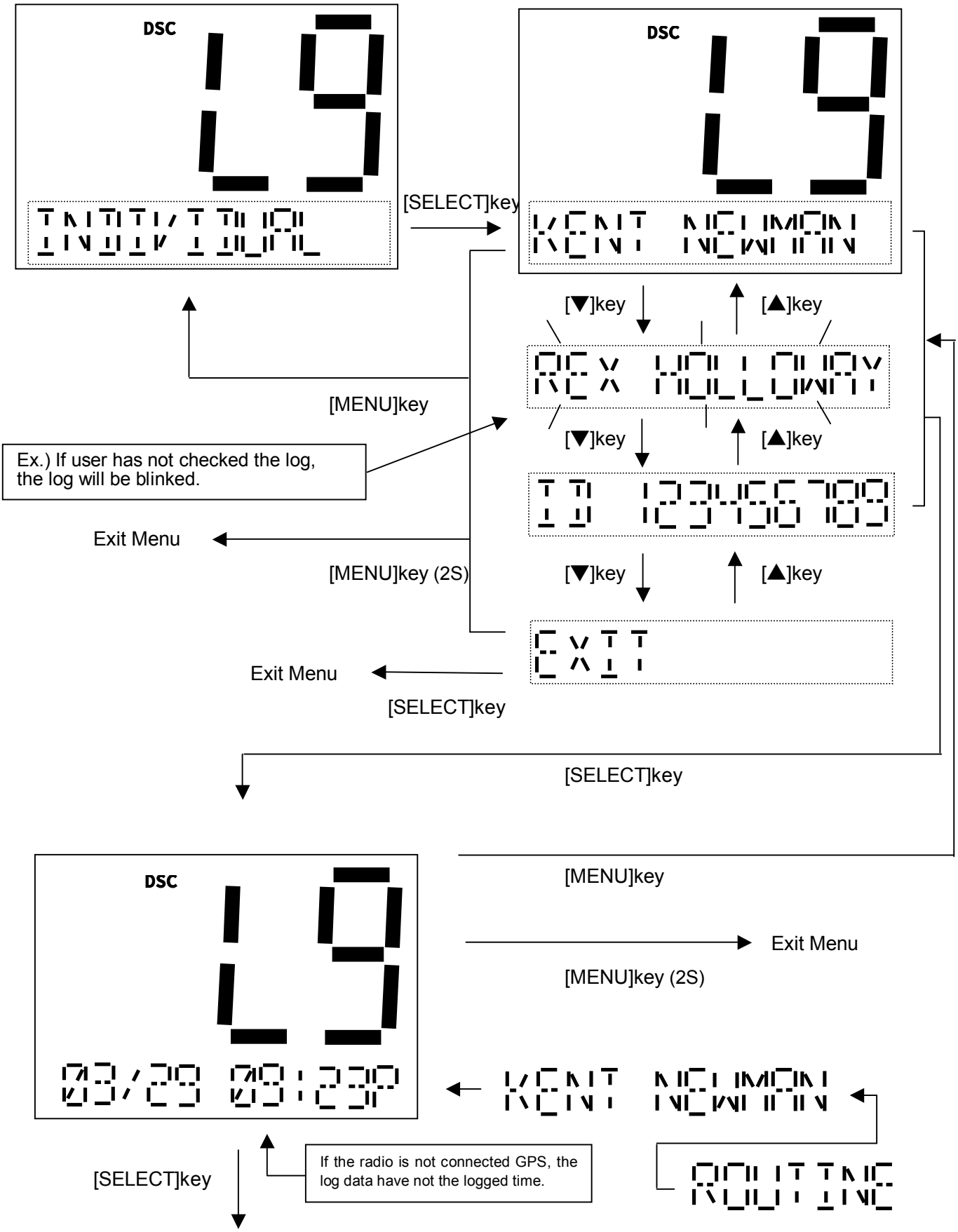


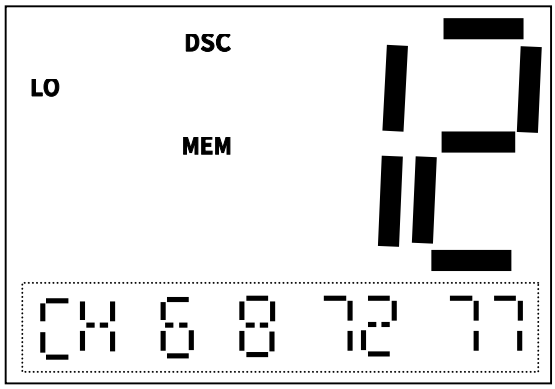
If the radio is not connected GPS, the log data have not the logged time.



5.5.1.7.2. INDIVIDUAL CALL Log. Menu

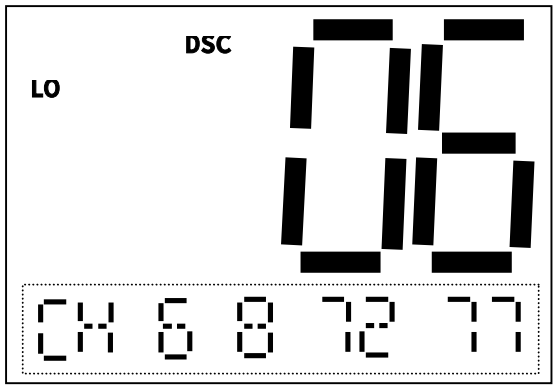
Example:



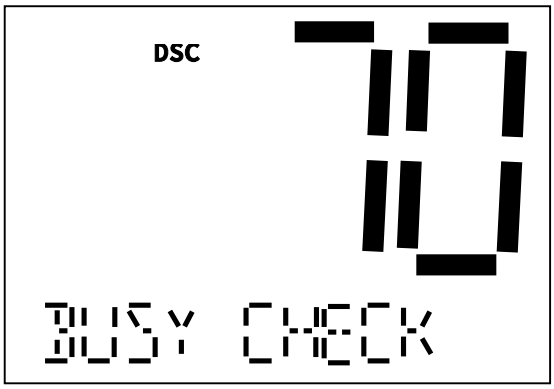


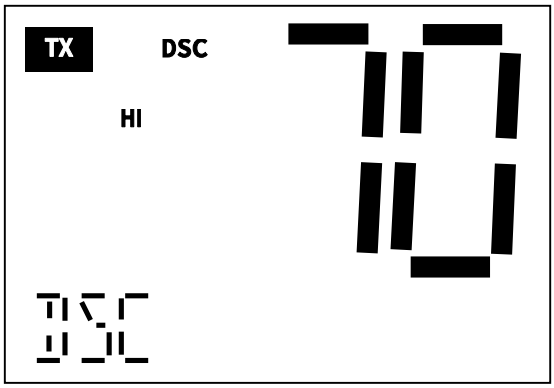
Example : [▲]key

Select Inter-ship Channel by [▲] or [▼]key.
Same as [5.5.1.1. INDIVIDUAL CALL Menu].



[SELECT]key

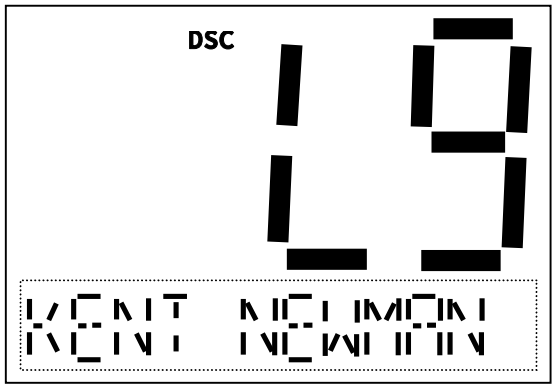




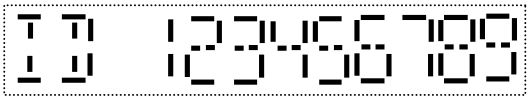
TX Power : High

Same as INDIVIDUAL CALL Menu

NOTE



If ID of “KENT NEWMAN” is memorized in directory already, “KENT NEWMAN” will be indicated.



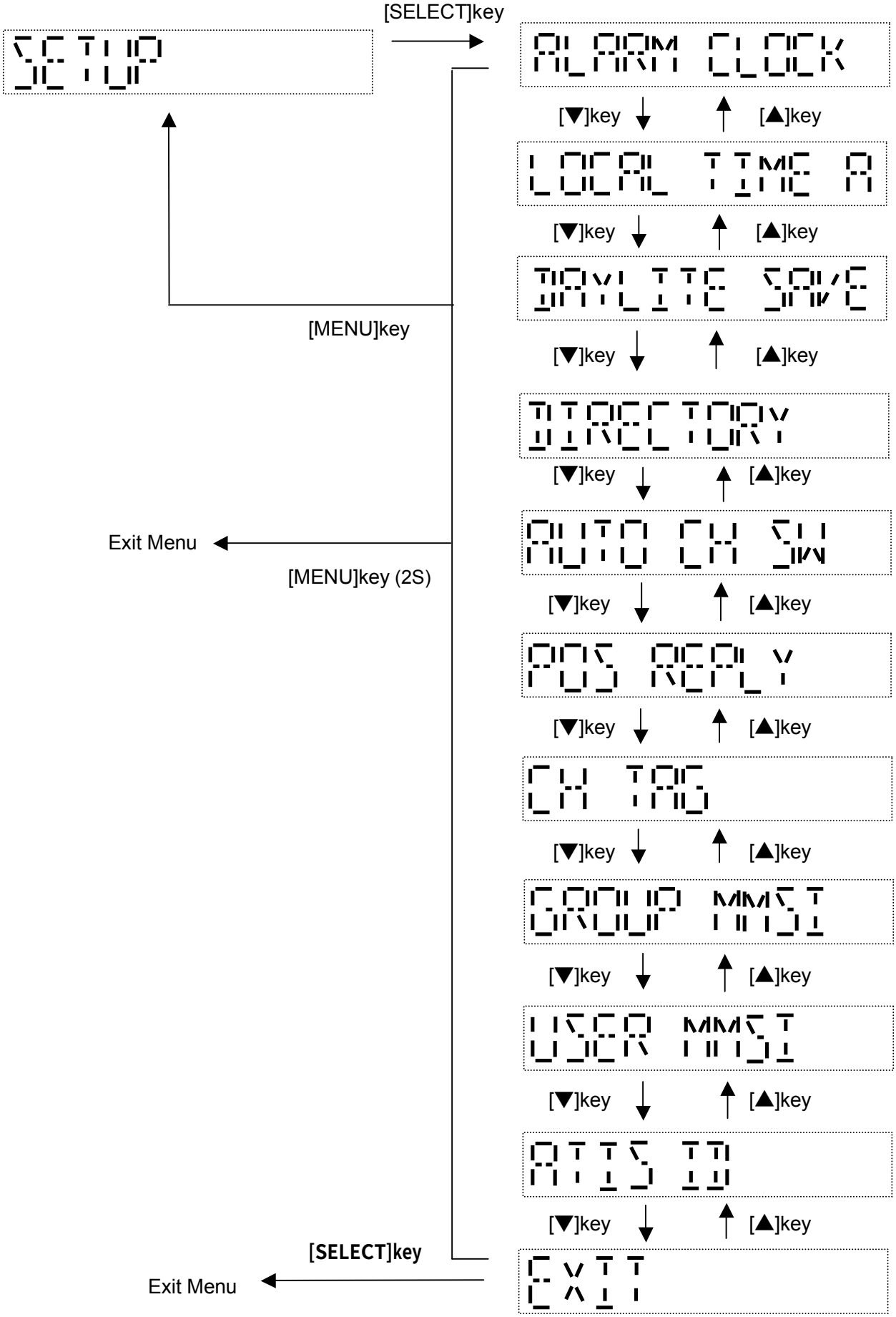
If this ID is not memorized in directory, this ID will be indicated.

5.5.2. SETUP Menu

This section has explained about Setup of this radio.

Items in Setup Menu are as follows.

ALARM CLOCK
LOCAL TIME ADJUST
DAYLITE SAVE
DIRECTORY
AUTO. CH.SW
POS. REPLY
CH TAG
GROUP MMSI
USER MMSI
ATIS ID

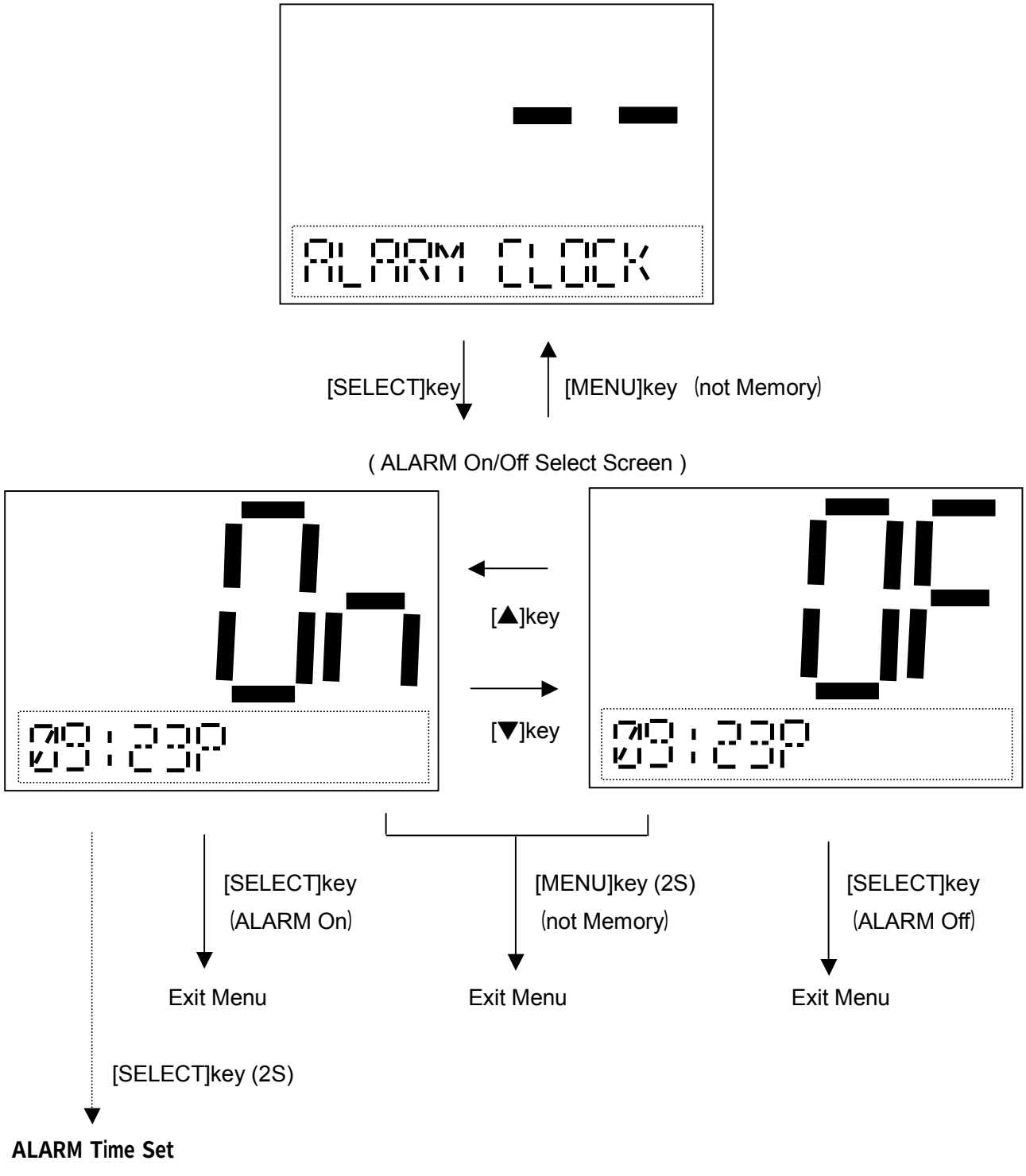

[SELECT]key
SETUP
ALARM CLOCK
[▼]key
[▲]key
LOCAL TIME A
[▼]key
[▲]key
DAYLIGHT SAVE
[▼]key
[▲]key
DIRECTION
[▼]key
[▲]key
AUTO CH SW
[▼]key
[▲]key
POS RCPL
[▼]key
[▲]key
CH TAG
[▼]key
[▲]key
CODING MMST
[▼]key
[▲]key
USER MMST
[▼]key
[▲]key
ATTS TT
[▼]key
[▲]key
EXIT
[MENU]key
Exit Menu
[MENU]key (2S)
[SELECT]key
Exit Menu

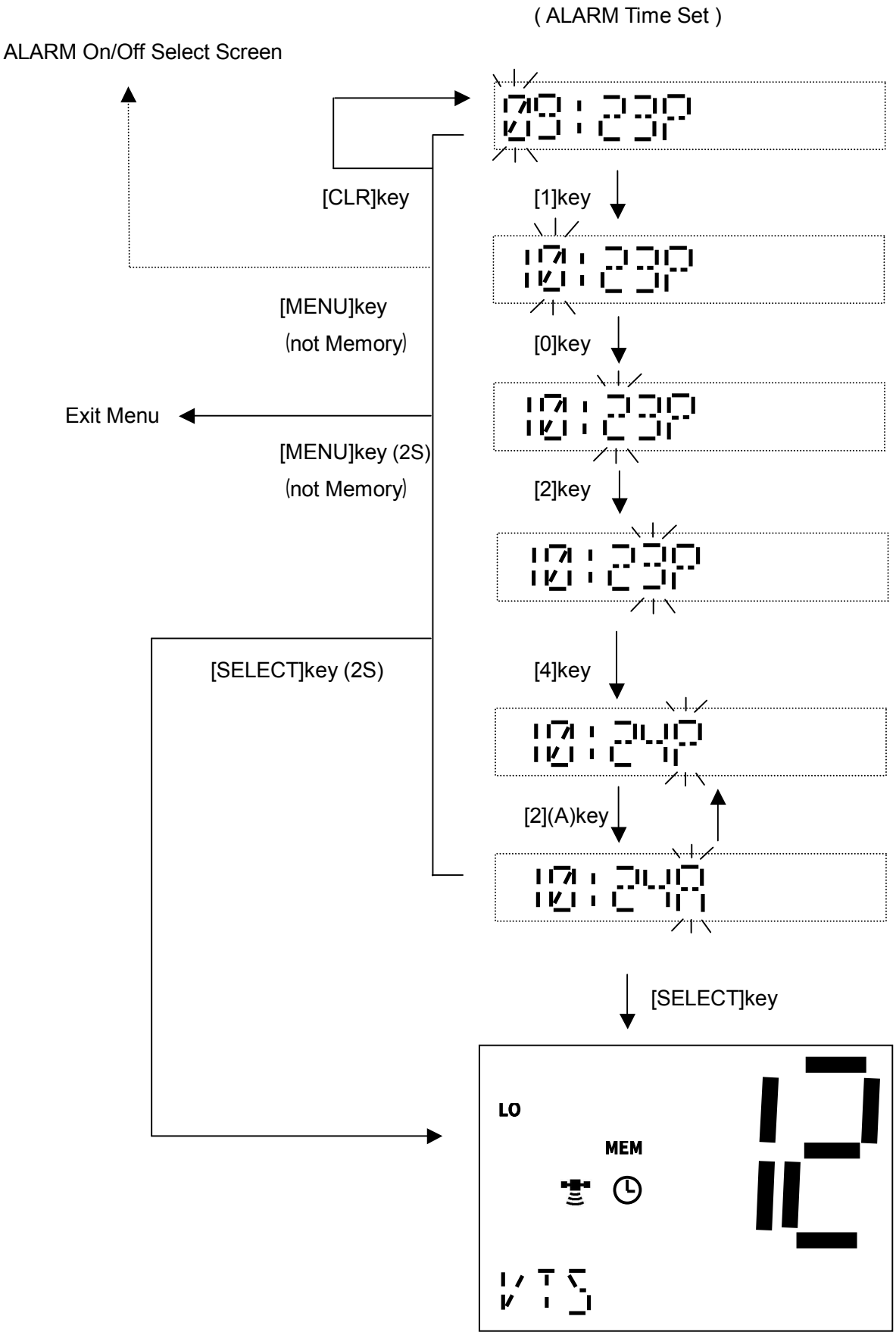
5.5.2.1. ALARM CLOCK Menu

This feature will allow the user to set the alarm based on satellite time only if GPS is connected to the NMEA0183 jack. This option will only appear in the options list if a GPS is added to the unit.

When set-up time comes, the radio will generate alarm. While alarm is generated, “ALARM” icon blinks. Push any key, in order to cancel alarm and disappear the “ALARM” icon.

Example:





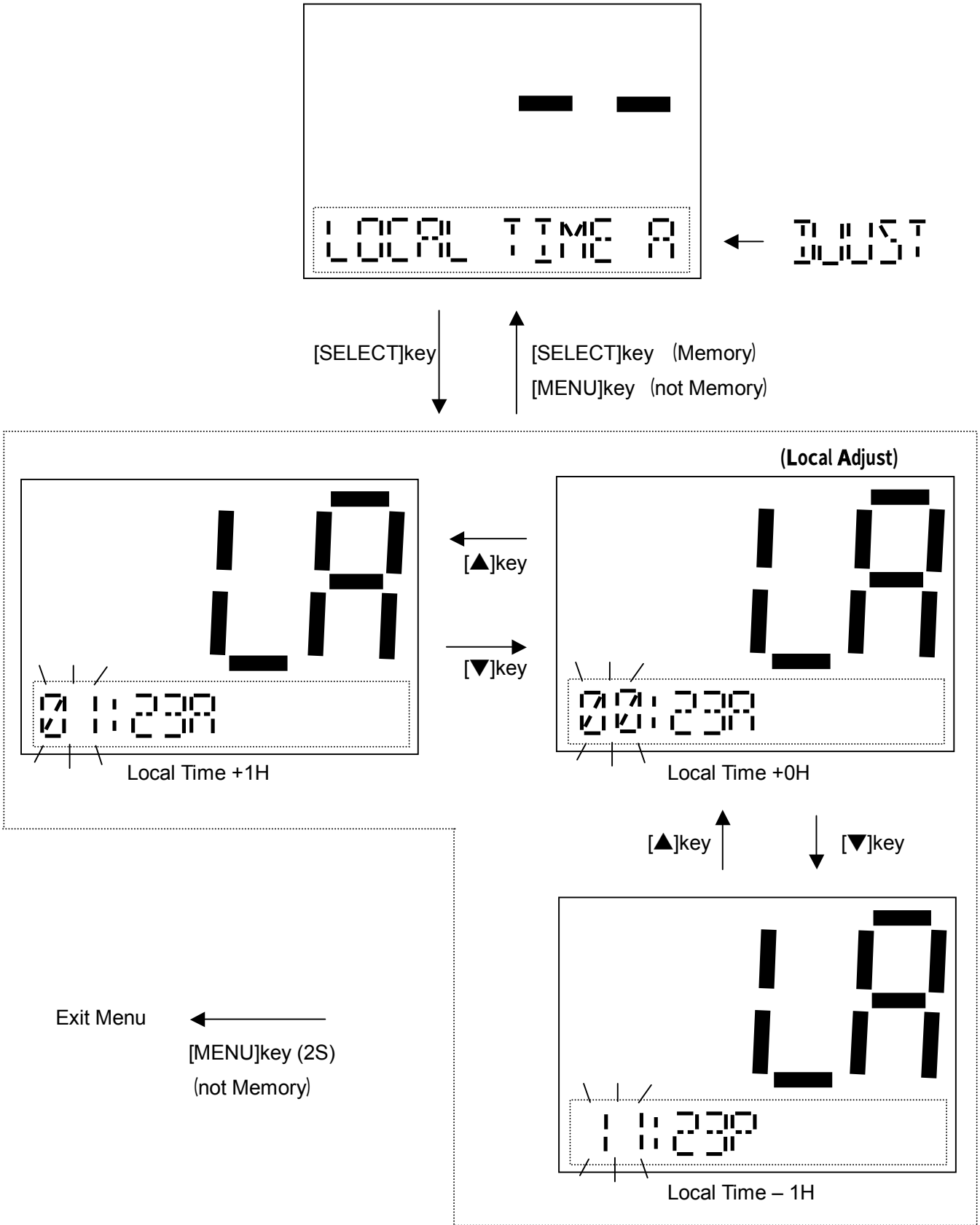
NOTE: [▲]key is used to change cursor position to right.

[▼]key is used to change cursor position to left.

5.5.2.2. LOCAL TIME ADJUST Menu

This feature allows to adjusting local time –1H to + 1H.

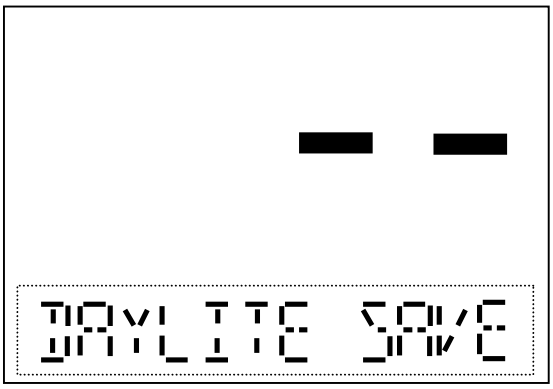
The following screens illustrate how to select this feature.



5.5.2.3. DAYLITE SAVE Menu

This feature allows changing the summer time is turned on or off.

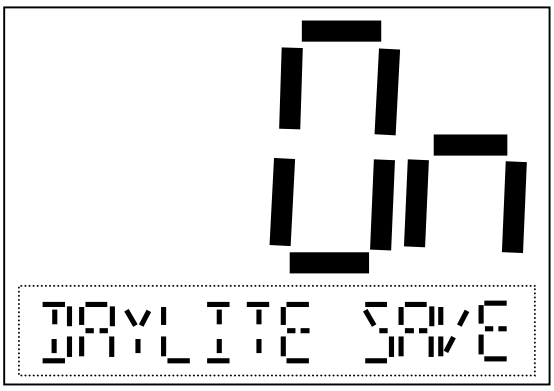
The following screens illustrate how to select this feature.



[SELECT]key

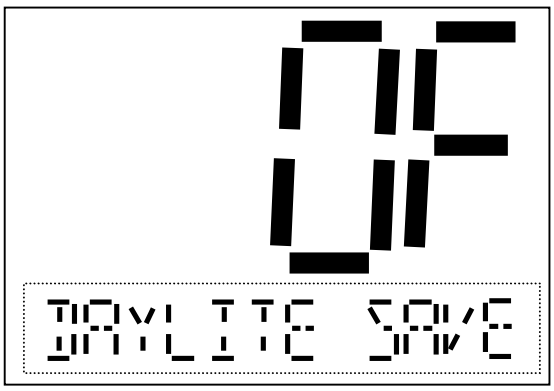
[SELECT]key (Memory)

[MENU]key (not Memory)



[▲]key

[▼]key



Summer Time : On

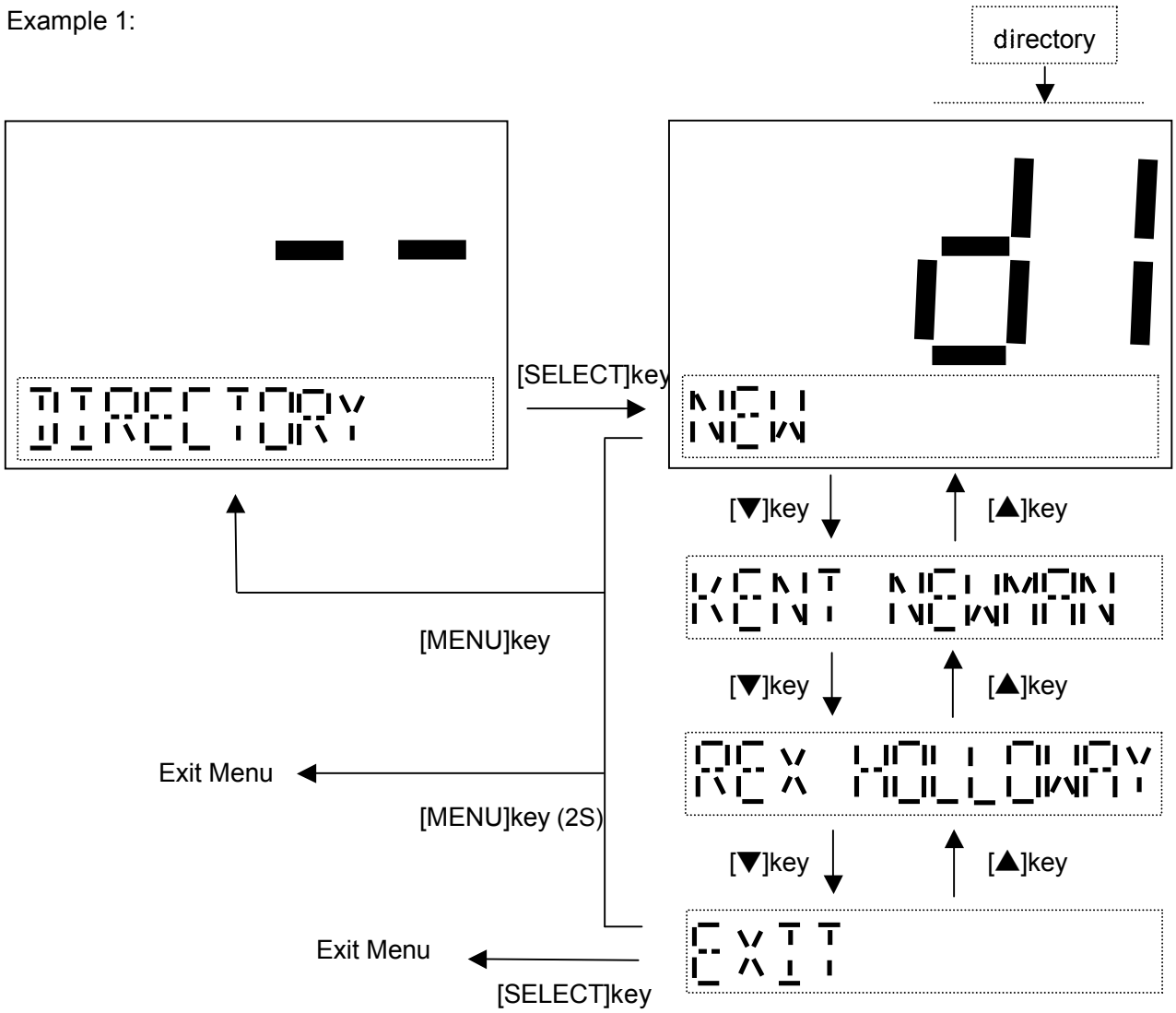
Summer Time : Off

[MENU]key (2S)
(not Memory)

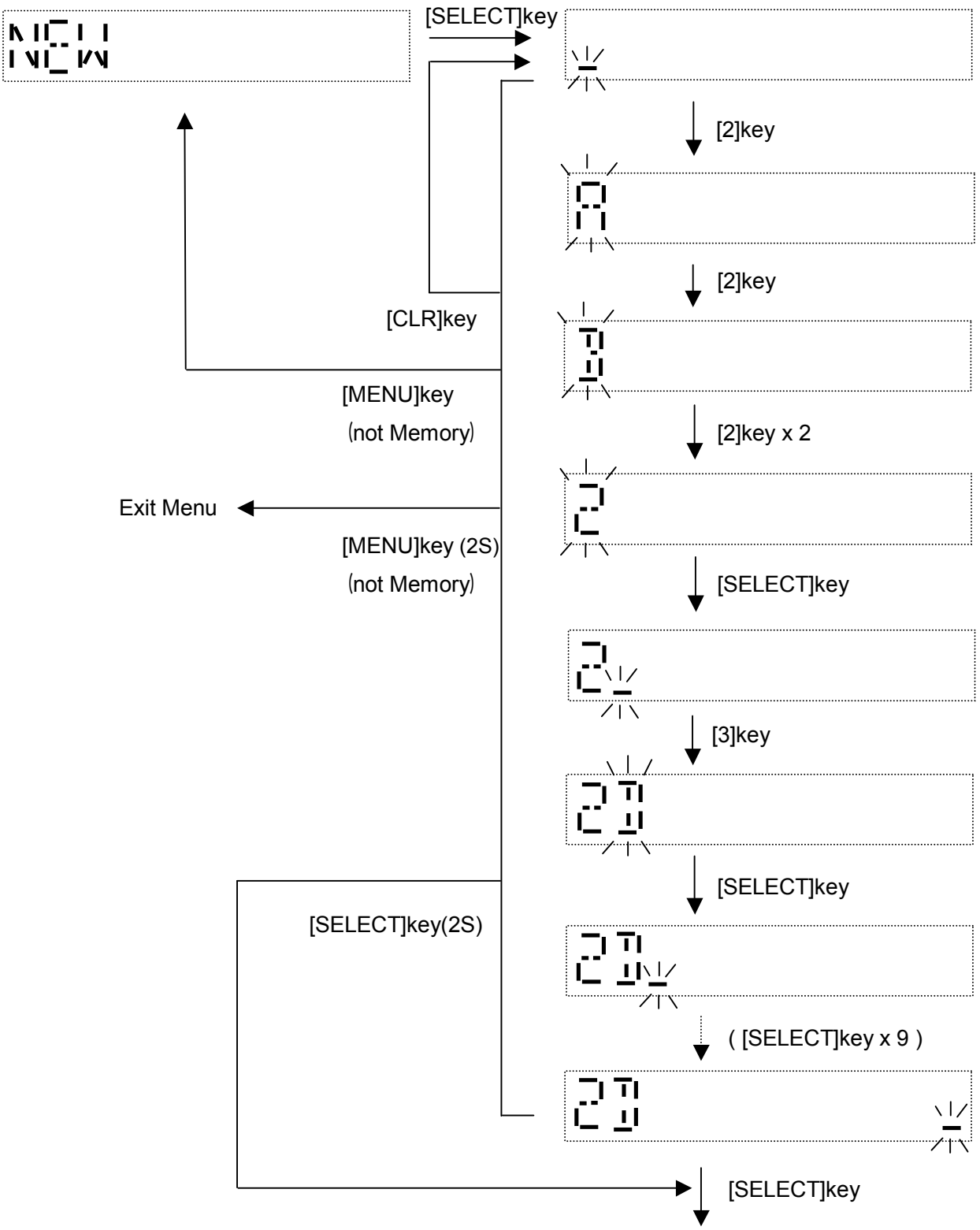
Exit Menu

5.5.2.4. DIRECTORY Menu

Example 1:

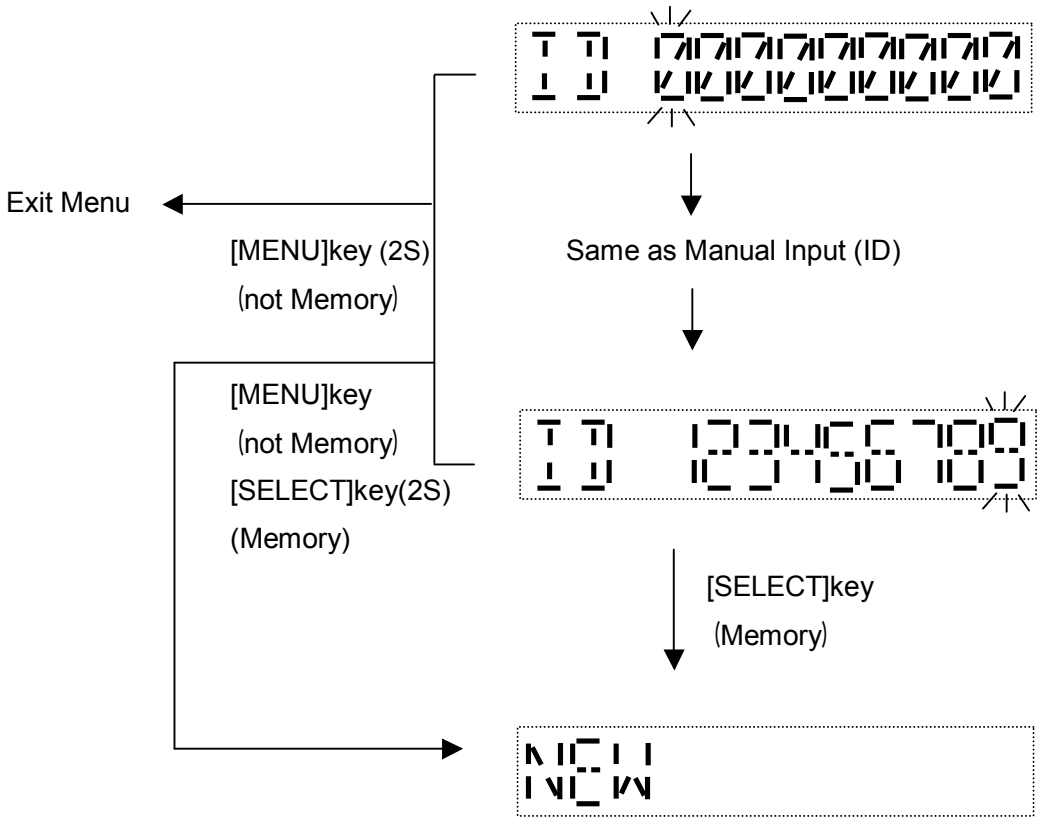


Example 2: Set New Data

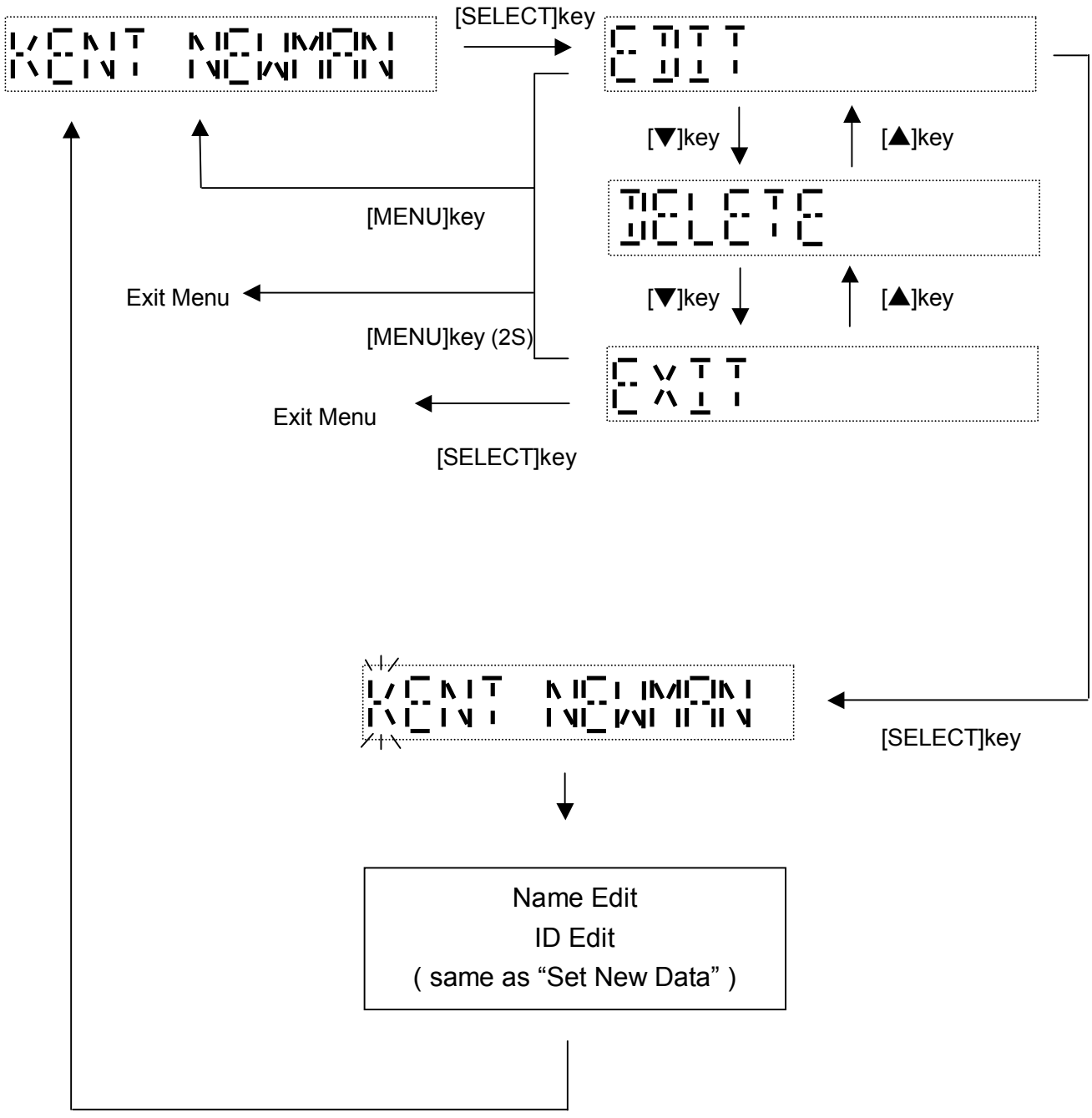


NOTE: [▲]key is used to change cursor position to right.

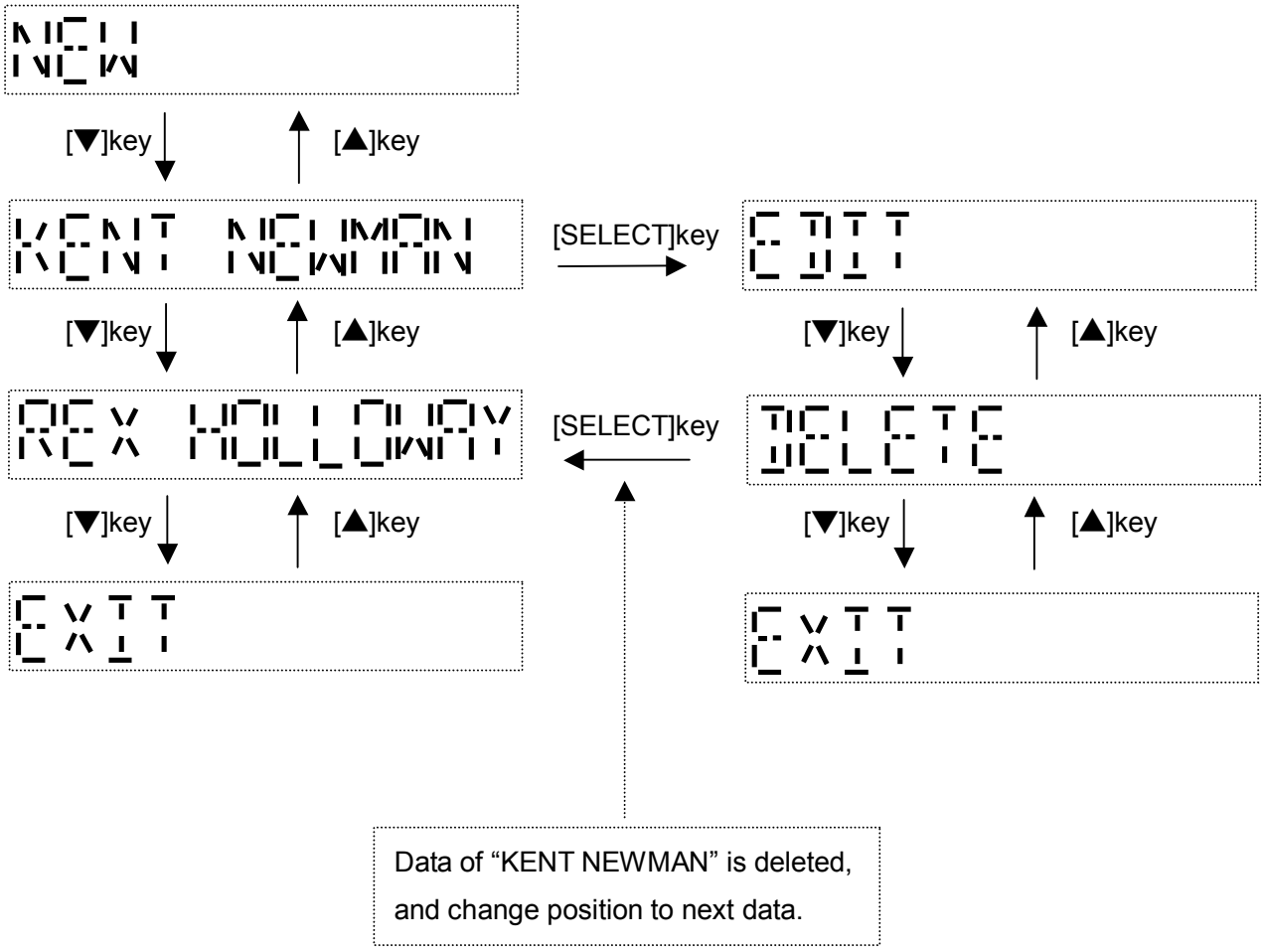
[▼]key is used to change cursor position to left.


Exit Menu
[MENU]key (2S)
(not Memory)
Same as Manual Input (ID)
[MENU]key
(not Memory)
[SELECT]key(2S)
(Memory)
[SELECT]key
(Memory)

Example 3: Edit Data

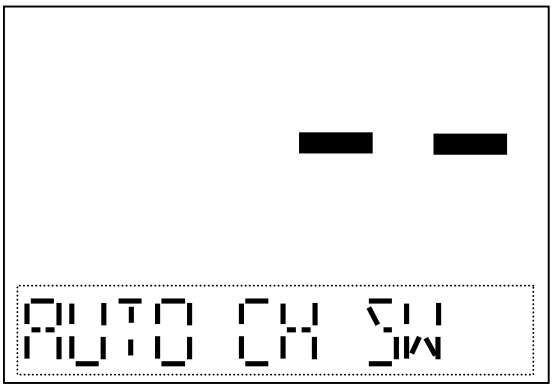


Example 4: Delete Data



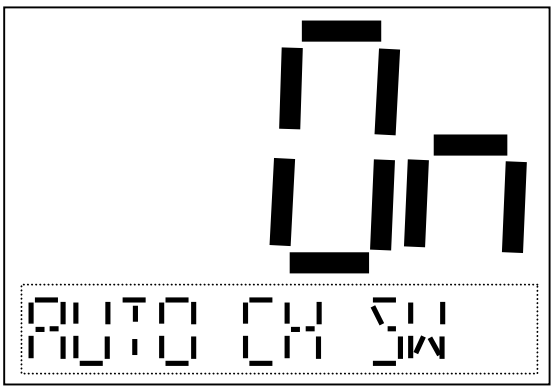
5.5.2.5. AUTO CH SW Menu

This feature allows disabling the automatic channel change that happens when receiving a DSC Call. The following screens illustrate how to select this feature.



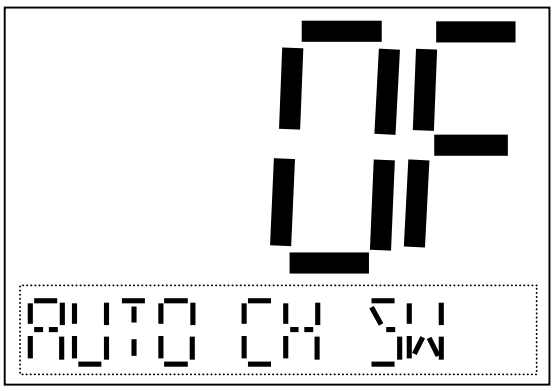
[SELECT]key

[SELECT]key (Memory)
[MENU]key (not Memory)



[▲]key

[▼]key



AUTO CH SW : On

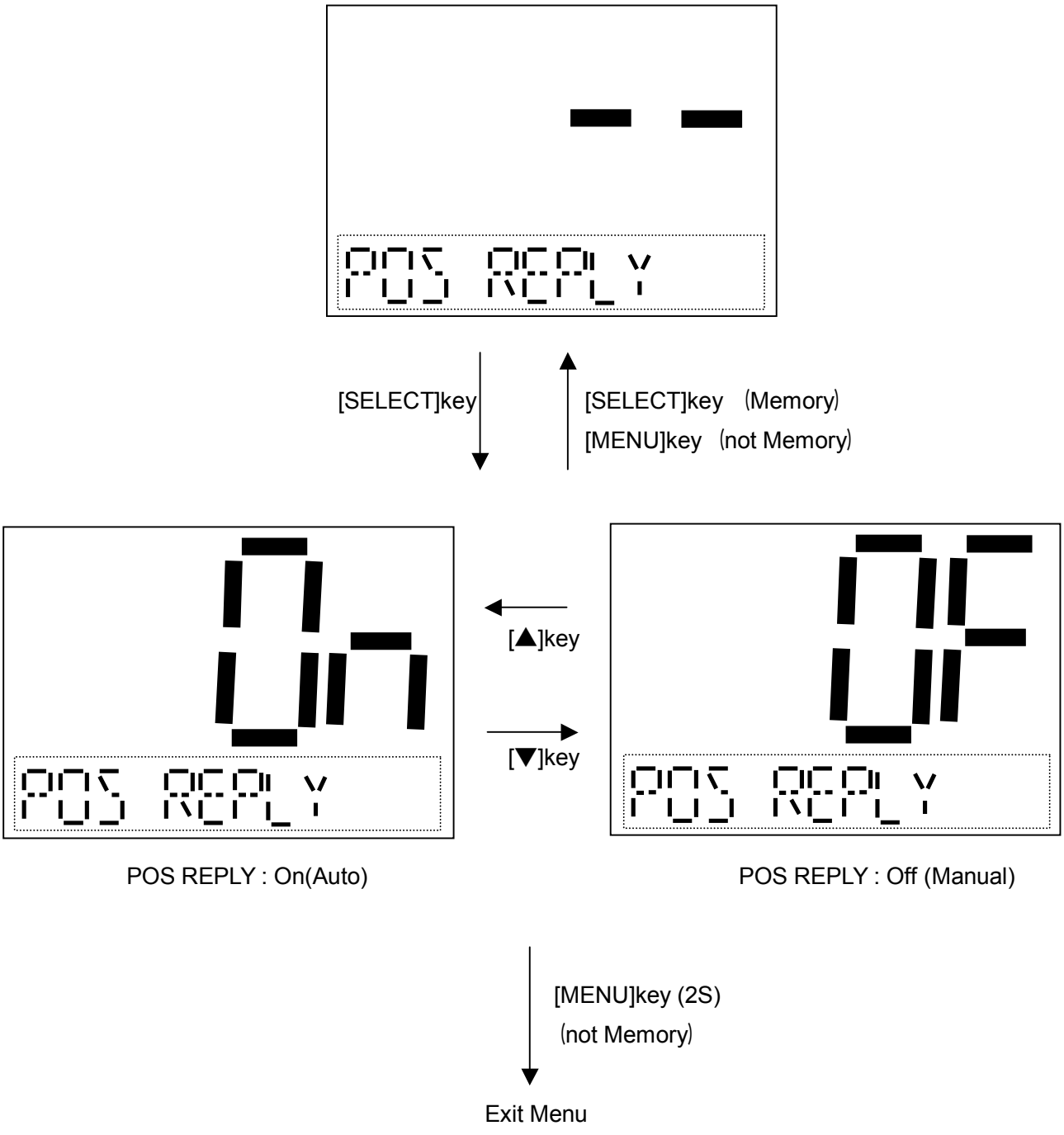
AUTO CH SW : Off

[MENU]key (2S)
(not Memory)

Exit Menu

5.5.2.6. POS REPLY Menu

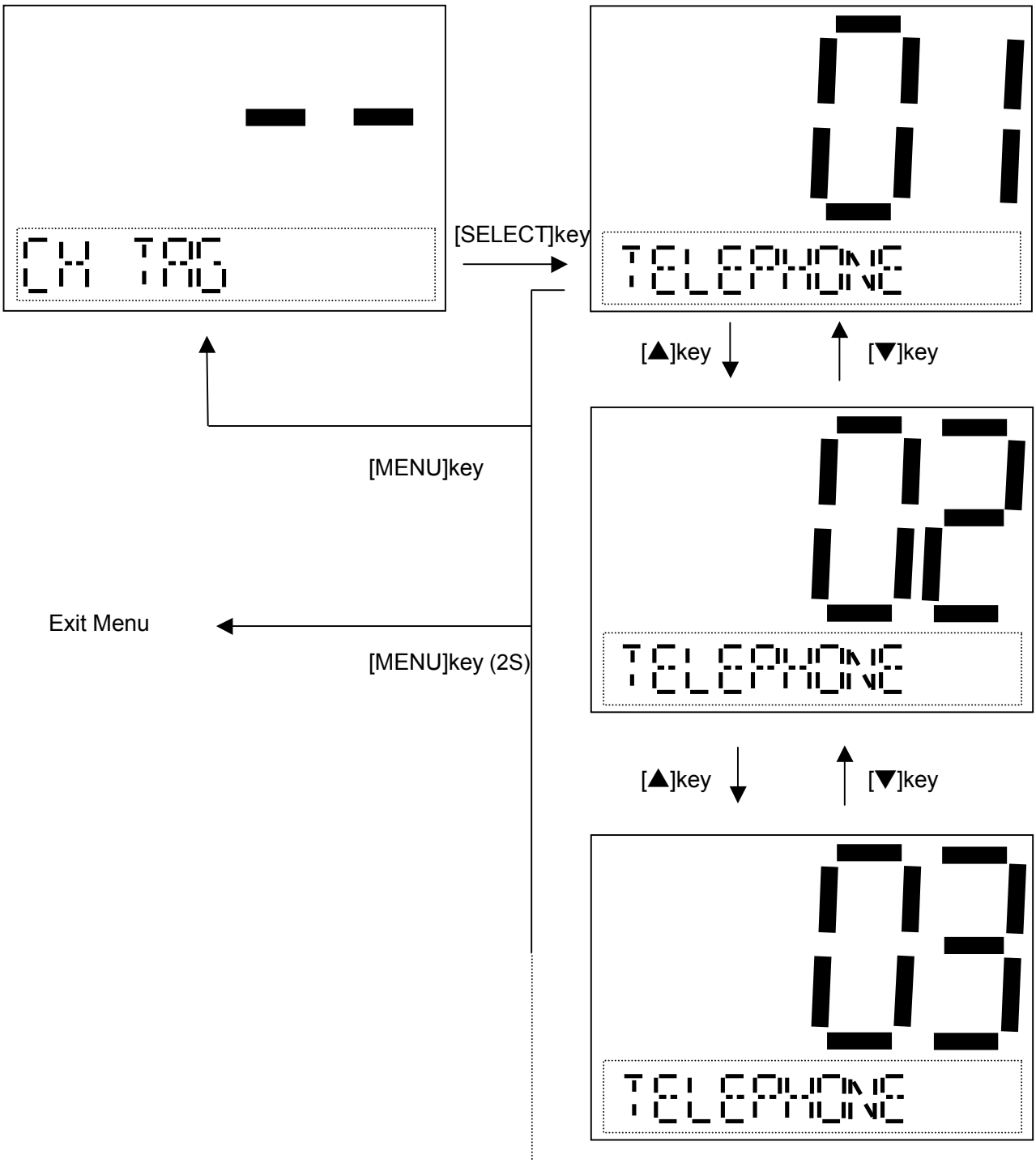
When this radio is requested the position data by other vessel, the user can decide to transmit the ACK automatically or manually.



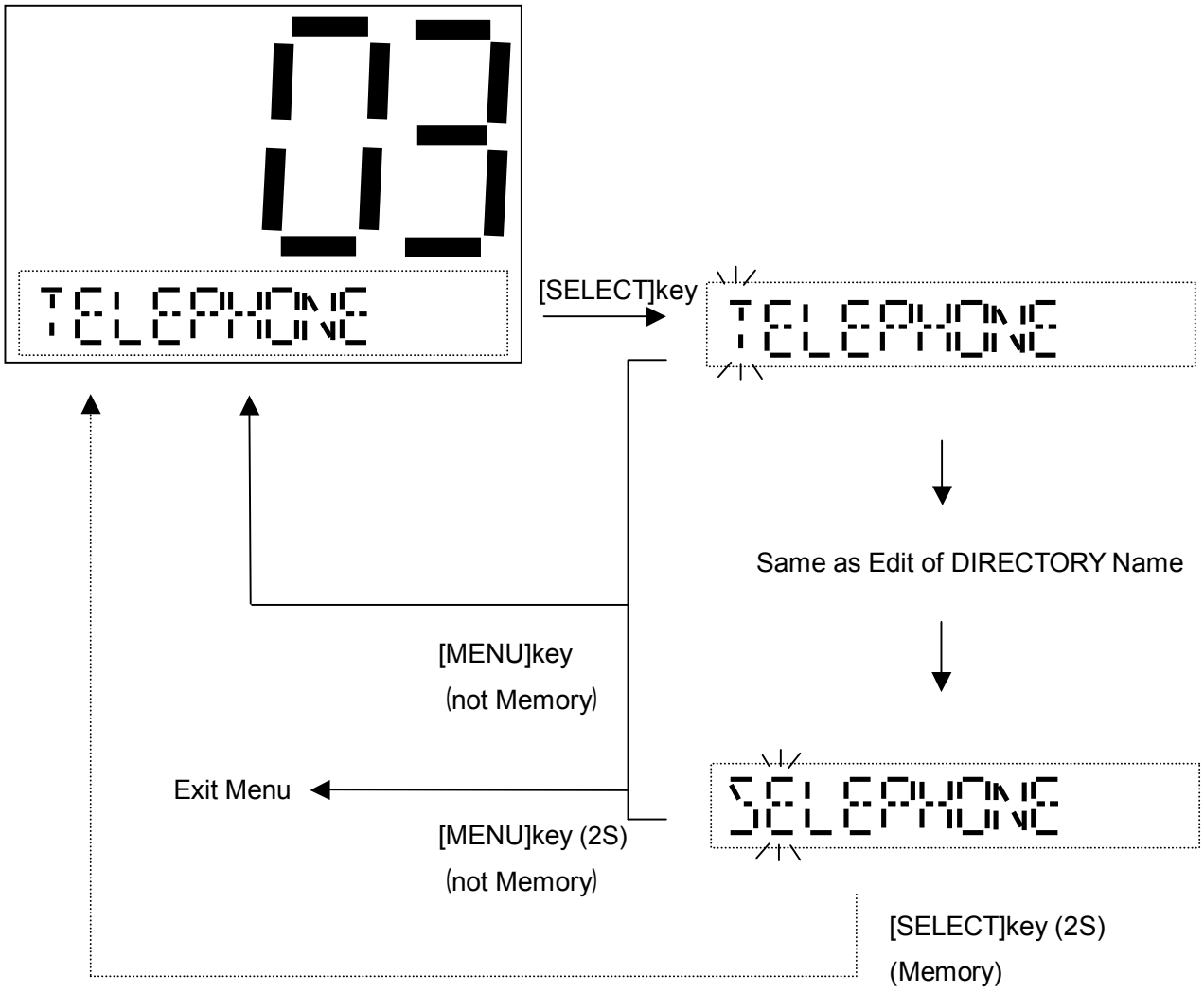
5.5.2.7. CH TAG Menu

This feature allows setting name each MRN channel. (The user can name for the channel of each of U.I.C mode.) Max character of the TAG is 12digits.

Example 1:



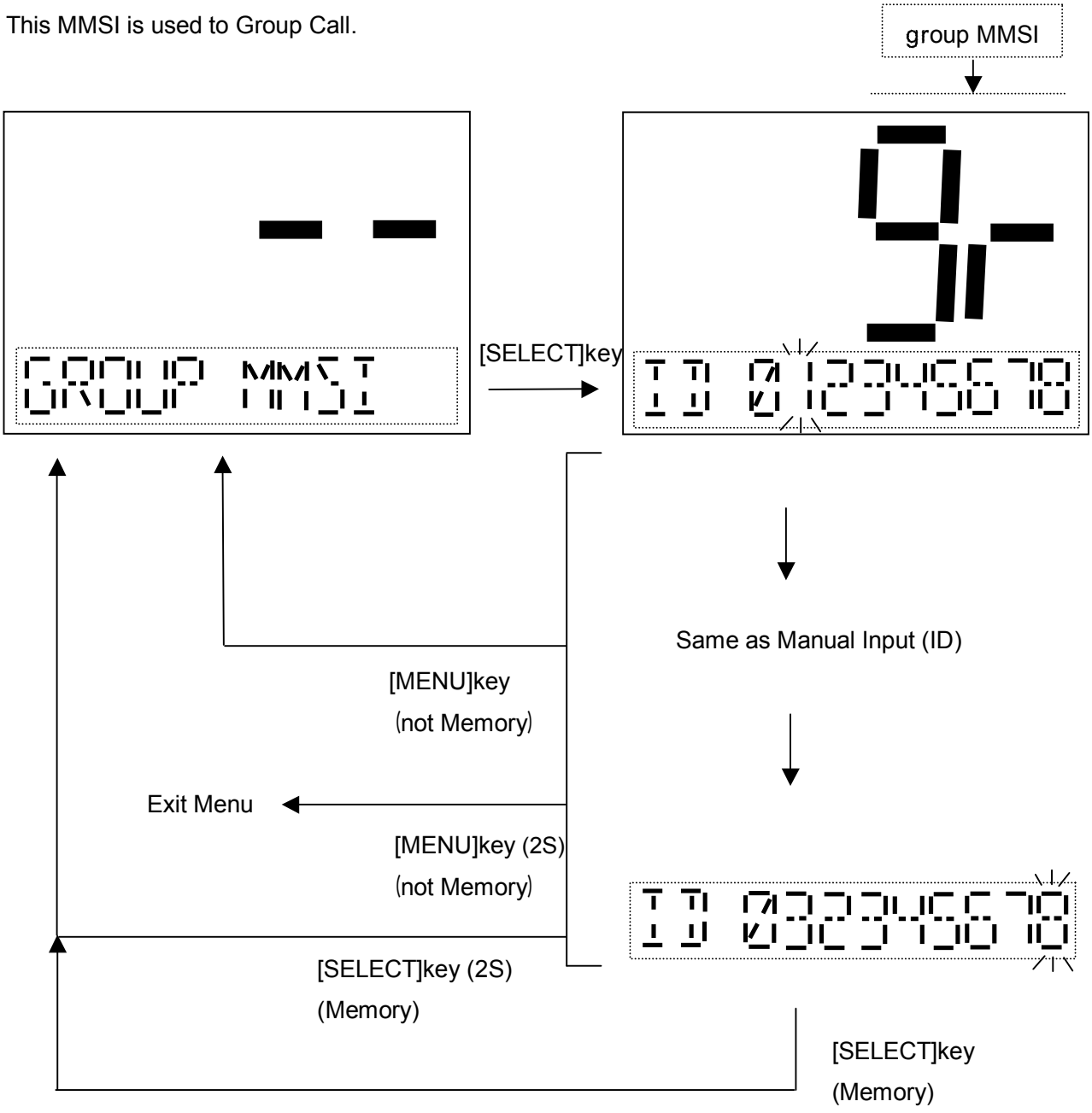
Example 2: Edit Data



5.5.2.8. GROUP MMSI Menu

Group MMSI is composed by number of 9 digits.

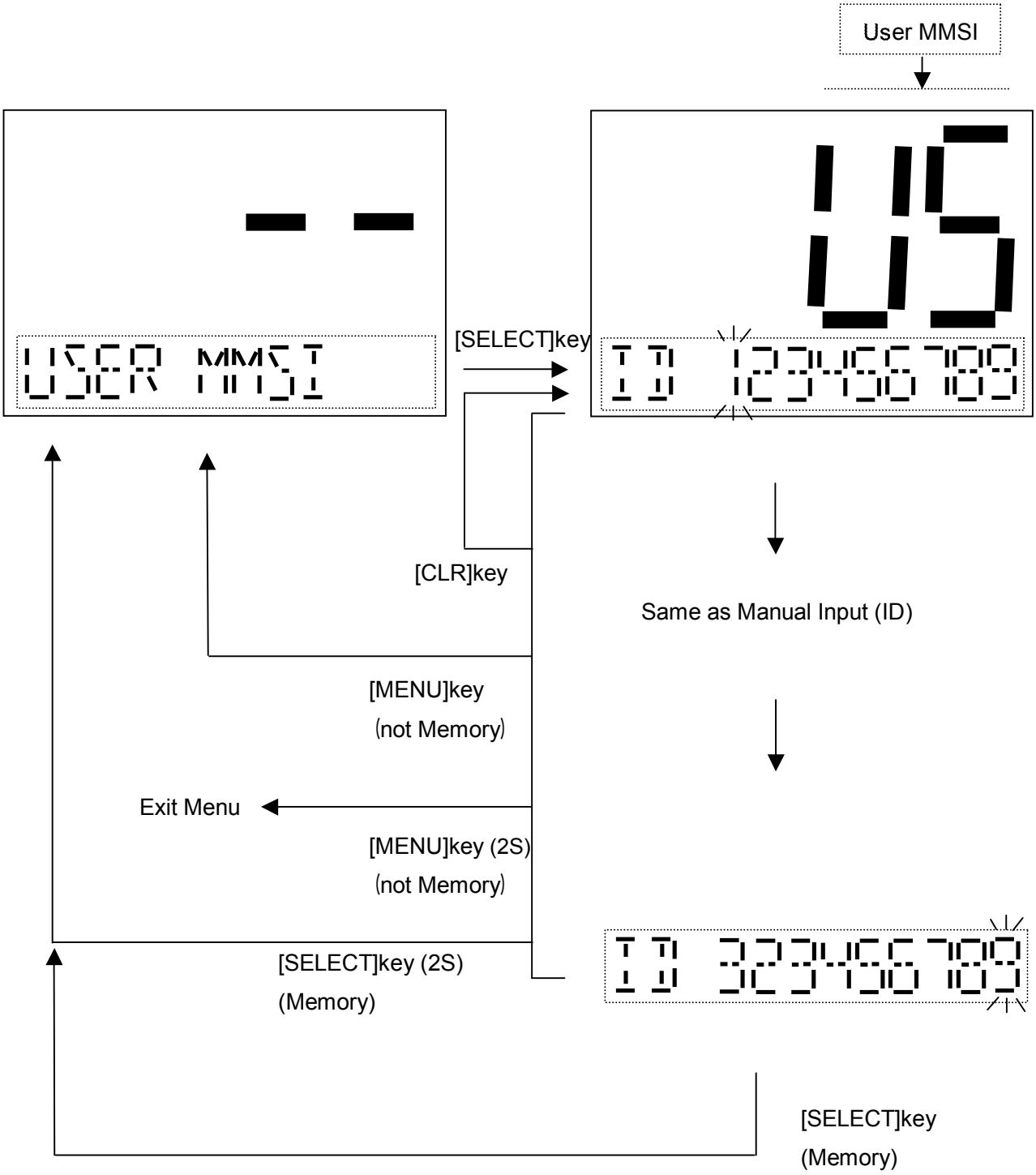
This MMSI is used to Group Call.



Note : The first digit of a Group MMSI is preselected “0” in the radio.

5.5.2.9. USER MMSI Menu

USER MMSI is composed by number of 9 digits. The specifications for this feature state that the radio can only be programmed 1 time. If the radio needs changing the MMSI 2times, the user should send back to Uniden for reprogramming.

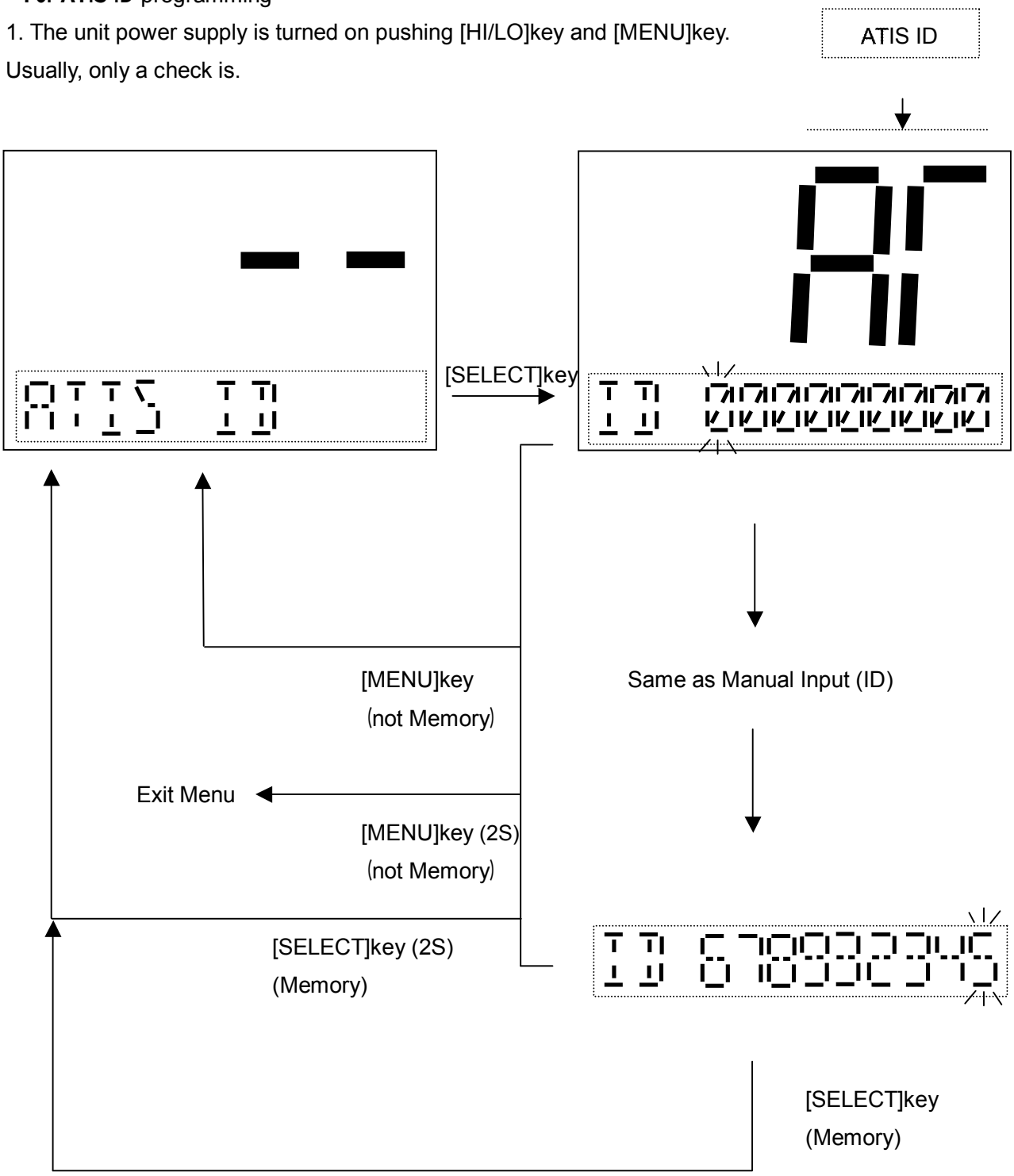


5.5.2.10. ATIS ID Menu

The ATIS ID is composed by number of 10 digits. The first digit of ATIS ID is preselected “9” in the radio. The ATIS ID can only be entered once. If it is necessary to change the ATIS ID, the user should send back to Uniden for reprogramming.

*** For ATIS ID** programming

1. The unit power supply is turned on pushing [HI/LO]key and [MENU]key. Usually, only a check is.



5.5.3. SYSTEM Menu

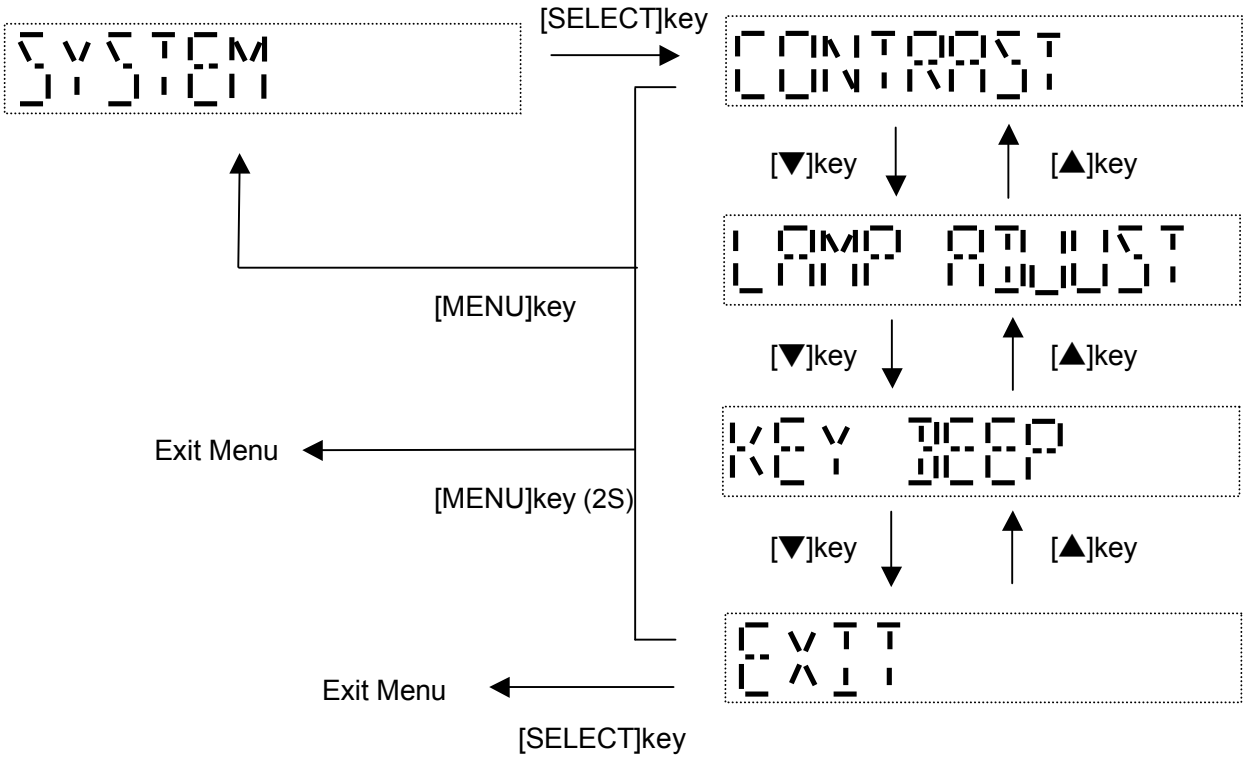
This section has explained about setting of System of this radio.

Items in System Menu are as follows.

CONTRAST

LAMP ADJUST

KEY BEEP

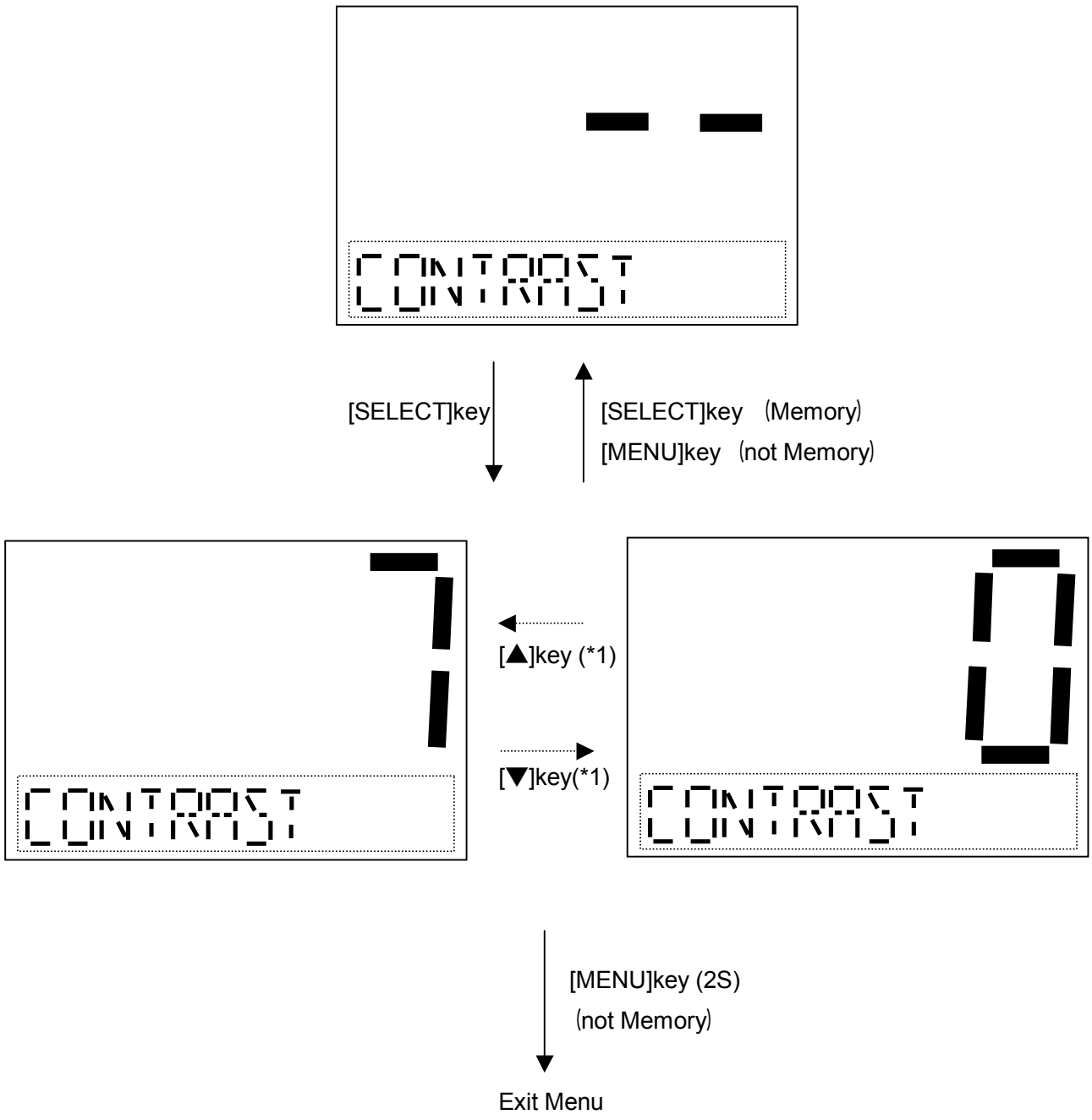


5.5.3.1. CONTRAST Menu

This option allows changing the contrast levels of the LCD.

The contrast can be set as 0 - 7 levels continuously.

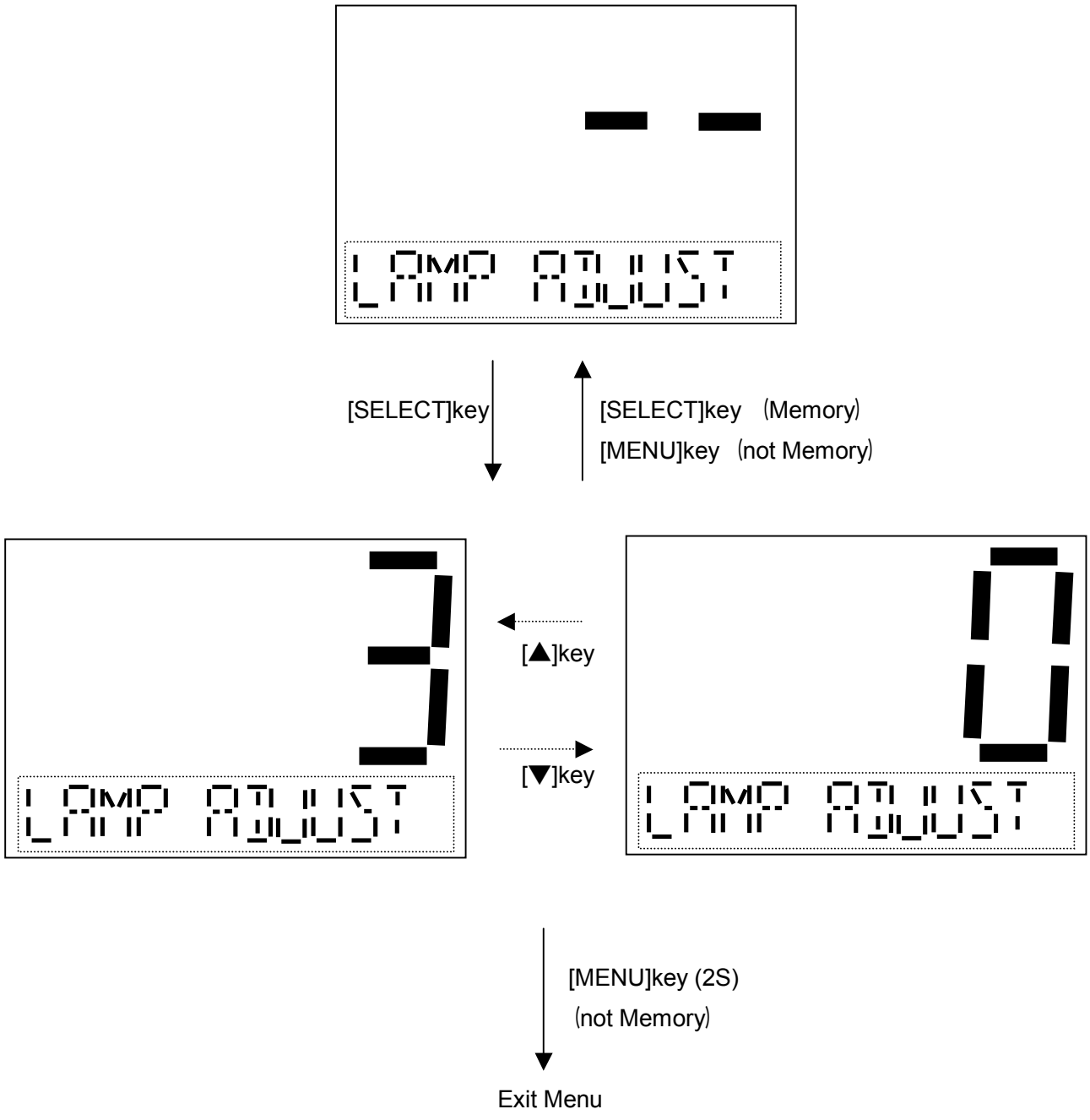
The each level has adjusting of 5step.



*1 : Push and hold the key.

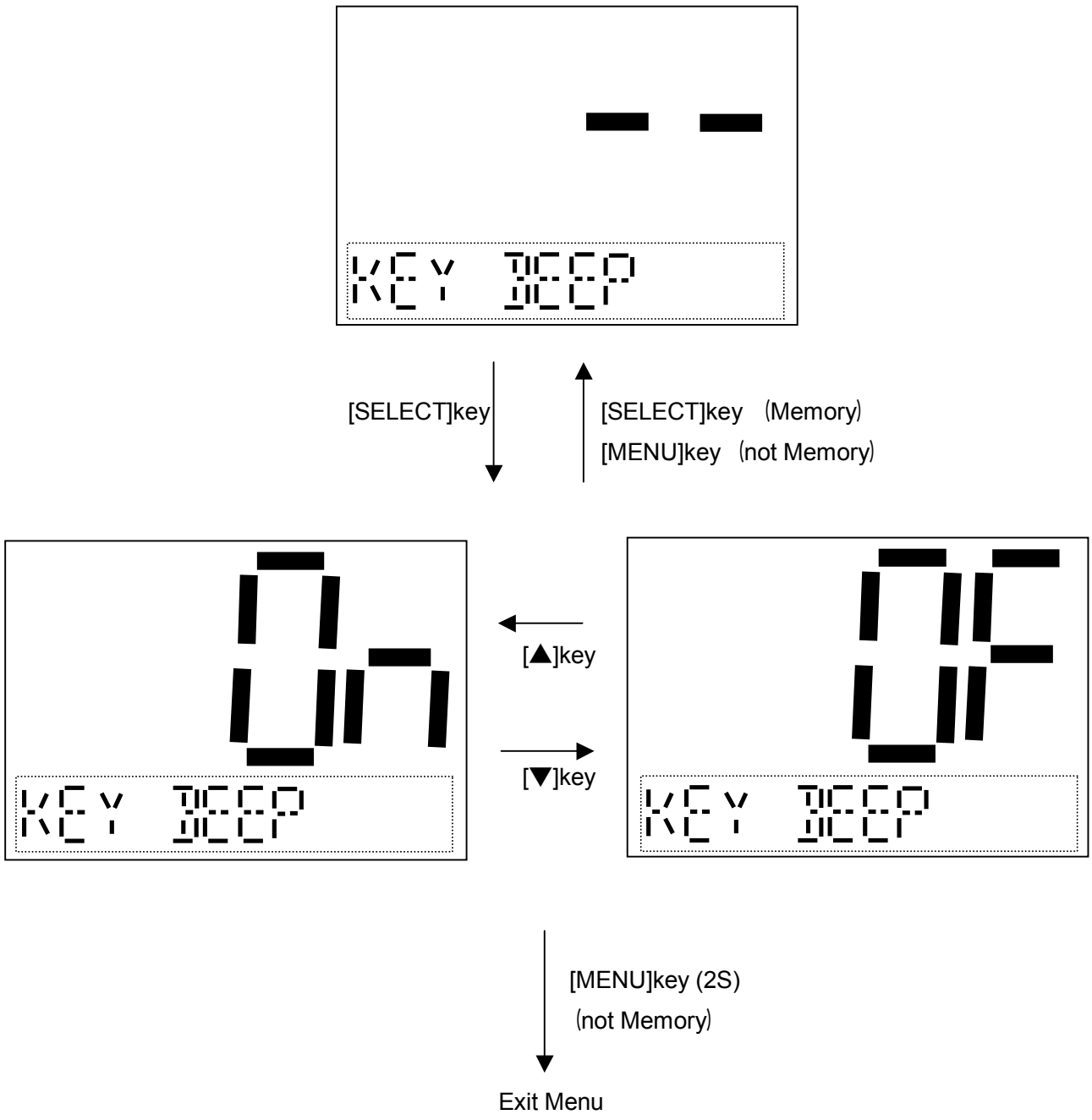
5.5.3.2. LAMP ADJUST Menu

The feature allows changing the brightness level of the back lighting of the LCD screen and the keys. The brightness can be set as 4 levels.



5.5.3.3. KEY BEEP Menu

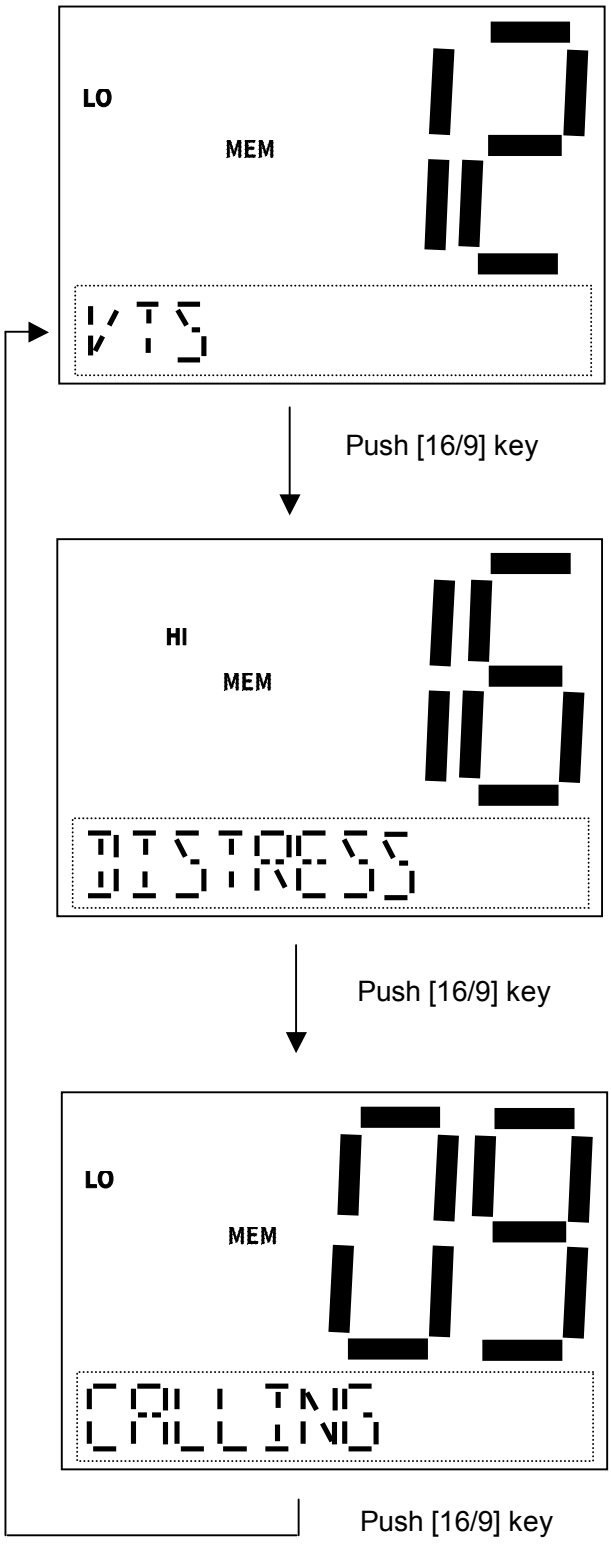
This feature allows changing the Key Beep (Key Tone, Error Tone and Wake Up Tone) is enabled (on) or disabled (off).



5.6. 16CH / 9CH

Pushing [16/9 /TRI] key immediately recalls EMG 16CH from any location except when current channel is 16CH. (But if Triple watch mode is ON, the channel will change to EMG 16CH.)
And the transmit output power will change to HI in 16CH. Next push [16/9 /TRI] key to recall EMG 9CH. Pushing [16/9 /TRI] key again reverts the radio to the previous select channel.

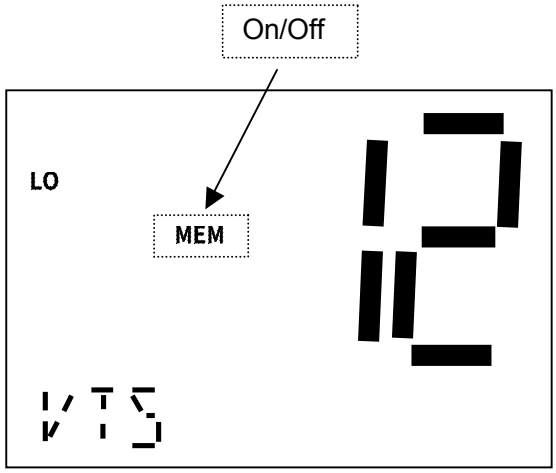
When [16/9 /TRI] key is pushed on conditions that Scan mode or Triple watch mode is ON, Scan mode or Triple watch mode is stopped temporarily.
When [PTT] key is pushed on condition that EMG mode is ON, Triple watch mode or Scan mode has be canceled.
When [16/9 /TRI] key is pushed when Triple watch mode or Scan mode has stopped temporarily, then these modes will be recalled.
When [16/9 /TRI], [▲], [▼], and [STEP/SCAN] key is pushed, EMG mode is canceled.



5.7. Memory Channel Set / Cancel

Pushing [MEM] key to store the memory with the current MRN CH by not memory channel, “MEM” icon appears.

Pushing [MEM] key to remove the memory of channel, and “MEM” icon disappears.



NOTE

(Memory Channel can be set up by mode of USA, INT, and CAN.)

If the radio is SCAN mode with scanning, the channel can’t be set.

Pushing [MEM] key while staying the channel that is scanning, the channel will be canceled the memorized channel.

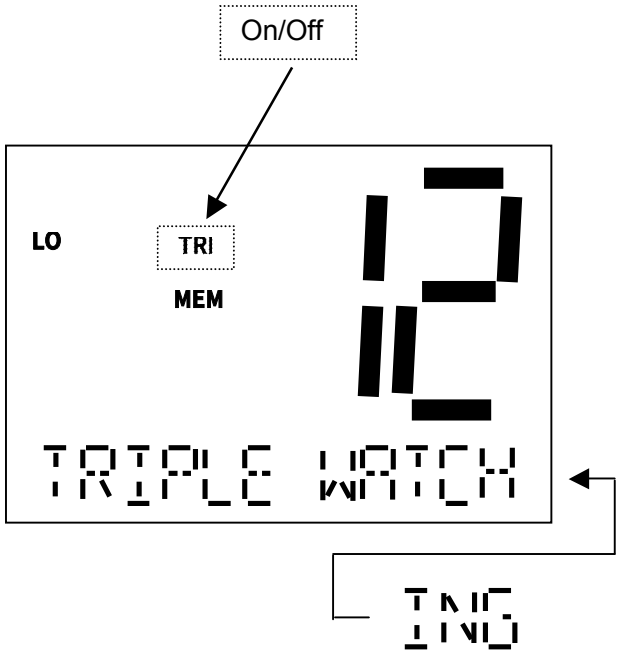
If repeat the above-mentioned operation, a memory channel is turned off. If the memorized channel becomes only one channel, scan mode will turn off and will turn into MRN Idle mode. Only one memorized channel is set as current channel. It cannot be cancel all memory channels at the same time.

5.8. Triple Watch

This function carries out scan of 9CH, 16CH, and current channel.

Pushing and holding [16/9 /TRI] key for 2 seconds in state of Triple watch off, it is set to Triple watch on, “TRI” icon and message of “TRIPLE WATCHING” appears.

Pushing and holding [16/9 /TRI] key for 2 seconds in state of Triple watch on, it is set to Triple watch off, and “TRI” icon and message of “TRIPLE WATCHING” disappears.



NOTE

Triple watch receives EMG 16CH, EMG 9CH, and Current CH by turns.

If 9CH is busy, Triple watch receives EMG 9CH and EMG 16CH by turns.

If 16CH is busy, Triple watch only receives EMG 16CH.

If Triple watch is in EMG mode, Triple watch receives EMG 16CH, EMG 9CH and last MRN CH(16 or 9).

If user pushes [16/9 /TRI] key in Triple watch, Triple watch will be interrupted temporarily and it will be set to EMG 16CH. If user pushes [16/9 /TRI] key once again, it will be set to EMG 9CH, and Triple watch will be resumed if user pushes [16/9 /TRI] key once again.

Triple Watch will be resumed if a signal of EMG CH is lost for 3 seconds (Drop Out Delay Timer) in the EMG CH Stay state of Triple Watch On.

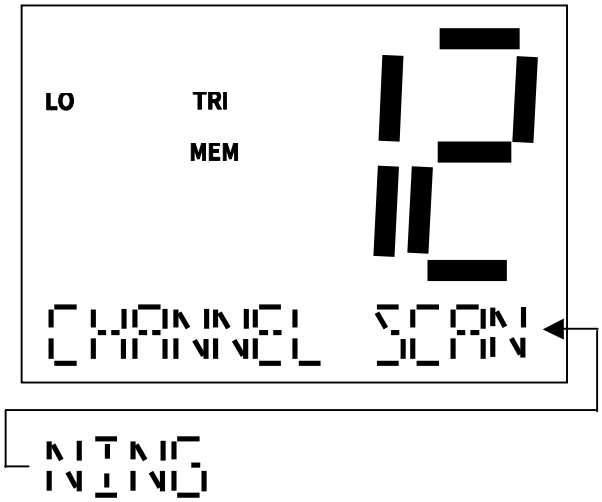
When [DISTRESS] key and [PTT] is pushed, Triple Watch mode is canceled.

5.9. Scan mode

This feature will allow the user to scan the memorized channels.

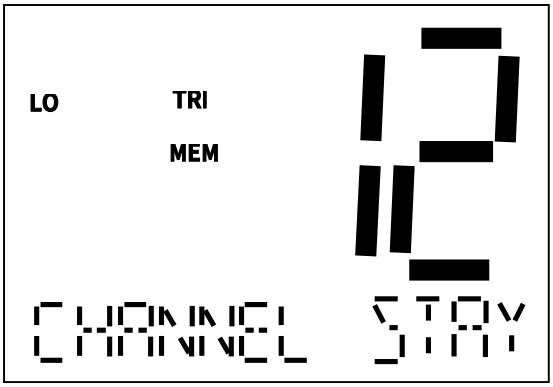
Pushing and holding [STEP/SCAN] key for 2 seconds in scan mode off, it is set to Triple watch scan on, “CHANNEL SCANNING” is indicated on 14seg. And “TRI” icon appears. Pushing and holding [STEP/SCAN] key for 2 seconds in scan mode on, it is set to scan mode off.

When [DISTRESS] or [PTT] key is pushed, SCAN mode is canceled.



If the radio has detected a signal, the CH digits are displayed a stay channel. If [▲] key is pushed while scan is staying, the memory channel can restart scanning.

If a signal stopped when the radio is staying a channel in Scan mode, then the radio wait to detect a signal for 3 seconds (Drop out Delay Timer). But if a signal wasn’t detected, then restart to scan.



Pushing and holding [STEP/SCAN] key for 2 seconds by EMG 16CH or EMG 9CH, EMG 16CH or EMG 9CH will be canceled and Triple watch scan will be started. When one does not have Memory channel, it is not set to scan mode and ring the Error Tone even if it pushed [STEP/SCAN] key. Pushing and holding [STEP/SCAN] key for 2 seconds at the time only a memory channel, it will be set to the Memory channel, without being set to scan mode.

Push [PTT] key or [SCAN] key in SCAN mode

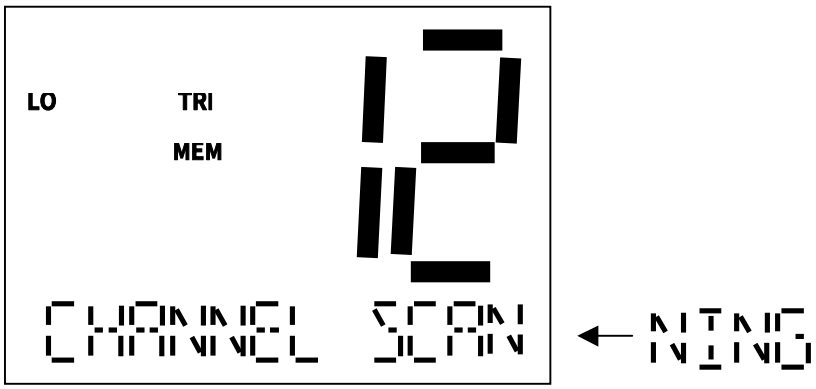
→ (Triple Watch) Scan mode will be OFF. Current channel become as following

Scanning	→ Scanning CH
Scan Stay	→ Stay Channel
16CH Watch Stay	→ 16CH
9CH Watch Stay	→ 9CH

5.9.1. Triple watch scan

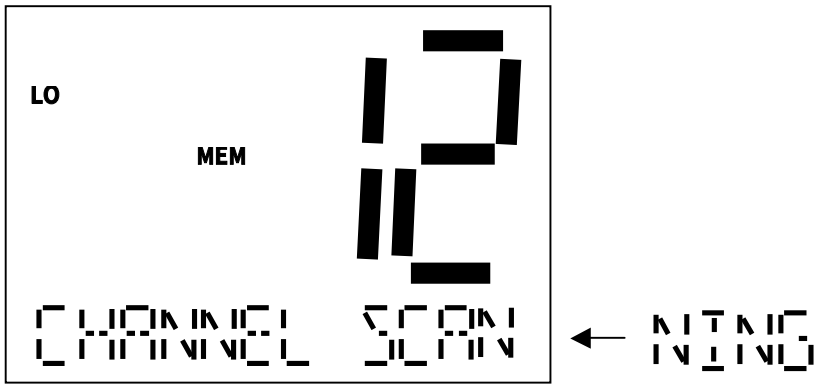
Pushing and holding [STEP/SCAN] key for 2 seconds in scan mode off, it is set to Triple watch scan on, “CHANNEL SCANNING” is indicated on 14seg. and “TRI” icon appears.

Although current channel is scanned, EMG 16CH and EMG 9CH are watched every 2 seconds. "TRI" turn on. Triple watch scan is not performed when the memory is not registered.



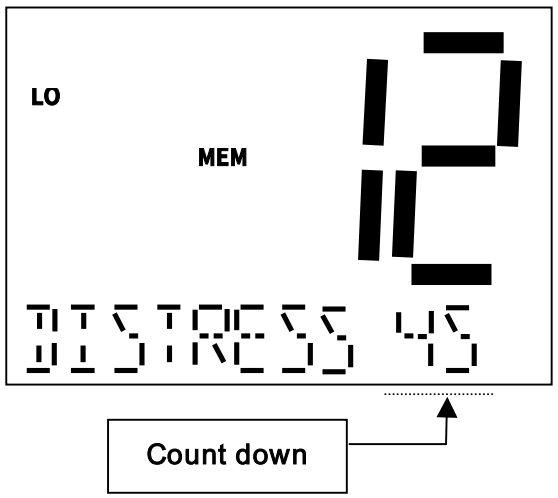
5.9.2. Normal scan

To Normal scan is turned on, pushing and holding [16/9/TRI] key for 2 seconds in Triple watch scan mode. Although Memory channel is scanned, EMG 16CH and EMG 9CH are not watched in Normal scan. Normal scan is not performed when the memory is not registered.



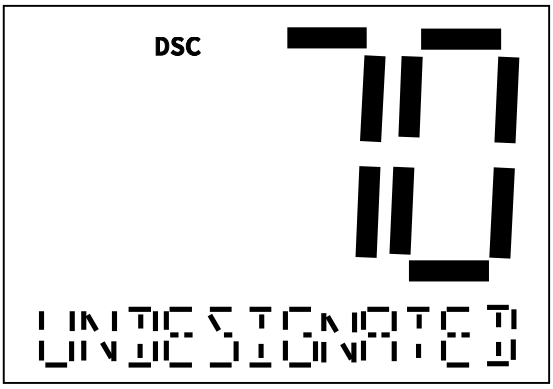
5.10. Distress

This feature will allow the user to transmit a Distress Call. In order to transmit a Distress Call, push [DISTRESS] key for 5 seconds. And select nature code. Then push [SELECT] key. Distress Call is sent with High Power (less than 25W).

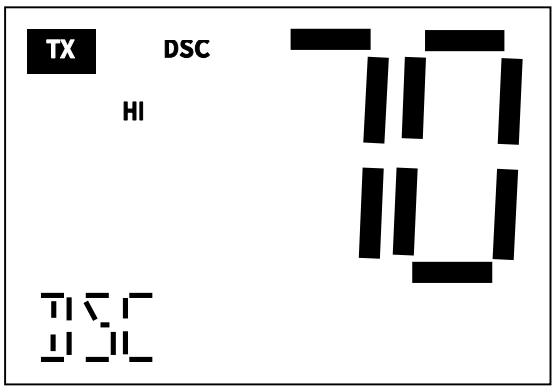


Count down

4S –1S count down



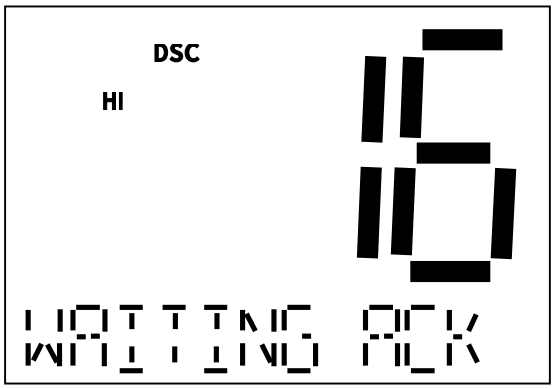
If channel 70 is free, it transmits a Distress Call automatically



TX Power : High

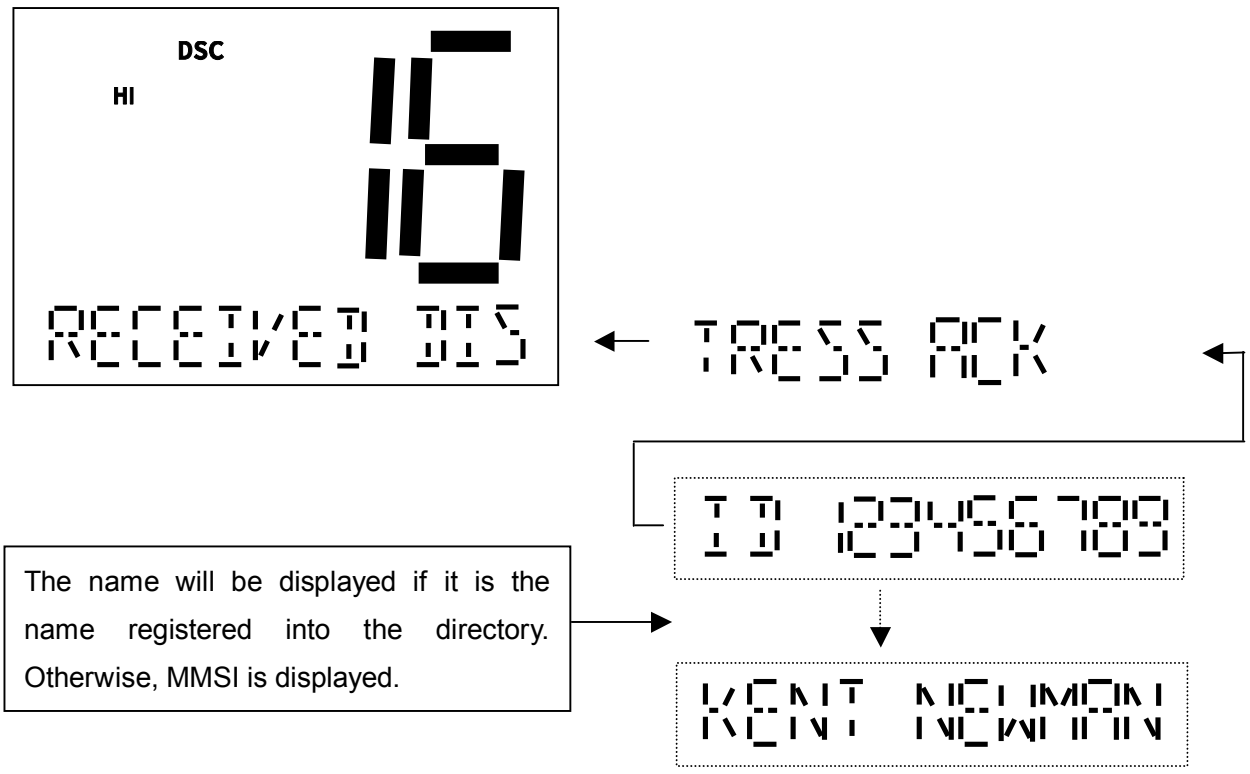
The radio “shadow-watches” for a transmission between CH16 and CH70 until an acknowledgment signal is received.
If user push [16/9 /TRI], it is canceled the Distress Call.

Then the Distress Call has been sent, the Distress alert will sound. Distress Call is transmitted and it waits for about 210 - 270 seconds. This is continued until an acknowledgment signal is received.



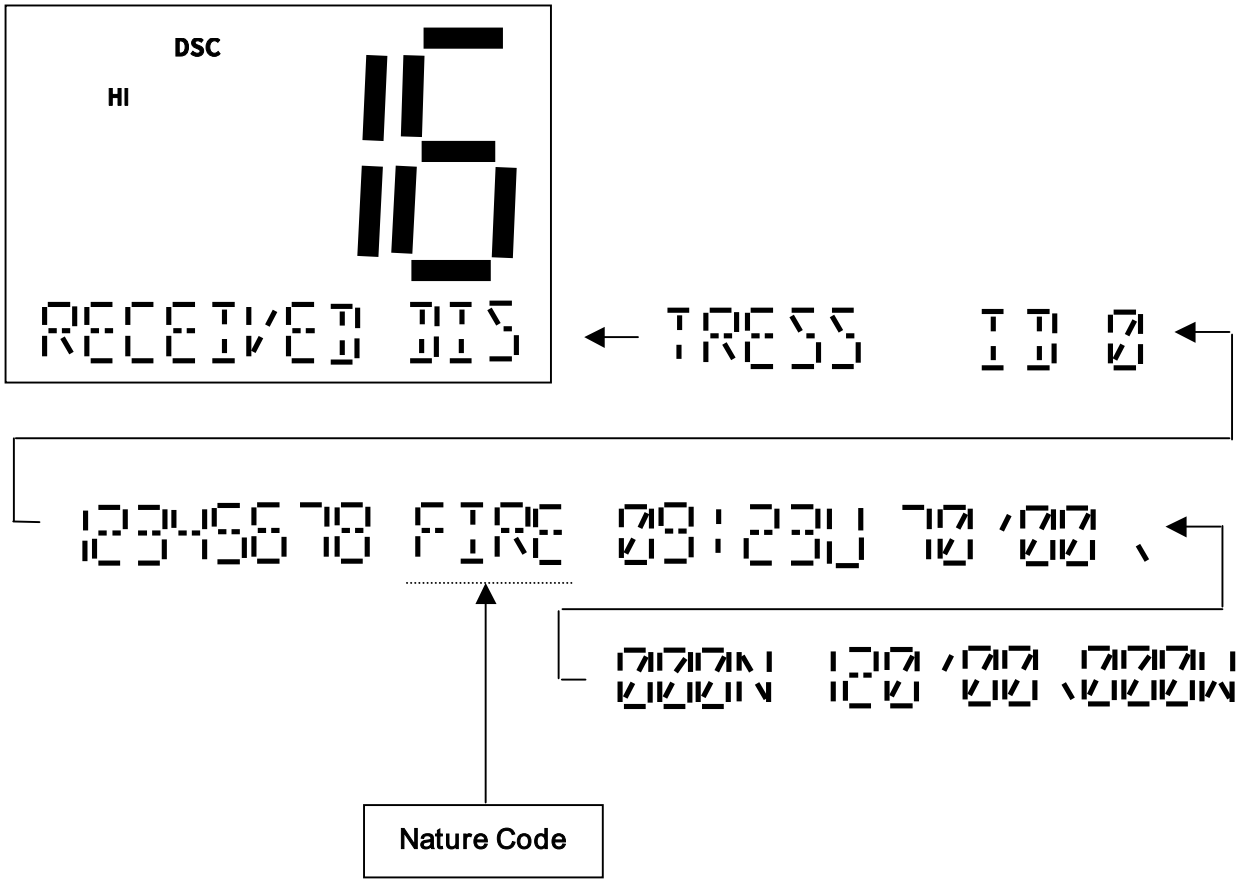
Distress Ack Wait

If this radio received an acknowledgment signal,
as shown in the following screen.



The name will be displayed if it is the name registered into the directory. Otherwise, MMSI is displayed.

If this radio takes a Distress Call, it will be displayed such as the following screen and an emergency alarm sounds. The screen will display a message with calling radio's MMSI(or Name), nature code, time (hour/minute) and position (degree/minute; second data = "000").
If the data of caller radio is attached second data of position, this radio will display second data too.
(This radio support the second data of position for Distress/Position Request Call)



FIRE
FLOODING
COLLISION
GROUNDING
CAPSIZING
SINKING
ADRIFT
ABANDONING
PIRACY/ARMED
OVERBOARD
UNDESIGNATED

If the radio receives a Distress Call without GPS data, the position data indicate as below.

A) Even if the radio has already displayed message screen, if the radio received a DSC Call, it will display a new message instead of old message
B) If the user pushes any key when message screen is displayed, the message screen is disappeared.
C) Even if the user doesn't push any key, the radio will stop DSC Routine Tone or DSC Distress Tone automatically. (When STANDBY mode is OFF, the tone stop after 5 minutes. When STANDBY mode is ON, the DSC Distress Tone stop after 30 sec, the DSC Routine Tone stop after 5 sec)
D) The radio don't watch 70CH if the signal of current channel is busy. So the radio can't receive DSC Call when signal is busy.
E) When the radio send DSC Call, Channel Display change to 70CH temporarily and check whether a signal (on 70CH) is busy. If signal is busy the radio will wait until signal isn't busy. If signal isn't busy the radio will send a DSC Call (If [16/9 /TRI] key was pushed, the radio cancel to send DSC Call).
F) When the radio received DSC Call, the radio is canceled SCAN, TRIPLE WATCH, EMG function/mode.
G) A) – F) are common operation of All DSC Call.

5.11. DSC Call

5.11.1. Individual

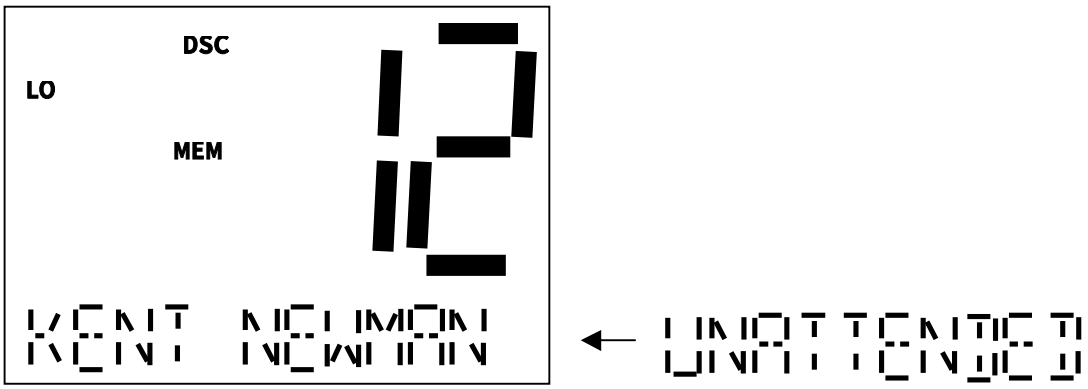
Please refer to P.21 [5.5.1.1 INDIVIDUAL CALL Menu] about transmit Individual Call.

Individual Call is sent with High Power.

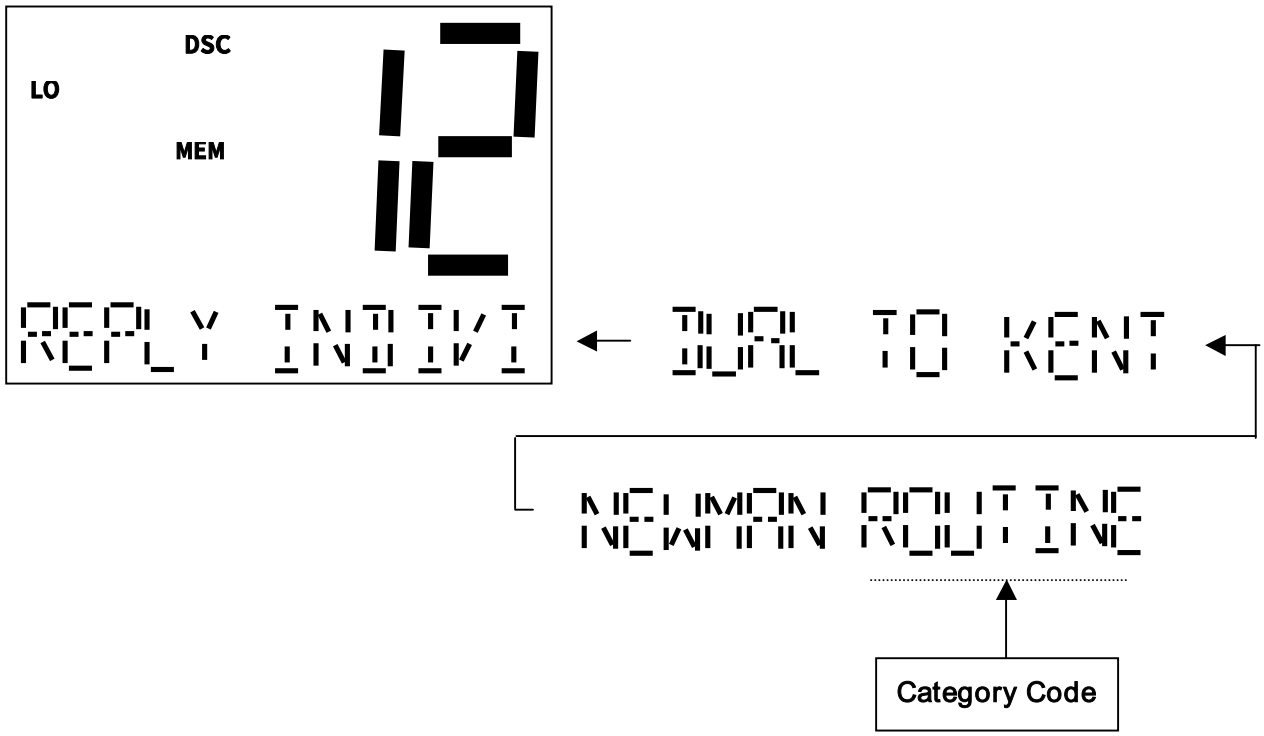
DSC Call Tone (Routine) will sounds when receive the ACK after sending Individual Call.

It will stop the tone to push any key.

If the calling vessel has already set “STANDBY” mode, it will display the following.



If this radio takes the Individual Call, it will be displayed the following screen and an emergency alert sounds. The name will be displayed if it is the name registered into the directory; otherwise MMSI is displayed with category code.
If user reply the Individual Call push [SELECT]key. If cancel to reply the call, push [MENU] or [CLR]key.



DISTRESS
URGENCY
SAFETY
ROUTINE
SHIP BUSINESS

Example: Radio one makes an Individual Call on 18CH and radio two is on 20CH. The receiving radio will automatically change to 18CH once the signal is received. The receiving radio will also display the name that has called and the indicator of INDIVIDUAL

NOTE
When the call is first made both radios will display 70CH while the signal is received. After all of the data is received, the receiving radio will change channels to the channel that the transmitting radio first sent the transmission out on.

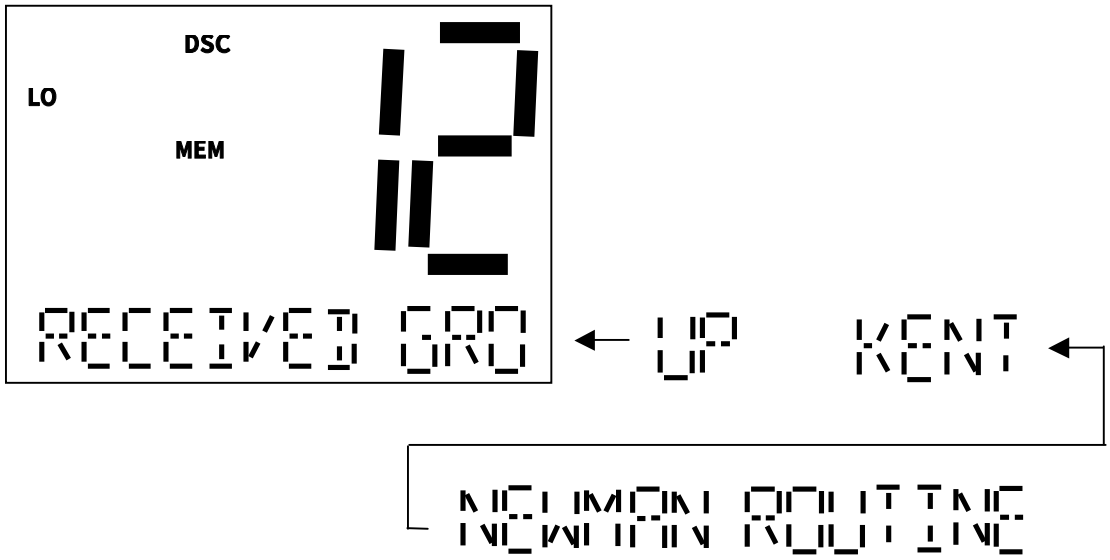
5.11.2. Group

Please refer to P.25 [5.5.1.2 GROUP CALL Menu] about transmit Group Call.

Group Call is sent with Low Power.

If Group MMSI registered beforehand is the same, it will be possible to communicate.

If this radio has received Group Call, the following screen display on LCD and sounds DSC Call Tone. To stop the tone, push any key. Push any key again, it will return to idle screen.



5.11.3. All Ships

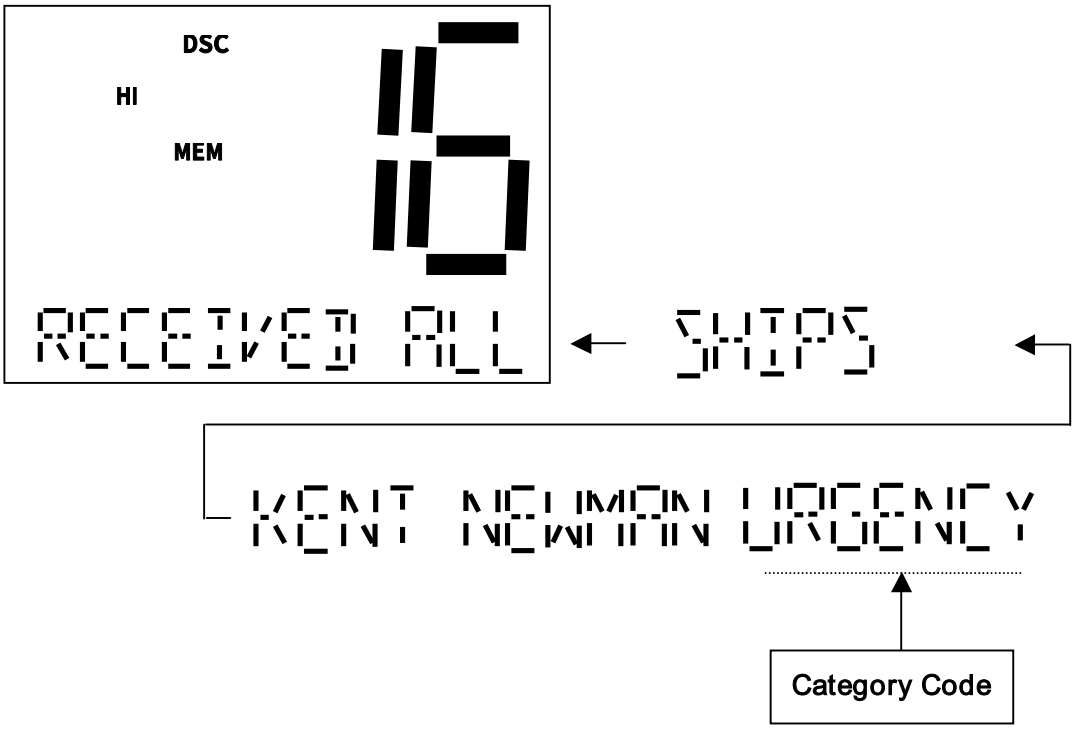
Please refer to P.27 [5.5.1.3 ALL SHIPS CALL Menu] about transmit All Ships Call.

ROUTINE is sent with Low Power. The others are sent with High Power.

This function will be used to send a message to all vessels. There will be three types of transmissions that may be sent, URGENCY, SAFETY and ROUTINE.

If this radio is received from other vessel, it will display the following screen. When sending either an URGENCY or SAFETY message, both radios will automatically move to 70CH until all of the data is received and then both radios will go to 16CH for transmissions and replies.

The ROUTINE transmission will go to 70CH until all data is transmitted, and then both radios will go to the channel that the transmission originated from.



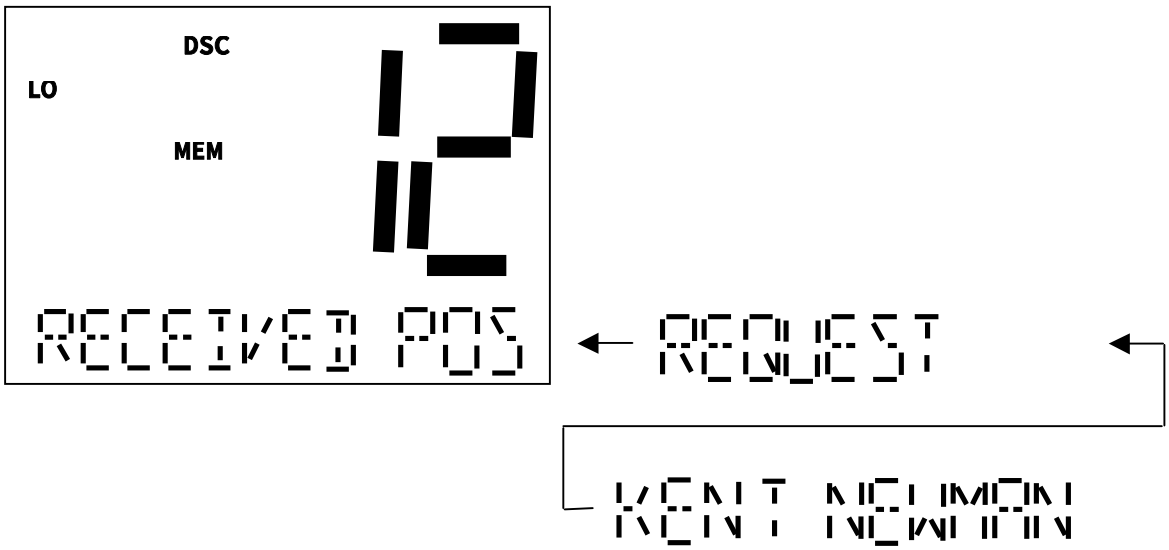
5.11.4. POS. REQUEST

Please refer to P.29 [5.5.1.4 POSITION REQUEST CALL Menu] about transmit Position Request Call.

Position Request Call is sent with High Power.

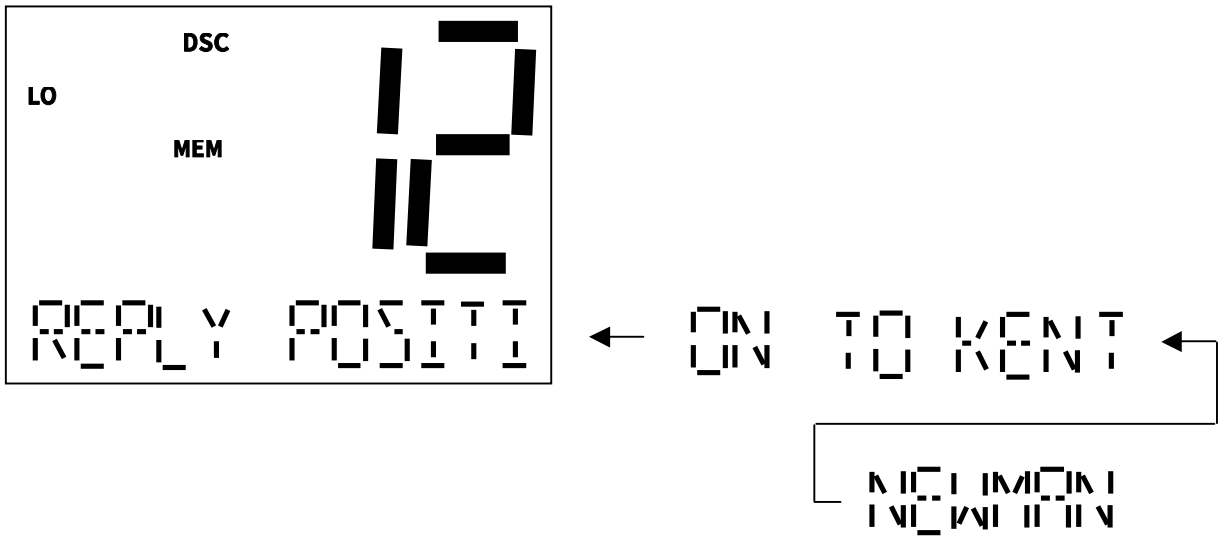
This function will be used to request that the position of the vessel registered into the directory should be transmitted.

When this radio is requested the position data by other vessel, it will display the following screen. "POS.REPLY" is set up as “Auto”.



When this radio is requested to the position data by other vessel, it will display the following screen. "POS.REPLY" is set up as “Off”.

If reply a position request, push [SELECT]key. If cancel to reply a position request, push [MENU]key.

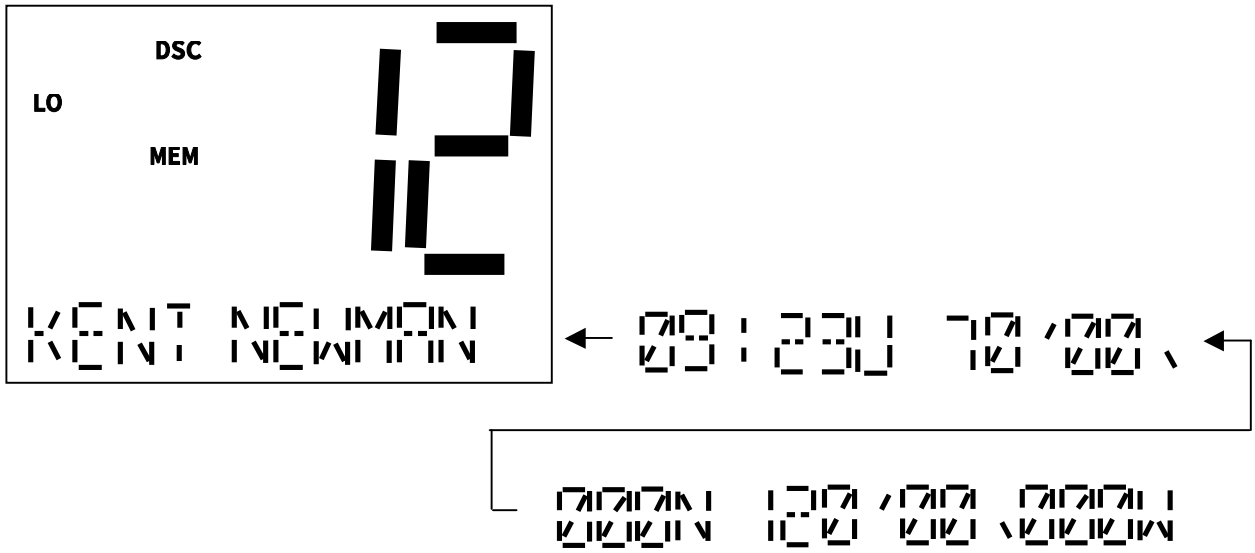


If this radio receives “POS. REPLY”, the following screen appears.

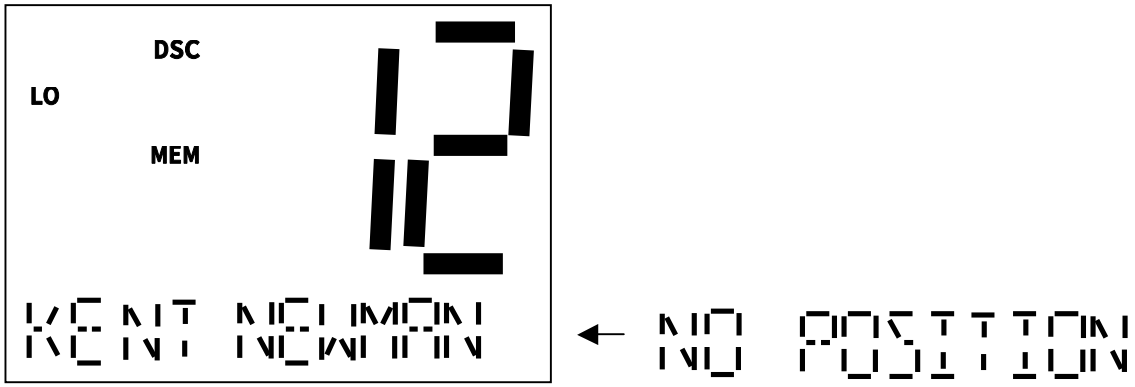
The screen will display a message with calling radio’s MMSI(or Name), time (hour/minute) and position (degree/minute; second data = “000”).

If the reply data is attached second data of position, this radio will display second data too.

(This radio support the second data of position for Distress/Position Request Call)



If this radio receives “POS. REPLY” without GPS data, the following screen appears.

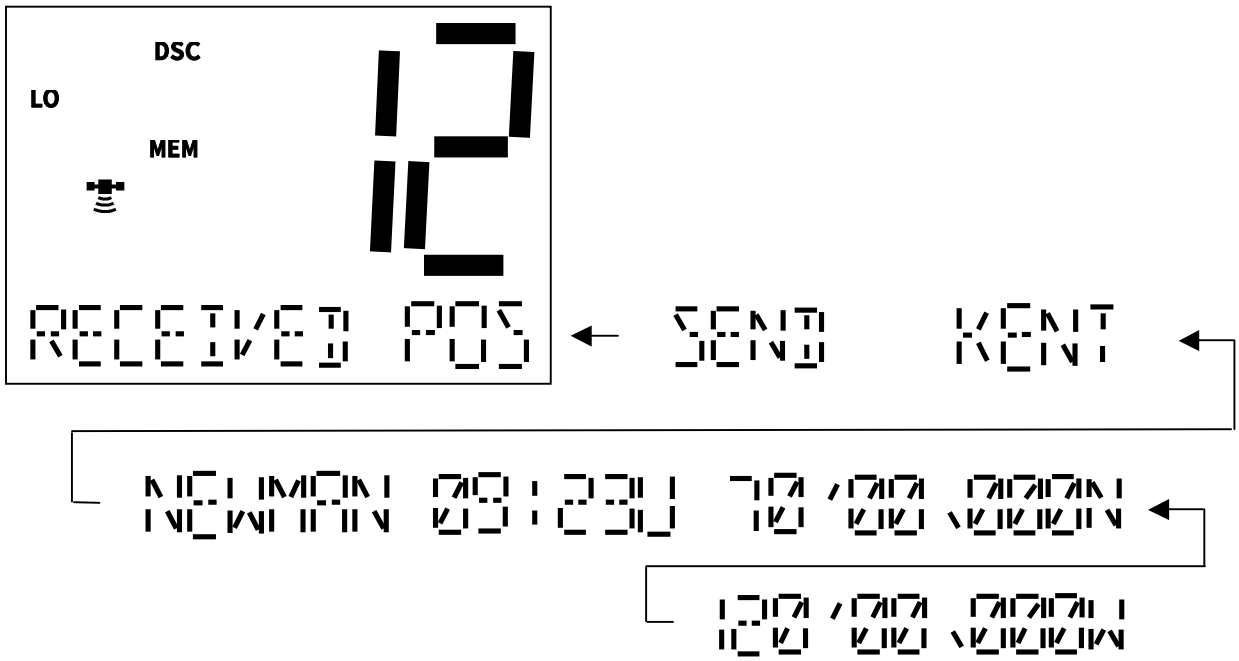


5.11.5. POS. SEND

Please refer to P.31 [5.5.1.5 POSITION SEND Menu] about transmit Position Send Call.

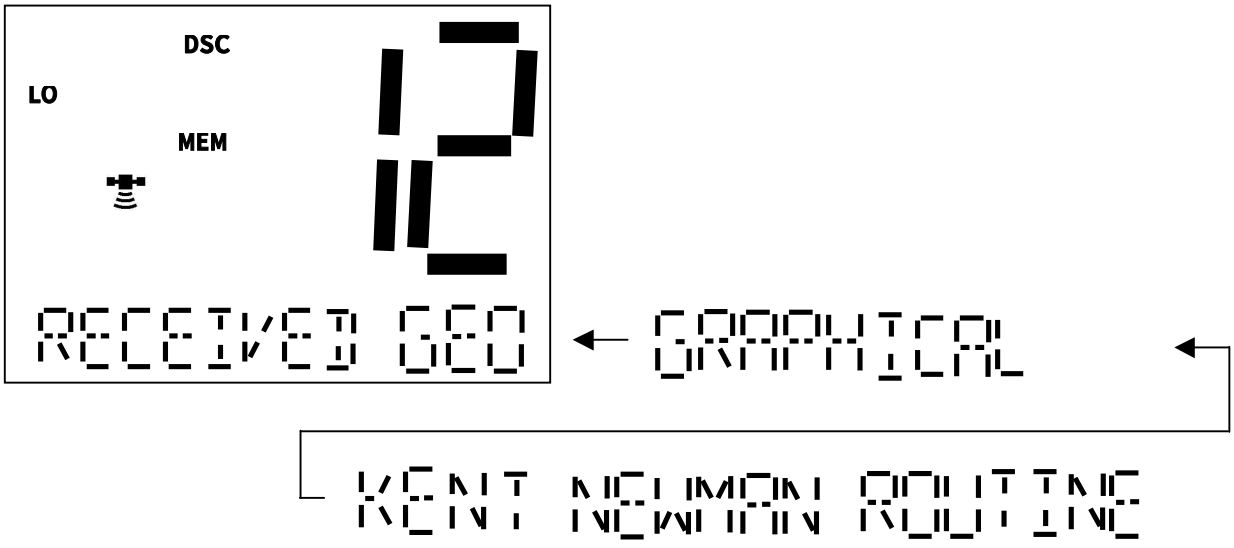
Position Send Call is sent with High Power.

This function will be used to transmit that the position of the vessel registered into DIRECTORY should be transmitted. The position information include not only degree and minute but also second. If this radio receives “POS. SEND”, the following screen appears.



5.11.6. Geographical Call

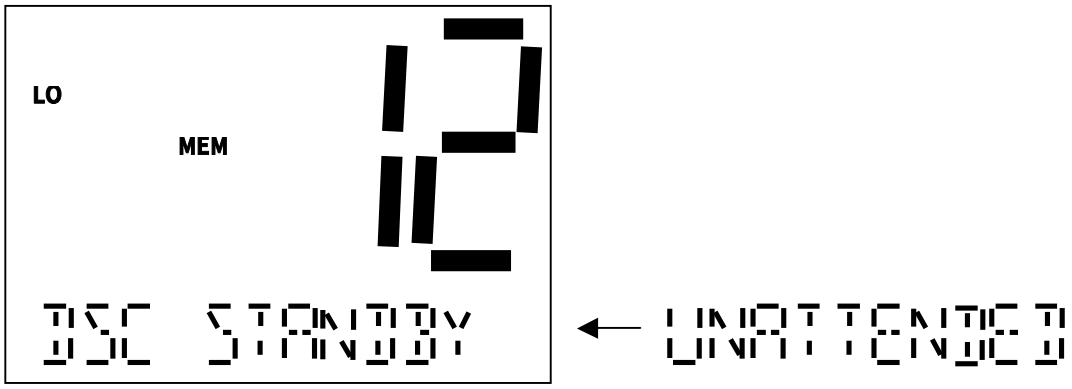
This function can receive the electric wave transmitted towards the vessel that is present in the domain specified from the call side. This operation will display the following screen. This radio is impossible to transmit the Geographical Call. Only receive. The time that received the Geographical Call is displayed.



5.11.7. Standby

Please refer to P.33 [5.5.1.6 STANDBY Menu] about set this mode.

This radio will allow the user to place the radio in an unattended mode. This will not allow an incoming DSC Call. The user will need to place the radio in this mode if they will be away from the radio and not wish to answer any calls. The following screen will appear to let the user know that the STANDBY mode has been activated.



If any calls is received in standby state, it will be indicated the call message.

When this mode is activated if the radio received DSC Call, it is as following.

Individual Call

It will automatically reply NACK to the call on channel 70 and then change to calling radio's channel. The call is memorized as Call Wait Log.

Distress Call

The call is memorized as Call Wait Log.

Other Call

These Calls aren't memorized as Call Wait Log.

The user can push any key or [PTT] key to deactivate this feature. The radio will automatically reply to the call on 70CH same as when the radio is not STANDBY mode.

5.11.8. Auto Channel Switch

Please refer to P.51 [5.5.2.5 AUTO CH SW Menu] about set this mode.

If the radio received DSC Call when AUTO CH SW mode is OFF, it will display message screen and sound DSC Call Tone (Routine). But the channel doesn't change. If received Individual Call, this radio will reply that it is unattended.

The user can deactivate this feature by Auto CH SW Menu only. When this mode is activated the radio will receive DSC Call Tone (Routine) indicating that a call is coming in. The radio will automatically reply to the call on 70CH and then return to the working channel.

* Auto ch switch setting is ignore, when All DSC calls of category distress or urgency or DISTRESS CALL are received.

5.11.9. Call Wait

Please refer to P.34 [5.5.1.7 CALL WAIT Menu] about use this feature.

This feature allows the user to view a list of received calls that came into the radio while either in STANDBY mode or if a call timed out after 5 minutes and went into the Call Wait log. Distress Call has 10 record able domains, and Individual Call has 20 record able domains.

A new log is placed on the top of each Menu. If the number of logs is max, then the bottom log (most oldest log) is removed from memory.

5.11.10. Directory

Please refer to P.46 [5.5.2.4 DIRECTORY Menu] about use this feature.

This function will allow the user to send an Individual Call etc. Directory is the function to memorize the name and number of 20 other vessels.

The name can be inputted to within 12 characters.

NOTE

MMSI cannot be inputted if all the portions of a name are inputted by BLANK.

5.12. Step

The user will push [STEP/SCAN]key to activate the step operation. If time this key is pushed, the radio will step to the next channel that has been placed into Memory.

Please refer to P.63 [5.7 Memory Channel Set / Cancel] about use this feature.

5.13. U.I.C

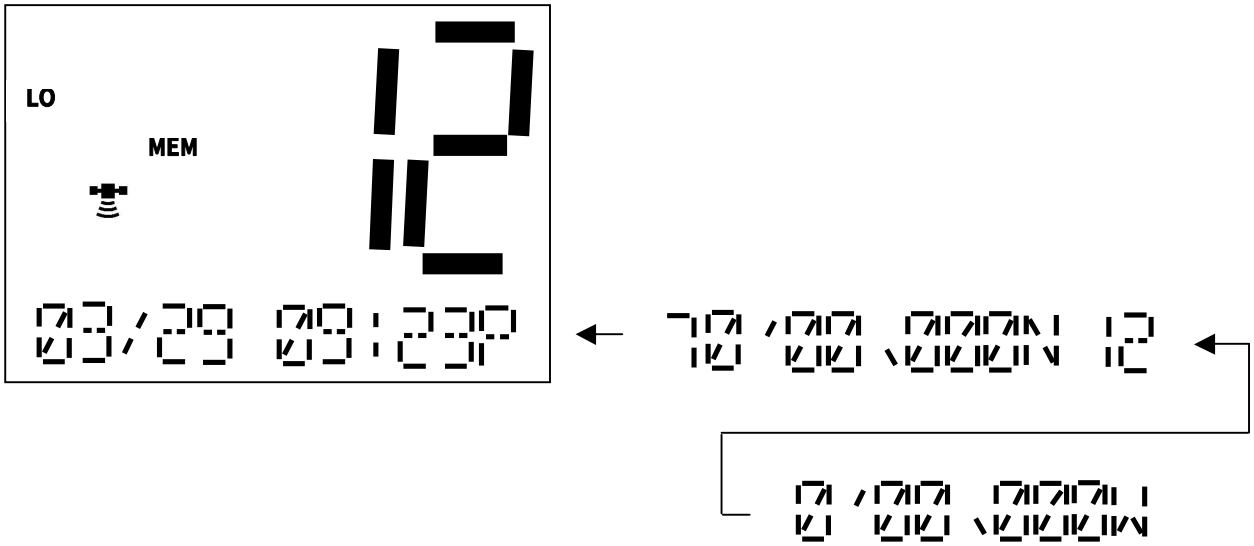
The unit power supply is turned on pushing [HI/LO]key and [SELECT]key for confirming private use which changes UIC. If the hidden feature (U.I.C.) is enabled, pushing and holding the [MEM]key for 2 seconds will change channel mode (USA to International, International to Canada, Canada to USA).

The radio needs to remember which channel was last selected in each of U, I, C so that when the radio is switched modes the next time these modes are selected the last channel is displayed. Also, this will apply even if the radio is turned off. The initial default channel for each mode is channel 16. When U.I.C. mode is changed, Triple Watch mode, Scan mode, EMG mode are canceled.

5.14. Other Function

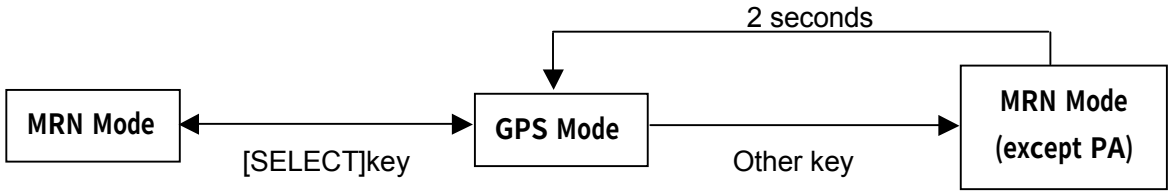
5.14.1. GPS Display

This section will explain the operations of GPS that this radio will be able to display based on an external GPS module being connected through the NMEA0183 jack. The radio meets the requirements of GPS by displaying date, time, latitude and longitude. Below is how the display will read based on having and external GPS module connected. The local time offset from UTC will automatically be applied based on current Lat/Long position. This will eliminate any need for a time offset screen.



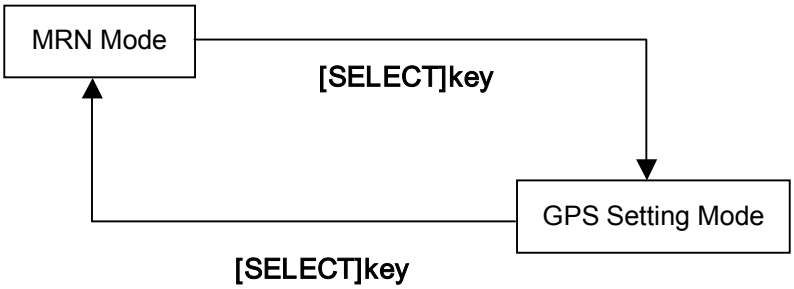
The channel mode display information will be the priority and will be displayed whenever the radio receives an incoming transmission or when the radio is transmitting. The user can also toggle back and forth between the two displays by pushing [SELECT]key from the channel display screen.

< GPS OK >



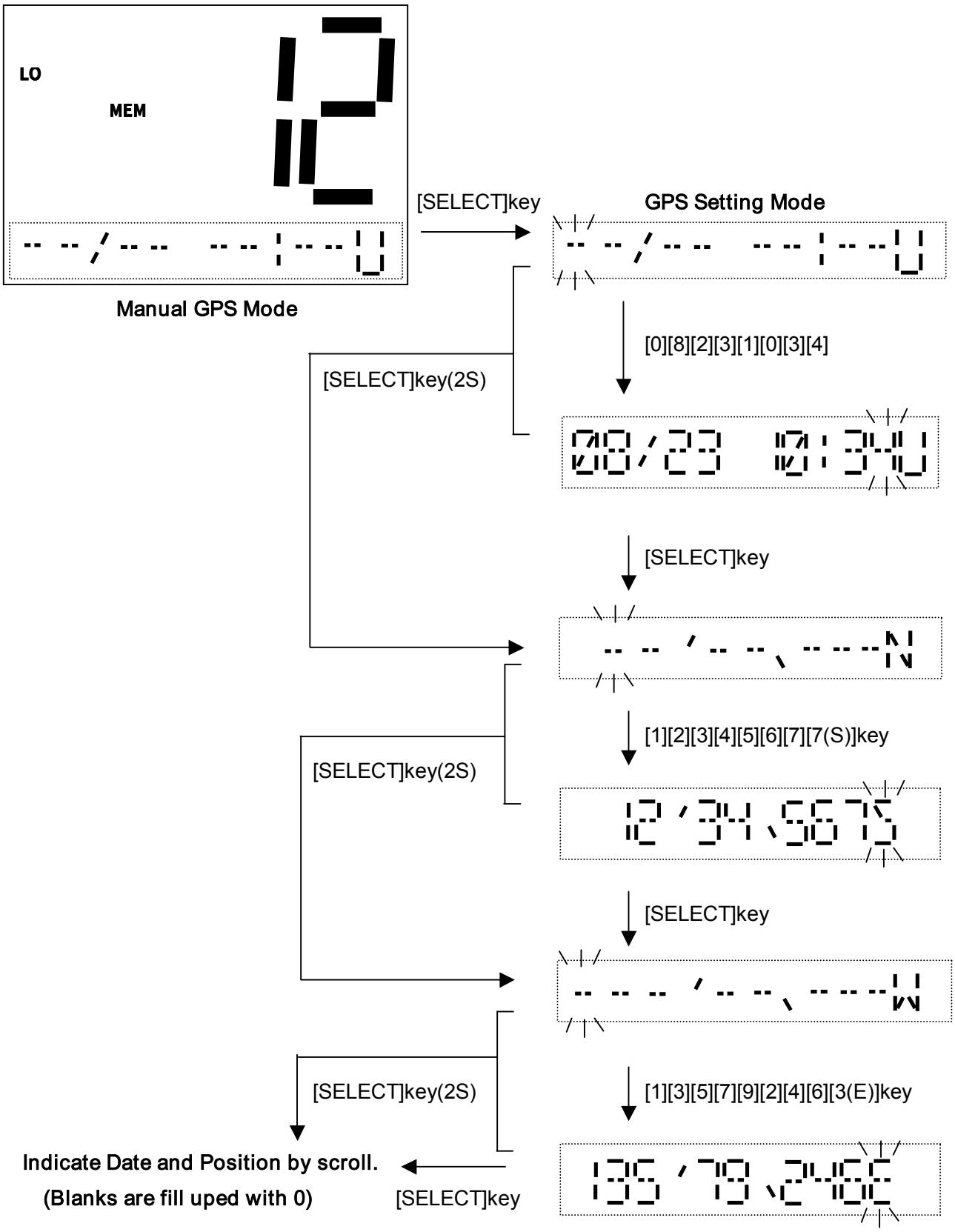
If user push [SELECT] key in MRN Mode and external GPS module unconnected, the radio will be GPS Setting Mode.
The time is used UTC in this mode.

< Not connect GPS >



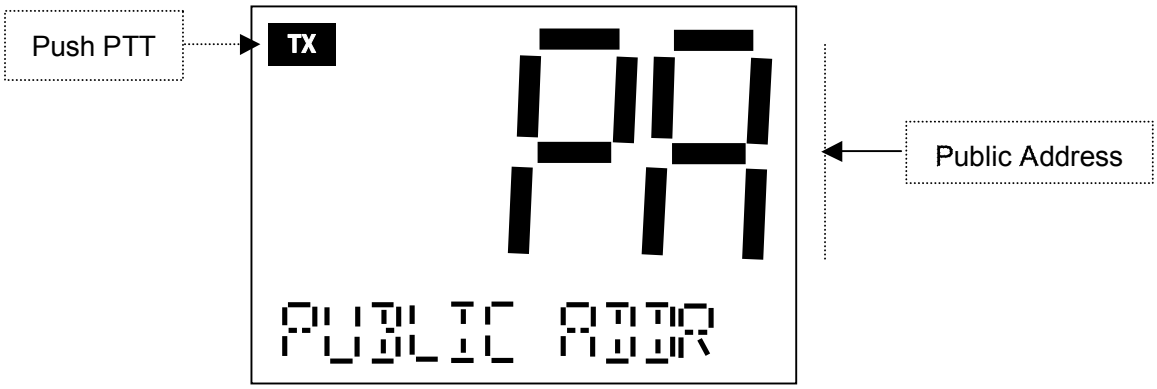
Note : if external GPS modulate is not connected, and position data not input, GPS Icon will start blinking.
If the position data is not change for 4hours, GPS Icon will start blinking.
And if the position data is not change for 23.5hours, GPS setting data is cleared(No Data).

< GPS Setting Mode >



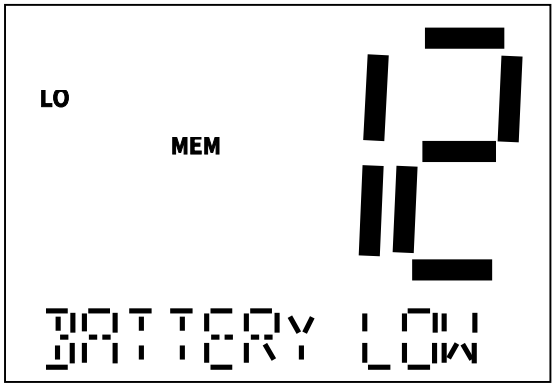
5.14.2. PA

The [PA]key will be used to activate the Public Address feature. When the PA key is pushed, the LCD screen will be as follows. Push and hold PTT on the microphone, and speak clearly in a normal voice. Pushing the [PA] key again will return the radio to the radio mode.

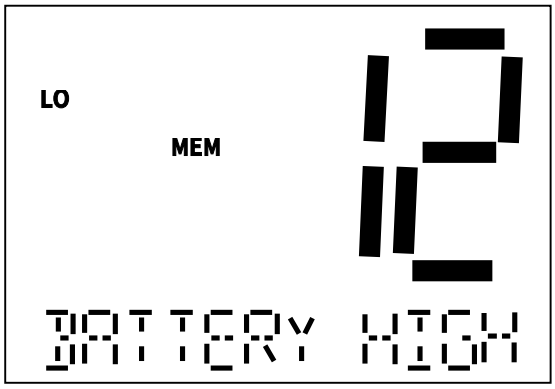


5.14.3. Hi/Lo Battery detect

This feature will allow the user to detect a battery condition. The display of a battery is not performed when DSC is received. When the radio detect battery low (11V), appear the following screen.

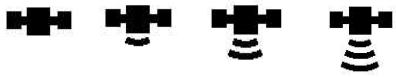


When the radio detect battery high (16V), appear the following screen.



5.14.4. GPS ANTENNA DETECT ICON

Waves will move to show activity and connection with the satellite.



If the external GPS modulate is not connected, and position data not input, GPS Icon will start blinking

If the position data is not change for 4hours, GPS Icon will start blinking.

5.14.5. Last Channel Memory

This radio indicates the memorized channel (the channel when shutting off = last channel) at time of turning on.

The last channel is as below.

Example, if you shut off the radio in EMG mode, the last channel will be current marine channel.

1: EMG mode => Current MRN CH

2: Scan Mode => Scan Start CH

3: Triple Watch Mode => Current MRN CH

If you shut off the radio within 3 seconds from the channel is changed, the channel will be not memorized. (the last channel will be memorized to EEP Memory per 3 seconds.)

5.14.6. Inlandwater way Mode/Seagoing Mode

Push and hold [PA] key, "Inlandwater way Mode" of PA Key and "Seagoing Mode" are switched.

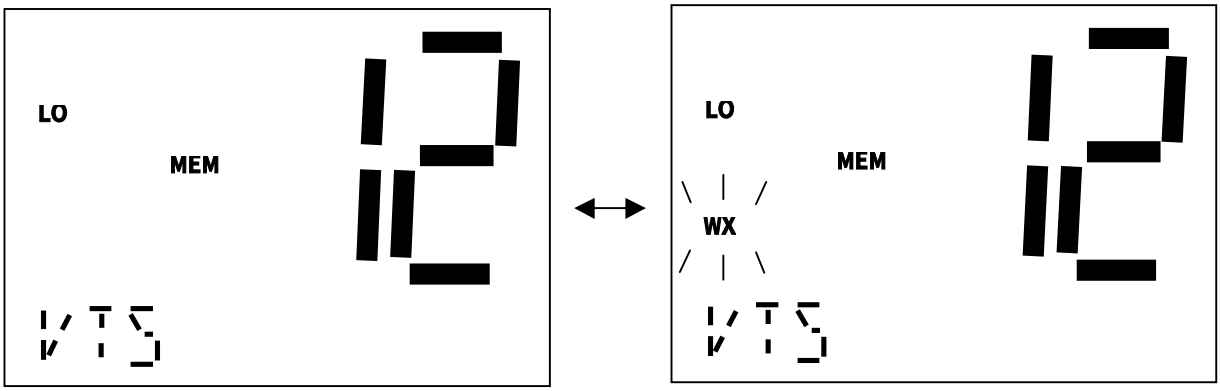
・Seagoing Mode

The sending and receiving of DISTRESS/DSC is transmitted and ATIS can be transmitted.

・Inlandwater way Mode

DISTRESS/DSC cannot be sent and received. ATIS can be transmitted.

“WX" icon blinks at active Mode.



Seagoing Mode　　Inlandwater way Mode

5.14.7. Free CH active ON/OFF(Hidden feature)

Transmission and reception of 30,31,L1, L2, L3, F1, F2, F3 and M1 of 9CH are enabled in addition to existing MRN CH.

The unit power supply is turned on pushing [HI/LO]key and [SCAN]key.

→Active Mode(3 Mode)/Inactive of Free CH changes.

It changes with Inactive -> Mode1 -> Mode2 -> Mode3 -> Mode4.

- Mode1 : L1/L2/F1/F2/F3 active
- Mode2 : L1/L2/L3/F1/F2/F3 active
- Mode3 : 30/31 active
- Mode4 : M1 active (CH display is “n1”)

CHANNEL SELECT

Press [▲] key to increment the Channel number.

01 → 02 →····· 88 → (L1) → (L2) → (F1) → (F2) → (F3) → (M1)

↑_____↓

Press [▼] key to decrement the Channel number.

01 ← 02 ····· 88 ← (L1) ← (L2) ← (F1) ← (F2) ← (F3) ← (M1)

↓_____↑

* Active/Inactive of Free CH becomes effective also at the time of Power On next time.

6. Reference

6.1. International Frequencies and Channels

CH	CH TAG	S/D	TX	RX
01	TELEPHONE	D	156.050	160.650
02	TELEPHONE	D	156.100	160.700
03	TELEPHONE	D	156.150	160.750
04	INTL	D	156.200	160.800
05	INTL	D	156.250	160.850
06	SAFETY	S	156.300	
07	INTL	D	156.350	160.950
08	COMMERCIAL	S	156.400	
09	CALLING	S	156.450	
10	COMMERCIAL	S	156.500	
11	VTS	S	156.550	
12	VTS	S	156.600	
13	BRG/BRG	S	156.650	
14	VTS	S	156.700	
15	COMMERCIAL	S	156.750	
16	DISTRESS	S	156.800	
17	SAR	S	156.850	
18	INTL	D	156.900	161.500
19	INTL	D	156.950	161.550
20	PORT OPR	D	157.000	161.600
21	INTL	D	157.050	161.650
22	INTL	D	157.100	161.700
23	INTL	D	157.150	161.750
24	TELEPHONE	D	157.200	161.800
25	TELEPHONE	D	157.250	161.850
26	TELEPHONE	D	157.300	161.900
27	TELEPHONE	D	157.350	161.950
28	TELEPHONE	D	157.400	162.000
60	TELEPHONE	D	156.025	160.625
61	INTL	D	156.075	160.675
62	INTL	D	156.125	160.725
63	INTL	D	156.175	160.775
64	TELEPHONE	D	156.225	160.825
65	INTL	D	156.275	160.875

66	INTL	D	156.325	160.925
67	BRG/BRG	S	156.375	
68	SHIP-SHIP	S	156.425	
69	PLEASURE	S	156.475	
70	DSC	S	156.525 (Only DSC)	
71	PLEASURE	S	156.575	
72	SHIP-SHIP	S	156.625	
73	PORT OPR	S	156.675	
74	PORT OPR	S	156.725	
75	CH75	S	156.775	
76	CH76	S	156.825	
77	PORT OPR	S	156.875	
78	INTL	D	156.925	161.525
79	INTL	D	156.975	161.575
80	INTL	D	157.025	161.625
81	INTL	D	157.075	161.675
82	INTL	D	157.125	161.725
83	INTL	D	157.175	161.775
84	TELEPHONE	D	157.225	161.825
85	TELEPHONE	D	157.275	161.875
86	TELEPHONE	D	157.325	161.925
87	TELEPHONE	S	157.375	
88	TELEPHONE	S	157.425	

6.2. USA Frequencies and Channels

CH	CH TAG	S/D	TX	RX
01	VTS	S	156.050	
03		S	156.150	
05	VTS	S	156.250	
06	SAFETY	S	156.300	
07	COMMERCIAL	S	156.350	
08	COMMERCIAL	S	156.400	
09	CALLING	S	156.450	
10	COMMERCIAL	S	156.500	
11	VTS	S	156.550	
12	VTS	S	156.600	
13	BRG/BRG	S	156.650	
14	VTS	S	156.700	
15	COMMERCIAL	S	-----	156.750
16	DISTRESS	S	156.800	
17	SAR	S	156.850	
18	COMMERCIAL	S	156.900	
19	COMMERCIAL	S	156.950	
20	PORT OPR	S	157.000	
21	CCG	S	157.050	
22	USCG	S	157.100	
23	USCG	S	157.150	
24	TELEPHONE	D	157.200	161.800
25	TELEPHONE	D	157.250	161.850
26	TELEPHONE	D	157.300	161.900
27	TELEPHONE	D	157.350	161.950
28	TELEPHONE	D	157.400	162.000
61	CCG	S	156.075	
63	VTS	S	156.175	
64	COMMERCIAL	S	156.225	
65	PORT OPR	S	156.275	
66	PORT OPR	S	156.325	
67	BRG/BRG	S	156.375	
68	SHIP-SHIP	S	156.425	
69	PLEASURE	S	156.475	
70	DSC	S	156.525 (Only DSC)	

71	PLEASURE	S	156.575	
72	SHIP-SHIP	S	156.625	
73	PORT OPR	S	156.675	
74	PORT OPR	S	156.725	
75	CH 75	S	156.775	
76	CH 76	S	156.825	
77	PORT OPR	S	156.875	
78	SHIP-SHIP	S	156.925	
79	SHIP-SHIP	S	156.975	
80	SHIP-SHIP	S	157.025	
81	CCG	S	157.075	
82	CCG	S	157.125	
83	USCG	S	157.175	
84	TELEPHONE	D	157.225	161.825
85	TELEPHONE	D	157.275	161.875
86	TELEPHONE	D	157.325	161.925
87	TELEPHONE	D	157.375	161.975
88	COMMERCIAL	S	157.425	

6.3. Canada Frequencies and Channels

CH	CH TAG	S/D	TX	RX
01	TELEPHONE	D	156.050	160.650
02	TELEPHONE	D	156.100	160.700
03	TELEPHONE	D	156.150	160.750
04	INTL	S	156.200	
05	VTS	S	156.250	
06	SAFETY	S	156.300	
07	COMMERCIAL	S	156.350	
08	COMMERCIAL	S	156.400	
09	CALLING	S	156.450	
10	COMMERCIAL	S	156.500	
11	VTS	S	156.550	
12	VTS	S	156.600	
13	BRG/BRG	S	156.650	
14	VTS	S	156.700	
15	COMMERCIAL	S	156.750	
16	DISTRESS	S	156.800	
17	SAR	S	156.850	
18	COMMERCIAL	S	156.900	
19	COMMERCIAL	S	156.950	
20	PORT OPR	D	157.000	161.600
21	CCG	S	157.050	
22	USCG	S	157.100	
23	INTL	D	157.150	161.750
24	TELEPHONE	D	157.200	161.800
25	TELEPHONE	D	157.250	161.850
26	TELEPHONE	D	157.300	161.900
27	TELEPHONE	D	157.350	161.950
28	TELEPHONE	D	157.400	162.000
60	TELEPHONE	D	156.025	160.625
61	CCG	S	156.075	
62	INTL	S	156.125	
64	COMMERCIAL	S	156.225	
65	PORT OPR	S	156.275	
66	PORT OPR	S	156.325	
67	BRG/BRG	S	156.375	

68	SHIP-SHIP	S	156.425	
69	PLEASURE	S	156.475	
70	DSC	S	156.525 (Only DSC)	
71	PLEASURE	S	156.575	
72	SHIP-SHIP	S	156.625	
73	PORT OPR	S	156.675	
74	PORT OPR	S	156.725	
75	CH 75	S	156.775	
76	CH 76	S	156.825	
77	PORT OPR	S	156.875	
78	SHIP-SHIP	S	156.925	
79	SHIP-SHIP	S	156.975	
80	SHIP-SHIP	S	157.025	
81	CCG	S	157.075	
82	CCG	S	157.125	
83	USCG	S	157.175	
84	TELEPHONE	D	157.225	161.825
85	TELEPHONE	D	157.275	161.875
86	TELEPHONE	D	157.325	161.925
87	TELEPHONE	D	157.375	161.975
88	TELEPHONE	D	157.425	162.025

6.4. Extend CH(Hidden feature)

CH	CH TAG	S/D	TX	RX
30	30 D CH	D	157.500	162.100
31	31 D CH	D	157.550	162.150
L1	CH L1	S	155.500	155.500
L2	CH L2	S	155.525	155.525
L3	CH L3	S	155.650	155.650
F1	CH F1	S	155.625	155.625
F2	CH F2	S	155.775	155.775
F3	CH F3	S	155.825	155.825
M1	CH M1	S	157.850	157.850

6.5. Only Low power CH

The CH that use exclusive for low power is following.

Seagoing Mode

AREA	CH	CH	CH	CH	CH	CH	CH	CH
INT	30	31	75	76	–	–	–	–
USA	13	67	30	31	75	76	–	–
CAN	13	15	17	20	30	31	75	76

Inlandwater way Mode

AREA	CH	CH	CH	CH	CH	CH	CH	CH
INT	6	8	10	11	12	13	14	15
	17	30	31	71	72	74	75	76
	77							
USA	13	67	30	31	75	76	–	–
CAN	13	15	17	20	30	31	75	76

6.6. Tones

Tone	Explanation
Key Tone (Single Tone)	This sounds when key is pressed.
Key Tone (Double Tone)	This sounds when key is pressed and held for 2 seconds.
Error Tone	This sounds when pressed key is invalid.
PTT Error Tone	This sounds when [PTT] key is invalid.
Wake Up Tone	This sounds when the radio is powered on.
DISTRESS send Tone	This sounds when the radio Distress send. ([SELECT] key pressed)
DSC ACK Wait Tone	This sounds when the radio is DSC ACK waiting state.
DSC Call Tone (Distress)	This sounds when Distress Call or DSC Call which category code is Distress or Urgency is decoded.
DSC Call Tone (Routine)	This sounds when DSC Call which category code isn't Distress or Urgency is decoded.

6.7. Initialize

MRN

NO.	FUNCTION	STATUS
1	Channel	CH16
2	SCAN	OFF
3	TRIPLE WATCH	OFF
4	EMG MODE	OFF
5	TX POWER	HI
6	Memory Channel	All Channel OFF
7	Mode	Seagoing Mode

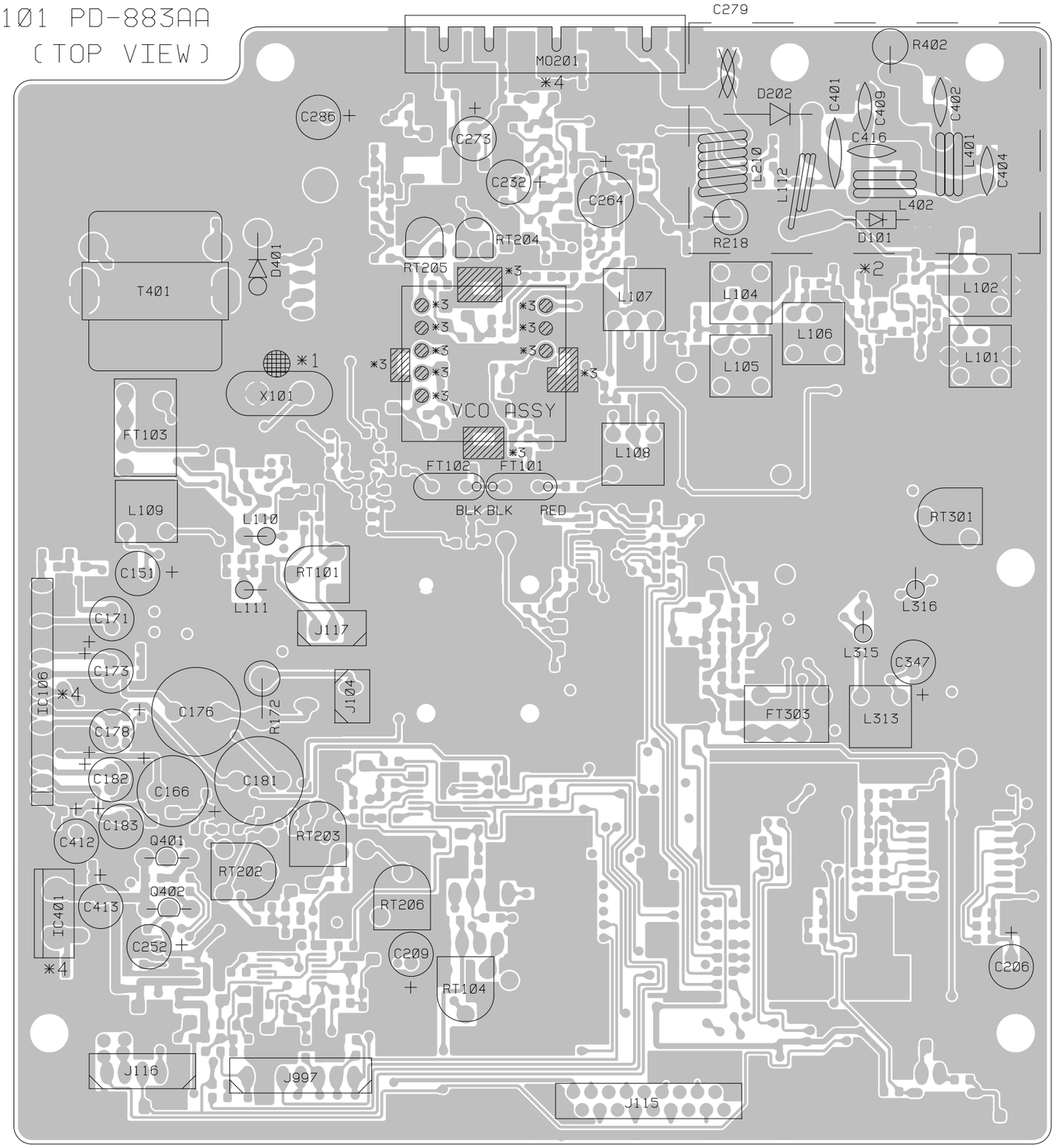
MENU - SYSTEM -

NO.	FUNCTION	STATUS
1	CONTRAST	7
2	LAMP ADJUST	3
3	KEY BEEP	ON

MENU - SETUP -

NO.	FUNCTION	STATUS
1	ALARM CLOCK	ALARM : 0FF , 00:00A
2	LOCAL TIME ADJUST	LOCAL TIME +0
3	DAYLITE SAVE	OFF
4	DIRECTORY	NONE
5	AUTO.CH.SW	ON
6	POS.REPLY	MANUAL
7	CH TAG	See Frequencies and channels list
8	GROUP MMSI	NONE
9	USER MMSI	NONE
10	ATIS ID	NONE

B101 PD-883AA
(TOP VIEW)



*1 APPLY RED BOND LOCK ON THE AREAS SWOWN IN

*2 ALL PARTS INSIDE THE BROKEN LINE MUST BE FLAT MOUNTED.

*3 SOLDERING AFTER DIP

*4 IC106, IC401, MO201 ASSY AND SOLDERING AFTER DIP

REVISIONS				
REV. CODE				
DATE				
LOT#/RN#				
REVISED BY				
CHECKED BY				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
04/01/24	04/01/25	UT605ZH	RT-2500
YUASA	YANAI	TITLE	MAIN ASSY 1/2 PARTS ASS'Y TOP VIEW
CHECK. BY	APPRO. BY		
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

C151	25V 47 C-0156
C166	25V 220 C-0156
C171	25V 47 C-0156
C173	25V 47 C-0156
C176	16V 470 C-0156
C178	25V 47 C-0156
C181	16V 470 C-0156
C182	25V 47 C-0156
C183	25V 47 C-0156
C206	10V 100 C-0156
C209	10V 100 C-0156
C232	50V 1 C-0156
C252	10V 100 C-0156
C264	25V 100 C-0156
C273	10V 100 C-0156
C286	25V 47 C-0156
C347	25V 47 C-0156
C401	68P
C402	10P
C404	27P
C409	18P
C412	25V 47 C-0156
C413	25V 47 C-0156
C416	0.5P-C

D101	XB15A308A2GB
D202	XB15A407A2GT
D401	GD 1N5401-B5

FT101	FL-0424
FT102	FL-0424
FT103	FL-0743
FT303	FL-0792

IC106	LA4446
IC401	L7808CV

J104	JK-0324 2P
J115	JK-0856 20P
J116	JK-0324 5P
J117	JK-0324 3P
J997	JK-0324 7P

L101	LB-1176

L102	LB-1176
L104	LB-1176
L105	LB-1176
L106	LB-1176
L107	LD-0193
L108	LB-1113
L109	LB-1175
L110	1mH LZ-0041
L111	1mH LZ-0041
L112	LE-0237
L210	LE-0435
L313	LB-1175
L315	1mH LZ-0041
L316	1mH LZ-0041
L401	LE-0212
L402	LE-0212

MO201	MO-0211

Q401	2SA950-Y
Q402	2SA950-Y

R172	3.3 2WS
R218	39 1WS
R402	10K 1WS

RT101	10KB RT-0552
RT104	10KB RT-0552
RT202	50KB RT-0552
RT203	20KB RT-0552
RT204	470B RT-0507
RT205	10KB RT-0507
RT206	50KB RT-0552
RT301	50KB RT-0552

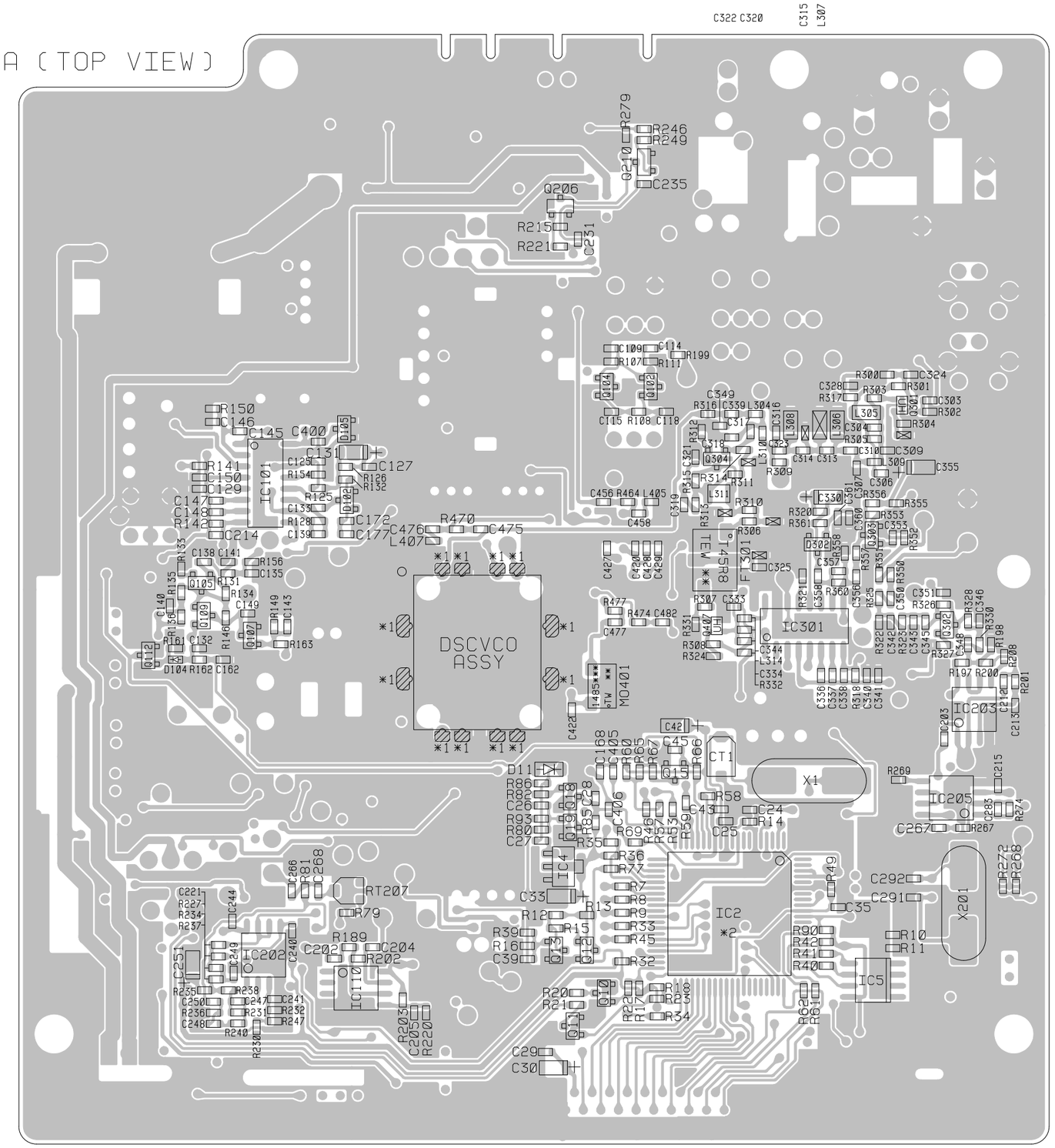
T401	TF-0157

X101	20.945MHz QX-0222

NOTES - parts top:
1. RESISTANCE VALUES ARE SHOWN IN OHMS UNLESS OTHERWISE NOTED. (K-KILO OHM. M-MEG OHM.)
2. CAPACITANCE VALUES ARE INDICATED IN MICRO FARADS UNLESS OTHERWISE NOTED. (P-MICRO-MICRO FARAD)
3. ALL CAPACITORS ARE RATED 50V UNLESS OTHERWISE NOTED.

DESIGN.BY	DRAWN.BY	UNIDEN NO.	MODEL NO.
	2005/01/26	UT605ZH	RT-2500
	YANAI KENJI	TITLE MAIN ASSY	
CHECK.BY	APPRO.BY	PARTS ASSY TOP VIEW 2/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B101 PD-883AA (TOP VIEW)



REVISIONS				
REV. CODE				
DATE				
LOT#/RN#				
REVISED BY				
CHECKED BY				

*1 SOLDERING AFTER REFLOW

*2 INSTALL IC2 AFTER PROGRAMMING

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
05/01/24	05/01/26	UT605ZH	RT-2500
YUASA	YANAI	TITLE MAIN ASSY 1/2	
CHECK. BY	APPRO. BY	CHIP LAYOUT TOP VIEW	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

C24	22P
C25	10P
C26	330P
C27	0.022
C28	330P
C29	330P
C30	16V 2.2 A C-0122
C33	16V 2.2 A C-0122
C35	330P
C39	330P
C42	16V 2.2 A C-0122
C43	330P
C45	330P
C109	0.001
C114	330P
C115	120P
C118	120P
C125	330P
C127	0.1
C129	0.1
C131	16V 2.2 A C-0122
C132	1 16V
C133	0.047
C135	0.0056
C138	0.1
C139	10P
C140	0.0056
C141	0.22 16V
C143	0.1
C145	39P
C146	56P
C147	0.1
C148	0.1
C149	0.01
C150	0.1
C162	0.001
C168	680P
C172	0.1
C177	0.1
C202	0.1
C203	0.1
C204	0.1
C205	0.01
C212	0.012
C213	0.0068
C214	10P
C215	0.1
C221	0.0018
C231	330P
C235	330P
C240	27P
C241	0.01
C244	330P
C247	82P
C248	0.015
C249	330P
C250	0.022
C251	20V 4.7 A C-0122
C266	0.22 16V
C267	820P
C268	0.22 16V
C283	330P
C291	27P
C292	27P
C303	100P
C304	22P
C306	0.001
C307	27P
C309	9P C-341

C310	12P
C313	4P-B
C314	4P-B
C316	27P
C317	330P
C318	10P
C319	0.01
C321	0.001
C323	12P
C324	0.001
C325	8P-C C-341
C328	0.001
C330	16V 2.2 A C-0122
C333	0.01
C334	12P
C336	0.1
C337	0.1
C338	10P
C339	10P
C340	0.1
C341	0.1
C342	0.0056
C343	0.1
C344	0.01
C345	0.1
C346	0.0056
C348	0.1
C349	12P
C350	0.01
C351	0.01
C353	0.0068
C355	20V 4.7 A C-0122
C356	470P
C357	10P
C358	0.047
C360	0.1
C361	0.1
C400	0.01
C405	0.01
C406	150P
C420	330P
C422	0.1
C427	330P
C428	330P
C429	330P
C456	10P
C458	5P-B
C475	10P
C476	5P-B
C477	330P
C482	47P

CT1	20P CT-0095

D11	RLS4148
D102	HSM88AS
D104	KDS160E-RTK
D105	1SS226
D302	HSM88AS

FT301	FL-1050

IC2	M30625FGAGP
IC4	XC61CC4302PR/XC61AC4302PR

IC5	24LC32AT-I/SN
IC101	S1T3361D01-S0T0
IC110	NJM4558M
IC202	NJM4558M
IC203	NJM4558M
IC205	NJM4558M
IC301	S1T3361D01-S0T0

L304	39nH LZ-0183
L305	0.039uH LZ-0116
L306	0.1uH LZ-0116
L308	0.1uH LZ-0116
L309	180nH LZ-0183
L310	47nH LZ-0183
L311	1.5uH LZ-0087
L314	1.0uH LZ-0226
L405	18nH LZ-0218
L407	18nH LZ-0218

MO401	MO-0295

Q10	2SC3052-1F
Q11	2SC3052-1F
Q12	2SC3052-1F
Q13	2SC3052-1F
Q15	2SC3052-1F
Q18	2SC3052-1F
Q19	2SC3052-1F
Q102	2SK711-GR
Q104	2SK711-GR
Q105	2SC2712-Y
Q107	2SC3052-1F
Q109	2SK374-Q (TX)
Q112	2SC3052-1F
Q206	2SC3052-1F
Q210	2SC3052-1F
Q301	3SK260-GR
Q302	2SC2712-Y
Q303	2SC2712-Y
Q304	2SC3356-R24
Q407	3SK260-GR

R7	1K
R8	1K
R9	1K
R10	0
R11	0
R12	10K
R13	10K
R14	2.2K
R15	2.2K
R16	10K
R17	10K
R18	10K
R20	2.2K
R21	2.2K
R22	2.2K
R23	2.2K
R32	2.2K
R33	2.2K
R34	2.2K
R35	2.2K
R36	47K
R39	10K
R40	1K

R41	1K
R42	2.2K
R45	0
R46	2.2K
R49	4.7K
R53	2.2K
R57	2.2K
R58	47K
R59	2.2K
R60	1K
R61	1K
R62	1K
R65	4.7K
R66	1K
R67	0
R69	1K
R77	2.2K
R79	560
R80	2.2K
R81	0
R82	560K
R85	47K
R86	560K
R90	47K
R93	2.2K
R107	27
R108	2.2K
R111	1K
R125	330K
R126	47K
R128	100K
R131	10K
R132	2.2K
R133	270
R134	560K
R135	2.2K
R136	100
R141	10
R142	33K
R146	100K
R149	47K
R150	3.3K
R154	10K
R156	10K
R161	2.2M
R162	4.7K
R163	47K
R189	10K
R197	100K
R198	100K
R199	1K
R200	5.6K
R201	5.6K
R202	22K
R203	10K
R208	10K
R215	10K
R220	12K
R221	10K
R227	150K-F
R230	10K
R231	180K
R232	27K
R234	220K-F
R235	4.7K
R236	18K
R237	220K-F
R238	27K
R240	1.8K

R246	100
R247	27K
R249	47K
R267	150K
R268	47K
R269	10K
R272	47K
R274	27K
R279	4.7K
R300	33K
R301	47K
R302	100K
R303	0
R304	0
R305	820
R306	0
R307	820
R308	47K
R309	1K
R310	220
R311	100K
R312	0
R313	180
R314	0
R315	560
R316	22
R317	100
R318	33K
R320	47K
R321	10K
R322	10K
R323	10K
R324	33K
R325	4.7K
R326	560K
R327	270
R328	2.2K
R330	100
R331	820
R332	100
R350	330
R351	10K
R352	0
R353	220K
R355	330
R356	3.3K
R357	1.2K
R358	56K
R360	100K
R361	2.2K
R464	100
R470	100
R474	10
R477	100

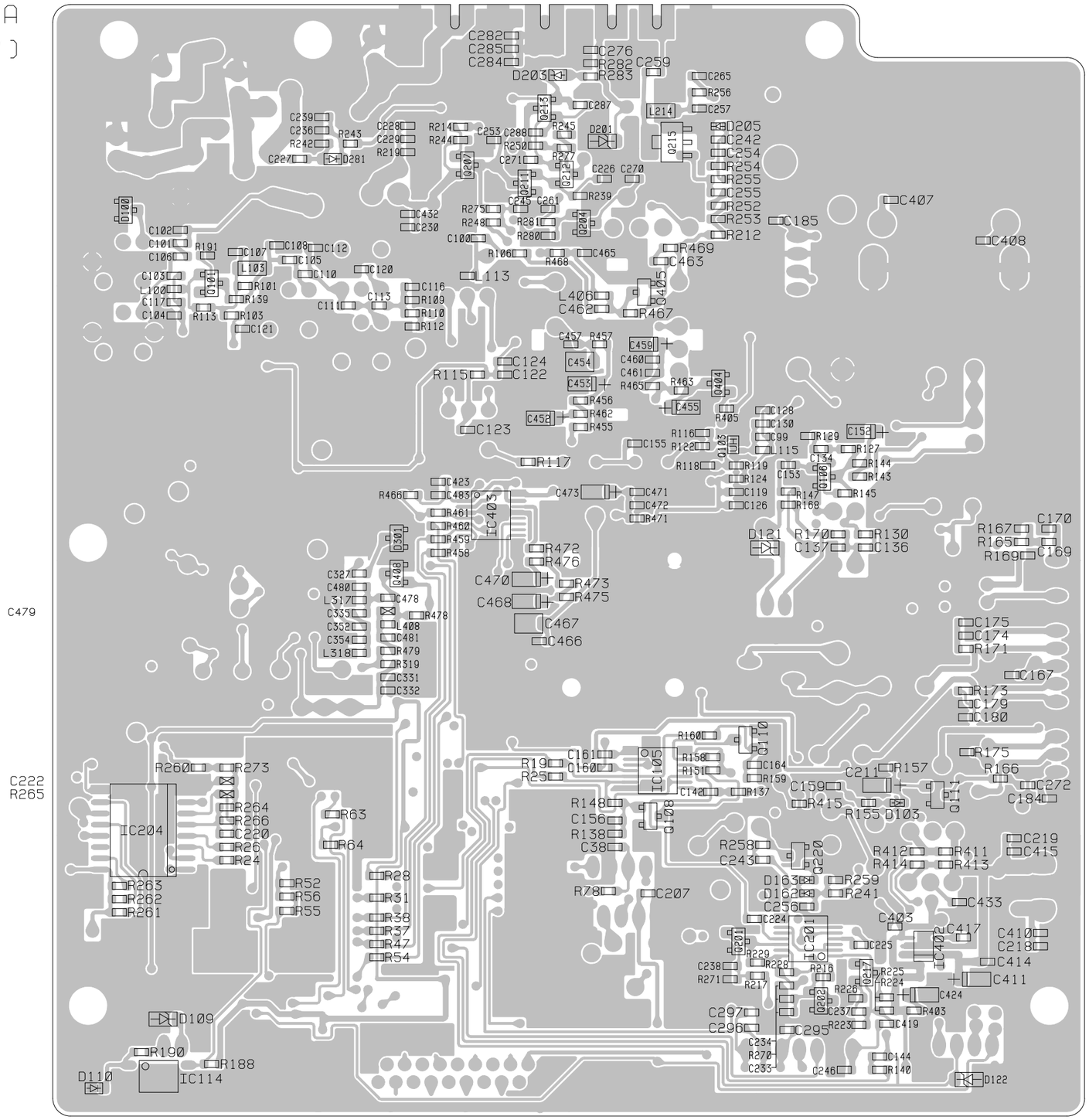
RT207	10K RT-0583

X1	9.9068MHz QX-0828
X201	3.579545MHz QX-0778

NOTES - chip top:
1. RESISTANCE VALUES ARE SHOWN IN OHMS
   UNLESS OTHERWISE NOTED.
   (K-KILO OHM. M-MEG OHM.)
2. RESISTOR WATTAGES ARE 1/16W
   UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN
   MICRO FARADS UNLESS OTHERWISE NOTED.
   (P-MICRO-MICRO FARAD)
4. ALL CAPACITORS ARE RATED 50V
   UNLESS OTHERWISE NOTED.
5. ALL CAPACITORS SIZE ARE 1608
   UNLESS OTHERWISE NOTED.
6. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING
   PLEASE REFER TO THE PARTS LIST
   FOR THE CHIP PARTS.

DESIGN.BY	DRAWN.BY	UNIDEN NO.	MODEL NO.
	2005/01/26	UT605ZH	RT-2500
	YANAI KENJI	TITLE MAIN ASSY	
CHECK.BY	APPRO.BY	CHIP LAY OUT TOP VIEW 2/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B101 PD-883AA
(BOTTOM VIEW)



REVISIONS			
REV. CODE			
DATE			
LOT#/RN#			
REVISED BY			
CHECKED BY			

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
05/01/24	05/01/25	UT605ZH	RT-2500
YUASA	YANAI	TITLE	MAIN ASSY 1/2
CHECK. BY	APPRO. BY	CHIP LAYOUT BOTTOM VIEW	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

C38	330P
C99	12P
C100	330P
C101	12P
C102	56P
C103	12P
C104	33P
C105	15P
C106	1.5P-B
C107	0.001
C108	39P
C110	2P-B
C111	2P-B
C112	22P
C113	12P
C116	39P
C117	100P
C119	0.01
C120	22P
C121	0.001
C122	0.001
C123	0.001
C124	0.1
C126	0.001
C128	0.01
C130	0.01
C134	470P
C136	0.01
C137	0.01
C142	0.1
C144	820P
C152	20V 4.7 A C-0122
C153	0.0068
C155	5P-B
C156	0.001
C159	0.001
C160	0.1
C161	0.1
C164	0.001
C167	0.1
C169	0.1
C170	0.001
C174	0.1
C175	0.1
C179	0.1
C180	0.1
C184	0.001
C185	330P
C207	330P
C211	20V 4.7 A C-0122
C218	0.047
C219	0.047
C220	100P
C224	0.1
C225	0.1
C226	330P
C227	2P-B
C228	330P
C229	0.01
C230	330P
C233	0.001
C234	0.001
C236	0.1
C237	330P
C238	0.001
C239	330P
C242	0.001
C243	1 16V
C245	330P

C246	330P
C253	0.1
C254	0.001
C255	330P
C256	0.001
C257	330P
C259	0.001
C261	330P
C265	330P
C270	330P
C271	330P
C272	0.1
C276	330P
C282	330P
C284	0.1
C285	0.01
C287	0.047
C288	0.047
C295	100P
C296	100P
C297	100P
C327	0.01
C331	0.1
C332	0.001
C335	18P
C352	27P
C354	18P
C403	0.1
C407	0.001
C408	0.001
C410	0.001
C411	16V 2.2 A C-0122
C414	0.1
C415	0.001
C417	0.1
C419	0.1
C423	330P
C424	20V 4.7 A C-0122
C432	330P
C433	330P
C452	16V 2.2 A C-0122
C453	25V 0.47 A C-0122
C454	16V 0.022 3216 C-0279
C455	16V 1 A C-0122
C457	330P
C459	16V 2.2 A C-0122
C460	0.001
C461	0.1
C462	12P
C463	22P
C465	0.001
C466	330P
C467	16V 0.022 3216 C-0279
C468	25V 0.47 A C-0122
C470	16V 2.2 A C-0122
C471	0.1
C472	0.001
C473	16V 2.2 A C-0122
C478	27P
C480	15P
C481	0.01
C483	0.1

D100	1SS226
D103	KDS160E-RTK
D109	HZK6C

D110	1SS355
D121	HZK6C
D122	HZK6C
D162	KDS160E-RTK
D163	KDS160E-RTK
D201	HZK5B
D203	UDZ3.0B TE-17
D205	KDS114E-RTK
D281	MA728
D301	1SS226

IC105	BU4066BCFV
IC114	LTV-354T
IC201	BU4066BCFV
IC204	FX604D4
IC402	TK11250CMCL
IC403	TB31202FN

L100	56nH LZ-0183
L103	0.039uH LZ-0116
L113	100nH LZ-0183
L115	1.0uH LZ-0226
L214	0.047uH LZ-0116
L317	0.27uH LZ-0226
L318	0.27uH LZ-0226
L406	39nH LZ-0183
L408	1uH LZ-0136

Q101	2SC3356-R24
Q103	3SK260-GR
Q106	2SC2712-Y
Q108	2SC3052-1F
Q110	2SC3052-1F
Q111	2SC3052-1F
Q201	2SC3052-1F
Q202	2SC3052-1F
Q204	2SC3052-1F
Q207	2SA1365-T12-F T1
Q211	2SC3052-1F
Q212	2SC3052-1F
Q213	2SC3052-1F
Q215	2SC3357
Q217	2SC2712-Y
Q220	2SC3052-1F
Q404	2SC3052-1F
Q405	2SC3356-R24
Q408	2SC2714-Y

R19	2.2K
R24	2.2K
R25	2.2K
R26	2.2K
R28	2.2K
R31	2.2K
R37	2.2K
R38	2.2K
R47	2.2K
R52	10K
R54	2.2K
R55	27K
R56	22K
R63	1K
R64	1K
R78	2.2K
R101	100

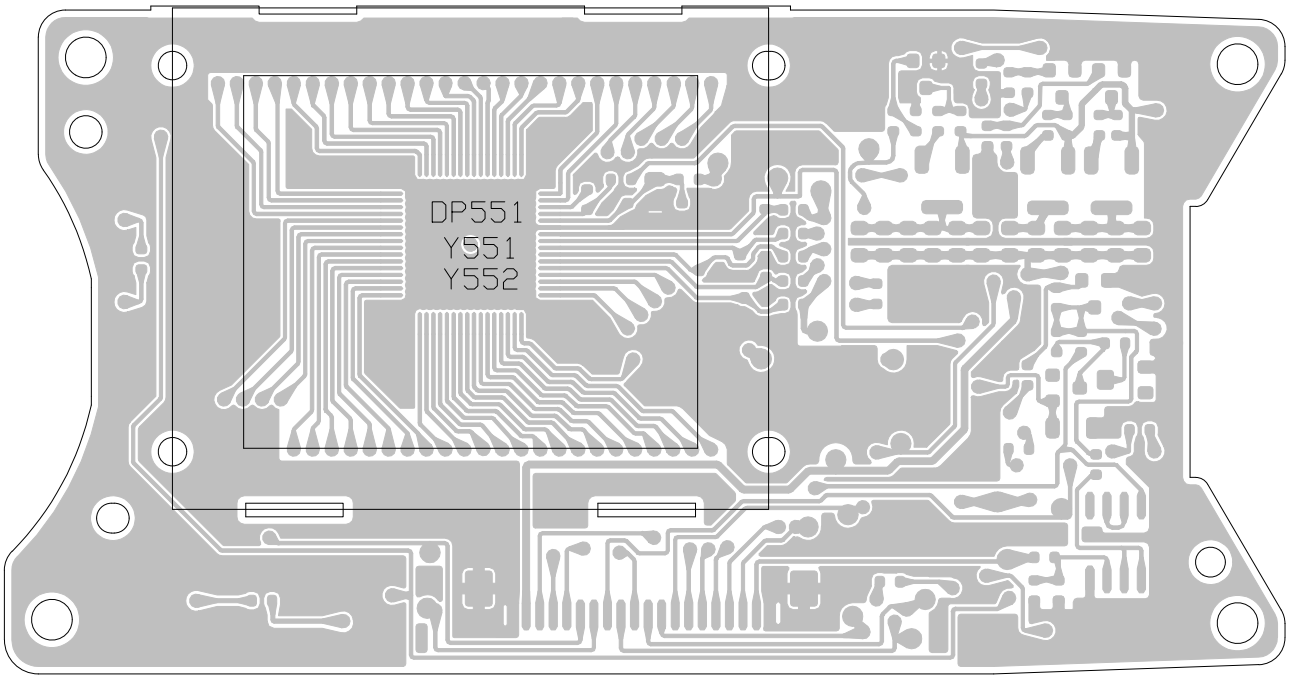
R103	330
R106	100
R109	330
R110	10
R112	330
R113	39K
R115	100
R116	1.5K
R117	820
R118	33K
R119	47K
R122	1.5K
R124	100
R127	1.2K
R129	56K
R130	4.7K
R137	2.2K
R138	47K
R139	0
R140	0
R143	330
R144	3.3K
R145	220K
R147	0
R148	47K
R151	47K
R155	4.7K
R157	2.2M
R158	47K
R159	47K
R160	47K
R165	3.9K
R166	4.7K
R167	100K
R168	10K
R169	120
R170	330
R171	1.0
R173	1.0
R175	120
R188	1.8K
R190	150
R191	4.7
R212	22
R214	3.3K
R216	47K
R217	47K
R219	470
R223	120K
R224	220K
R225	1.2K
R226	56
R228	47K
R229	47K
R239	680
R241	4.7K
R242	100
R243	4.7K
R244	100K
R245	1K
R248	180
R250	56K
R252	22
R253	220
R254	680
R255	470
R256	22
R258	15K
R259	2.2M

R260	0
R261	47K
R262	47K
R263	47K
R264	100K
R266	100K
R270	47K
R271	47K
R273	0
R275	3.3K
R277	2.7K
R280	10K
R281	10K
R282	100K
R283	100
R319	10
R403	0
R405	10K
R411	47K
R412	1.5K
R413	15K
R414	470
R415	1K
R455	100
R456	0
R457	5.6K
R458	1K
R459	1K
R460	1K
R461	470
R462	820
R463	2.2K
R465	0
R466	4.7K
R467	33K
R468	150
R469	150
R471	220
R472	100
R473	0
R475	5.6K
R476	820
R478	100K
R479	220

NOTES - chip bottom:
1. RESISTANCE VALUES ARE SHOWN IN OHMS
   UNLESS OTHERWISE NOTED.
   (K-KILO OHM. M-MEG OHM.)
2. RESISTOR WATTAGES ARE 1/16W
   UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN
   MICRO FARADS UNLESS OTHERWISE NOTED.
   (P-MICRO-MICRO FARAD)
4. ALL CAPACITORS ARE RATED 50V
   UNLESS OTHERWISE NOTED.
5. ALL CAPACITORS SIZE ARE 1608
   UNLESS OTHERWISE NOTED.
6. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING
   PLEASE REFER TO THE PARTS LIST
   FOR THE CHIP PARTS.

DESIGN.BY	DRAWN.BY	UNIDEN NO.	MODEL NO.
	2005/01/25	UT605ZH	RT-2500
	YANAI KENJI	TITLE MAIN ASSY	
CHECK.BY	APPRO.BY	CHIP LAY OUT BOTTOM VIEW 2/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

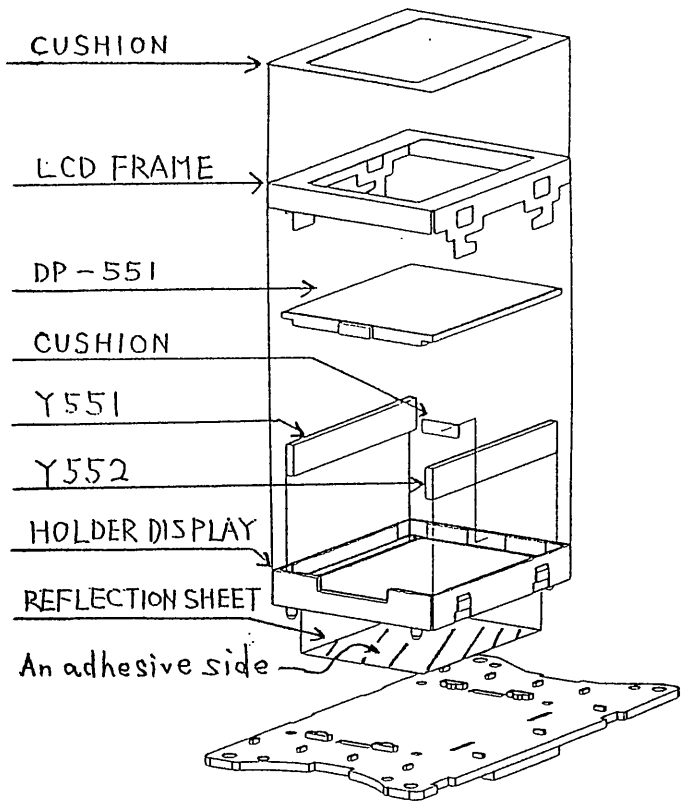
B551 PD-859AA 1/3 (TOP VIEW)



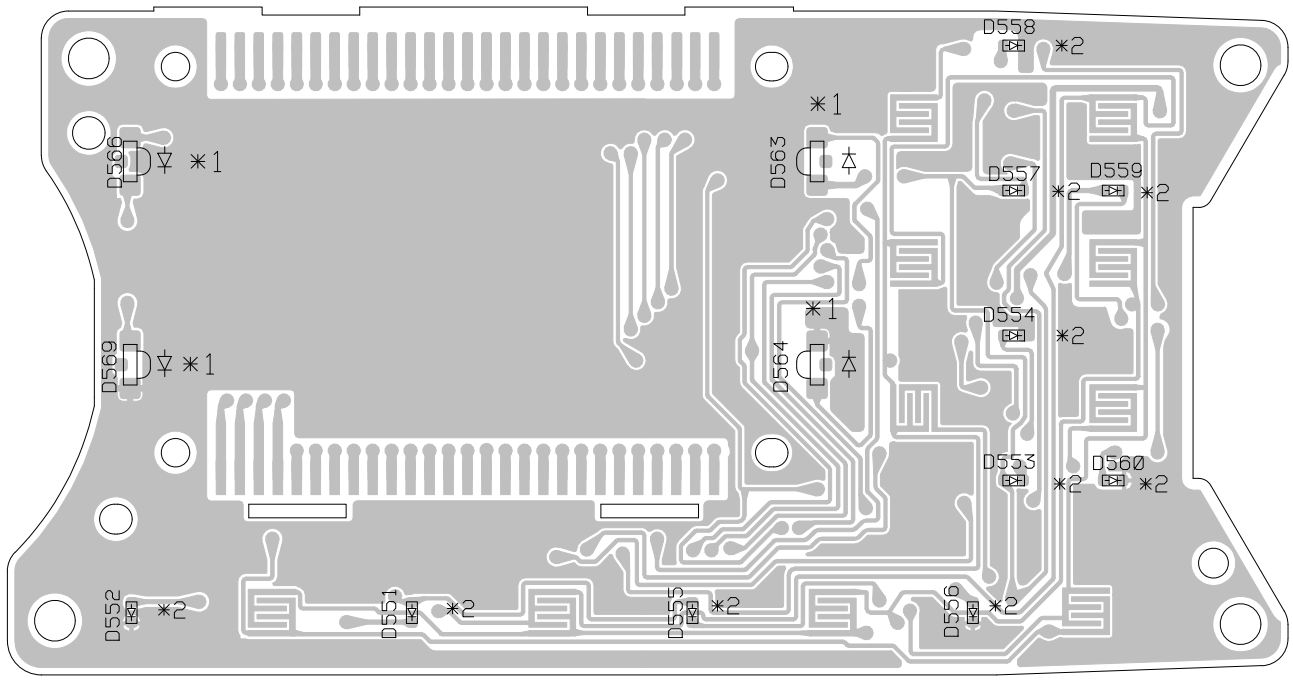
DP551	DL-0273
Y551	YY-1518
Y552	YY-1518

REVISIONS																					
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE																				
	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

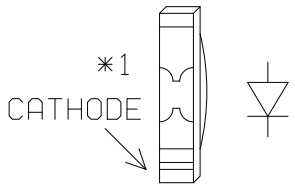
DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/05	UT605ZH	RT-2500
	YANAI	TITLE	FRONT ASSY
CHECK. BY	APPRO. BY		PARTS ASS'Y TOP VIEW
		DRAWING NO.	
REV. NO.			UNIDEN CORP.


CUSHION
LCD FRAME
DP-551
CUSHION
Y551
Y552
HOLDER DISPLAY
REFLECTION SHEET
An adhesive side

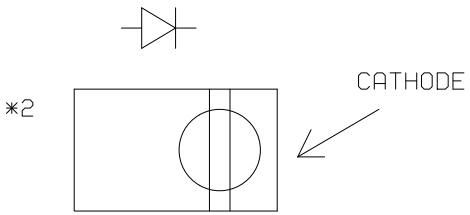
B551 PD-859AA 1/3 (TOP VIEW)



D551	LTST-C190AKT
D552	LTST-C190AKT
D553	LTST-C190AKT
D554	LTST-C190AKT
D555	LTST-C190AKT
D556	LTST-C190AKT
D557	LTST-C190AKT
D558	LTST-C190AKT
D559	LTST-C190AKT
D560	LTST-C190AKT
D563	LTST-S320KFKT-U
D564	LTST-S320KFKT-U
D566	LTST-S320KFKT-U
D569	LTST-S320KFKT-U



LTST-S320KFKT-U



LTST-C190AKT

REVISIONS																					
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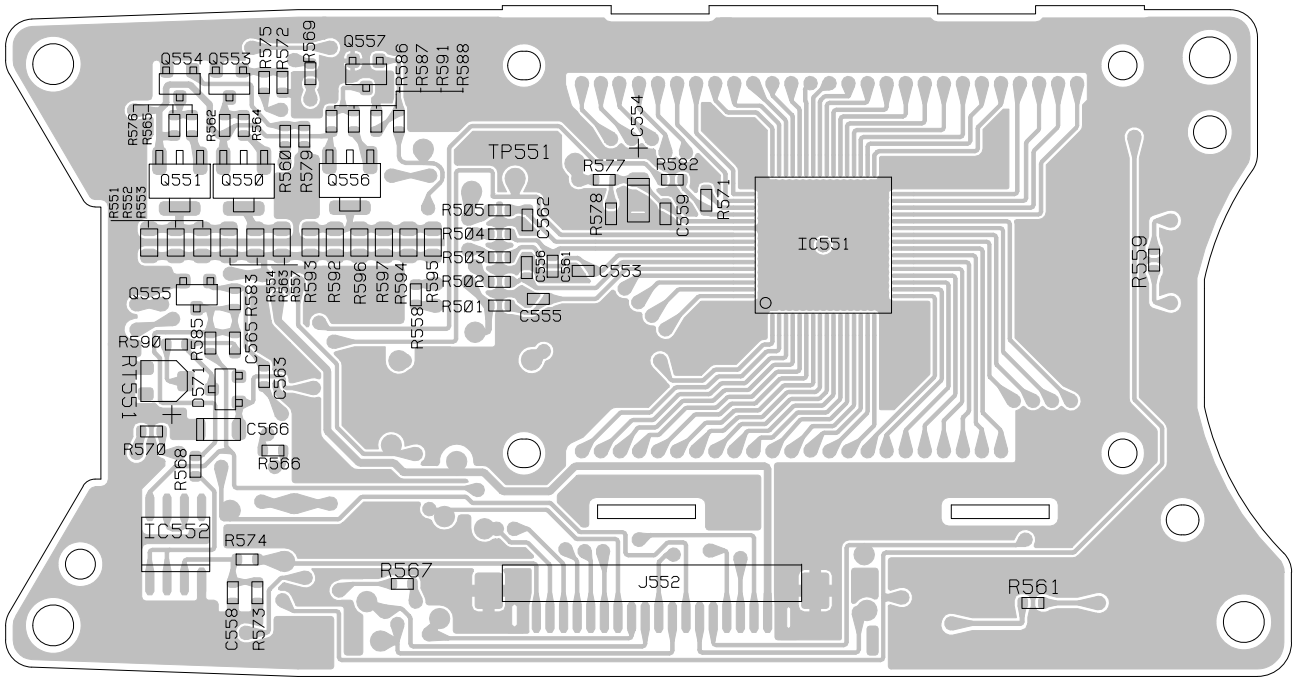
	DATE																				
	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/26	UT605ZH	RT-2500
	YANAI	TITLE	FRONT ASSY
CHECK. BY	APPRO. BY		CHIP LAYOUT TOP VIEW
		DRAWING NO.	
REV. NO.			UNIDEN CORP.

B551 PD-859AA 1/3 (BOTTOM VIEW)



REVISIONS																						
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE																					
	LOT#/RN#																					
	REVISED BY																					
	CHECKED BY																					

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/05	UT605ZH	RT-2500
	YANAI	TITLE FRONT ASSY 1/2	
CHECK. BY	APPRO. BY	CHIP LAYOUT BOTTOM VIEW	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

C553	150P
C554	16V 1 A C-0122
C555	150P
C556	150P
C558	0.47 16V
C559	0.47 16V
C561	150P
C562	150P
C563	0.1
C565	0.1
C566	16V 1 A C-0122

D571	HSM88WK

IC551	NJU6433FD1
IC552	NJM2904M

J552	JK-0965 20P

Q550	2SB1115-YL
Q551	2SB1115-YL
Q553	2SC3052-1F
Q554	2SC3052-1F
Q555	2SC3052-1F
Q556	2SB1115-YL
Q557	2SC3052-1F

R501	1K
R502	1K
R503	1K
R504	1K
R505	1K
R551	180 1/10W
R552	180 1/10W
R553	180 1/10W
R554	180 1/10W
R557	270 1/10W
R558	6.8
R559	6.8
R560	1K
R561	6.8
R562	47K
R563	270 1/10W
R564	1K

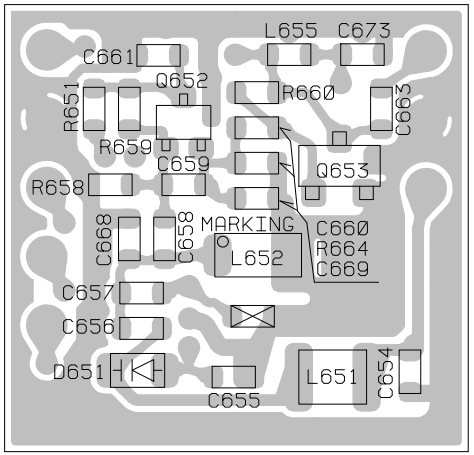
R565	1K
R566	6.8
R567	6.8
R568	1K
R569	6.8
R570	6.8
R571	100K
R572	100K
R573	470K
R574	10K
R575	1K
R576	47K
R577	4.7K
R578	15K
R579	100K
R582	10K
R583	220K
R585	2.7K
R586	47K
R587	1K
R588	1K
R590	4.7K
R591	100K
R592	180 1/10W
R593	180 1/10W
R594	180 1/10W
R595	180 1/10W
R596	180 1/10W
R597	180 1/10W

RT551	33KB RT-0569

NOTES - chip bottom:
1. RESISTANCE VALUES ARE SHOWN IN OHMS
   UNLESS OTHERWISE NOTED.
   (K-KILO OHM. M-MEG OHM.)
2. RESISTOR WATTAGES ARE 1/16W
   UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN
   MICRO FARADS UNLESS OTHERWISE NOTED.
   (P-MICRO-MICRO FARAD)
4. ALL CAPACITORS ARE RATED 50V
   UNLESS OTHERWISE NOTED.
5. ALL CAPACITORS SIZE ARE 1608
   UNLESS OTHERWISE NOTED.
6. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING
   PLEASE REFER TO THE PARTS LIST
   FOR THE CHIP PARTS.

DESIGN.BY	DRAWN.BY	UNIDEN NO.	MODEL NO.
	2005/01/26	UT605ZH	RT-2500
	YANAI KENJI	TITLE FRONT ASSY	
CHECK.BY	APPRO.BY	CHIP LAY OUT BOTTOM VIEW 2/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B651 PD-712BA (TOP VIEW)



C675

REVISIONS																					
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
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	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/06	UT605ZH	RT-2500
	YANAI	TITLE VCO ASSY	
CHECK. BY	APPRO. BY	CHIP LAYOUT TOP VIEW 1/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

C654	330P
C655	150P
C656	18P
C657	8P-C
C658	12P
C659	22P
C660	3P-B
C661	330P
C663	330P
C668	5P-B
C669	15P
C673	330P

D651	HVU350

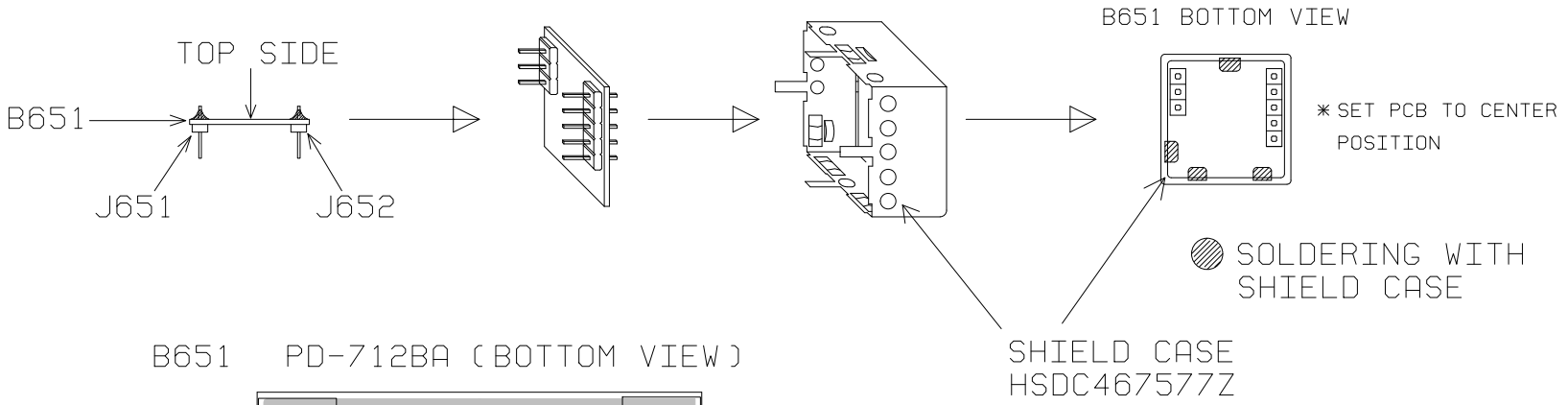
L651	5.6uH LZ-0087
L652	47nH LZ-0243
L655	100nH LZ-0218

Q652	2SC4226-R24
Q653	2SC2714-Y

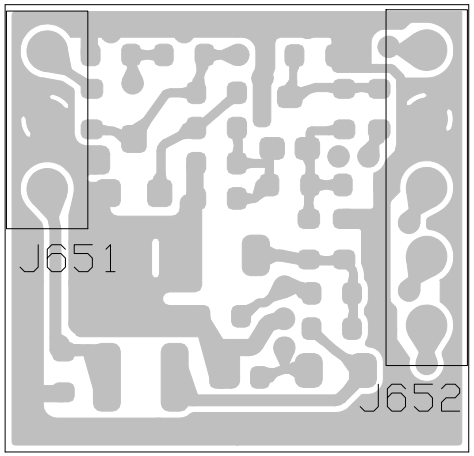
R651	18
R658	8.2K
R659	3.3K
R660	47K
R664	680

NOTES - chip top:
1. RESISTANCE VALUES ARE SHOWN IN OHMS
   UNLESS OTHERWISE NOTED.
   (K-KILO OHM. M-MEG OHM.)
2. RESISTOR WATTAGES ARE 1/16W
   UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN
   MICRO FARADS UNLESS OTHERWISE NOTED.
   (P-MICRO-MICRO FARAD)
4. ALL CAPACITORS ARE RATED 50V
   UNLESS OTHERWISE NOTED.
5. ALL CAPACITORS SIZE ARE 1608
   UNLESS OTHERWISE NOTED.
6. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING
   PLEASE REFER TO THE PARTS LIST
   FOR THE CHIP PARTS.

DESIGN.BY	DRAWN.BY	UNIDEN NO.	MODEL NO.
	2005/01/25	UT605ZH	RT-2500
	YANAI KENJI	TITLE VCO ASSY	
CHECK.BY	APPRO.BY	CHIP LAY OUT TOP VIEW 2/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	



B651 PD-712BA (BOTTOM VIEW)



J651	JK-1100 3P
J652	JK-1100 5P

NOTES:

1. ALL PARTS ARE NOT FLOATING.

REVISIONS																					
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE																				
	LOT#/RN#																				
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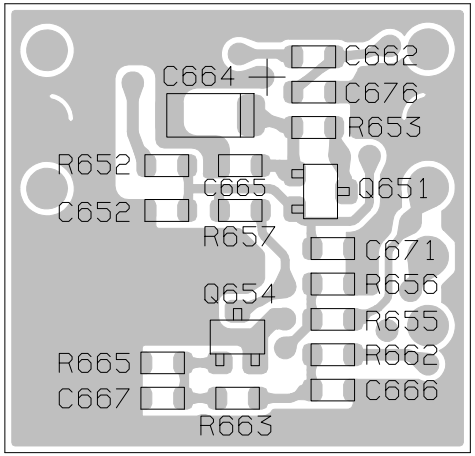
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/06	UT605ZH	RT-2500
	YANAI	TITLE VCO ASSY	
CHECK. BY	APPRO. BY	PARTS ASS'Y BOTTOM VIEW	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B651

PD-712BA (BOTTOM VIEW)



REVISIONS																					
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	DATE																				
	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/06	UT605ZH	RT-2500
	YANAI	TITLE VCO ASSY	
CHECK. BY	APPRO. BY	CHIP LAYOUT BOTTOM VIEW 1/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

C652	330P
C662	15P
C664	16V 2.2 A C-0122
C665	330P
C666	1 16V
C667	330P
C671	330P
C676	1P-B

Q651	2SC4177-L6
Q654	2SC5065-Y

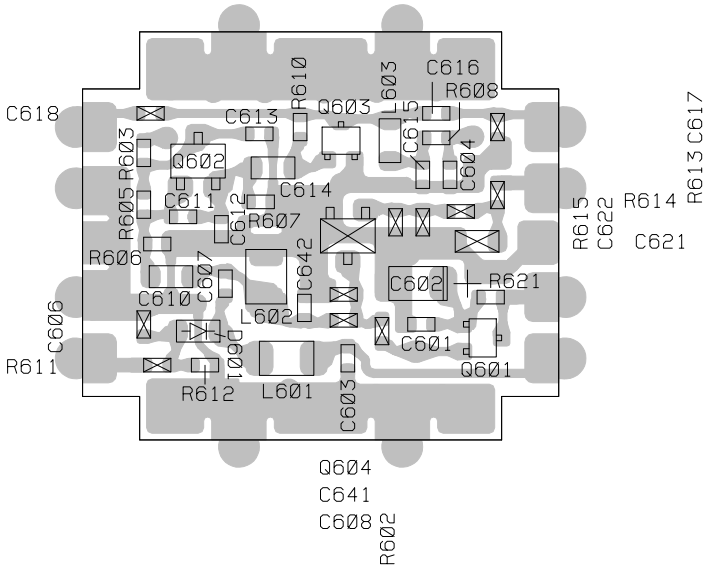
R652	100
R653	3.3K
R655	47K
R656	470
R657	100K
R662	1K
R663	3.3K
R665	47K

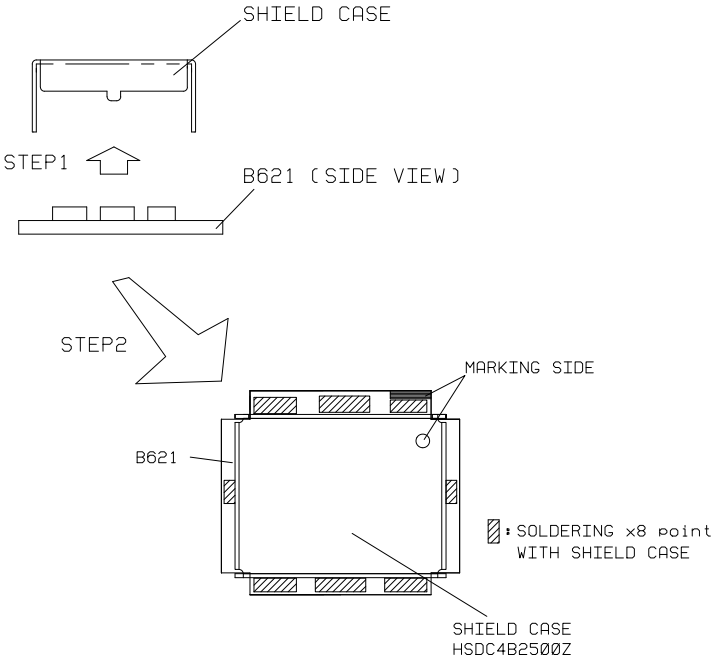
NOTES - chip bottom:
1. RESISTANCE VALUES ARE SHOWN IN OHMS
   UNLESS OTHERWISE NOTED.
   (K-KILO OHM. M-MEG OHM.)
2. RESISTOR WATTAGES ARE 1/16W
   UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN
   MICRO FARADS UNLESS OTHERWISE NOTED.
   (P-MICRO-MICRO FARAD)
4. ALL CAPACITORS ARE RATED 50V
   UNLESS OTHERWISE NOTED.
5. ALL CAPACITORS SIZE ARE 1608
   UNLESS OTHERWISE NOTED.
6. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING
   PLEASE REFER TO THE PARTS LIST
   FOR THE CHIP PARTS.

DESIGN.BY	DRAWN.BY	UNIDEN NO.	MODEL NO.
	2005/01/25	UT605ZH	RT-2500
	YANAI KENJI	TITLE VCO ASSY	
CHECK.BY	APPRO.BY	CHIP LAY OUT BOTTOM VIEW 2/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B621

PD-857AA (TOP VIEW)





REVISIONS																				
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE																			
	LOT#/RN#																			
	REVISED BY																			
	CHECKED BY																			

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	04/12/22	UT605ZH	RT-2500
	YANAI	TITLE	DSCVCO ASSY
CHECK. BY	APPRO. BY	CHIP LAYOUT TOP VIEW 1/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

C601	330P
C602	10V 2.2 P CZ-0239
C603	330P
C604	330P
C607	47P
C610	8P-C 1608
C611	27P
C612	27P
C613	330P
C614	10P 1608
C615	0.01
C616	56P
C642	15P

D601	HVC350B TRF

L601	1uH LZ-0199
L602	68NH LZ-0270
L603	100nH LZ-0218

Q601	2SC5383-T11-1E
Q602	2SC4226-R24
Q603	2SC4915-Y

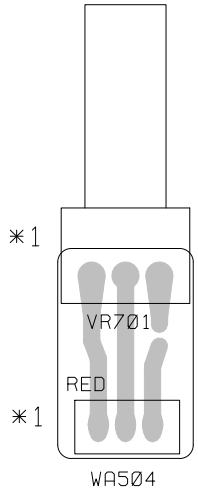
R603	18
R605	3.3K
R606	15K
R607	390
R608	120
R610	27K
R612	0
R621	3.3K

NOTES - chip top:
1. RESISTANCE VALUES ARE SHOWN IN OHMS
   UNLESS OTHERWISE NOTED.
   (K-KILO OHM. M-MEG OHM.)
2. RESISTOR WATTAGES ARE 1/16W
   UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN
   MICRO FARADS UNLESS OTHERWISE NOTED.
   (P-MICRO-MICRO FARAD)
4. ALL CAPACITORS TEMPERATURE
   CHARACTERISTICS ARE CH (LESS THAN 270PF)
   OR B (MORE THAN 270PF)
   UNLESS OTHERWISE NOTED.
5. ALL CAPACITORS SIZE ARE 1005
   UNLESS OTHERWISE NOTED.
6. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING
   PLEASE REFER TO THE PARTS LIST
   FOR THE CHIP PARTS.

DESIGN.BY	DRAWN.BY	UNIDEN NO.	MODEL NO.
	2005/01/25	UT605ZH	RT-2500
	YANAI KENJI	TITLE DSCVCO ASSY	
CHECK.BY	APPRO.BY	CHIP LAY OUT TOP VIEW 2/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B701 PD-859AA 3/3

(TOP VIEW)



VR701	RV-923 50KB
WA504	W-072257

*1 MANUAL SOLDERING

REVISIONS																					
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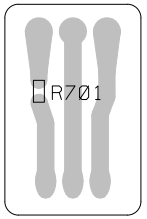
	DATE																				
	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/26	UT605ZH	RT-2500
	YANAI	TITLE SQUELCH ASSY PARTS ASS'Y TOP VIEW	
CHECK. BY	APPRO. BY		
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

R701	Ø 1/16W J (1608)

B701 PD-859AA 3/3

(BOTTOM VIEW)



REVISIONS																					
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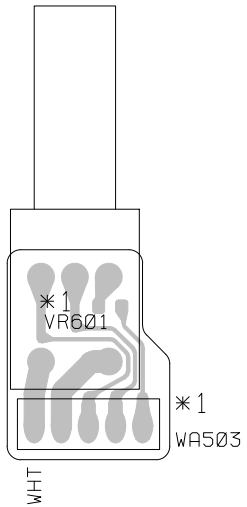
	DATE																				
	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/26	UT605ZH	RT-2500
	YANAI	TITLE SQUELCH ASSY CHIP LAYOUT BOTTOM VIEW	
CHECK. BY	APPRO. BY		
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B601 PD-859AA 2/3

(TOP VIEW)



VR601	RV-922 50KB
WA503	W-072134

*1 MANUAL SOLDERING

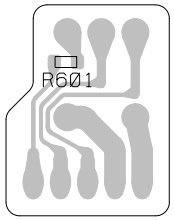
REVISIONS																					
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE																				
	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/26	UT605ZH	RT-2500
	YANAI	TITLE	VOL ASSY
CHECK. BY	APPRO. BY		PARTS ASS'Y TOP VIEW
		DRAWING NO.	
REV. NO.			UNIDEN CORP.

R601	Ø 1/16W J (1608)

B601 PD-859AA 2/3

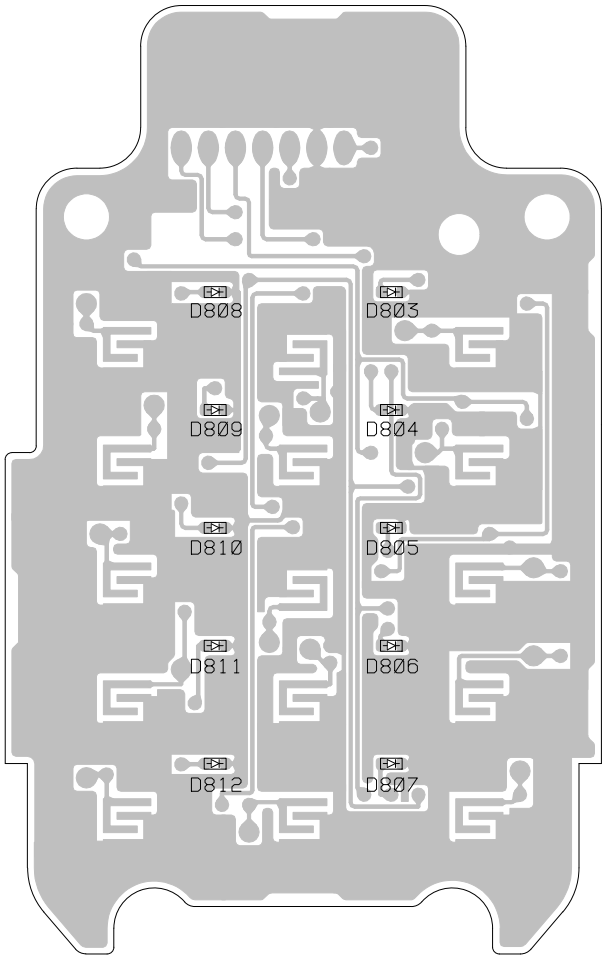
(BOTTOM VIEW)



REVISIONS																					
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE																				
	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
	05/01/26	UT605ZH	RT-2500
	YANAI	TITLE	VOL ASSY
CHECK. BY	APPRO. BY	CHIP LAYOUT BOTTOM VIEW	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B801 PD-879AA (TOP VIEW)



D803	LTST-C190AKT
D804	LTST-C190AKT
D805	LTST-C190AKT
D806	LTST-C190AKT
D807	LTST-C190AKT
D808	LTST-C190AKT
D809	LTST-C190AKT
D810	LTST-C190AKT
D811	LTST-C190AKT
D812	LTST-C190AKT

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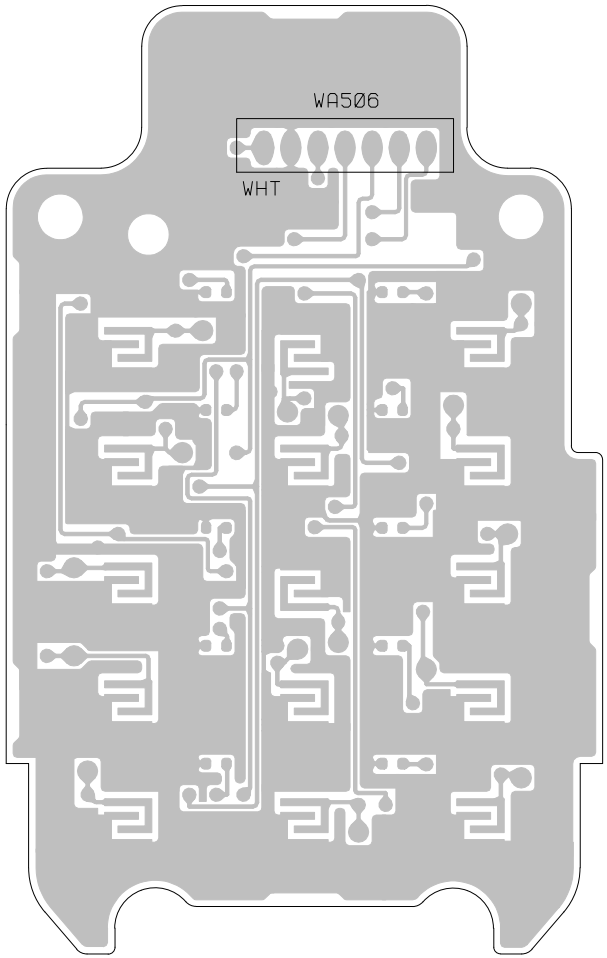
DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
04/12/14	04/12/22	UT604ZH/BH	MC-8000 DSC OCEANUS DSC/ATIS
YANAI	YANAI	TITLE	MIC MAIN ASSY CHIP LAYOUT TOP VIEW
CHECK. BY	APPRO. BY		
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B801 PD-879AA (BOTTOM VIEW)



WA506	WZ-1521

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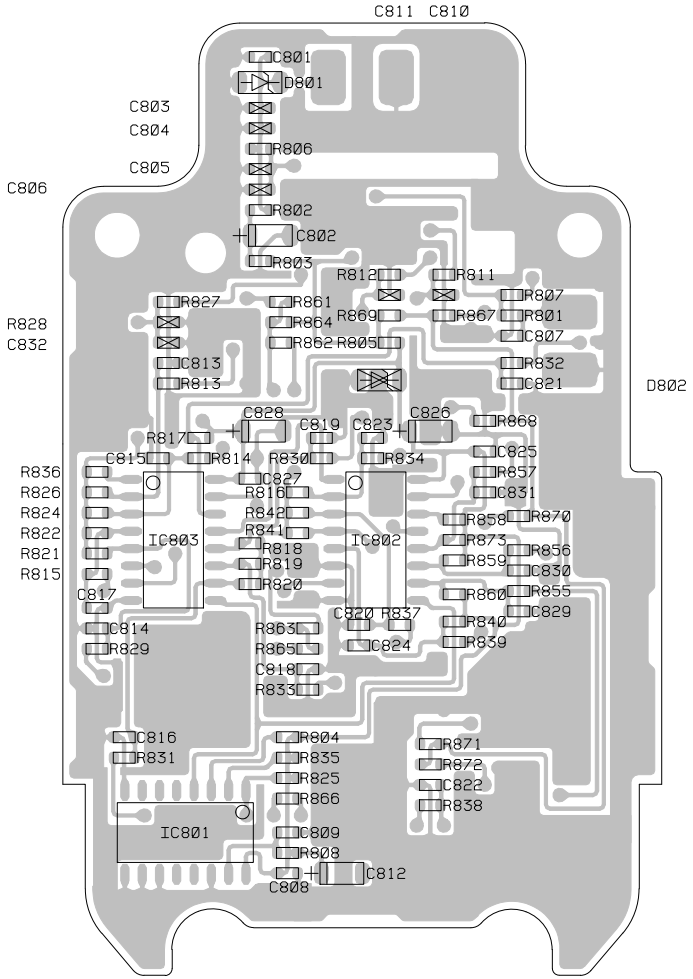
DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
04/12/14	04/12/22	UT604ZH/BH	MC-8000 DSC OCEANUS DSC/ATIS
YANAI	YANAI	TITLE MIC MAIN ASSY PARTS ASS'Y BOTTOM VIEW	
CHECK. BY	APPRO. BY		
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B801 PD-879AA (BOTTOM VIEW)



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	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
04/12/14	04/12/22	UT604ZH/BH	MC-8000 DSC OCEANUS DSC/ATIS
YANAI	YANAI	TITLE MIC MAIN ASSY 1/2 CHIP LAYOUT BOTTOM VIEW	
CHECK. BY	APPRO. BY		
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

C801	0.001
C802	20V 4.7 A C-0122
C807	330P
C808	330P
C809	0.001
C812	20V 4.7 A C-0122
C813	330P
C814	330P
C815	330P
C816	330P
C817	330P
C818	330P
C819	330P
C820	330P
C821	330P
C822	330P
C823	330P
C824	330P
C825	330P
C826	20V 4.7 A C-0122
C827	330P
C828	20V 4.7 A C-0122
C829	330P
C830	330P
C831	330P

D801	HZK6C

IC801	TC74HC123AFN(ELPNE)
IC802	TC74HC166AFN(ELF,M)
IC803	TC74HC166AFN(ELF,M)

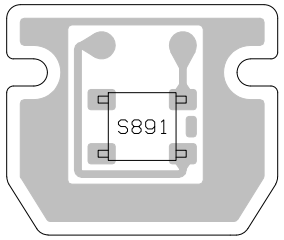
R801	100
R802	1.8K
R803	1K
R804	10K
R805	0
R806	15K
R807	10K
R808	10K
R811	100
R812	100
R813	1K
R814	1K
R815	1K
R816	10K

R817	10K
R818	10K
R819	10K
R820	10K
R821	10K
R822	10K
R824	10K
R825	10K
R826	10K
R827	100
R829	1K
R830	1K
R831	1K
R832	1K
R833	1K
R834	1K
R835	10K
R836	10K
R837	1K
R838	1K
R839	1K
R840	10K
R841	10K
R842	10K
R855	1K
R856	1K
R857	1K
R858	10K
R859	10K
R860	10K
R861	180
R862	180
R863	220
R864	10
R865	180
R866	180
R867	180
R868	180
R869	10
R870	220
R871	180
R872	180
R873	10K

NOTES - chip bottom:
1. RESISTANCE VALUES ARE SHOWN IN OHMS
   UNLESS OTHERWISE NOTED.
   (K-KILO OHM. M-MEG OHM.)
2. RESISTOR WATTAGES ARE 1/16W
   UNLESS OTHERWISE NOTED.
3. CAPACITANCE VALUES ARE INDICATED IN
   MICRO FARADS UNLESS OTHERWISE NOTED.
   (P-MICRO-MICRO FARAD)
4. ALL CAPACITORS ARE RATED 50V
   UNLESS OTHERWISE NOTED.
5. ALL CAPACITORS SIZE ARE 1608
   UNLESS OTHERWISE NOTED.
6. CHIP PARTS ARE NOT SPECIFIED IN THIS DRAWING
   PLEASE REFER TO THE PARTS LIST
   FOR THE CHIP PARTS.

DESIGN.BY	DRAWN.BY	UNIDEN NO.	MODEL NO.
	2005/01/25	UT604ZH/BH	MC-8000DSC / OCEANUS DSC/ATIS
	YANAI KENJI	TITLE MIC ASSY	
CHECK.BY	APPRO.BY	CHIP LAY OUT BOTTOM VIEW 2/2	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B891 PD-884AA (TOP VIEW)



S891	SW-0866

REVISIONS																					
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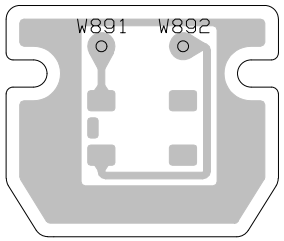
	LOT#/RN#																				
	REVISED BY																				
	CHECKED BY																				

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
04/12/22	04/12/22	UT604ZH/BH	MC-8000 DSC OCEANUS DSC/ATIS
YANAI	YANAI	TITLE MIC SWITCH ASSY CHIP LAYOUT TOP VIEW	
CHECK. BY	APPRO. BY		
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

B891 PD-884AA (BOTTOM VIEW)



W891	UL1571 #26 3-30-3 WHT
W892	UL1571 #26 3-30-3 BLK

* CUT ALL LEGS LESS THAN 2.0mm
* SOLDERING AT TOP SIDE

REVISIONS																					
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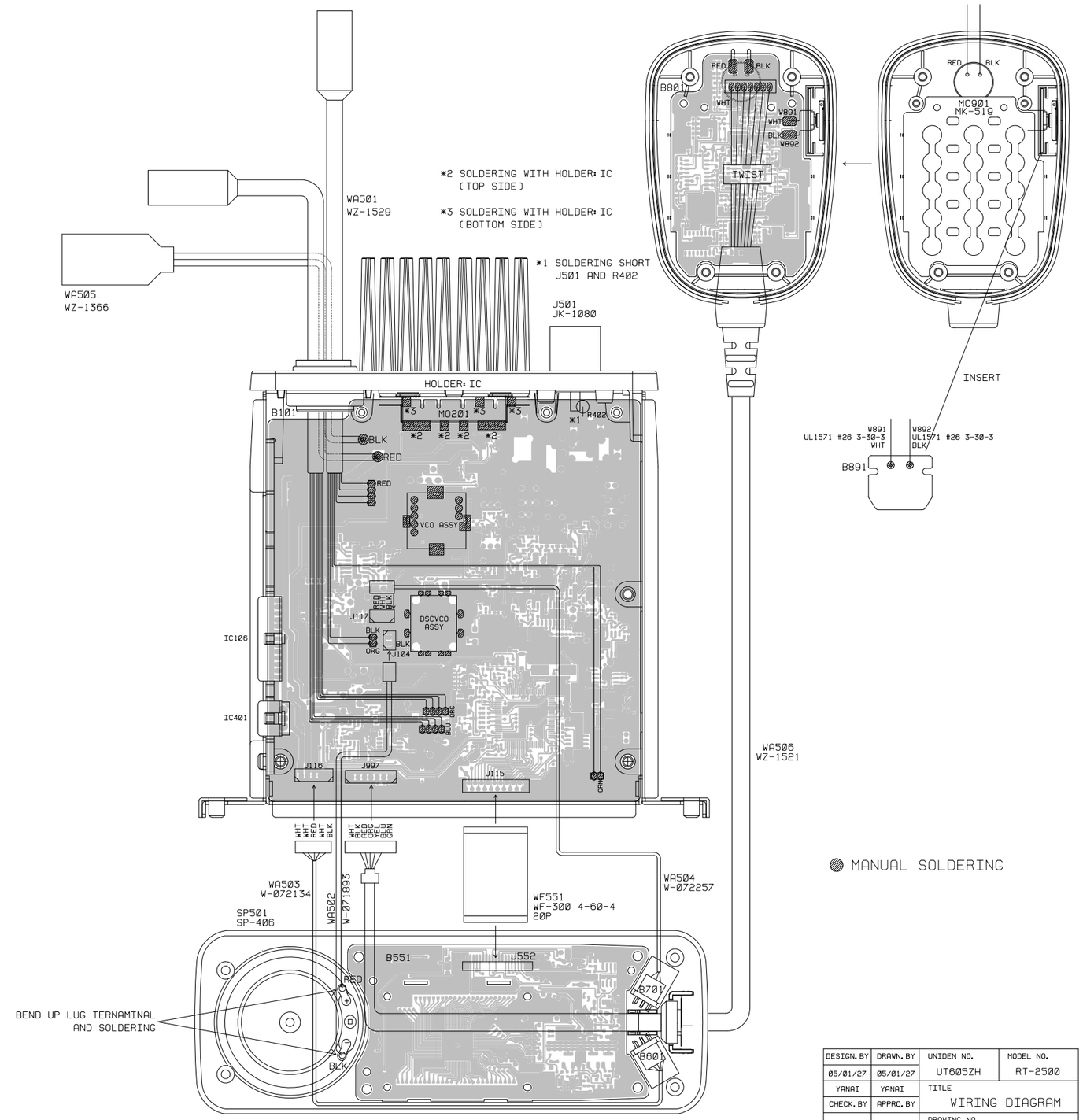
	CHECKED BY																				

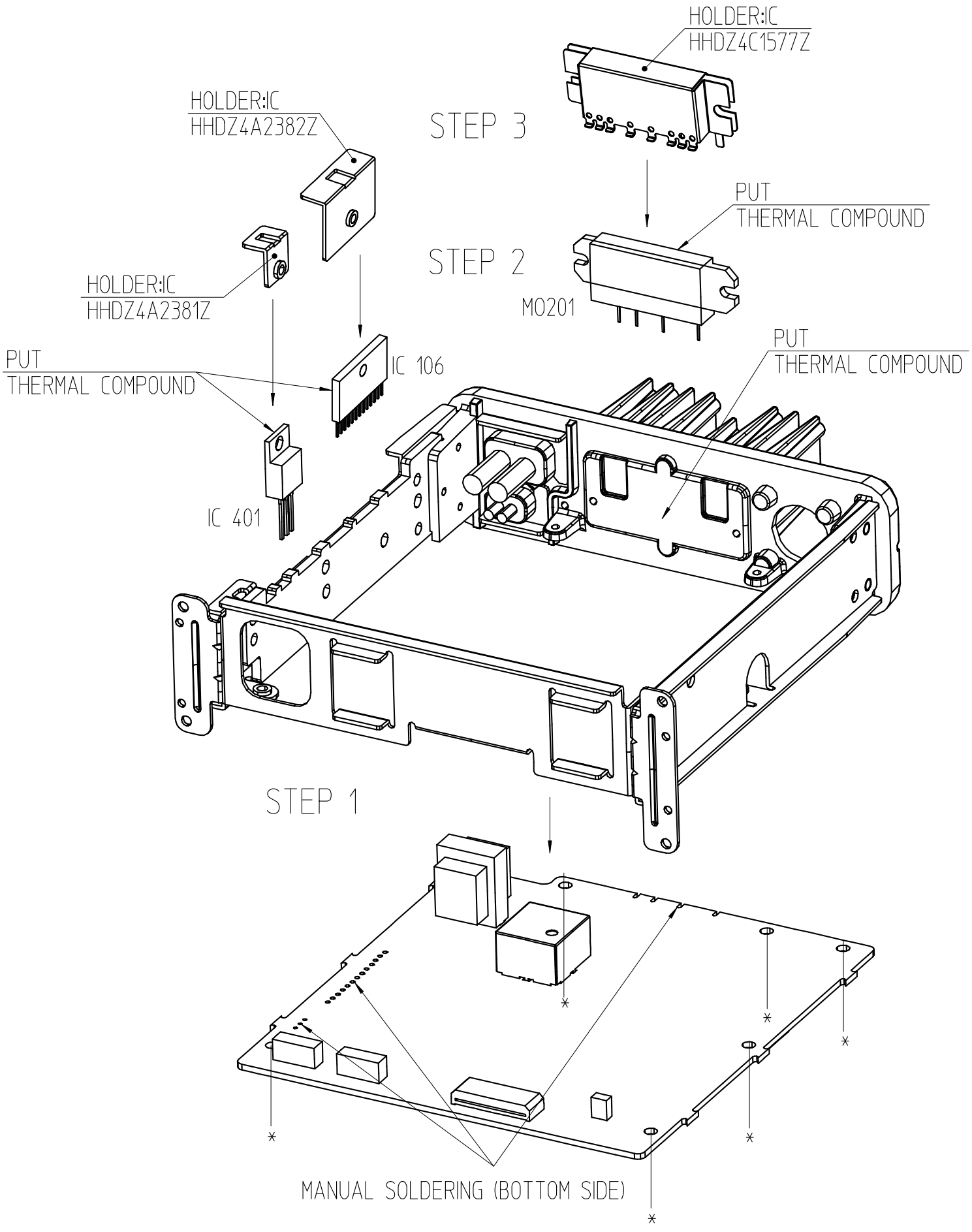
DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
04/12/22	05/01/25	UT604ZH/BH	MC-8000 DSC OCEANUS DSC/ATIS
YANAI	YANAI	TITLE MIC SWITCH ASSY PARTS ASS'Y BOTTOM VIEW	
CHECK. BY	APPRO. BY		
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	

STEP1 : PCB IS ATTACHED WITH ASS'Y FRAME USING SCREW
STEP2 : IC106,IC401,MO201 ARE PUT ON PCB
STEP3 : IC106,IC401,MO201 ARE FIXD USING HOLDER AND SCREWS
STEP4 : IC106,IC401,MO201 ARE MANUAL SOLDERING



● MANUAL SOLDERING

DESIGN. BY	DRAWN. BY	UNIDEN NO.	MODEL NO.
05/01/27	05/01/27	UT605ZH	RT-2500
YANAI	YANAI	TITLE	
CHECK. BY	APPRO. BY	WIRING DIAGRAM	
		DRAWING NO.	
REV. NO.		UNIDEN CORP.	


HOLDER:IC
HHDZ4C1577Z
STEP 3
HOLDER:IC
HHDZ4A2382Z
PUT
THERMAL COMPOUND
STEP 2
HOLDER:IC
HHDZ4A2381Z
M0201
PUT
THERMAL COMPOUND
IC 106
PUT
THERMAL COMPOUND
IC 401
STEP 1
MANUAL SOLDERING (BOTTOM SIDE)
STEP 4
* SCREW POSITION

ALIGNMENT PROCEDURE & SPECIFICATIONS

ALIGNMENT PROCEDURE FORM-8

DATE ISSUED 2005/1/31

APPRO	CHECK	ISSUE	WRITTEN

UNIDEN No **UT604ZH/BH**

BUYER'S MDL MC-8000DSC / OCEANUS DSC/ATIS

DOCUMENT No.

NO. OF PAGES 48 W/ COVER PAGE

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NO. OF ISSUANCE =

ALIGNMENT PROCEDURE FORM - 3				PAGE 1
MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE JIG REQUIREMENT	SUB TITLE CONFIRMATION	REF DIAGRAM .

JIG REQUIREMENT

PROCEDURE	JIG NAME	JIG NO. (PRODUCTION ASSIGNED)	ADAPTER NUMBER
	MAIN PCB CHECK JIG	UT604Z-	
	FRONT ASSY CHECK JIG	UT910Z-	
	FRONT ASSY CHECK JIG	UT920Z-	
	VCO PCB CHECK JIG	UT865Z-003F	
	VCO PCB CHECK JIG	UT899Z-	
	DSC ENCORDER JIG	UT888Z-003F	
	GPS LINE CHECK JIG	UT910Z-005F	
	MIC/PTT & ACC CABLE TEST JIG	UT604Z-	
	MIC PCB CHECK JIG	UT604Z-	
	MIC TEST JIG	UT604Z-	
	ROM WRITER	ANDO AF9708	

REVISIONS:															
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ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 2

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	VCO PCB CHECK	SUB TITLE	

REQUIRED EQUIPMENT AND JIG

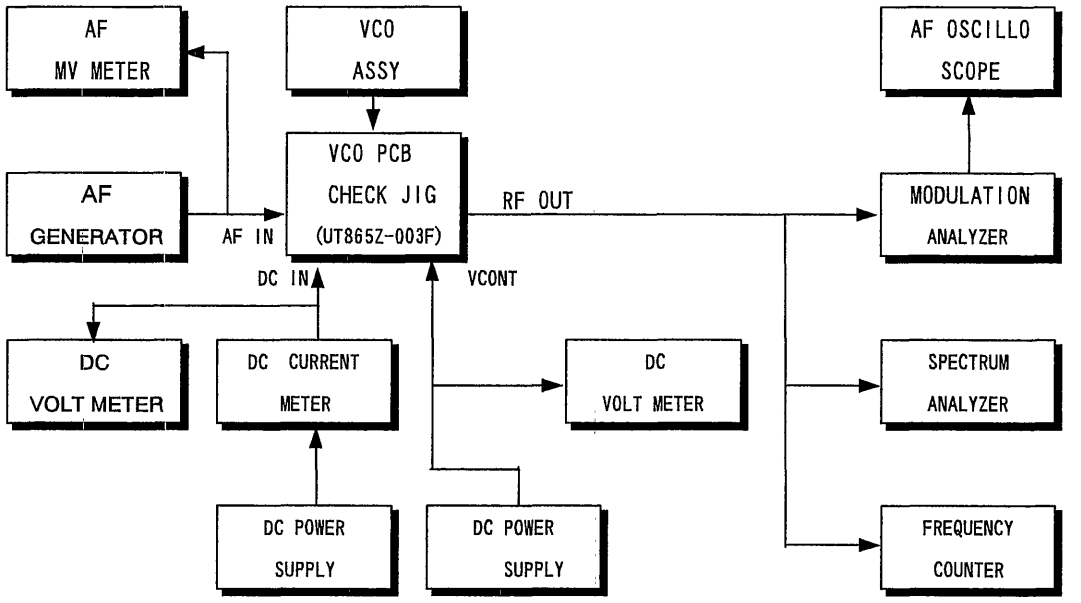
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		2	MORE THAN 15V, 1A
2	AF GENERATOR		1	
3	AF OSCILLOSCOPE		1	
4	AF MILLIVOLT METER		1	
5	MODULATION ANALYZER	HP:8901A or SAME EQUIP.	1	
6	SPECTRUM ANALYZER		1	0-1GHz
7	FREQUENCY COUNTER		1	0-200MHz
8	DC VOLT METER		2	DIGITAL
9	DC CURRENT METER		1	MORE THAN 1A
10	VCO PCB CHECK JIG	UT865Z-003F	1	MORE THAN 1A

JIG AND EQUIPMENT SETTING

1 DC POWER SUPPLY : 10VDC±0.2VDC, 1A (LIMITER)
2 AF GENERATOR : 1kHz ,100mVrms
3 FM LINEAR DETECTOR : HPF:OFF, LPF:17kHz, De-emp:OFF
4 JIG SW TX/RX SW : RX
MOD SW : OFF
VCONT SW : 0.3V, 1.5V, 4.7V

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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	LOT # / RN #														
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1. CONFIRMATION(With case)

STEP	CONDITION	PRECEDURE	MEASUREMENT	UNIT	CONFIRMATION
1		JIG POWER ON			
2	VCONT SW:1.5V	CHECK NG SUPPLY LED			OFF
	TX/RX SW:RX	CHECK FREQUENCY	FREQ. COUNTER	MHz	127～147
		CHECK OUTPUT LEVEL	SPECTRUM ANALYZER	dBm	>-10(-CABLE LOSS)
		CHECK CURRENT	DC CURRENT METER	mA	<22
3	VCONT SW:0.3V	CHECK NG SUPPLY LED			OFF
	TX/RX SW:RX	CHECK FREQUENCY	FREQ. COUNTER	MHz	>134.1
		CHECK OUTPUT LEVEL	SPECTRUM ANALYZER	dBm	>-10(-CABLE LOSS)
		CHECK CURRENT	DC CURRENT METER	mA	<22
4	VCONT SW:4.7V	CHECK NG SUPPLY LED			OFF
	TX/RX SW:RX	CHECK FREQUENCY	FREQ. COUNTER	MHz	<140.75
		CHECK OUTPUT LEVEL	SPECTRUM ANALYZER	dBm	>-10(-CABLE LOSS)
		CHECK CURRENT	DC CURRENT METER	mA	<22
5	VCONT SW:1.5V				
	TX/RX SW:TX	CHECK FREQUENCY	FREQ. COUNTER	MHz	140～165
	MOD SW:OFF	CHECK OUTPUT LEVEL	SPECTRUM ANALYZER	dBm	>-10(-CABLE LOSS)
		CHECK CURRENT	DC CURRENT METER	mA	<22
6	MOD SW:ON	CHECK DEVIATION	MODULATION ANALYZER	kHz	±5～±22kHz
	1kHz,100mVrms	CHECK WAVEFORM	AF SCOPE		SINE WAVE
7	MOD SW:OFF	CHECK DEVIATION	MODULATION ANALYZER 300Hz-3kHz BPF 750us De-emp	Hz	<±300Hz
8		JIG POWER OFF			

ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 4

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	DSCVCO PCB CHECK	SUB TITLE	EQUIPMENT SETTING	

REQUIRED EQUIPMENT AND JIG

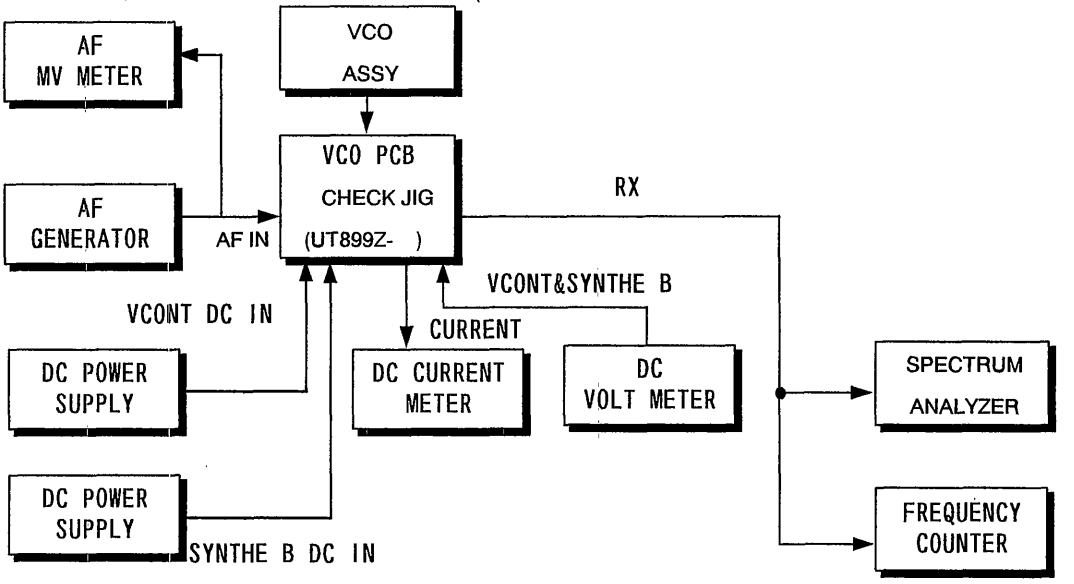
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		2	MORE THAN 15V ,1A
2	AF GENERATOR		1	
3	AF MILLIVOLT METER		1	
4	SPECTRUM ANALYZER		1	>1GHz
5	FREQUENCY COUNTER		1	>200MHz
6	DC VOLT METER		1	DIGITAL
7	DC CURRENT METER		1	>1A
8	VCO PCB CHECK JIG	UT899Z-	1	

JIG AND EQUIPMENT SETTING

1 DC POWER SUPPLY	: 7.5V DC±0.2V, 1A (LIMITER)	3 JIG SW	POWER SW : OFF
2 AF GENERATOR	: 1kHz ,100mVrms		RX/TX SW : RX
			MOD SW : OFF

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED



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MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
0			2005/1/31	-

TITLE	DSCVCO PCB CHECK	SUB TITLE	CONFIRMATION	REF DIAGRAM

1. CONFIRMATION

V-CONT VOLTAGE 1.5V FIXED

STEP	CONDITION	PROCEDURE	MEASUREMENT	UNIT	CONFIRMATION
1		JIG POWER SW : ON			
2	TX/RX SW:RX MOD SW:OFF	CHECK FREQUENCY CHECK OUTPUT LEVEL CHECK CURRENT	FREQ. COUNTER SPECTRUM ANALYZER DC CURRENT METER	MHz dBm mA	98～118 >-10 (*) <15
3		JIG POWER SW : OFF			
4	Shield cover put on shield case. Soldering with shield cover.				

(*) : Calibration for VCO CHECK JIG

REVISION															
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ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 6

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	FRONT PCB CHECK	SUB TITLE		

REQUIRED EQUIPMENT AND JIG

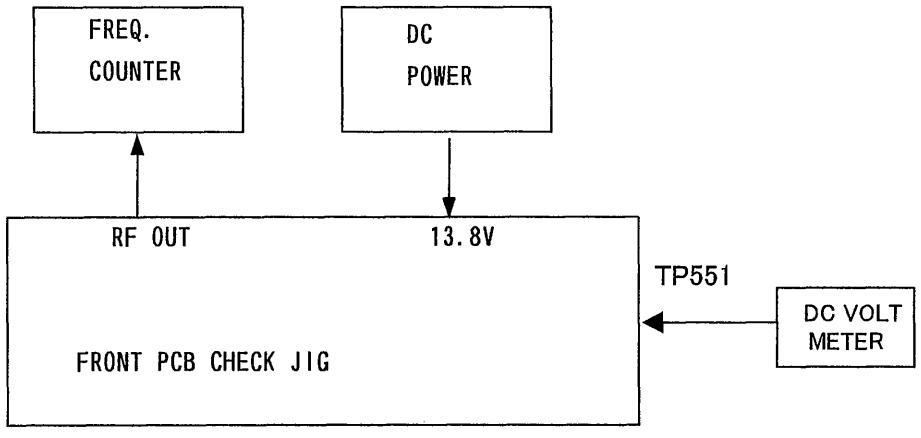
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		1	15V ; ≧1A
2	FREQUENCY COUNTER		1	0 - 200MHz
3	FRONT PCB CHECK JIG	UT910Z-	1	
		(FOR UT604ZH/BH)		
4	FRONT PCB CHECK JIG	UT920Z-	1	
		(FOR UT605ZH)		
5	DC VOLT METER		1	

JIG AND EQUIPMENT SETTING

1.DC POWER SUPPLY : 13.8V ; 1A(LIMITER)

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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	LOT # / RN #														
	REVISED BY														
	CHECKED BY														

TITLE	FRONT PCB CHECK	SUB TITLE		REF DIAGRAM

ALIGNMENT PROCEDURE

STEP	TEST CONDITION	INDICATOR	ADJ.	ALIGNMENT & CONFIRMATION
1			RT551	TURN TO CCW MAX
2	JIG PWR SW :ON	LCD[DP551]		"16" WILL APPEAR (16CH)
3	PUSH:[MENU] KEY	LCD[DP551]		CHANGE MENU MODE SCREEN
4	PUHU:[CH DN] KEY 2 TIMES	LCD[DP551]		"SYSTEM" WILL APPWER
5	PUSH:[SELECT] KEY 2 TIMES	LCD[DP551]		"CONTRAST" & "7" WILL APPEAR
6	PUSH:[CH DN] KEY 5 TIMES	LCD[DP551]		"CONTRAST" & "6" WILL APPEAR
7	PUSH:[CH DN] KEY MANY TIME UNTIL HEAR ERROR TONE	LCD[DP551]		LCD DISPLAY WILL DISAPPEAR
8	DC VOLT METER TO TP551	LCD[DP551]	RT551 *1	ADJ DC VOLTAGE TO 0.1V ±0.1V
9	WAIT FOR ABOUT 30 SEC	LCD[DP551]		"16" WILL APPEAR (16CH)
10	JIG PWR SW :OFF			

*1 HOLED TIME IS 30 SEC. PLEASE ADJUST IT QUICKLY.

REVISIONS:															
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	DATE														
	LOT # / RN #														
	REVISED BY														
	CHECKED BY														

TITLE	FRONT PCB CHECK	SUB TITLE		REF DIAGRAM

CONFIRMATIONS

STEP	TEST CONDITION	INDICATOR	CONFIRMATION
1	PUSH [HI/LO] KEY, [PA] KEY AND TURN JIG POWER SW ON (LCD TEST MODE)	LCD[DP551]	ALL LCD IS TURNED ON LCD BACK LIGHT IS LIGHT UP EACH LCD SEGMENT IS GRADUALLY
2	PUSH:[SELECT] KEY 5 TIMES (RX TEST MODE1)	LCD[DP551]	16ch WILL APPEAR FREQUENCY COUNTER INDICATE 135.4MHz
3	JIG POWER OFF AND JIG POWER SW ON.		16ch WILL APPEAR
4	PUSH:[UP] KEY	LCD[DP551]	17ch WILL APPEAR
5	PUSH:[MEM] KEY	LCD[DP551]	"MEM" ICON APPEAR
6	PUSH:[DOWN] KEY	LCD[DP551]	16ch WILL APPEAR
7	PUSH:[STEP] KEY	LCD[DP551]	17ch WILL APPEAR
8	PUSH:[16/9] KEY	LCD[DP551]	16ch WILL APPEAR
9	PUSH:[16/9] KEY	LCD[DP551]	9ch WILL APPEAR
10	PUSH:[H/L] KEY	LCD[DP551]	"LO" ICON WILL APPEAR
11	PUSH:[PA] KEY	LCD[DP551]	PA WILL APPEAR
12	PUSH:[PA] KEY	LCD[DP551]	9ch WILL APPEAR
13	PUSH:[DISTRESS] KEY 5SEC	LCD[DP551]	70ch WILL APPEAR
14	JIG POWER OFF		

ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 9

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	MIC PCB CHECK	SUB TITLE		

REQUIRED EQUIPMENT AND JIG

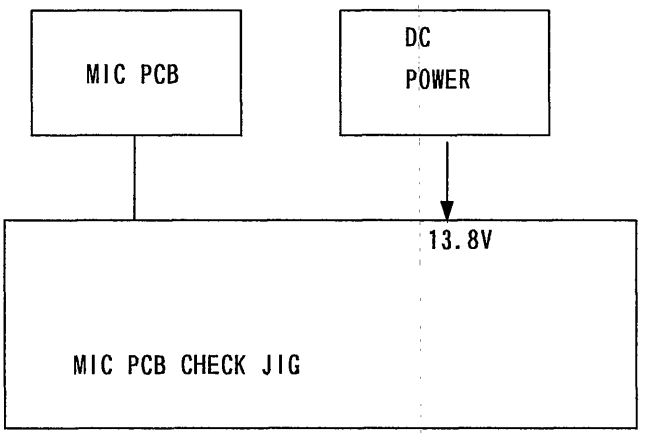
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		1	15V ; ≧1A
2	MIC PCB CHECK JIG	UT604Z-	1	

JIG AND EQUIPMENT SETTING

1.DC POWER SUPPLY : 13.8V ; 1A(LIMITER)

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	MIC PCB CHECK	SUB TITLE		REF DIAGRAM

CONFIRMATIONS

STEP	TEST CONDITION	INDICATOR	CONFIRMATION
1	JIG POWER SW ON		16ch WILL APPEAR
2	PUSH: [1] [2] [3] [4] [5] [6] [7] [8] [9] [0] KEY	LCD[DP551]	EACH PUSH KEY NUMBER WILL BLINK
3	PUSH: [CLR] KEY	LCD[DP551]	16ch WILL APPEAR
4	PUSH: [1] [7] [SELECT] KEY	LCD[DP551]	17ch WILL APPEAR
5	PUSH: [UP] KEY	LCD[DP551]	18ch WILL APPEAR
6	PUSH: [DOWN] KEY 2 TIMES	LCD[DP551]	16ch WILL APPEAR
7	PUSH: [MENU] KEY	LCD[DP551]	CHANGE MENU MODE SCREEN
8	PUSH: [MENU] KEY AGAIN	LCD[DP551]	16ch WILL APPEAR
9	JIG POWER OFF		

ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 11

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	MAIN PCB CHECK :TRANSMITTER	SUB TITLE	

REQUIRED EQUIPMENT AND JIG

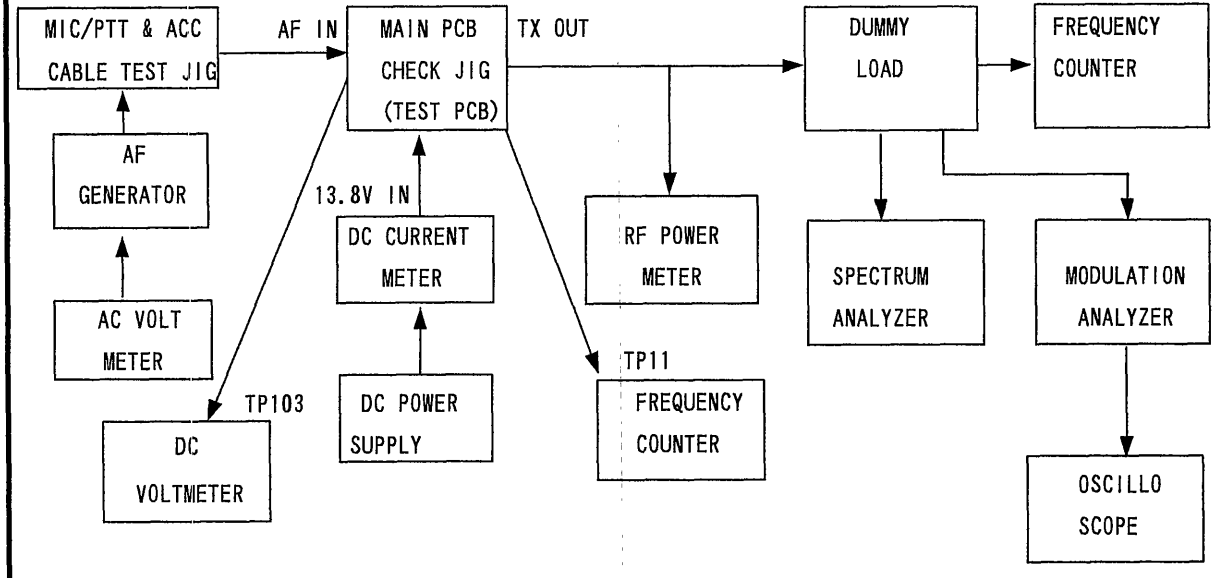
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		1	15V : ≧1A
2	MODULATION ANALYZER	HP8901A OR EQUIVALENT	1	
3	FREQUENCY COUNTER		2	>200MHz
4	RF POWER METER		1	>1W
5	DC CURRENT METER		1	
6	AF GENERATOR		1	
7	OSCILLOSCOPE		1	
8	DC VOLTMETER		1	
9	DUMMY LOAD		1	50 OHM : >1W
10	AC VOLT METER		1	
11	MAIN PCB CHECK JIG	UT604Z-	1	
12	MIC/PTT & ACC CABLE TEST JIG	UT604Z-	1	
13	SPECTRUM ANALYZER		1	

JIG AND EQUIPMENT SETTING

1. DC POWER SUPPLY	: 13.8V ; 1A (LIMITER)
2. CHANNEL	: CH14, CH70
3. MODULATION FREQUENCY	: 1kHz
4. TX MODE	: PTT SWITCH ON

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	MAIN PCB CHECK : TRANSMITTER	SUB TITLE		REF DIAGRAM

ALIGNMENT PROCEDURE

STEP	CH	TEST CONDITION	MEASUREMENT	ADJ.	PROCEDURE
1	-	PUSH [TEST MODE SW] AND TURN JIG POWER SW ON	-	-	LOG IN TEST MODE
2	-	PUSH [SELECT] KEY	-	-	-
3	14	NO MODULATION PTT SW TX ON	FREQUENCY COUNTER TO TX OUT	-	CHECK FREQUENCY TO 156.700 MHz±50Hz
4	14	PTT SW TX ON	DC VOLTMETER TO VCO CONT VOLTAGE(TP103)	-	CONFIRM DC VOLT METER 1.5～4.0V
5	14	NO MODULATION PTT SW TX ON	RF POWER METER TO TX OUT	-	CHECK TO TX POWER METER >10.0dBm
6	14	AF GENE:50mVrms 1kHz PTT SW TX ON	MODULATION ANALYZER TO TX OUT WITH OSCILLOSCOPE	RT203	ADJUST DEVIATION TO 4.4kHz±0.1kHz
7	-	PUSH [SELECT] KEY	-	-	-
8	70	DSC DEV ADJ TEST PTT SW TX ON	MODULATION ANALYZER TO TX OUT	RT202	ADJUST DEVIATION TO 2.6kHz±0.1kHz @1.3kHz
9	-	PUSH [PA] KEY	-	-	"WX" ICON WILL APPEAR
10	70	ATIS DEV ADJ TEST PTT SW TX ON	MODULATION ANALYZER TO TX OUT	RT207	ADJUST DEVIATION TO 1.2kHz±0.1kHz @1.3kHz
11	-	PUSH [SELECT] KEY 2 TIMES	-	-	-
12	70	NO MODULATION PTT SW TX ON	FREQUENCY COUNTER TO TP11	CT1	ADJUST FREQUENCY TO 600.000Hz±0.018Hz
13	-	JIG POWER SW OFF	-	-	-

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ALIGNMENT PROCEDURE	FORM-1	EQUIPMENT SETTING	PAGE 13

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	MAIN PCB CHECK : RECEIVER	SUB TITLE	

REQUIRED EQUIPMENT AND JIG

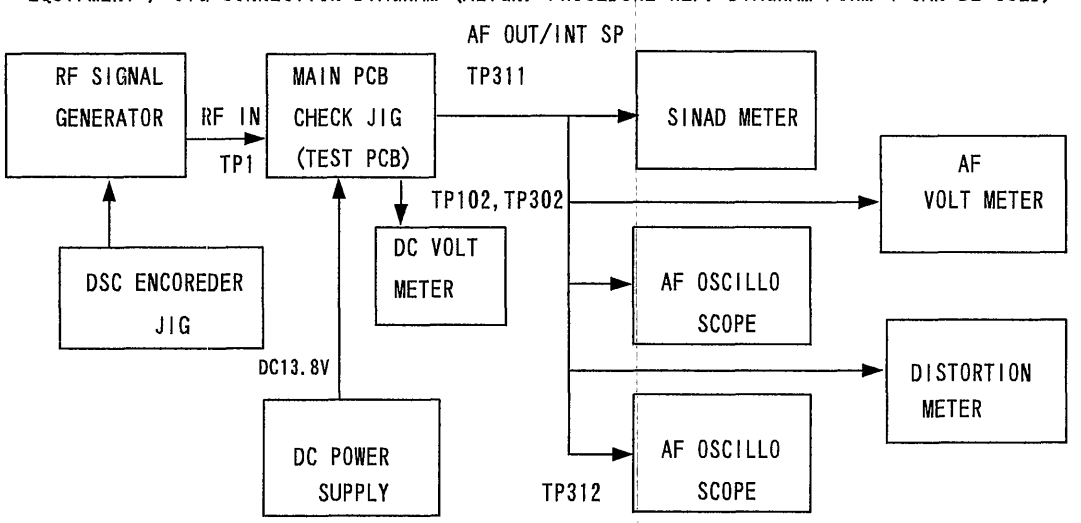
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		1	15V : ≧2A
2	RF SIGNAL GENERATOR		1	0 - 1GHz
3	DISTORTION METER		2	
4	SINAD METER		2	
5	AF VOLTMETER		2	
6	AF OSCILLOSCOPE		3	
7	DC VOLT METER		2	
8	DSC ENCOREDER JG	UT888Z-003F	1	
9	MAIN PCB CHECK JIG	UT604Z-	1	

JIG AND EQUIPMENT SETTING

1. DC POWER SUPPLY	: 13.8V ; 2A (LIMITER)	5. SQUELCH	: CCW
2. CHANNEL	: CH16	6:SIGNAL GENERATOR	:156.8MHz, 156.05MHz
3. MODULATION	: 1kHz, ±3kHz DEVIATION		
4. AUDIO OUTPUT	: 0.4～0.5W(1.8～2Vrms AT 8 OHM LOAD)		

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	MAIN PCB CHECK : RECEIVER	SUB TITLE		REF DIAGRAM

1. ALIGNMENT PROCEDURE

STEP	CH	TEST CONDITION	MEASUREMENT	ADJ.	PROCEDURE
1	-	PUSH [TEST MODE SW] AND TURN JIG POWER SW ON	-	-	LOG IN TEST MODE
2	-	PUSH 6 TIMES [SELECT] KEY	-	-	LOG IN RX DSC TEST MODE
3	70	PTT SW : OFF SSG : 1mV NO MODULATION	DC VOLTMETER OR OSCILLOSCOPE TO TP302	L313	ADJUST DC VOLTAGE TO 3.2V±0.05V
4	70	PTT SW : OFF MOD:1kHz, ±3kHz Dev SSG : -113dBm	IC203の 1pin(TP311)を モニタして下さい。	L101,102	ADJUST TO MAXIMUM SINAD >12dB
5	70	PTT SW : OFF SSG : SQ : TIGHT	RT301をADJUST ADJUST方法は下記参照		
6	70	PTT SW : OFF MOD : EXT MOD : ±3kHz Dev SSG : 1mV	CHECK JIG LCD DISPLAY	-	PUSH : DISTRESS SW CONFIRM THE JIG LCD DISPLAY INDICATE " RECEIVED DISTRESS・・・・".
7	-	JIG POWER SW OFF	-	-	-

RT301のADJUST
1. IC203の1pin(TP311)を8920に接続し、SINADが8dBになるようにSSGの出力を設定する。
2. 1. で設定したSSGの出力レベルのまま、IC301の14pin(TP312)をモニタし、
LOレベルであることを確認する。
3. IC301の14pin(TP312)をモニタしながらRT301を時計方向に回し、
LO→HIになるところでADJUST。

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MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	MAIN PCB CHECK : RECEIVER	SUB TITLE		REF DIAGRAM

1. ALIGNMENT PROCEDURE

STEP	CH	TEST CONDITION	MEASUREMENT	ADJ.	PROCEDURE
1	-	PUSH [TEST MODE SW] AND TURN JIG POWER SW ON	-	-	LOG IN TEST MODE
2	-	PUSH 5 TIMES [SELECT] KEY	-	-	LOG IN RX TEST MODE
3	16	PTT SW : OFF SSG : 1mV NO MODULATION	DC VOLTMETER OR OSCILLOSCOPE TO TP102	L109	ADJUST DC VOLTAGE TO 3.2V±0.05V
4	16	PTT SW : OFF MOD:1kHz, ±3kHz Dev SSG : -113dBm	SINAD METER TO AF OUTPUT WITH DUMMY LOAD	L104, 105 L106, 108	ADJUST TO MAXIMUM SINAD >12dB
5	16	PTT SW : OFF SSG : -109dBm SQ : TIGHT	OSCILLOSCOPE TO EXTERNAL SPEAKER	RT101	ADJUST SLOWLY UNTIL WAVEFORM APPEARS ON THE OSCILLOSCOPE
6	-	JIG POWER SW OFF	-	-	-

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ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 16

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	ALIGNMENT OF TRANSMITTER	SUB TITLE		

REQUIRED EQUIPMENT AND JIG

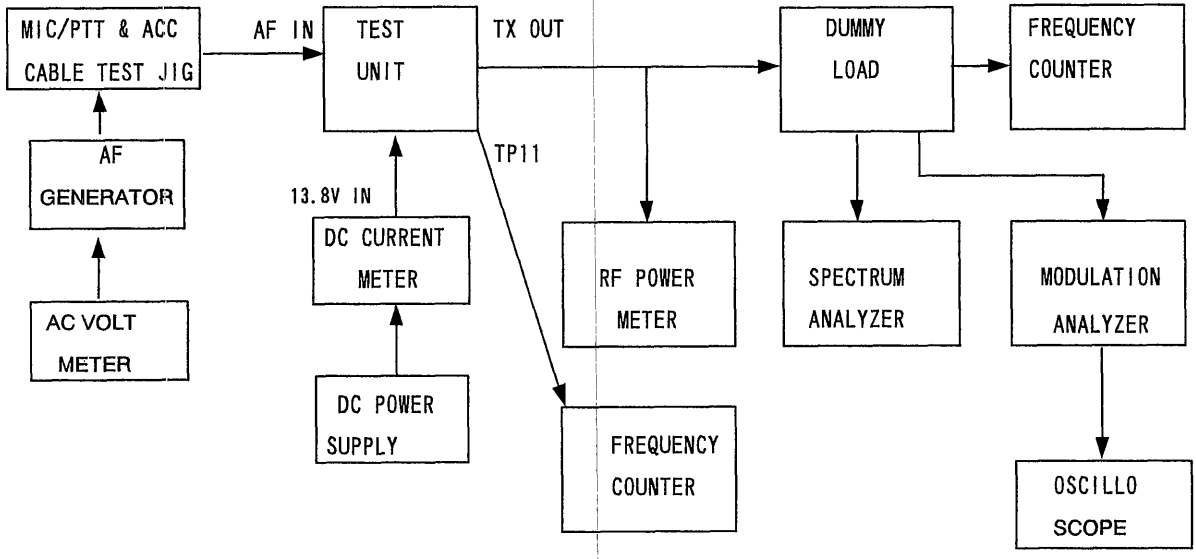
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		1	15V : ≧8A
2	MODULATION ANALYZER	HP8901A OR EQUIVALENT	1	
3	FREQUENCY COUNTER		2	0-200MHz
4	RF POWER METER		1	>1W
5	DC CURRENT METER		1	
6	AF GENERATOR		1	
7	OSCILLOSCOPE		1	
8	DUMMY LOAD		1	50 OHM : >30W
9	AC VOLT METER		1	
10	MIC/PTT & ACC CABLE TEST JIG	UT604Z-	1	
11	SPECTRUM ANALYZER		1	

JIG AND EQUIPMENT SETTING

1. DC POWER SUPPLY : 13.8V ; 8A (LIMITER)
2. CHANNEL : CH14, CH70
3. MODULATION FREQUENCY : 1kHz
4. TX MODE : PTT SWITCH ON

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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1. ALIGNMENT PROCEDURE

STEP	CH	TEST CONDITION	MEASUREMENT	ADJ.	PROCEDURE
1	14	NO MODULATION PTT SW TX ON	FREQUENCY COUNTER TO TX OUT	-	CHECK FREQUENCY TO 156.700 MHz±50Hz
2	14	NO MODULATION PTT SW TX ON	RF POWER METER TO TX OUT	RT205	ADJUST POWER READING TO 20W ± 0.5W INDICATE ON LCD "TX HI"
3	-	-	-		PUSH [HI/LO] KEY.
4	14	NO MODULATION	RF POWER METER TO TX OUT	RT204	ADJUST POWER READING TO 0.75W ± 0.1W INDICATE ON LCD "TX LO"
5	-	REPEAT STEPS 2～4	-	-	-
6	14	AF GENE :50mVrms :1kHz PTT SW TX ON @HI POWER	MODULATION ANALYZER TO TX OUT WITH OSCILLOSCOPE HPF:OFF LPF:15,17or20kHz DE-EMPH:OFF	RT203	ADJUST DEVIATION TO ±4.4kHz±0.1kHz INDICATE ON LCD "TX HI"
7	70	DSC DEV ADJ TEST PTT SW TX ON @LO POWER	MODULATION ANALYZER TO TX OUT WITH OSCILLOSCOPE HPF:OFF LPF:15,17or20kHz DE-EMPH:OFF	RT202	ADJUST DEVIATION TO 2.6kHz±0.1kHz @1.3kHz INDICATE ON LCD "TX LO" INDICATE ON LCD "1.3KHz OUT"
8	-	PUSH [PA] KEY	-	-	"WX" ICON WILL APPEAR
9	70	ATIS DEV ADJ TEST PTT SW TX ON @LO POWER	MODULATION ANALYZER TO TX OUT WITH OSCILLOSCOPE HPF:OFF LPF:15,17or20kHz DE-EMPH:OFF	RT207	ADJUST DEVIATION TO 1.2kHz±0.1kHz @1.3kHz INDICATE ON LCD "TX LO" INDICATE ON LCD "1.3KHz OUT" INDICATE ON LCD "WX"
10	70	NO MODULATION PTT SW TX ON	FREQUENCY COUNTER TO TP11	CT1	ADJUST FREQUENCY TO 600.000Hz±0.018Hz

STEP1～6: TEST MODE (TX TEST)
STEP7～9: TEST MODE (DSC DEV.ADJ:1.3kHz)
STEP10: TEST MODE (DSC DEV.ADJ:1.3kHz/2.1kHz)

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ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 18

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	ALIGNMENT OF RECEIVER	SUB TITLE	BAND PASS FILTER	

REQUIRED EQUIPMENT AND JIG

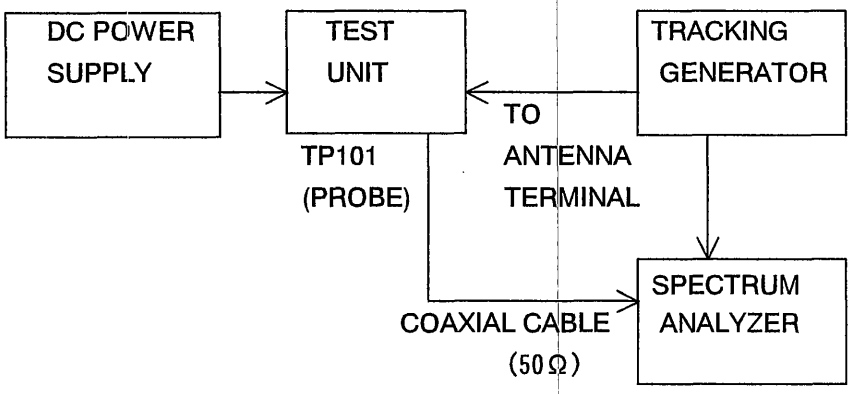
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		1	15V ; ≧1A
2	TRACKING GENERATOR		1	VHF BAND
3	SPECTRUM ANALYZER		1	

JIG AND EQUIPMENT SETTING

1. DC POWER SUPPLY : 13.8V ; 1A (LIMITER)

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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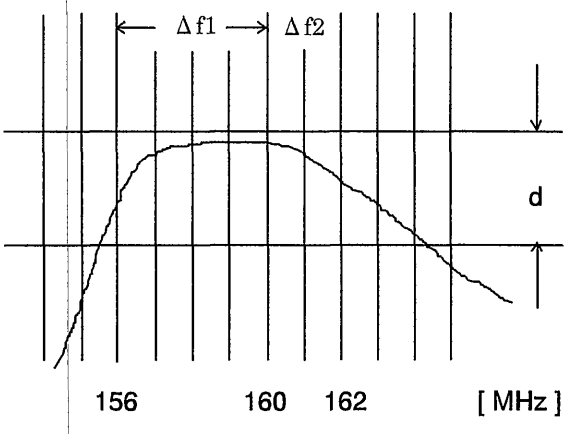
ALIGNMENT PROCEDURE	ALIGNMENT PROCEDURE	FORM - 3	PAGE 19

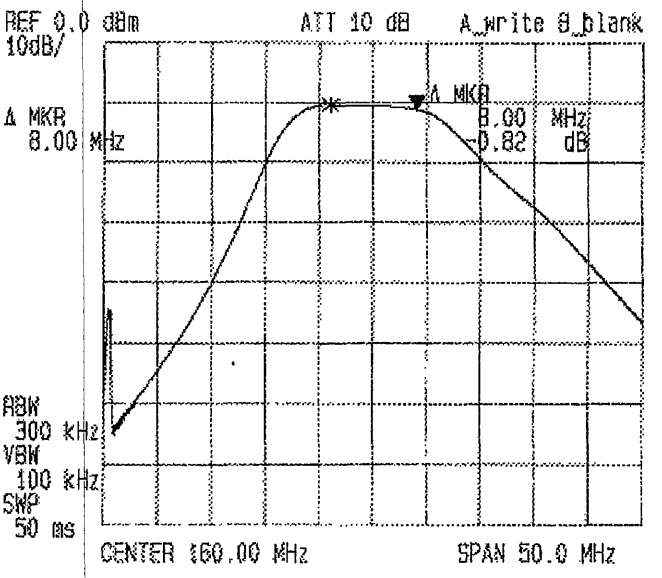
MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	ALIGNMENT OF RECEIVER	SUB TITLE	BAND PASS FILTER	REF DIAGRAM

ALIGNMENT PROCEDURE

STEP	CONDITION	ADJ.	PROCEDURE
1	CH:16 TRACK GEN OUT = -30dBm NOTE. THE LOCATION OF THE GND OF PROBE BE AS NEAR TO TP101.	L104 L105 L106	ADJUST BANDPASS WAVEFORM AS SHOWN. Δf1 ≧ 4MHz Δf2 ≧ 2MHz Δd ≦ 3dB





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ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 20

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	ALIGNMENT OF RECEIVER	SUB TITLE		

REQUIRED EQUIPMENT AND JIG

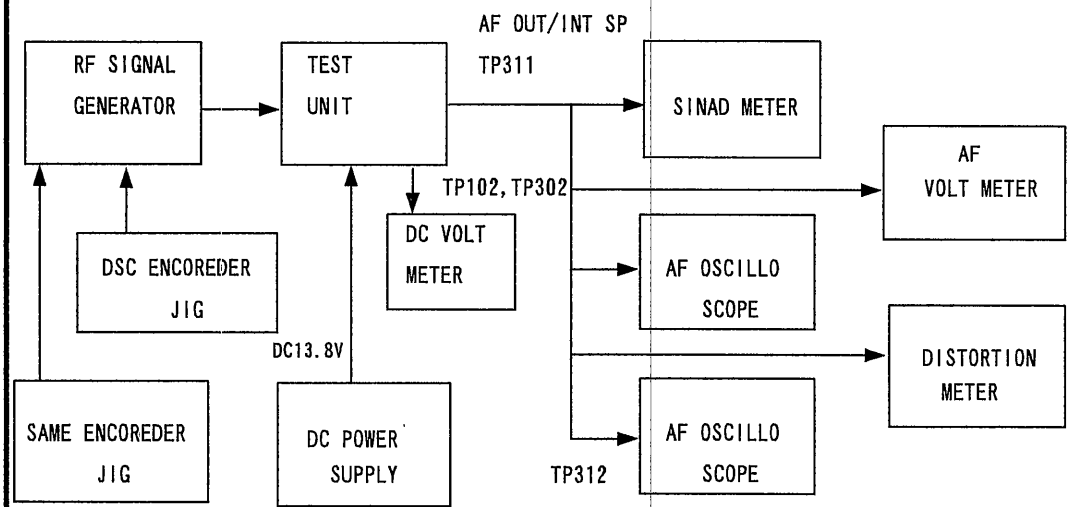
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		1	15V : ≧5A
2	RF SIGNAL GENERATOR		1	0 - 1GHz
3	DISTORTION METER		2	
4	SINAD METER		2	
5	AF VOLTMETER		2	
6	AF OSCILLOSCOPE		3	
7	DC VOLT METER		2	
8	DSC ENCOREDER JG	UT888Z-005F	1	
9	SAME ENCOREDER JIG	UB301Z-003F	1	

JIG AND EQUIPMENT SETTING

1. DC POWER SUPPLY	: 13.8V ; 5A (LIMITER)	5. SQUELCH	: CCW
2. CHANNEL	: CH16	6. SIGNAL GENERATOR	: 156.8MHz
3. MODULATION	: 1kHz, ±3kHz DEVIATION		(CH16)
4. AUDIO OUTPUT	: 0.4～0.5W(1.8～2Vrms AT 8 OHM LOAD)		

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	ALIGNMENT OF RECEIVER	SUB TITLE		REF DIAGRAM

1. ALIGNMENT PROCEDURE

STEP	CH	TEST CONDITION	MEASUREMENT	ADJ.	PROCEDURE
1	70	SSG : 1mV NO MODULATION	DC VOLTMETER OR OSCILLOSCOPE TO TP302	L313	ADJUST DC VOLTAGE TO 3.2V±0.05V
2	70	MOD:1kHz, ±3kHz Dev SSG : -113dBm	IC203の 1pin(TP311)を モニタして下さい。	-	CHECK TO SINAD >12dB
3	70	SSG : SQ : TIGHT	RT301をADJUST ADJUST方法は下記参照		
4	70	MOD : EXT MOD : ±3kHz Dev SSG : 1mV	CHECK LCD DISPLAY	-	PUSH : DISTRESS SW CONFIRM THE LCD DISPLAY INDICATE " RECEIVED DISTRESS ・・・ ".
5	-	POWER SW OFF			

STEP1～4: TEST MODE(DSC TEST)

RT301のADJUST
1. IC203の1pin(TP311)を8920に接続し、SINADが8dBになるようにSSGの出力を設定する。
2. 1. で設定したSSGの出力レベルのまま、IC301の14pin(TP312)をモニタし、
LOレベルであることを確認する。
3. IC301の14pin(TP312)をモニタしながらRT301を時計方向に回し、
LO→HIになるところでADJUST。

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MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	ALIGNMENT OF RECEIVER	SUB TITLE		REF DIAGRAM

1. ALIGNMENT PROCEDURE

STEP	CH	TEST CONDITION	MEASUREMENT	ADJ.	PROCEDURE
1	16	SSG : 1mV NO MODULATION	DC VOLTMETER OR OSCILLOSCOPE TO TP102	L109	ADJUST DC VOLTAGE TO 3.2V±0.05V
2	16	MOD:1kHz, ±3kHz Dev SSG : -113dBm	SINAD METER TO AF OUTPUT WITH DUMMY LOAD	L108	ADJUST TO MAXIMUM SINAD >12dB AFTER, 1 TURN L108 TO C.W. TO KEEP MAXIMUM SINAD (STOP THERE WHILE THE CORE OF L108 SEEMS TO BE BROKEN.)
3	16	SSG : -109dBm SQ : TIGHT	OSCILLOSCOPE	RT101	ADJUST SLOWLY UNTIL WAVEFORM APPEARS ON THE OSCILLOSCOPE.
4	-	POWER SW OFF			

STEP1～3: TEST MODE(RX TEST)

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ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 23

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	OTHER CONFIRMATION 1	SUB TITLE		

REQUIRED EQUIPMENT AND JIG

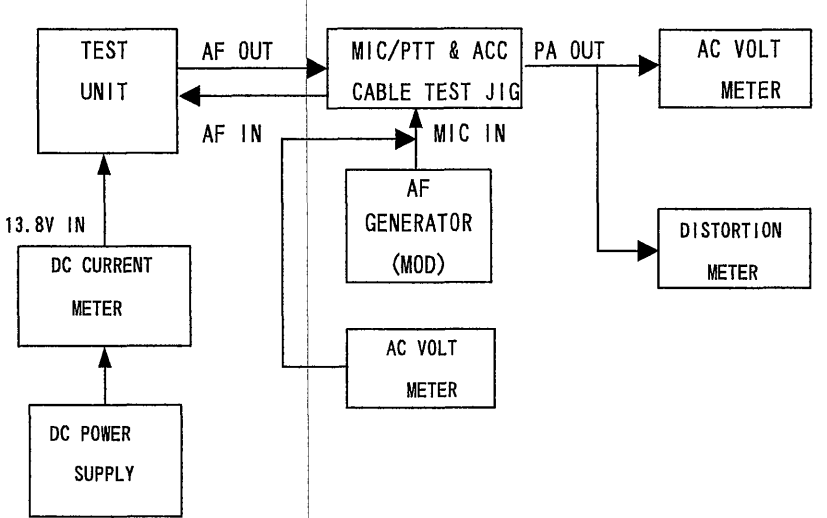
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		1	MORE THAN 15V , 5A
2	AF GENERATOR		1	
3	AC VOLT METER		2	
4	DISTORTION METER		1	
5	MIC/PTT & ACC CABLE TEST JIG	UT604Z-	1	
6	DC CURRENT METER		1	

JIG AND EQUIPMENT SETTING

1. DC POWER SUPPLY : 13.8V ; 5A (LIMITER)
2. SQUELCH : CCW

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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TITLE	OTHER CONFIRMATION 1	SUB TITLE		REF DIAGRAM

1-1. OTHER CONFIRMATION (HAIL MODE CHECK)

STEP	CH	TEST CONDITION	MEASUREMENT	ADJ	CONFIRMATION
1	-	PA SW TURN ON	-	-	-
2	-	PTT : ON VOLUME : MAX MOD : 1kHz 10mV	CHECK AC VOLT METER TO PA OUT	-	CONFIRM THE AC VOLT METER IT SHOULD EXCEED 4Vrms (4W).
3	-	PTT : ON VOLUME : MAX MOD : 1kHz 10mV	CHECK DISTORTION METER TO PA OUT	-	CONFIRM THE DISTORTION METER IT SHOULD EXCEED 20%
4	-	PTT : ON VOLUME : MAX MOD : 1kHz	CHECK DISTORTION METER TO PA OUT	-	SET TO MOD LEVEL AT OUTPUT AUDIO LEVEL OF AC VOLT METER 2.5～3.5Vrms CONFIRM THE DISTORTION METER LESS THAN 7%

*TEST IN Normal Mode.

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ALIGNMENT PROCEDURE FORM-1	EQUIPMENT SETTING	PAGE 25

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	OTHER CONFIRMATION 2	SUB TITLE		

REQUIRED EQUIPMENT AND JIG

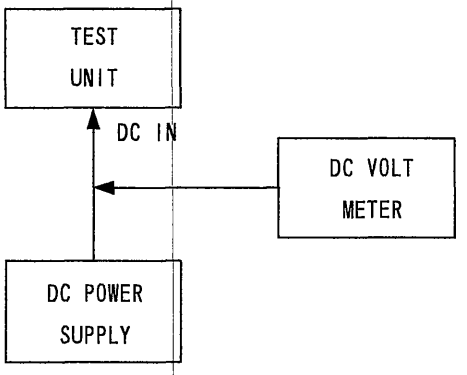
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	DC POWER SUPPLY		1	MORE THAN 17V, 1A
2	DC VOLTMETER		1	MORE THAN 20V

JIG AND EQUIPMENT SETTING

1. DC POWER SUPPLY : 10～17V : 1A (LIMITER)
2. VOLUME : MINIMUM
3. SQUELCH : CCW

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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1-3. OTHER CONFIRMATION (VOLTAGE INDICATOR CHECK)

STEP	CH	TEST CONDITION	MEASUREMENT	ADJ.	PROCEDURE
1	-	PTT:OFF VOLUME : MINIMUM SQUELCH : CCW DC POWER SUPPLY: 10.5V	CHECK LCD DISPLAY	-	CONFIRM THE LCD DISPLAY. INDICATE LCD "BATTERY LOW"
2	-	PTT:OFF VOLUME : MINIMUM SQUELCH : CCW DC POWER SUPPLY: 16.5V	CHECK LCD DISPLAY	-	CONFIRM THE LCD DISPLAY. INDICATE LCD "BATTERY HIGH"

*TEST IN Normal Mode.

ALIGNMENT PROCEDURE	FORM-1	EQUIPMENT SETTING	PAGE 27

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	OTHER CONFIRMATION 3	SUB TITLE	

REQUIRED EQUIPMENT AND JIG

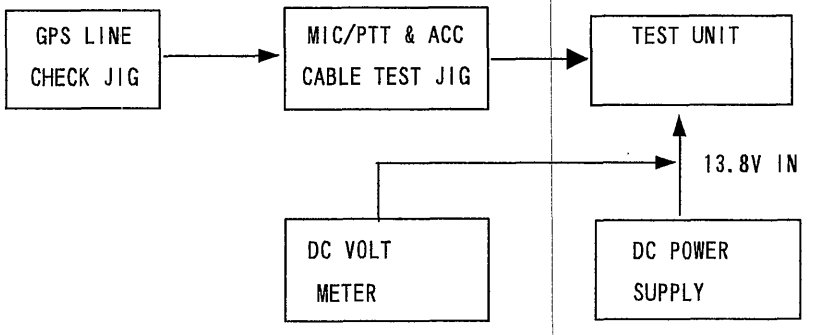
NO.	JIG / EQUIPMENT NAME	JIG/EQUIP. MODEL NO.	QTY	REMARKS (SPEC OF EQUIP.)
1	GPS LINE CHECK JIG	UT910Z-005F	1	MORE THAN 15V, 1A
2	MIC/PTT & ACC CABLE TEST JIG	UT604Z-	1	
3	DC POWER SUPPLY		1	
4	DC VOLT METER		1	

JIG AND EQUIPMENT SETTING

1. DC POWER SUPPLY : 13.8V ; 1A (LIMITER)
2. CHANNEL : CH16
3. SQUELCH : CCW

TOOLS / EQPT REQ'D FOR ADJUSTMENT

EQUIPMENT / JIG CONNECTION DIAGRAM (ALIGN. PROCEDURE REF. DIAGRAM FORM 4 CAN BE USED)



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1-4. OTHER CONFIRMATION (GPS CONNECTION CHECK)

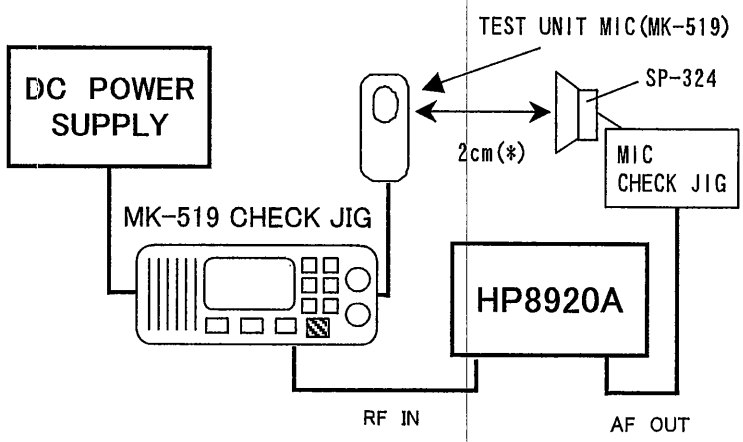
STEP	CH	TEST CONDITION	MEASUREMENT	ADJ.	PROCEDURE
1	-	CONNECT GPS LINE CHECK JIG & UNIT	-	-	-
2	-	POWER SW : TURN ON	-	-	
3	16	PTT SW : OFF	CHECK LCD DISPLAY	-	GPS CONNECT AND RECEIVE DATA CONFIRM THE ICON ON LCD 
4	-	POWER SW : TURN OFF		-	

TITLE	OTHER CONFIRMATIONS 4	SUB TITLE		REF DIAGRAM

SET UP (HP8920A)

1) IF FILTER: 230kHz
2) Filter1: 300Hz
3) Filter2: 3kHz
4) De_Emphasis: off
5) Detector: RMS
6) DC Power Supply: 13.8V±0.2V

1. MIC CHECK (MK-519)



* : Calibration for MIC CHECK JIG to 94dBSPL

STEP	CONDITIONS	CHECK POINT	CONFIRMATION
1	UNIT POWER ON	-	-
2	AF GENERATOR :1.1kHz TONE 600mVrms	-	-
3	INSERT MIC UNIT IN JIG UNIT PTT ON	CHECK DEVIATION	±1.5kHz < DEV. < ±3.0kHz
4	AF GENERATOR :2kHz TONE 600mVrms	-	-
5	INSERT MIC UNIT IN JIG UNIT PTT ON	CHECK DEVIATION	> 2.5 kHz
6	UNIT PTT OFF UNIT POWER OFF REMOVE MIC UNIT FROM JIG	-	-

REVISIONS:															
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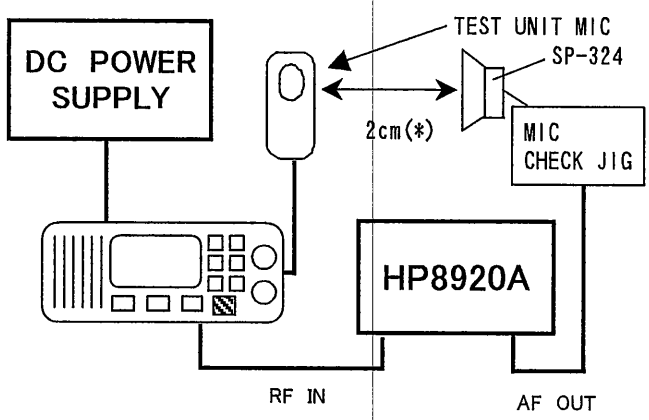
SET UP (HP8920A)

1) IF FILTER: 230kHz
2) Filter1: 300Hz
3) Filter2: 3kHz
4) De_Emphasis: off
5) Detector: RMS
6) DC Power Supply: 13.8V±0.2V

2. MIC CHECK (UNIT)



* : Calibration for MIC CHECK JIG to 94dBSPL

STEP	CONDITIONS	CHECK POINT	CONFIRMATION
1	UNIT POWER ON	-	-
2	AF GENERATOR :1.1kHz TONE 600mVrms	-	-
3	INSERT MIC UNIT IN JIG UNIT PTT ON	CHECK DEVIATION	±1.5kHz < DEV. < ±3.0kHz
4	AF GENERATOR :2kHz TONE 600mVrms	-	-
5	INSERT MIC UNIT IN JIG UNIT PTT ON	CHECK DEVIATION	> 2.5 kHz
6	UNIT PTT OFF UNIT POWER OFF REMOVE MIC UNIT FROM JIG	-	-

REVISIONS:															
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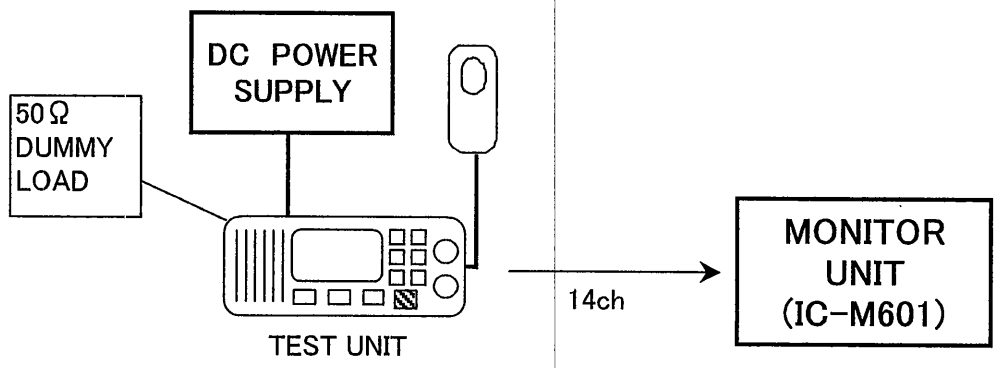
TITLE	OTHER CONFIRMATIONS 5	SUB TITLE		REF DIAGRAM

1. ATIS ID CONFIRM



STEP	CONDITIONS	INDICATOR	CONFIRMATION
1	PUSH: [MENU] KEY, [HI/LO] KEY AND TURN POWER SW ON	TEST UNIT LCD	16ch WILL APPEAR
2	PUSH: [MENU] KEY	TEST UNIT LCD	DSC CALL WILL APPEAR
3	PUSH: [DOWN] KEY	TEST UNIT LCD	SETUP WILL APPEAR
4	PUSH: [SELECT] KEY	TEST UNIT LCD	INDIVIDUAL WILL APPEAR
5	PUSH: [DOWN] KEY 6 TIMES	TEST UNIT LCD	ATIS ID WILL APPEAR
6	PUSH: [SELECT] KEY	TEST UNIT LCD	ID 000000000 WILL APPEAR
7	PUSH: [1] KEY 9 TIMES	TEST UNIT LCD	ID 111111111 WILL APPEAR
8	PUSH: [SELECT] KEY	TEST UNIT LCD	ATIS ID WILL APPEAR
9	PUSH: [DOWN] KEY	TEST UNIT LCD	EXIT WILL APPEAR
10	PUSH: [SELECT] KEY	TEST UNIT LCD	16ch WILL APPEAR
11	PUSH: [DOWN] KEY 2 TIMES	TEST UNIT LCD	14ch WILL APPEAR
12	PUSH: [HI/LO] KEY THEN PUSH: [PTT] KEY	MONITOR UNIT LCD	9111111111 WILL APPEAR
13	POWER OFF		

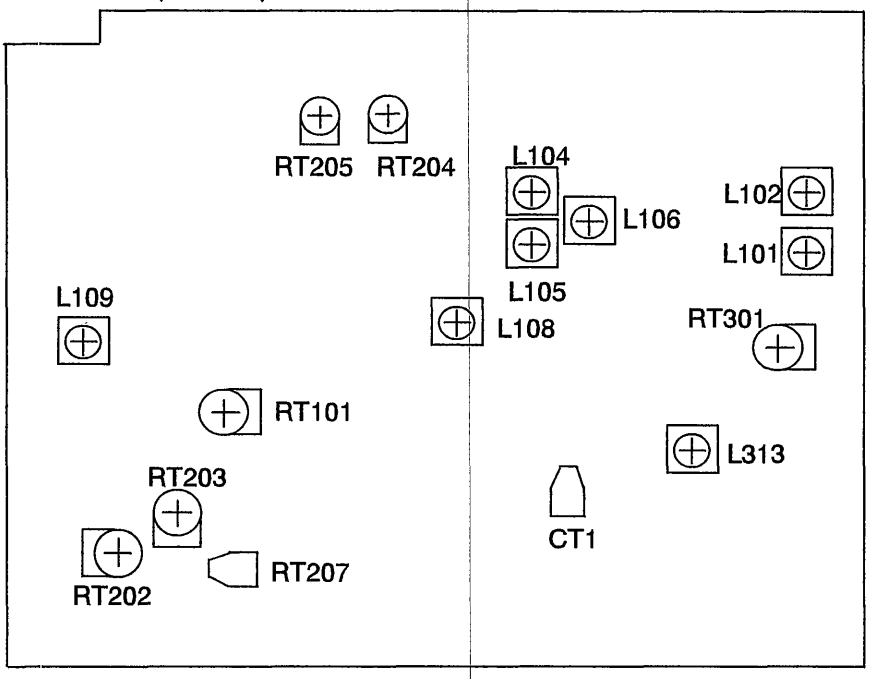
ALIGNMENT PROCEDURE FORM-4	REFERENCE DIAGRAM NO.	PAGE 32

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	ADJUST POINT	SUB TITLE		REF DIAGRAM

ADJUSTMENT POINTS

MAIN PCB B101 PD-883 (TOP VIEW)



RT101	SQUELCH ADJUST
RT202	DSC DEVIATION LEVEL ADJUST
RT203	MIC DEVIATION LEVEL ADJUST
RT204	TX LO-POWER ADJUST
RT205	TX HI-POWER ADJUST
RT207	ATIS DEVIATION LEVEL ADJUST
RT301	SQUELCH ADJUST
CT1	FREQUENCY ADJUST
L101	BPF ADJUST
L102	BPF ADJUST
L104	BPF ADJUST
L105	BPF ADJUST
L106	BPF ADJUST
L108	MIXER ADJUST
L109	DISCRI ADJUST
L313	DISCRI ADJUST

REVISIONS:															
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ALIGNMENT PROCEDURE FORM-5	SPECIFICATION	PAGE 33

MODEL	SECTION	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH	TRANSMITTER		2005/1/31	-

TITLE	TRANSMITTER	SPEC.	

1. STANDARD CONDITION (VOLT. SUPPLY, STD. DEV., ANTENNA IMPEDANCE, TEL. IMPEDANCE, ETC.)

1. TEST TEMPERATURE : 25℃±2℃
2. POWER SOURCE : 13.8V DC ±0.1V
3. ANTENNA IMPEDANCE : 50 Ω
4. REFERENCE MODULATION TX : 1kHz ±3.0kHz DEV.
5. AUDIO STANDARD OUTPUT POWER : EXT:2W @ 8Ω INT:0.5W @ 8Ω
6. STANDARD TEST METHOD : ETSI EN 301 178-1 V1.2.1 WITHOUT NOTICE

2. TX SPECIFICATION

NO	ITEM	CONDITION	UNIT	SPEC		REMARKS
				25℃	-15℃～55℃	
1	Frequency Tolerance	@25℃, No Mod.	PPM	±1.5	-	TEST CH : 14
2	Frequency Stability	-15～55℃	PPM	-	±10	TEST CH : 14
3	Carrier Power	HI POWER	W	18～25	6～25	TEST CH : 01, 14, 88
	@DC13.8V	LOW POWER	W	0.4～1.0	0.2～1.0	TEST CH : 01, 14, 88
4	Spurious Emission	HI POWER	dBm	<-36	-	TEST CH : 01, 14, 88
		LOW POWER	dBm	<-36	-	TEST CH : 01, 14, 88
5	Modulation Frequency	300Hz	dB	-13.5 ～ -9.5	-	TEST CH : 14
	Response	500Hz	dB	-9 ～ -5	-	TEST CH : 14
	@1kHz±1kHz Deviation	2000Hz	dB	+3 ～ +7	-	TEST CH : 14
		3000Hz	dB	+6.5 ～ +10.5	-	TEST CH : 14
6	Microphone Sensitivity	1kHz MOD	mV	<10.0	-	TEST CH : 01, 14, 88
	@±3kHz Deviation					
7	Maximum Deviation	1kHz MOD	±kHz	4.0～5.0	-	TEST CH : 01, 14, 88
	@100mV INPUT					
8	Distortion	LPF : 3kHz				
	@1kHz MOD ±3kHz DEV	HPF : 300Hz	%	<10	<10	TEST CH : 01, 14, 88
		DE-EMP: 750μs				
9	Hum and Noise Ratio	LPF : 3kHz				
	@1kHz MOD ±3kHz Dev	HPF : 300Hz	dB	>40	-	TEST CH : 01, 14, 88
		DE-EMP: 750μs				
10	Current Drain	HI POWER	A	<6.0	-	TEST CH : 01, 14, 88
		LOW POWER	A	<1.5	-	TEST CH : 01, 14, 88

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	CHECKED BY														

MODEL	SECTION	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH	RECEIVER		2005/1/31	-

TITLE: RECEIVER SPEC.

1. STANDARD CONDITION (VOLT. SUPPLY, STD. DEV., ANTENNA IMPEDANCE, TEL. IMPEDANCE, ETC.)
   1. TEMPERATURE : 25℃±2℃
   2. POWER SUPPLY : 13.8V DC±0.1V
   3. RF SG OUTPUT LEVEL : 1mV
   4. ANTENNA IMPEDANCE : 50Ω
   5. AUDIO STANDARD OUTPUT POWER : EXT:2W @8Ω INT:0.5W @8Ω
   6 REFERENCE MODULATION RX : 1kHz ±3.0kHz Dev

2. RX SPECIFICATION

NO	ITEM	CONDITION	UNIT	SPEC		REMARKS
				25℃	-15℃~55℃	
1	Sensitivity for 20dB SINAD	W/CCITT	uV	<0.5	<1.0	TEST CH : 06, 16, 28
2	Squelch Sensitivity	Threshold	uV	<0.5	<1.0	TEST CH : 06, 16, 28
		Tight	uV	<1.0	<2.0	TEST CH : 06, 16, 28
3	Audio Frequency Response	300Hz	dB	7.5 ~ 11.5	-	TEST CH : 16
	@1kHz±1kHz Dev. Reference	500Hz	dB	3.0 ~ 7.0	-	TEST CH : 16
		2000Hz	dB	-9.0 ~ -5.0	-	TEST CH : 16
		3000Hz	dB	-12.5 ~ -8.5	-	TEST CH : 16
4	Adj. Channel Selectivity(*)	±25kHz	dB	>66	>56	TEST CH : 16
5	Inter Modulation Rejection(*)		dB	>65	-	TEST CH : 16
6	Image Rejection(*)	1st and 2nd	dB	>66	-	TEST CH : 16
7	Spurious Response Rejection(*)		dB	>66	-	TEST CH : 16
8	Conducted Spurious Emission	@Antenna Terminal	dBm	<-57	-	TEST CH : 06, 16, 28
9	Hum and Noise Ratio		dB	>40	-	TEST CH : 06, 16, 28
10	Total Harmonic Distortion	@ Standard AF Output	%	<10	<10	TEST CH : 16
11	Audio Output Power	@ 10% THD	W	>2.0	>2.0	TEST CH : 16
12	Current Drain SQ VOL at MAX. (CW)	@ No Signal	mA	<650	-	TEST CH : 16
		@ MAX OUTPUT	mA	<1300	-	TEST CH : 16

REVISION															
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	CHECKED BY														

MODEL	SECTION	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH	OTHER		2005/1/31	-

TITLE: OTHER SPEC.

1. STANDARD CONDITION (VOLT. SUPPLY, STD. DEV., ANTENNA IMPEDANCE, TEL. IMPEDANCE, ETC.)

1. TEMPERATURE : +25℃±2℃
2. POWER SUPPLY : 13.8V DC ±0.1V
3. PA SPEAKER IMPEDANCE : 4Ω
4 RF SG OUTPUT LEVEL : 1mV
5. AUDIO STANDARD OUTPUT POWER : EXT:2W @ 8Ω INT:0.5W @ 8Ω
6 ANTENNA IMPEDANCE : 50Ω

2. OTHER SPECIFICATION

NO	ITEM	CONDITION	UNIT	SPEC		REMARKS
				25℃	-15℃～55℃	
1	PA OUTPUT POWER @ MIC IN 10mV	VOL:MAX	W	>4.0	-	
2	PA DISTORTION @ MIC IN 10mV	OUTPUT 3W	%	<7.0	-	
3	DSC DATA SENSITIVITY	±3kHz Dev	uV	<0.8	-	70CH

REVISION															
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	CHECKED BY														

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	OFFSET FREQUENCY LIST	SUB TITLE		REF DIAGRAM

FREQUENCY OFFSET-TEMPERATURE TABLE

TEMPERATURE [℃]	CH01	CH16	CHWX0
15	156.050349	156.800351	163.275366
17	156.050281	156.800282	163.275294
19	156.050212	156.800213	163.275222
21	156.050140	156.800141	163.275147
23	156.050072	156.800072	163.275075
25	156.050000	156.800000	163.275000
27	156.049925	156.799924	163.274921
29	156.049839	156.799838	163.274832
31	156.049760	156.799759	163.274749
33	156.049695	156.799694	163.274681
35	156.049640	156.799639	163.274624

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	LOT # / RN #														
	REVISED BY														
	CHECKED BY														

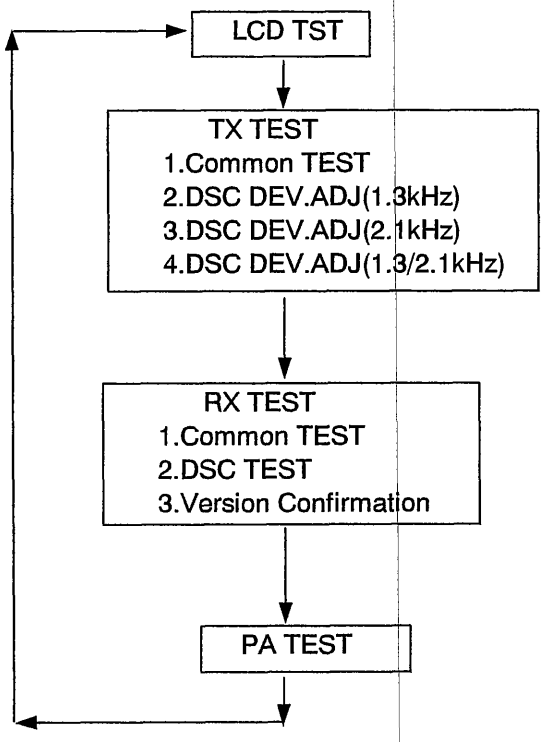
Absolute measurement uncertainties:maximum values (refer ETSI EN 301 178-1 V1.2.1)

Parameter	Maximum uncertainty
RF frequency	±0.1ppm
RF power	±0.75dB
Maximum frequency deviation	
within 300Hz to 6kHz of modulation frequency	±0.5%
within 6kHz to 25kHz of modulation frequency	±3dB
Deviation limitation	±5%
Adjacent channel power	±5dB
Conducted spurious emission of transmitter	±4dB
Audio output power	±0.5dB
Amplitude characteristics of receiver limiter	±1.5dB
Sensitivity at 20dB SINAD	±3dB
Conducted emission of receiver	±3dB
Two-signal measurement	±4dB
Three-signal measurement	±3dB
Radiated emission of transmitter	±6dB
Radiated emission of receiver	±6dB
Transmitter transient time	±20%
Transmitter transient frequency	±250Hz

TEST MODE SPECIFICATION

Enter TEST MODE

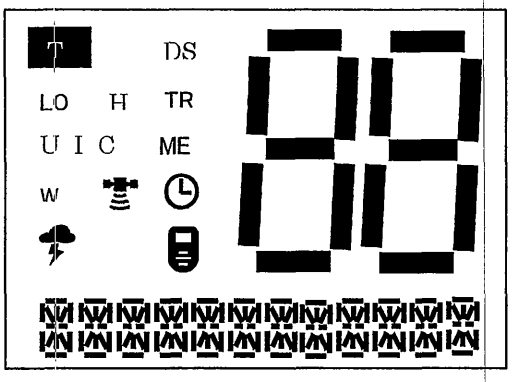
Turn off [VOL/POWER] switch, then hold [H/L] key and [PA] key, and turns on [VOL/POWER] switch.
[SELECT] key pushes in each test mode, it will move the next test mode.



Escape TEST MODE
[VOL/POWER] switch turns off.
(*) If enter test mode, initialize data.

1.LCD TEST

a. All segments of LCD turn on in this test mode.



b. [SELECT] key pushes, it will move TX test mode.

2. TX TEST

2-1. Common TEST

The channel when enter this mode is 14CH.

a. The channels that can be chosen are CH14, CH88, CHL2, CHM1 and CH01 (ALL CH INT Mode).
The channel is changed by [▲] or [▼] key.
In this mode, Mute state is ON.

b. If [PTT] switch holds, it will transmit and turn on TX Icon. If [PTT] switch releases, it won't transmit and disappear TX Icon. TX TIMEOUT function doesn't work.

c. [HI/LO] key pushes, it is possible to change 1W/25W TX power.
When Low Power transmits, it will output 25W for holding [HI/LO] key.
When CH changes, it is possible to set High power.

d. [SELECT] key pushes in this mode, it will move to DSC DEV.ADJ.

2-2. DSC DEV.ADJ (1.3kHz)/(2.1kHz)/(1.3/2.1kHz)

a. In this mode, there is only CH70.
In due to adjust DSC transmitting level, UNIT outputs 1.3/2.1kHz TONE while holding [PTT] switch.
Then "1.3KHZ OUT" or "2.1KHZ OUT" or "1.3/2.1KHZ OUT" will be displayed on the LCD.
[SELECT] key pushes in this mode, it will move to RX TEST.

* DSC Mode changes in ATIS Mode at times and changes into DSC Mode at ATIS Mode if [PA] key is pushed. ("1.3KHZ OUT" and "2.1KHZ OUT")
"WX" icon lights at ATIS Mode.
Moreover, an initial value is DSC Mode.

3. RX TEST

3-1. Common TEST

The channel when enter this mode is 16CH.

a. The channels that can be chosen are CH16, CH28, CH31, CHL1 and CH06 (ALL CH INT Mode).
The channel is changed by [▲] or [▼] key

According to the state of SQ, MUTE is controlled in this mode.
SQ Busy (signal on) >> MUTE OFF
SQ OFF (No signal) >> MUTE ON

b. If [PTT] key pushes, it won't transmit.

c. It is possible to adjust volume level with [VOL/POWER] knob.

d. It is possible to adjust squelch level with [SQUELCH] knob.

e. If power supply is under about 11V, "BATTERY LO" is displayed on LCD.
If power supply is over about 16V, then "BATTERY HI" is displayed on LCD.
[SELECT] key pushes in this mode, it will move to DSC TEST.

3-2 DSC TEST

a. In this mode, there is only CH70.
In this mode, DSC DECODE function is ON.

According to the state of SQ, MUTE is controlled like RX TEST mode.
SQ Busy (signal on) >> MUTE OFF
SQ OFF (No signal) >> MUTE ON

b. It is possible to adjust volume level with [VOL/POWER] knob.

c. It is possible to adjust squelch level with [SQUELCH] knob.

d. [SELECT] key pushes in this mode, it will move to PA TEST.

3-3 Software Version TEST

a. CH06 select.
b. [STEP/SCAN] key -> [Hi/Lo] key -> [16/9] key push
c. "Version XXX CHECK SUM XXXX" will be displayed on the LCD.

4. PA TEST

a. [PTT] Key is pushed, change to PA TX.
It is possible to adjust the PA volume. To turn up the PA volume, rotate [VOL/POWER] knob clockwise.
To turn down the PA volume, rotate [VOL/POWER] knob counterclockwise.

b. [SELECT] key pushes in this mode, it will come back to LCD TEST.

SHIPMENT SETTING

MRN

NO.	FUNCTION	STATUS
1	Channel	CH16
2	SCAN	OFF
3	TRIPLE WATCH	OFF
4	EMG MODE	OFF
5	TX POWER	HI
6	Memory Channel	All Channel OFF

MENU - SYSTEM -

NO.	FUNCTION	STATUS
1	CONTRAST	7
2	LAMP ADJUST	3
3	KEY BEEP	ON

MENU - SETUP -

NO.	FUNCTION	STATUS
1	ALARM CLOCK	ALARM : 0FF , 00:00A
2	LOCAL TIME	LOCAL TIME +0
3	DAYLITE SAVE	OFF
4	DIRECTORY	NONE
5	AUTO.CH.SW	ON
6	POS.REPLY	AUTO
7	CH TAG	See Frequencies and channels list
8	GROUP MMSI	NONE
9	USER MMSI (*1)	NONE
10	ATIS ID (*2)	NONE

(*) If enter test mode, initialize data. (except USER MMSI and ATIS ID)

*1 USER MMSI SETUP

Use initialize JIG. Hold [▲] key, and turn on [VOL/POWER] switch.

*2 ATIS ID SETUP

Use initialize JIG. Hold [▼] key, and turn on [VOL/POWER] switch.

ALIGNMENT PROCEDURE FORM-4	REFERENCE DIAGRAM NO.	PAGE 43

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	FREQUENCY LIST	SUB TITLE		REF DIAGRAM

MRN CH

MODE	USA MODE			INT MODE			CAN MODE		
CH NO	TX FRQ.(MHz)	RX FRQ.(MHz)	note	TX FRQ.(MHz)	RX FRQ.(MHz)	note	TX FRQ.(MHz)	RX FRQ.(MHz)	note
1	156.050	156.050		156.050	160.650	DUP	156.050	160.650	DUP
2	-	-	INH	156.100	160.700	DUP	156.100	160.700	DUP
3	156.150	156.150		156.150	160.750	DUP	156.150	160.750	DUP
4	-	-	INH	156.200	160.800	DUP	156.200	156.200	
5	156.250	156.250		156.250	160.850	DUP	156.250	156.250	
6	156.300	156.300		156.300	156.300		156.300	156.300	
7	156.350	156.350		156.350	160.950	DUP	156.350	156. 350	
8	156.400	156.400		156.400	156.400		156.400	156.400	
9	156.450	156.450		156.450	156.450		156.450	156.450	
10	156.500	156.500		156.500	156.500		156.500	156.500	
11	156.550	156.550		156.550	156.550		156.550	156.550	
12	156.600	156.600		156.600	156.600		156.600	156.600	
13	156.650	156.650	1W	156.650	156.650		156.650	156.650	1W
14	156.700	156.700		156.700	156.700		156.700	156.700	
15	RX ONLY	156.750		156.750	156.750		156.750	156.750	1W
16	156.800	156.800		156.800	156.800		156.800	156.800	
17	156.850	156.850		156.850	156.850		156.850	156.850	1W
18	156.900	156.900		156.900	161.500	DUP	156.900	156.900	
19	156.950	156.950		156.950	161.550	DUP	156.950	156.950	
20	157.000	157.000		157.000	161.600	DUP	157.000	161.600	D,1w
21	157.050	157.050		157.050	161.650	DUP	157.050	157.050	
22	157.100	157.100		157.100	161.700	DUP	157.100	157.100	
23	157.150	157.150		157.150	161.750	DUP	157.150	161.750	DUP
24	157.200	161.800	DUP	157.200	161.800	DUP	157.200	161.800	DUP
25	157.250	161.850	DUP	157.250	161.850	DUP	157.250	161.850	DUP
26	157.300	161.900	DUP	157.300	161.900	DUP	157.300	161.900	DUP
27	157.350	161.950	DUP	157.350	161.950	DUP	157.350	161.950	DUP
28	157.400	162.000	DUP	157.400	162.000	DUP	157.400	162.000	DUP
60	-	-	INH	156.025	160.625	DUP	156.025	160.625	DUP
61	156.075	156.075		156.075	160.675	DUP	156.075	156.075	
62	-	-	INH	156.125	160.725	DUP	156.125	156.125	
63	156.175	156.175		156.175	160.775	DUP	-	-	INH
64	156.225	156.225		156.225	160.825	DUP	156.225	156.225	

REVISION															
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE														
	LOT # / RN #														
	REVISED BY														
	CHECKED BY														

MODEL	UNIT	BLOCK	ISSUE DATE	ISSUED
UT604ZH/BH			2005/1/31	-

TITLE	FREQUENCY LIST	SUB TITLE		REF DIAGRAM

MRN CH

	MODE	USA MODE			INT MODE			CAN MODE		
	CH NO	TX FRQ.(MHz)	RX FRQ.(MHz)	note	TX FRQ.(MHz)	RX FRQ.(MHz)	note	TX FRQ.(MHz)	RX FRQ.(MHz)	note
	65	156.275	156.275		156.275	160.875	DUP	156.275	156.275	
	66	156.325	156.325		156.325	160.925	DUP	156.325	156.325	
	67	156.375	156.375	1W	156.375	156.375		156.375	156.375	
	68	156.425	156.425		156.425	156.425		156.425	156.425	
	69	156.475	156.475		156.475	156.475		156.475	156.475	
	70	RX ONLY	156.525		RX ONLY	156.525		RX ONLY	156.525	
	71	156.575	156.575		156.575	156.575		156.575	156.575	
	72	156.625	156.625		156.625	156.625		156.625	156.625	
	73	156.675	156.675		156.675	156.675		156.675	156.675	
	74	156.725	156.725		156.725	156.725		156.725	156.725	
	75	156.775	156.775	1W	156.775	156.775	1W	156.775	156.775	1W
	76	156.825	156.825	1W	156.825	156.825	1W	156.825	156.825	1W
	77	156.875	156.875		156.875	156.875		156.875	156.875	
	78	156.925	156.925		156.925	161.525	DUP	156.925	156.925	
	79	156.975	156.975		156.975	161.575	DUP	156.975	156.975	
	80	157.025	157.025		157.025	161.625	DUP	157.025	157.025	
	81	157.075	157.075		157.075	161.675	DUP	157.075	157.075	
	82	157.125	157.125		157.125	161.725	DUP	157.125	157.125	
	83	157.175	157.175		157.175	161.775	DUP	157.175	157.175	
	84	157.225	161.825	DUP	157.225	161.825	DUP	157.225	161.825	DUP
	85	157.275	161.875	DUP	157.275	161.875	DUP	157.275	161.875	DUP
	86	157.325	161.925	DUP	157.325	161.925	DUP	157.325	161.925	DUP
	87	157.375	161.975	DUP	157.375	157.375		157.375	161.975	DUP
	88	157.425	157.425		157.425	157.425		157.425	162.025	DUP
	30	157.500	162.100	D,1W	157.500	162.100	D,1W	157.500	162.100	D,1W
	31	157.550	162.150	D,1W	157.550	162.150	D,1W	157.550	162.150	D,1W
	L1	155.500	155.500		155.500	155.500		155.500	155.500	
	L2	155.525	155.525		155.525	155.525		155.525	155.525	
	L3	155.650	155.650		155.650	155.650		155.650	155.650	
	F1	155.625	155.625		155.625	155.625		155.625	155.625	
	F2	155.775	155.775		155.775	155.775		155.775	155.775	
	F3	155.825	155.825		155.825	155.825		155.825	155.825	
*	M1	157.850	157.850		157.850	157.850		157.850	157.850	

*:CH indication is ⌐ |

REVISION	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE														
	LOT # / RN #														
	REVISED BY														
	CHECKED BY														

ALIGNMENT PROCEDURE	FORM-9	SOFTWARE VERSION TABLE	PAGE	45

MODEL	BLOCK	UNIT	ISSUE DATE	ISSUED
UT604ZH			2005/1/31	-

	ISSUE DATE	REVISION PARTS No	EFFECTIVE LOT No		BEFORE VERSION No	AFTER VERSION No	REVISION NOTE No
1	2005/1/31	IC002	HE2022	A	-	Ver:*.** Check Sum:****H	-
2	/ /						
3	/ /						
4	/ /						
5	/ /						
6	/ /						
7	/ /						
8	/ /						
9	/ /						
10	/ /						
11	/ /						
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REVISION															
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE														
	LOT # / RN #														
	REVISED BY														
	CHECKED BY														

ALIGNMENT PROCEDURE	FORM-9	SOFTWARE VERSION TABLE	PAGE	46

MODEL	BLOCK	UNIT	ISSUE DATE	ISSUED
UT604BH			2005/1/31	-

	ISSUE DATE	REVISION PARTS No	EFFECTIVE LOT No		BEFORE VERSION No	AFTER VERSION No	REVISION NOTE No
1	2005/1/31	IC002	HE2029	A	-	Ver:*.** Check Sum:****H	-
2	/ /						
3	/ /						
4	/ /						
5	/ /						
6	/ /						
7	/ /						
8	/ /						
9	/ /						
10	/ /						
11	/ /						
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16	/ /						
17	/ /						
18	/ /						
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REVISION															
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE														
	LOT # / RN #														
	REVISED BY														
	CHECKED BY														

ALIGNMENT PROCEDURE	FORM-9	SOFTWARE VERSION TABLE	PAGE	47

MODEL	BLOCK	UNIT	ISSUE DATE	ISSUED
UT605ZH			2005/1/31	-

	ISSUE DATE	REVISION PARTS No	EFFECTIVE LOT No		BEFORE VERSION No	AFTER VERSION No	REVISION NOTE No
1	2005/1/31	IC002	HE2024	A	-	Ver:*.** Check Sum:****H	-
2	/ /						
3	/ /						
4	/ /						
5	/ /						
6	/ /						
7	/ /						
8	/ /						
9	/ /						
10	/ /						
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REVISION															
	REV. CODE	△	△	△	△	△	△	△	△	△	△	△	△	△	△
	DATE														
	LOT # / RN #														
	REVISED BY														
	CHECKED BY														

INQUIRY BOM BY MODEL or LOT

MODEL	UT605ZH
TOTAL	948

ASSY CODE	PARTS CODE	DESCRIPTION	SPEC	REF NO	N	G	S	QTY	REVISION	REMARKS	RP	REP1	REP2	R
AT605ZHBAE	BCAZ111016Z	C:ELECTROLYTIC	100UF 10V M C-156	C206	N	G		1						
AT605ZHBAE	BCAZ111016Z	C:ELECTROLYTIC	100UF 10V M C-156	C209	N	G		1						
AT605ZHBAE	BCAZ111016Z	C:ELECTROLYTIC	100UF 10V M C-156	C252	N	G		1						
AT605ZHBAE	BCAZ111016Z	C:ELECTROLYTIC	100UF 10V M C-156	C273	N	G		1						
AT605ZHBAE	BCAZ314716Z	C:ELECTROLYTIC	470UF 16V M C-156	C176	N	G		1						
AT605ZHBAE	BCAZ314716Z	C:ELECTROLYTIC	470UF 16V M C-156	C181	N	G		1						
AT605ZHBAE	BCAZ512216Z	C:ELECTROLYTIC	220UF 25V M C-156	C166	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C151	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C171	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C173	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C178	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C182	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C183	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C286	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C347	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C412	N	G		1						
AT605ZHBAE	BCAZ514706Z	C:ELECTROLYTIC	47UF 25V M C-156	C413	N	G		1						
AT605ZHBAE	BCAZ811096Z	C:ELECTROLYTIC	1UF 50V M C-156	C232	N	G		1						
AT605ZHBAE	BCAZ814796Z	C:ELECTROLYTIC	4.7UF 50V M C-156	C264	N	G		1	HK05-020					
AT605ZHBAE	BCHC811002Z	C:CERAMIC TS2.5S	10PF 50V D CH	C402	N			1						
AT605ZHBAE	BCHC811804Z	C:CERAMIC TS2.5S	18PF 50V J CH	C409	N			1						
AT605ZHBAE	BCHC812704Z	C:CERAMIC TS2.5S	27PF 50V J CH	C404	N			1						
AT605ZHBAE	BCHC816804Z	C:CERAMIC TS5.0S	68PF 50V J CH	C401	N			1						
AT605ZHBAE	BCHF815081Z	C:CERAMIC TS2.5S	0.5PF 50V C CK	C416	N			1						
AT605ZHBAE	BCML311055G	C:CERAMIC M/L (1608) TAPE	1UF 16V K B	C132	N	G		1						
AT605ZHBAE	BCML311055G	C:CERAMIC M/L (1608) TAPE	1UF 16V K B	C243	N	G		1						
AT605ZHBAE	BCML312245G	C:CERAMIC M/L (1608) TAPE	0.22UF 16V K B	C141	N	G		1						
AT605ZHBAE	BCML312245G	C:CERAMIC M/L (1608) TAPE	0.22UF 16V K B	C266	N	G		1						

AT605ZHBAE	BCML312245G	C:CERAMIC M/L (1608) TAPE	0.22UF 16V K B	C268	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C107	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C109	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C121	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C122	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C123	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C126	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C156	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C159	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C162	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C164	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C170	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C184	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C233	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C234	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C238	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C242	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C254	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C256	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C259	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C321	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C328	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C332	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C407	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C408	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C410	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C415	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C460	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C465	N	G		1						
AT605ZHBAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C472	N	G		1						
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C119	N	G		1						
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C128	N	G		1						
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C130	N	G		1						
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C136	N	G		1						
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C137	N	G		1						
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C149	N	G		1						

AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C205	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C229	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C241	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C285	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C319	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C327	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C333	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C344	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C350	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C351	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C400	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C405	N	G		1					
AT605ZHBAE	BCML811035G	C:CERAMIC M/L (1608) TAPE	0.01UF 50V K B	C481	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C124	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C127	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C129	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C138	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C142	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C143	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C147	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C148	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C150	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C160	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C161	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C167	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C169	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C172	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C174	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C175	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C177	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C179	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C180	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C202	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C203	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C204	N	G		1					
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C215	N	G		1					

AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C224	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C225	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C236	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C253	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C272	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C284	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C331	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C336	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C337	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C340	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C341	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C343	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C345	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C348	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C360	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C361	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C403	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C414	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C417	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C419	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C422	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C461	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C471	N	G		1						
AT605ZHBAE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C483	N	G		1						
AT605ZHBAE	BCML811235G	C:CERAMIC M/L (1608) TAPE	0.012UF 50V K B	C212	N	G		1						
AT605ZHBAE	BCML811535G	C:CERAMIC M/L (1608) TAPE	0.015UF 50V K B	C248	N	G		1						
AT605ZHBAE	BCML811825G	C:CERAMIC M/L (1608) TAPE	0.0018UF 50V K B	C221	N	G		1						
AT605ZHBAE	BCML812235G	C:CERAMIC M/L (1608) TAPE	0.022UF 50V K B	C027	N	G		1						
AT605ZHBAE	BCML812235G	C:CERAMIC M/L (1608) TAPE	0.022UF 50V K B	C250	N	G		1						
AT605ZHBAE	BCML814735G	C:CERAMIC M/L (1608) TAPE	0.047UF 50V K B	C133	N	G		1						
AT605ZHBAE	BCML814735G	C:CERAMIC M/L (1608) TAPE	0.047UF 50V K B	C218	N	G		1						
AT605ZHBAE	BCML814735G	C:CERAMIC M/L (1608) TAPE	0.047UF 50V K B	C219	N	G		1						
AT605ZHBAE	BCML814735G	C:CERAMIC M/L (1608) TAPE	0.047UF 50V K B	C287	N	G		1						
AT605ZHBAE	BCML814735G	C:CERAMIC M/L (1608) TAPE	0.047UF 50V K B	C288	N	G		1						
AT605ZHBAE	BCML814735G	C:CERAMIC M/L (1608) TAPE	0.047UF 50V K B	C358	N	G		1						
AT605ZHBAE	BCML815625G	C:CERAMIC M/L (1608) TAPE	0.0056UF 50V K B	C135	N	G		1						

AT605ZHBAE	BCML815625G	C:CERAMIC M/L (1608) TAPE	0.0056UF 50V K B	C140	N	G		1						
AT605ZHBAE	BCML815625G	C:CERAMIC M/L (1608) TAPE	0.0056UF 50V K B	C342	N	G		1						
AT605ZHBAE	BCML815625G	C:CERAMIC M/L (1608) TAPE	0.0056UF 50V K B	C346	N	G		1						
AT605ZHBAE	BCML816825G	C:CERAMIC M/L (1608) TAPE	0.0068UF 50V K B	C153	N	G		1						
AT605ZHBAE	BCML816825G	C:CERAMIC M/L (1608) TAPE	0.0068UF 50V K B	C213	N	G		1						
AT605ZHBAE	BCML816825G	C:CERAMIC M/L (1608) TAPE	0.0068UF 50V K B	C353	N	G		1						
AT605ZHBAE	BCMM811002G	C:CERAMIC M/L (1608) TAPE	10PF 50V D CH	C139	N	G		1						
AT605ZHBAE	BCMM811002G	C:CERAMIC M/L (1608) TAPE	10PF 50V D CH	C214	N	G		1						
AT605ZHBAE	BCMM811002G	C:CERAMIC M/L (1608) TAPE	10PF 50V D CH	C318	N	G		1						
AT605ZHBAE	BCMM811002G	C:CERAMIC M/L (1608) TAPE	10PF 50V D CH	C338	N	G		1						
AT605ZHBAE	BCMM811002G	C:CERAMIC M/L (1608) TAPE	10PF 50V D CH	C339	N	G		1						
AT605ZHBAE	BCMM811002G	C:CERAMIC M/L (1608) TAPE	10PF 50V D CH	C357	N	G		1						
AT605ZHBAE	BCMM811002G	C:CERAMIC M/L (1608) TAPE	10PF 50V D CH	C456	N	G		1						
AT605ZHBAE	BCMM811002G	C:CERAMIC M/L (1608) TAPE	10PF 50V D CH	C475	N	G		1						
AT605ZHBAE	BCMM811014G	C:CERAMIC M/L (1608) TAPE	100PF 50V J CH	C117	N	G		1						
AT605ZHBAE	BCMM811014G	C:CERAMIC M/L (1608) TAPE	100PF 50V J CH	C220	N	G		1						
AT605ZHBAE	BCMM811014G	C:CERAMIC M/L (1608) TAPE	100PF 50V J CH	C295	N	G		1						
AT605ZHBAE	BCMM811014G	C:CERAMIC M/L (1608) TAPE	100PF 50V J CH	C296	N	G		1						
AT605ZHBAE	BCMM811014G	C:CERAMIC M/L (1608) TAPE	100PF 50V J CH	C297	N	G		1						
AT605ZHBAE	BCMM811098G	C:CERAMIC M/L (1608) TAPE	1PF 50V B CH	C106	N	G		1	HK05-017					
AT605ZHBAE	BCMM811204G	C:CERAMIC M/L (1608) TAPE	12PF 50V J CH	C099	N	G		1						
AT605ZHBAE	BCMM811204G	C:CERAMIC M/L (1608) TAPE	12PF 50V J CH	C101	N	G		1						
AT605ZHBAE	BCMM811204G	C:CERAMIC M/L (1608) TAPE	12PF 50V J CH	C103	N	G		1						
AT605ZHBAE	BCMM811204G	C:CERAMIC M/L (1608) TAPE	12PF 50V J CH	C113	N	G		1						
AT605ZHBAE	BCMM811204G	C:CERAMIC M/L (1608) TAPE	12PF 50V J CH	C334	N	G		1						
AT605ZHBAE	BCMM811204G	C:CERAMIC M/L (1608) TAPE	12PF 50V J CH	C349	N	G		1						
AT605ZHBAE	BCMM811204G	C:CERAMIC M/L (1608) TAPE	12PF 50V J CH	C462	N	G		1						
AT605ZHBAE	BCMM811214G	C:CERAMIC M/L (1608) TAPE	120PF 50V J CH	C115	N	G		1						
AT605ZHBAE	BCMM811214G	C:CERAMIC M/L (1608) TAPE	120PF 50V J CH	C118	N	G		1						
AT605ZHBAE	BCMM811504G	C:CERAMIC M/L (1608) TAPE	15PF 50V J CH	C105	N	G		1						
AT605ZHBAE	BCMM811504G	C:CERAMIC M/L (1608) TAPE	15PF 50V J CH	C480	N	G		1						
AT605ZHBAE	BCMM811514G	C:CERAMIC M/L (1608) TAPE	150PF 50V J CH	C406	N	G		1						
AT605ZHBAE	BCMM811598G	C: CERAMIC M/L (1608) TAPE	1.5PF 50V B CH	C110	N	G		1	HK05-017					
AT605ZHBAE	BCMM811598G	C: CERAMIC M/L (1608) TAPE	1.5PF 50V B CH	C111	N	G		1	HK05-017					
AT605ZHBAE	BCMM811804G	C:CERAMIC M/L (1608) TAPE	18PF 50V J CH	C323	N	G		1	HK05-013					
AT605ZHBAE	BCMM811804G	C:CERAMIC M/L (1608) TAPE	18PF 50V J CH	C335	N	G		1						

AT605ZHBAE	BCMM811804G	C:CERAMIC M/L (1608) TAPE	18PF 50V J CH	C354	N	G		1						
AT605ZHBAE	BCMM812098G	C: CERAMIC M/L (1608) TAPE	2PF 50V B CH	C227	N	G		1						
AT605ZHBAE	BCMM812204G	C:CERAMIC M/L (1608) TAPE	22PF 50V J CH	C024	N	G		1						
AT605ZHBAE	BCMM812204G	C:CERAMIC M/L (1608) TAPE	22PF 50V J CH	C112	N	G		1						
AT605ZHBAE	BCMM812204G	C:CERAMIC M/L (1608) TAPE	22PF 50V J CH	C120	N	G		1						
AT605ZHBAE	BCMM812204G	C:CERAMIC M/L (1608) TAPE	22PF 50V J CH	C463	N	G		1						
AT605ZHBAE	BCMM812704G	C:CERAMIC M/L (1608) TAPE	27PF 50V J CH	C240	N	G		1						
AT605ZHBAE	BCMM812704G	C:CERAMIC M/L (1608) TAPE	27PF 50V J CH	C291	N	G		1						
AT605ZHBAE	BCMM812704G	C:CERAMIC M/L (1608) TAPE	27PF 50V J CH	C292	N	G		1						
AT605ZHBAE	BCMM812704G	C:CERAMIC M/L (1608) TAPE	27PF 50V J CH	C352	N	G		1						
AT605ZHBAE	BCMM812704G	C:CERAMIC M/L (1608) TAPE	27PF 50V J CH	C478	N	G		1						
AT605ZHBAE	BCMM813304G	C:CERAMIC M/L (1608) TAPE	33PF 50V J CH	C104	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C026	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C028	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C029	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C035	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C038	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C039	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C043	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C045	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C100	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C125	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C185	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C207	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C226	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C228	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C230	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C231	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C235	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C237	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C239	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C244	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C245	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C246	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C249	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C255	N	G		1						

AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C257	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C261	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C265	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C270	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C271	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C276	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C282	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C283	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C311	N	G		1	HK05-016					
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C420	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C423	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C427	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C428	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C429	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C432	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C433	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C457	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C466	N	G		1						
AT605ZHBAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C477	N	G		1						
AT605ZHBAE	BCMM813904G	C:CERAMIC M/L (1608) TAPE	39PF 50V J CH	C108	N	G		1						
AT605ZHBAE	BCMM813904G	C:CERAMIC M/L (1608) TAPE	39PF 50V J CH	C116	N	G		1						
AT605ZHBAE	BCMM813904G	C:CERAMIC M/L (1608) TAPE	39PF 50V J CH	C145	N	G		1						
AT605ZHBAE	BCMM814098G	C:CERAMIC M/L (1608) TAPE	4PF 50V B CH	C312	N	G		1	HK05-016					
AT605ZHBAE	BCMM814704G	C:CERAMIC M/L (1608) TAPE	47PF 50V J CH	C114	N	G		1	HK05-017					
AT605ZHBAE	BCMM814704G	C:CERAMIC M/L (1608) TAPE	47PF 50V J CH	C482	N	G		1						
AT605ZHBAE	BCMM814714G	C:CERAMIC M/L (1608) TAPE	470PF 50V J CH	C134	N	G		1						
AT605ZHBAE	BCMM814714G	C:CERAMIC M/L (1608) TAPE	470PF 50V J CH	C356	N	G		1						
AT605ZHBAE	BCMM815098G	C: CERAMIC M/L (1608) TAPE	5PF 50V B CH	C155	N	G		1						
AT605ZHBAE	BCMM815098G	C: CERAMIC M/L (1608) TAPE	5PF 50V B CH	C458	N	G		1						
AT605ZHBAE	BCMM815098G	C: CERAMIC M/L (1608) TAPE	5PF 50V B CH	C476	N	G		1						
AT605ZHBAE	BCMM815604G	C:CERAMIC M/L (1608) TAPE	56PF 50V J CH	C102	N	G		1						
AT605ZHBAE	BCMM815604G	C:CERAMIC M/L (1608) TAPE	56PF 50V J CH	C146	N	G		1						
AT605ZHBAE	BCMM816814G	C:CERAMIC M/L (1608) TAPE	680PF 50V J CH	C168	N	G		1						
AT605ZHBAE	BCMM818091G	C:CERAMIC M/L (1608) TAPE	8PF 50V C CH	C025	N	G		1	HK05-021					
AT605ZHBAE	BCMM818091G	C:CERAMIC M/L (1608) TAPE	8PF 50V C CH	C325	N	G		1						
AT605ZHBAE	BCMM818204G	C:CERAMIC M/L (1608) TAPE	82PF 50V J CH	C247	N	G		1						

AT605ZHBAE	BCMM818214G	C:CERAMIC M/L (1608) TAPE	820PF 50V J CH	C144	N	G		1						
AT605ZHBAE	BCMM818214G	C:CERAMIC M/L (1608) TAPE	820PF 50V J CH	C267	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C030	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C033	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C042	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C131	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C330	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C411	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C452	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C459	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C470	N	G		1						
AT605ZHBAE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C473	N	G		1						
AT605ZHBAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C152	N	G		1						
AT605ZHBAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C211	N	G		1						
AT605ZHBAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C251	N	G		1						
AT605ZHBAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C355	N	G		1						
AT605ZHBAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C424	N	G		1						
AT605ZHBAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C455	N	G		1	HK05-083					
AT605ZHBAE	BCSH514786Z	C:TANTALUM CHIP TAPE	0.47UF 25V M C-122 TAPE	C453	N	G		1						
AT605ZHBAE	BCSH514786Z	C:TANTALUM CHIP TAPE	0.47UF 25V M C-122 TAPE	C468	N	G		1						
AT605ZHBAE	BCTJ312234Z	C:MYLAR CHIP	0.022UF 16V J C-279	C454	N			1						
AT605ZHBAE	BCTJ312234Z	C:MYLAR CHIP	0.022UF 16V J C-279	C467	N			1						
AT605ZHBAE	BCTY0095200	C:TRIMMER	CT-095 ECRKN020E61X 20PF	CT001	N			1	HK05-004					
AT605ZHBAE	BDAG0433001	DIODE	RLS4148 TE11	D011	N	G		1	AC05-006					
AT605ZHBAE	BDAY0274001	DIODE	1SS226 TE85L	D100	N			1						
AT605ZHBAE	BDAY0274001	DIODE	1SS226 TE85L	D105	N			1						
AT605ZHBAE	BDAY0274001	DIODE	1SS226 TE85L	D301	N			1						
AT605ZHBAE	BDAY0346001	DIODE	HSM88AS TL	D102	N			1						
AT605ZHBAE	BDAY0346001	DIODE	HSM88AS TL	D302	N			1						
AT605ZHBAE	BDAY0432004	DIODE:ZENER	HZK6C TR	D109	N			1	HK05-087		P	BDAY1187001		
AT605ZHBAE	BDAY0432004	DIODE:ZENER	HZK6C TR	D121	N			1	HK05-087		P	BDAY1187001		
AT605ZHBAE	BDAY0432004	DIODE:ZENER	HZK6C TR	D122	N			1	HK05-087		P	BDAY1187001		
AT605ZHBAE	BDAY0432026	DIODE:ZENER	HZK5B TR	D201	N			1	HK05-082		P	BDAY1187026		
AT605ZHBAE	BDAY0769001	DIODE	MA728-TX	D281	N			1						
AT605ZHBAE	BDAY0807001	DIODE	1SS355 TE-17	D110	N			1						
AT605ZHBAE	BDAY0916016	DIODE:ZENER	UDZ3.0B TE-17	D203	N			1	HK05-003					

AT605ZHBAE	BDAY0992001	DIODE	KDS114E-RTK	D205	N			1						
AT605ZHBAE	BDAY0993001	DIODE	KDS160E-RTK	D103	N			1						
AT605ZHBAE	BDAY0993001	DIODE	KDS160E-RTK	D104	N			1						
AT605ZHBAE	BDAY0993001	DIODE	KDS160E-RTK	D162	N			1						
AT605ZHBAE	BDAY0993001	DIODE	KDS160E-RTK	D163	N			1						
AT605ZHBAE	BDAY1125001	DIODE	DA-1125 XB15A407A2GT	D202	N			1						
AT605ZHBAE	BDAY1126001	DIODE	XB15A308A2GB	D101	N			1						
AT605ZHBAE	BDAY1190001	DIODE	GD 1N5401-B5	D401	N			1						
AT605ZHBAE	BDBA0950124	TRANSISTOR	DB-010 2SA950-Y	Q401	N			1						
AT605ZHBAE	BDBA0950124	TRANSISTOR	DB-010 2SA950-Y	Q402	N			1						
AT605ZHBAE	BDBA1365106	TRANSISTOR	DB-090 2SA1365-T12-F T1	Q207	N			1						
AT605ZHBAE	BDBC2712124	TRANSISTOR	DB-381 2SC2712-Y TE85L	Q105	N			1						
AT605ZHBAE	BDBC2712124	TRANSISTOR	DB-381 2SC2712-Y TE85L	Q106	N			1						
AT605ZHBAE	BDBC2712124	TRANSISTOR	DB-381 2SC2712-Y TE85L	Q217	N			1						
AT605ZHBAE	BDBC2712124	TRANSISTOR	DB-381 2SC2712-Y TE85L	Q302	N			1						
AT605ZHBAE	BDBC2712124	TRANSISTOR	DB-381 2SC2712-Y TE85L	Q303	N			1						
AT605ZHBAE	BDBC2714124	TRANSISTOR	DB-718 2SC2714-Y TE85L	Q408	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q010	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q011	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q012	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q013	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q015	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q018	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q019	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q107	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q108	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q110	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q111	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q112	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q201	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q202	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q204	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q206	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q210	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q211	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q212	N			1						

AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q213	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q220	N			1						
AT605ZHBAE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q404	N			1						
AT605ZHBAE	BDBC3356646	TRANSISTOR	DB-711 2SC3356-R24 T1B	Q101	N			1						
AT605ZHBAE	BDBC3356646	TRANSISTOR	DB-711 2SC3356-R24 T1B	Q304	N			1						
AT605ZHBAE	BDBC3356646	TRANSISTOR	DB-711 2SC3356-R24 T1B	Q405	N			1						
AT605ZHBAE	BDBC3357000	TRANSISTOR	DB-754 2SC3357 T1	Q215	N			1						
AT605ZHBAE	BDCB0374116	FIELD EFFECT TRANSISTOR	DC-054 2SK374-Q (TX)	Q109	N			1						
AT605ZHBAE	BDCB0711303	FIELD EFFECT TRANSISTOR	DC-046 2SK711-GR	Q102	N			1						
AT605ZHBAE	BDCB0711303	FIELD EFFECT TRANSISTOR	DC-046 2SK711-GR	Q104	N			1						
AT605ZHBAE	BDCC0260303	FIELD EFFECT TRANSISTOR	DC-128 3SK260-GR	Q103	N			1						
AT605ZHBAE	BDCC0260303	FIELD EFFECT TRANSISTOR	DC-128 3SK260-GR	Q407	N			1						
AT605ZHBAE	BDEG4221003	INTEGRATED CIRCUIT	FX604D4	IC204	N	G		1						
AT605ZHBAE	BDEG4232001	INTEGRATED CIRCUIT	M30625FGAGP	IC002	N	G		1	HK04-005					
AT605ZHBAE	BDEY0705003	INTEGRATED CIRCUIT	NJM4558M TE3	IC110	N			1						
AT605ZHBAE	BDEY0705003	INTEGRATED CIRCUIT	NJM4558M TE3	IC202	N			1						
AT605ZHBAE	BDEY0705003	INTEGRATED CIRCUIT	NJM4558M TE3	IC203	N			1						
AT605ZHBAE	BDEY0705003	INTEGRATED CIRCUIT	NJM4558M TE3	IC205	N			1						
AT605ZHBAE	BDEY0924001	INTEGRATED CIRCUIT	L7808CV	IC401	N	G		1						
AT605ZHBAE	BDEY2657001	INTEGRATED CIRCUIT	LA4446	IC106	N			1						
AT605ZHBAE	BDEY3282003	INTEGRATED CIRCUIT	S1T3361D01-S0T0	IC101	N			1						
AT605ZHBAE	BDEY3282003	INTEGRATED CIRCUIT	S1T3361D01-S0T0	IC301	N			1						
AT605ZHBAE	BDEY3355003	INTEGRATED CIRCUIT	TK11250CMCL	IC402	N			1						
AT605ZHBAE	BDEY3423003	INTEGRATED CIRCUIT	LTV-354T	IC114	N			1						
AT605ZHBAE	BDEY3841003	INTEGRATED CIRCUIT	24LC32AT-I/SN	IC005	N			1						
AT605ZHBAE	BDEY3876003	INTEGRATED CIRCUIT	BU4066BCFV-E2	IC105	N			1						
AT605ZHBAE	BDEY3876003	INTEGRATED CIRCUIT	BU4066BCFV-E2	IC201	N			1						
AT605ZHBAE	BDEY3943003	INTEGRATED CIRCUIT	TB31202FN	IC403	N			1						
AT605ZHBAE	BDEY4017003	INTEGRATED CIRCUIT	XC61CC4302PR/XC61AC4302PR	IC004	N			1						
AT605ZHBAE	BFLG1050001	FILTER	FL-1050 MF T45R8	FT301	N	G		1						
AT605ZHBAE	BFLY0424001	FILTER:CRYSTAL	FL-424 21S15BZ/21R15BZ	FT101	N			.5						
AT605ZHBAE	BFLY0424001	FILTER:CRYSTAL	FL-424 21S15BZ/21R15BZ	FT102	N			.5						
AT605ZHBAE	BFLY0743001	FILTER:CERAMIC	FL-743 LTW33-455D	FT103	N			1						
AT605ZHBAE	BFLY0792001	FILTER	FL-792 LTM450EW	FT303	N			1						
AT605ZHBAE	BJKY0324002	JACK	JK-324 53014-0210 2P	J104	N			1						
AT605ZHBAE	BJKY0324003	JACK	JK-324 53014-0310 3P	J117	N			1						

AT605ZHBAE	BJKY0324005	JACK	JK-324 53014-0510 5P	J116	N			1						
AT605ZHBAE	BJKY0324007	JACK	JK-324 53014-0710 7P	J997	N			1						
AT605ZHBAE	BJKY0856020	JACK	JK-856 IMSA-9610S-20B 20P	J115	N			1						
AT605ZHBAE	BLBY1113001	COIL	LB-1113 292GNS-7541N	L108	N			1						
AT605ZHBAE	BLBY1175001	COIL	LB-1175 7002BE-A0026HM	L109	N			1						
AT605ZHBAE	BLBY1175001	COIL	LB-1175 7002BE-A0026HM	L313	N			1						
AT605ZHBAE	BLBY1176001	COIL	LB-1176 KS2458N	L101	N			1						
AT605ZHBAE	BLBY1176001	COIL	LB-1176 KS2458N	L102	N			1						
AT605ZHBAE	BLBY1176001	COIL	LB-1176 KS2458N	L104	N			1						
AT605ZHBAE	BLBY1176001	COIL	LB-1176 KS2458N	L105	N			1						
AT605ZHBAE	BLBY1176001	COIL	LB-1176 KS2458N	L106	N			1						
AT605ZHBAE	BLDY0193001	COIL	LD-193 T159SNS-1280N	L107	N			1						
AT605ZHBAE	BLEY0212001	COIL	LE-212 D5.0 2 1/2T	L401	N			1						
AT605ZHBAE	BLEY0212001	COIL	LE-212 D5.0 2 1/2T	L402	N			1						
AT605ZHBAE	BLEY0237001	COIL	LE-237 D5.0 2 1/2T	L112	N			1						
AT605ZHBAE	BLEY0435001	COIL	LE-435 L-1E4-S(R22-E858)	L210	N			1						
AT605ZHBAE	BLZG0041102	INDUCTOR:MOLDED	LZ-041 1MH K	L110	N	G		1	AC05-003					
AT605ZHBAE	BLZG0041102	INDUCTOR:MOLDED	LZ-041 1MH K	L111	N	G		1	AC05-003					
AT605ZHBAE	BLZG0041102	INDUCTOR:MOLDED	LZ-041 1MH K	L315	N	G		1	AC05-003					
AT605ZHBAE	BLZG0041102	INDUCTOR:MOLDED	LZ-041 1MH K	L316	N	G		1	AC05-003					
AT605ZHBAE	BLZY0087159	INDUCTOR:MOLDED CHIP	LZ-087 1.5UH J TAPE	L311	N			1						
AT605ZHBAE	BLZY0116397	INDUCTOR:MOLDED CHIP	LZ-116 0.039UH J TAPE	L103	N			1						
AT605ZHBAE	BLZY0116397	INDUCTOR:MOLDED CHIP	LZ-116 0.039UH J TAPE	L308	N			1	HK05-015					
AT605ZHBAE	BLZY0116477	INDUCTOR:MOLDED CHIP	LZ-116 0.047UH J TAPE	L214	N			1						
AT605ZHBAE	BLZY0136109	INDUCTOR:MOLDED CHIP	LZ-136 MLF1608A1R0KT 1UH	L408	N			1						
AT605ZHBAE	BLZY0183108	INDUCTOR:MOLDED CHIP TAPE	LZ-183 HK1608R10J-T 100NH	L113	N			1						
AT605ZHBAE	BLZY0183397	INDUCTOR:MOLDED CHIP TAPE	LZ-183 HK160839NJ-T 39NH	L406	N			1						
AT605ZHBAE	BLZY0183477	INDUCTOR:MOLDED CHIP TAPE	LZ-183 HK160847NJ-T 47NH	L312	N			1	HK05-019					
AT605ZHBAE	BLZY0183567	INDUCTOR:MOLDED CHIP TAPE	LZ-183 HK160856NJ-T 56NH	L100	N			1						
AT605ZHBAE	BLZY0218187	INDUCTOR:MOLDED CHIP TAPE	LZ-218 CIH10T18NJ T 18NH	L405	N	G		1						
AT605ZHBAE	BLZY0218187	INDUCTOR:MOLDED CHIP TAPE	LZ-218 CIH10T18NJ T 18NH	L407	N	G		1						
AT605ZHBAE	BLZY0226109	INDUCTOR:MOLDED CHIP	LZ-226 SGMI1608M1R0K T	L115	N	G		1						
AT605ZHBAE	BLZY0226109	INDUCTOR:MOLDED CHIP	LZ-226 SGMI1608M1R0K T	L314	N	G		1						
AT605ZHBAE	BLZY0226278	INDUCTOR:MOLDED CHIP	LZ-226 SGMI1608GR27K T	L317	N	G		1						
AT605ZHBAE	BLZY0226278	INDUCTOR:MOLDED CHIP	LZ-226 SGMI1608GR27K T	L318	N	G		1						
AT605ZHBAE	BMOG0295001	MODULE	MO-295 TTS14NSB-A5 14.85M	MO401	N	G		1						

AT605ZHBAE	BMOY0211001	MODULE:POW	MO-211 S-AV37	MO201	N			1						
AT605ZHBAE	BPDG0883AAZ	PCB:MAIN	PD-0883AA	B101	N	G		1						
AT605ZHBAE	BQXG0828001	CRYSTAL	QX-828 9.9068MHZ	X001	N	G		1	HK05-006					
AT605ZHBAE	BQXY0222001	CRYSTAL	QX-222 20.945MHZ	X101	N			1						
AT605ZHBAE	BQXY0778001	CRYSTAL	QX-778 3.579545MHZ	X201	N			1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R010	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R011	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R045	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R067	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R081	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R139	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R140	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R147	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R199	N	G		1	HK05-014					
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R260	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R273	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R306	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R312	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R314	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R329	N	G		1	HK05-019					
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R352	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R403	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R456	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R465	N	G		1						
AT605ZHBAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R473	N	G		1						
AT605ZHBAE	BRFC161004G	R:CARBON FIXED CHIP	10 1/16W J TAPE	R110	N	G		1						
AT605ZHBAE	BRFC161004G	R:CARBON FIXED CHIP	10 1/16W J TAPE	R141	N	G		1						
AT605ZHBAE	BRFC161004G	R:CARBON FIXED CHIP	10 1/16W J TAPE	R319	N	G		1						
AT605ZHBAE	BRFC161004G	R:CARBON FIXED CHIP	10 1/16W J TAPE	R474	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R106	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R115	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R124	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R136	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R242	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R246	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R283	N	G		1						

AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R330	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R332	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R455	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R464	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R470	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R472	N	G		1						
AT605ZHBAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R477	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R007	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R008	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R009	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R040	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R041	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R060	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R061	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R062	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R063	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R064	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R066	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R069	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R111	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R245	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R415	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R458	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R459	N	G		1						
AT605ZHBAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R460	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R012	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R013	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R016	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R017	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R018	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R039	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R052	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R131	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R154	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R156	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R168	N	G		1						

AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R189	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R203	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R208	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R215	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R221	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R230	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R269	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R280	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R281	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R321	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R322	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R323	N	G		1						
AT605ZHBAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R405	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R128	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R146	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R167	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R197	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R198	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R244	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R264	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R266	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R282	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R311	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R360	N	G		1						
AT605ZHBAE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R478	N	G		1						
AT605ZHBAE	BRFC161094G	R:CARBON FIXED CHIP	1 1/16W J TAPE	R171	N	G		1						
AT605ZHBAE	BRFC161094G	R:CARBON FIXED CHIP	1 1/16W J TAPE	R173	N	G		1						
AT605ZHBAE	BRFC161214G	R:CARBON FIXED CHIP	120 1/16W J TAPE	R169	N	G		1						
AT605ZHBAE	BRFC161214G	R:CARBON FIXED CHIP	120 1/16W J TAPE	R175	N	G		1						
AT605ZHBAE	BRFC161224G	R:CARBON FIXED CHIP	1.2K 1/16W J TAPE	R127	N	G		1						
AT605ZHBAE	BRFC161224G	R:CARBON FIXED CHIP	1.2K 1/16W J TAPE	R225	N	G		1						
AT605ZHBAE	BRFC161224G	R:CARBON FIXED CHIP	1.2K 1/16W J TAPE	R357	N	G		1						
AT605ZHBAE	BRFC161234G	R:CARBON FIXED CHIP	12K 1/16W J TAPE	R220	N	G		1						
AT605ZHBAE	BRFC161514G	R:CARBON FIXED CHIP	150 1/16W J TAPE	R190	N	G		1						
AT605ZHBAE	BRFC161514G	R:CARBON FIXED CHIP	150 1/16W J TAPE	R468	N	G		1						
AT605ZHBAE	BRFC161514G	R:CARBON FIXED CHIP	150 1/16W J TAPE	R469	N	G		1						

AT605ZHBAE	BRFC161524G	R:CARBON FIXED CHIP	1.5K 1/16W J TAPE	R116	N	G		1						
AT605ZHBAE	BRFC161524G	R:CARBON FIXED CHIP	1.5K 1/16W J TAPE	R122	N	G		1						
AT605ZHBAE	BRFC161524G	R:CARBON FIXED CHIP	1.5K 1/16W J TAPE	R412	N	G		1						
AT605ZHBAE	BRFC161534G	R:CARBON FIXED CHIP	15K 1/16W J TAPE	R258	N	G		1						
AT605ZHBAE	BRFC161534G	R:CARBON FIXED CHIP	15K 1/16W J TAPE	R413	N	G		1						
AT605ZHBAE	BRFC161543G	R:CARBON FIXED CHIP	150K 1/16W F TAPE	R227	N	G		1						
AT605ZHBAE	BRFC161544G	R:CARBON FIXED CHIP	150K 1/16W J TAPE	R267	N	G		1						
AT605ZHBAE	BRFC161554G	R:CARBON FIXED CHIP	1.5M 1/16W J TAPE	R125	N	G		1	HK05-046					
AT605ZHBAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R101	N	G		1	HK05-014					
AT605ZHBAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R248	N	G		1						
AT605ZHBAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R313	N	G		1						
AT605ZHBAE	BRFC161824G	R:CARBON FIXED CHIP	1.8K 1/16W J TAPE	R188	N	G		1						
AT605ZHBAE	BRFC161824G	R:CARBON FIXED CHIP	1.8K 1/16W J TAPE	R240	N	G		1						
AT605ZHBAE	BRFC161834G	R:CARBON FIXED CHIP	18K 1/16W J TAPE	R236	N	G		1						
AT605ZHBAE	BRFC161844G	R:CARBON FIXED CHIP	180K 1/16W J TAPE	R231	N	G		1						
AT605ZHBAE	BRFC162204G	R:CARBON FIXED CHIP	22 1/16W J TAPE	R212	N	G		1						
AT605ZHBAE	BRFC162204G	R:CARBON FIXED CHIP	22 1/16W J TAPE	R252	N	G		1						
AT605ZHBAE	BRFC162204G	R:CARBON FIXED CHIP	22 1/16W J TAPE	R256	N	G		1						
AT605ZHBAE	BRFC162204G	R:CARBON FIXED CHIP	22 1/16W J TAPE	R316	N	G		1						
AT605ZHBAE	BRFC162214G	R:CARBON FIXED CHIP	220 1/16W J TAPE	R253	N	G		1						
AT605ZHBAE	BRFC162214G	R:CARBON FIXED CHIP	220 1/16W J TAPE	R310	N	G		1						
AT605ZHBAE	BRFC162214G	R:CARBON FIXED CHIP	220 1/16W J TAPE	R471	N	G		1						
AT605ZHBAE	BRFC162214G	R:CARBON FIXED CHIP	220 1/16W J TAPE	R479	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R014	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R015	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R019	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R020	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R021	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R022	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R023	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R024	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R025	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R026	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R028	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R031	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R032	N	G		1						

AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R033	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R034	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R035	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R037	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R038	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R042	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R046	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R047	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R053	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R054	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R057	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R059	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R077	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R078	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R080	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R093	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R108	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R132	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R135	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R137	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R328	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R361	N	G		1						
AT605ZHBAE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R463	N	G		1						
AT605ZHBAE	BRFC162234G	R:CARBON FIXED CHIP	22K 1/16W J TAPE	R056	N	G		1						
AT605ZHBAE	BRFC162234G	R:CARBON FIXED CHIP	22K 1/16W J TAPE	R202	N	G		1						
AT605ZHBAE	BRFC162243G	R:CARBON FIXED CHIP	220K 1/16W F TAPE	R234	N	G		1						
AT605ZHBAE	BRFC162243G	R:CARBON FIXED CHIP	220K 1/16W F TAPE	R237	N	G		1						
AT605ZHBAE	BRFC162244G	R:CARBON FIXED CHIP	220K 1/16W J TAPE	R145	N	G		1						
AT605ZHBAE	BRFC162244G	R:CARBON FIXED CHIP	220K 1/16W J TAPE	R224	N	G		1						
AT605ZHBAE	BRFC162244G	R:CARBON FIXED CHIP	220K 1/16W J TAPE	R353	N	G		1						
AT605ZHBAE	BRFC162254G	R:CARBON FIXED CHIP	2.2M 1/16W J TAPE	R157	N	G		1						
AT605ZHBAE	BRFC162254G	R:CARBON FIXED CHIP	2.2M 1/16W J TAPE	R161	N	G		1						
AT605ZHBAE	BRFC162254G	R:CARBON FIXED CHIP	2.2M 1/16W J TAPE	R259	N	G		1						
AT605ZHBAE	BRFC162704G	R:CARBON FIXED CHIP	27 1/16W J TAPE	R107	N	G		1						
AT605ZHBAE	BRFC162714G	R:CARBON FIXED CHIP	270 1/16W J TAPE	R133	N	G		1						
AT605ZHBAE	BRFC162714G	R:CARBON FIXED CHIP	270 1/16W J TAPE	R327	N	G		1						

AT605ZHBAE	BRFC162724G	R:CARBON FIXED CHIP	2.7K 1/16W J TAPE	R277	N	G		1						
AT605ZHBAE	BRFC162734G	R:CARBON FIXED CHIP	27K 1/16W J TAPE	R055	N	G		1						
AT605ZHBAE	BRFC162734G	R:CARBON FIXED CHIP	27K 1/16W J TAPE	R232	N	G		1						
AT605ZHBAE	BRFC162734G	R:CARBON FIXED CHIP	27K 1/16W J TAPE	R238	N	G		1						
AT605ZHBAE	BRFC162734G	R:CARBON FIXED CHIP	27K 1/16W J TAPE	R247	N	G		1						
AT605ZHBAE	BRFC162734G	R:CARBON FIXED CHIP	27K 1/16W J TAPE	R274	N	G		1						
AT605ZHBAE	BRFC163314G	R:CARBON FIXED CHIP	330 1/16W J TAPE	R103	N	G		1						
AT605ZHBAE	BRFC163314G	R:CARBON FIXED CHIP	330 1/16W J TAPE	R109	N	G		1						
AT605ZHBAE	BRFC163314G	R:CARBON FIXED CHIP	330 1/16W J TAPE	R112	N	G		1						
AT605ZHBAE	BRFC163314G	R:CARBON FIXED CHIP	330 1/16W J TAPE	R143	N	G		1						
AT605ZHBAE	BRFC163314G	R:CARBON FIXED CHIP	330 1/16W J TAPE	R170	N	G		1						
AT605ZHBAE	BRFC163314G	R:CARBON FIXED CHIP	330 1/16W J TAPE	R350	N	G		1						
AT605ZHBAE	BRFC163314G	R:CARBON FIXED CHIP	330 1/16W J TAPE	R355	N	G		1						
AT605ZHBAE	BRFC163324G	R:CARBON FIXED CHIP	3.3K 1/16W J TAPE	R144	N	G		1						
AT605ZHBAE	BRFC163324G	R:CARBON FIXED CHIP	3.3K 1/16W J TAPE	R150	N	G		1						
AT605ZHBAE	BRFC163324G	R:CARBON FIXED CHIP	3.3K 1/16W J TAPE	R214	N	G		1						
AT605ZHBAE	BRFC163324G	R:CARBON FIXED CHIP	3.3K 1/16W J TAPE	R275	N	G		1						
AT605ZHBAE	BRFC163324G	R:CARBON FIXED CHIP	3.3K 1/16W J TAPE	R356	N	G		1						
AT605ZHBAE	BRFC163334G	R:CARBON FIXED CHIP	33K 1/16W J TAPE	R118	N	G		1						
AT605ZHBAE	BRFC163334G	R:CARBON FIXED CHIP	33K 1/16W J TAPE	R142	N	G		1						
AT605ZHBAE	BRFC163334G	R:CARBON FIXED CHIP	33K 1/16W J TAPE	R318	N	G		1						
AT605ZHBAE	BRFC163334G	R:CARBON FIXED CHIP	33K 1/16W J TAPE	R324	N	G		1						
AT605ZHBAE	BRFC163334G	R:CARBON FIXED CHIP	33K 1/16W J TAPE	R467	N	G		1						
AT605ZHBAE	BRFC163924G	R:CARBON FIXED CHIP	3.9K 1/16W J TAPE	R165	N	G		1						
AT605ZHBAE	BRFC163934G	R:CARBON FIXED CHIP	39K 1/16W J TAPE	R113	N	G		1						
AT605ZHBAE	BRFC164714G	R:CARBON FIXED CHIP	470 1/16W J TAPE	R219	N	G		1						
AT605ZHBAE	BRFC164714G	R:CARBON FIXED CHIP	470 1/16W J TAPE	R255	N	G		1						
AT605ZHBAE	BRFC164714G	R:CARBON FIXED CHIP	470 1/16W J TAPE	R414	N	G		1						
AT605ZHBAE	BRFC164714G	R:CARBON FIXED CHIP	470 1/16W J TAPE	R461	N	G		1						
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R049	N	G		1						
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R065	N	G		1						
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R130	N	G		1						
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R155	N	G		1						
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R162	N	G		1						
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R166	N	G		1						
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R235	N	G		1						

AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R241	N	G		1					
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R243	N	G		1					
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R279	N	G		1					
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R325	N	G		1					
AT605ZHBAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R466	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R036	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R058	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R085	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R090	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R119	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R126	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R138	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R148	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R149	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R151	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R158	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R159	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R160	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R163	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R216	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R217	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R228	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R229	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R249	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R261	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R262	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R263	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R268	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R270	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R271	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R272	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R308	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R320	N	G		1					
AT605ZHBAE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R411	N	G		1					
AT605ZHBAE	BRFC164794G	R:CARBON FIXED CHIP	4.7 1/16W J TAPE	R191	N	G		1					
AT605ZHBAE	BRFC165604G	R:CARBON FIXED CHIP	56 1/16W J TAPE	R226	N	G		1					

AT605ZHBAE	BRFC165614G	R:CARBON FIXED CHIP	560 1/16W J TAPE	R079	N	G		1						
AT605ZHBAE	BRFC165614G	R:CARBON FIXED CHIP	560 1/16W J TAPE	R315	N	G		1						
AT605ZHBAE	BRFC165624G	R:CARBON FIXED CHIP	5.6K 1/16W J TAPE	R200	N	G		1						
AT605ZHBAE	BRFC165624G	R:CARBON FIXED CHIP	5.6K 1/16W J TAPE	R201	N	G		1						
AT605ZHBAE	BRFC165624G	R:CARBON FIXED CHIP	5.6K 1/16W J TAPE	R457	N	G		1						
AT605ZHBAE	BRFC165624G	R:CARBON FIXED CHIP	5.6K 1/16W J TAPE	R475	N	G		1						
AT605ZHBAE	BRFC165634G	R:CARBON FIXED CHIP	56K 1/16W J TAPE	R129	N	G		1						
AT605ZHBAE	BRFC165634G	R:CARBON FIXED CHIP	56K 1/16W J TAPE	R250	N	G		1						
AT605ZHBAE	BRFC165634G	R:CARBON FIXED CHIP	56K 1/16W J TAPE	R358	N	G		1						
AT605ZHBAE	BRFC165644G	R:CARBON FIXED CHIP	560K 1/16W J TAPE	R082	N	G		1						
AT605ZHBAE	BRFC165644G	R:CARBON FIXED CHIP	560K 1/16W J TAPE	R086	N	G		1						
AT605ZHBAE	BRFC165644G	R:CARBON FIXED CHIP	560K 1/16W J TAPE	R134	N	G		1						
AT605ZHBAE	BRFC165644G	R:CARBON FIXED CHIP	560K 1/16W J TAPE	R326	N	G		1						
AT605ZHBAE	BRFC166814G	R:CARBON FIXED CHIP	680 1/16W J TAPE	R239	N	G		1						
AT605ZHBAE	BRFC166814G	R:CARBON FIXED CHIP	680 1/16W J TAPE	R254	N	G		1						
AT605ZHBAE	BRFC168214G	R:CARBON FIXED CHIP	820 1/16W J TAPE	R117	N	G		1						
AT605ZHBAE	BRFC168214G	R:CARBON FIXED CHIP	820 1/16W J TAPE	R307	N	G		1						
AT605ZHBAE	BRFC168214G	R:CARBON FIXED CHIP	820 1/16W J TAPE	R331	N	G		1						
AT605ZHBAE	BRFC168214G	R:CARBON FIXED CHIP	820 1/16W J TAPE	R462	N	G		1						
AT605ZHBAE	BRFC168214G	R:CARBON FIXED CHIP	820 1/16W J TAPE	R476	N	G		1						
AT605ZHBAE	BRSJ001034Z	R:METAL OXIDE	10K 1WS J	R402	N	G		1						
AT605ZHBAE	BRSJ003904Z	R:METAL OXIDE	39 1WS J	R218	N	G		1						
AT605ZHBAE	BRSJ023394Z	R:METAL OXIDE	3.3 2WS J	R172	N	G		1						
AT605ZHBAE	BRTG0583103	R:SEMI-FIXED	RT-0583 RH03ADC14X	RT207	N	G		1	HK05-005					
AT605ZHBAE	BRTY0507103	R:SEMI-FIXED	RT-507 10KB	RT205	N			1						
AT605ZHBAE	BRTY0507471	R:SEMI-FIXED	RT-507 470B	RT204	N			1						
AT605ZHBAE	BRTY0552102	R:SEMI-FIXED	RT-552 1KB	RT301	N			1	HK05-038					
AT605ZHBAE	BRTY0552103	R:SEMI-FIXED	RT-552 10KB	RT101	N			1						
AT605ZHBAE	BRTY0552103	R:SEMI-FIXED	RT-552 10KB	RT104	N			1						
AT605ZHBAE	BRTY0552203	R:SEMI-FIXED	RT-552 20KB	RT203	N			1						
AT605ZHBAE	BRTY0552503	R:SEMI-FIXED	RT-552 50KB	RT202	N			1						
AT605ZHBAE	BRTY0552503	R:SEMI-FIXED	RT-552 50KB	RT206	N			1						
AT605ZHBAE	BTFY0157001	TRANSFORMER:AF CHOKE	TF-157	T401	N	G		1						
AT605ZHBBE	BCML314745G	C:CERAMIC M/L (1608) TAPE	0.47UF 16V K B	C558	N	G		1						
AT605ZHBBE	BCML314745G	C:CERAMIC M/L (1608) TAPE	0.47UF 16V K B	C559	N	G		1						
AT605ZHBBE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C563	N	G		1						

AT605ZHBBE	BCML811045G	C:CERAMIC M/L (1608) TAPE	0.1UF 50V K B	C565	N	G		1						
AT605ZHBBE	BCMM811514G	C:CERAMIC M/L (1608) TAPE	150PF 50V J CH	C553	N	G		1						
AT605ZHBBE	BCMM811514G	C:CERAMIC M/L (1608) TAPE	150PF 50V J CH	C555	N	G		1						
AT605ZHBBE	BCMM811514G	C:CERAMIC M/L (1608) TAPE	150PF 50V J CH	C556	N	G		1						
AT605ZHBBE	BCMM811514G	C:CERAMIC M/L (1608) TAPE	150PF 50V J CH	C561	N	G		1						
AT605ZHBBE	BCMM811514G	C:CERAMIC M/L (1608) TAPE	150PF 50V J CH	C562	N	G		1						
AT605ZHBBE	BCSH311096Z	C:TANTALUM CHIP	1UF 16V M C-122 TAPE	C554	N	G		1						
AT605ZHBBE	BCSH311096Z	C:TANTALUM CHIP	1UF 16V M C-122 TAPE	C566	N	G		1						
AT605ZHBBE	BDAG1030001	DIODE:LED	LTST-S320KFKT-U	D563	N	G		1	AC05-002		P	BDAY1246001		
AT605ZHBBE	BDAG1030001	DIODE:LED	LTST-S320KFKT-U	D564	N	G		1	AC05-002		P	BDAY1246001		
AT605ZHBBE	BDAG1030001	DIODE:LED	LTST-S320KFKT-U	D566	N	G		1	AC05-002		P	BDAY1246001		
AT605ZHBBE	BDAG1030001	DIODE:LED	LTST-S320KFKT-U	D569	N	G		1	AC05-002		P	BDAY1246001		
AT605ZHBBE	BDAY0435001	DIODE	HSM88WK TL	D571	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D551	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D552	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D553	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D554	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D555	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D556	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D557	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D558	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D559	N			1						
AT605ZHBBE	BDAY1203001	DIODE	LTST-C190AKT	D560	N			1						
AT605ZHBBE	BDBB1115333	TRANSISTOR	DB-126 2SB1115-YL T1	Q550	N			1						
AT605ZHBBE	BDBB1115333	TRANSISTOR	DB-126 2SB1115-YL T1	Q551	N			1						
AT605ZHBBE	BDBB1115333	TRANSISTOR	DB-126 2SB1115-YL T1	Q556	N			1						
AT605ZHBBE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q553	N			1						
AT605ZHBBE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q554	N			1						
AT605ZHBBE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q555	N			1						
AT605ZHBBE	BDBC3052106	TRANSISTOR	DB-862 2SC3052-T12-1F	Q557	N			1						
AT605ZHBBE	BDEY0703002	INTEGRATED CIRCUIT	NJM2904M (TE3)	IC552	N			1						
AT605ZHBBE	BDEY3036001	INTEGRATED CIRCUIT	NJU6433FD1	IC551	N			1						
AT605ZHBBE	BJKY0965020	JACK	JK-965 IMSA-9611S-20C 20P	J552	N			1						
AT605ZHBBE	BPDY0859AA1	PCB:FRONT	PD-859AA 1/3	B551	N			1						
AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R551	N	G		1						
AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R552	N	G		1						

AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R553	N	G		1						
AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R554	N	G		1						
AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R592	N	G		1						
AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R593	N	G		1						
AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R594	N	G		1						
AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R595	N	G		1						
AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R596	N	G		1						
AT605ZHBBE	BRFC011814G	R:CARBON FIXED CHIP	180 1/10W J TAPE	R597	N	G		1						
AT605ZHBBE	BRFC012714G	R:CARBON FIXED CHIP	270 1/10W J TAPE	R557	Y	G		1						
AT605ZHBBE	BRFC012714G	R:CARBON FIXED CHIP	270 1/10W J TAPE	R563	Y	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R501	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R502	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R503	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R504	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R505	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R560	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R564	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R565	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R568	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R575	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R587	N	G		1						
AT605ZHBBE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R588	N	G		1						
AT605ZHBBE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R574	N	G		1						
AT605ZHBBE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R582	N	G		1						
AT605ZHBBE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R571	N	G		1						
AT605ZHBBE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R572	N	G		1						
AT605ZHBBE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R579	N	G		1						
AT605ZHBBE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R591	N	G		1						
AT605ZHBBE	BRFC161524G	R:CARBON FIXED CHIP	1.5K 1/16W J TAPE	R578	N	G		1						
AT605ZHBBE	BRFC162224G	R:CARBON FIXED CHIP	2.2K 1/16W J TAPE	R590	N	G		1						
AT605ZHBBE	BRFC162244G	R:CARBON FIXED CHIP	220K 1/16W J TAPE	R583	N	G		1						
AT605ZHBBE	BRFC162724G	R:CARBON FIXED CHIP	2.7K 1/16W J TAPE	R585	N	G		1						
AT605ZHBBE	BRFC164714G	R:CARBON FIXED CHIP	470 1/16W J TAPE	R577	N	G		1						
AT605ZHBBE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R562	N	G		1						
AT605ZHBBE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R576	N	G		1						
AT605ZHBBE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R586	N	G		1						

AT605ZHBBE	BRFC164744G	R:CARBON FIXED CHIP	470K 1/16W J TAPE	R573	N	G		1						
AT605ZHBBE	BRFC166894G	R:CARBON FIXED CHIP	6.8 1/16W J TAPE	R558	N	G		1						
AT605ZHBBE	BRFC166894G	R:CARBON FIXED CHIP	6.8 1/16W J TAPE	R559	N	G		1						
AT605ZHBBE	BRFC166894G	R:CARBON FIXED CHIP	6.8 1/16W J TAPE	R561	N	G		1						
AT605ZHBBE	BRFC166894G	R:CARBON FIXED CHIP	6.8 1/16W J TAPE	R566	N	G		1						
AT605ZHBBE	BRFC166894G	R:CARBON FIXED CHIP	6.8 1/16W J TAPE	R567	N	G		1						
AT605ZHBBE	BRFC166894G	R:CARBON FIXED CHIP	6.8 1/16W J TAPE	R569	N	G		1						
AT605ZHBBE	BRFC166894G	R:CARBON FIXED CHIP	6.8 1/16W J TAPE	R570	N	G		1						
AT605ZHBBE	BRTY0569333	R:SEMI-FIXED	RT-569 PVZ3A333A01R00	RT551	N			1			P	BRTY0550333		
AT605ZHBCE	BCML311055G	C:CERAMIC M/L (1608) TAPE	1UF 16V K B	C666	N	G		1						
AT605ZHBCE	BCMM811098G	C:CERAMIC M/L (1608) TAPE	1PF 50V B CH	C676	N	G		1						
AT605ZHBCE	BCMM811204G	C:CERAMIC M/L (1608) TAPE	12PF 50V J CH	C658	N	G		1						
AT605ZHBCE	BCMM811504G	C:CERAMIC M/L (1608) TAPE	15PF 50V J CH	C662	N	G		1						
AT605ZHBCE	BCMM811504G	C:CERAMIC M/L (1608) TAPE	15PF 50V J CH	C669	N	G		1						
AT605ZHBCE	BCMM811514G	C:CERAMIC M/L (1608) TAPE	150PF 50V J CH	C655	N	G		1						
AT605ZHBCE	BCMM811804G	C:CERAMIC M/L (1608) TAPE	18PF 50V J CH	C656	N	G		1						
AT605ZHBCE	BCMM812204G	C:CERAMIC M/L (1608) TAPE	22PF 50V J CH	C659	N	G		1						
AT605ZHBCE	BCMM813098G	C: CERAMIC M/L (1608) TAPE	3PF 50V B CH	C660	N	G		1						
AT605ZHBCE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C652	N	G		1						
AT605ZHBCE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C654	N	G		1						
AT605ZHBCE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C661	N	G		1						
AT605ZHBCE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C663	N	G		1						
AT605ZHBCE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C665	N	G		1						
AT605ZHBCE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C667	N	G		1						
AT605ZHBCE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C671	N	G		1						
AT605ZHBCE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C673	N	G		1						
AT605ZHBCE	BCMM815098G	C: CERAMIC M/L (1608) TAPE	5PF 50V B CH	C668	N	G		1						
AT605ZHBCE	BCMM818091G	C:CERAMIC M/L (1608) TAPE	8PF 50V C CH	C657	N	G		1						
AT605ZHBCE	BCSH312296Z	C:TANTALUM CHIP TAPE	2.2UF 16V M C-122 TAPE	C664	N	G		1						
AT605ZHBCE	BDAY0764001	DIODE	HVU350 TRF	D651	N			1						
AT605ZHBCE	BDBC2714124	TRANSISTOR	DB-718 2SC2714-Y TE85L	Q653	N			1						
AT605ZHBCE	BDBC4177648	TRANSISTOR	DB-756 2SC4177-L6 T1	Q651	N			1						
AT605ZHBCE	BDBC4226646	TRANSISTOR	DB-803 2SC4226-R24 T1	Q652	N			1						
AT605ZHBCE	BDBC5065124	TRANSISTOR	DB-848 2SC5065-Y(TE85R)	Q654	N			1						
AT605ZHBCE	BJKY1100003	JACK	JK-1100 9201B-1-03A-T	J651	N			1						
AT605ZHBCE	BJKY1100005	JACK	JK-1100 9201B-1-05A-T	J652	N			1						

AT605ZHBCE	BLZY0087569	INDUCTOR:MOLDED CHIP	LZ-087 5.6UH J TAPE	L651	N			1						
AT605ZHBCE	BLZY0218108	INDUCTOR:MOLDED CHIP TAPE	LZ-218 CIH10TR10J T 100NH	L655	N	G		1						
AT605ZHBCE	BLZY0243477	INDUCTOR:MOLDED CHIP	LZ-243 1008HQ-47NX B 47NH	L652	N			1						
AT605ZHBCE	BPDY0712BAZ	PCB:VCO	PD-712BA	B651	N			1						
AT605ZHBCE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R652	N	G		1						
AT605ZHBCE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R662	N	G		1						
AT605ZHBCE	BRFC161044G	R:CARBON FIXED CHIP	100K 1/16W J TAPE	R657	N	G		1						
AT605ZHBCE	BRFC161804G	R:CARBON FIXED CHIP	18 1/16W J TAPE	R651	N	G		1						
AT605ZHBCE	BRFC163324G	R:CARBON FIXED CHIP	3.3K 1/16W J TAPE	R653	N	G		1						
AT605ZHBCE	BRFC163324G	R:CARBON FIXED CHIP	3.3K 1/16W J TAPE	R659	N	G		1						
AT605ZHBCE	BRFC163324G	R:CARBON FIXED CHIP	3.3K 1/16W J TAPE	R663	N	G		1						
AT605ZHBCE	BRFC164714G	R:CARBON FIXED CHIP	470 1/16W J TAPE	R656	N	G		1						
AT605ZHBCE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R655	N	G		1						
AT605ZHBCE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R660	N	G		1						
AT605ZHBCE	BRFC164734G	R:CARBON FIXED CHIP	47K 1/16W J TAPE	R665	N	G		1						
AT605ZHBCE	BRFC166814G	R:CARBON FIXED CHIP	680 1/16W J TAPE	R664	N	G		1						
AT605ZHBCE	BRFC168224G	R:CARBON FIXED CHIP	8.2K 1/16W J TAPE	R658	N	G		1						
AT605ZHBDE	BPDY0859AA2	PCB:VOL	PD-859AA 2/3	B601	N			1						
AT605ZHBDE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R601	N	G		1						
AT605ZHBDE	BRVY0922001	R:VARIABLE TP96N268N B503	RV-922 RY-7457 50KB	VR601	N			1						
AT605ZHBEE	BPDY0859AA3	PCB:SQ	PD-859AA 3/3	B701	N			1						
AT605ZHBEE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R701	N	G		1						
AT605ZHBEE	BRVY0923001	R:VARIABLE TP96N267 17.8F B503	RV-923 50KB	VR701	N			1						
AT605ZHBFE	BCMM811002G	C:CERAMIC M/L (1608) TAPE	10PF 50V D CH	C614	N	G		1						
AT605ZHBFE	BCMM818091G	C:CERAMIC M/L (1608) TAPE	8PF 50V C CH	C610	N	G		1						
AT605ZHBFE	BCNA811504G	C:CERAMIC M/L (1005) TAPE	15PF 50V J CH	C642	N	G		1						
AT605ZHBFE	BCNA812704G	C:CERAMIC M/L (1005) TAPE	27PF 50V J CH	C611	N	G		1						
AT605ZHBFE	BCNA812704G	C:CERAMIC M/L (1005) TAPE	27PF 50V J CH	C612	N	G		1						
AT605ZHBFE	BCNA814704G	C:CERAMIC M/L (1005) TAPE	47PF 50V J CH	C607	N	G		1						
AT605ZHBFE	BCNA815604G	C:CERAMIC M/L (1005) TAPE	56PF 50V J CH	C616	N	G		1						
AT605ZHBFE	BCNB311035G	C:CERAMIC M/L (1005) TAPE	0.01UF 16V K B	C615	N	G		1						
AT605ZHBFE	BCNB813315G	C:CERAMIC M/L (1005) TAPE	330p 50V K B	C601	N	G		1						
AT605ZHBFE	BCNB813315G	C:CERAMIC M/L (1005) TAPE	330p 50V K B	C603	N	G		1						
AT605ZHBFE	BCNB813315G	C:CERAMIC M/L (1005) TAPE	330p 50V K B	C604	N	G		1						
AT605ZHBFE	BCNB813315G	C:CERAMIC M/L (1005) TAPE	330p 50V K B	C613	N	G		1						
AT605ZHBFE	BCZY0239014	C:TANTALUM (TAPE)	CZ-239 2.2UF 10V M P	C602	N			1						

AT605ZHBFE	BDAY1223001	DIODE	HVC350B TRF	D601	N			1						
AT605ZHBFE	BDBC4226646	TRANSISTOR	DB-803 2SC4226-R24 T1	Q602	N			1						
AT605ZHBFE	BDBC4915124	TRANSISTOR	DB-835 2SC4915-Y TE85L	Q603	N			1						
AT605ZHBFE	BDBC5383105	TRANSISTOR	DB-849 2SC5383-T11-1E	Q601	N			1						
AT605ZHBFE	BLZG0270687	INDUCTOR:MOLDED CHIP	LZ-270 C2012H-68NG	L602	N	G		1						
AT605ZHBFE	BLZY0199109	INDUCTOR:MOLDED CHIP	LZ-199 ELJND1R0JF 1UH	L601	N	G		1						
AT605ZHBFE	BLZY0218108	INDUCTOR:MOLDED CHIP TAPE	LZ-218 CIH10TR10J T 100NH	L603	N	G		1						
AT605ZHBFE	BPDY0857AAZ	PCB:VCO	PD-857AA	B621	N			1						
AT605ZHBFE	BRFA160004G	R:CARBON FIXED CHIP(1005)	0 1/16W J 1005 TAPE	R612	N	G		1						
AT605ZHBFE	BRFA161214G	R:CARBON FIXED CHIP(1005)	120 1/16W J 1005 TAPE	R608	N	G		1						
AT605ZHBFE	BRFA161534G	R:CARBON FIXED CHIP(1005)	15K 1/16W J 1005 TAPE	R606	N	G		1						
AT605ZHBFE	BRFA161804G	R:CARBON FIXED CHIP(1005)	18 1/16W J 1005 TAPE	R603	N	G		1						
AT605ZHBFE	BRFA162734G	R:CARBON FIXED CHIP(1005)	27K 1/16W J 1005 TAPE	R610	N	G		1						
AT605ZHBFE	BRFA163324G	R:CARBON FIXED CHIP(1005)	3.3K 1/16W J 1005 TAPE	R605	N	G		1						
AT605ZHBFE	BRFA163324G	R:CARBON FIXED CHIP(1005)	3.3K 1/16W J 1005 TAPE	R621	N	G		1						
AT605ZHBFE	BRFA163914G	R:CARBON FIXED CHIP(1005)	390 1/16W J 1005 TAPE	R607	N	G		1						
AT605ZHBYE	BDLY0273001	LIQUID CRYSTAL DISPLAY	DL-273 DLC-31028S4GF	DP551	N			1						
AT605ZHBYE	BJKY1080001	JACK:ANT	JK-1080 NS-2503	J501	N			1						
AT605ZHBYE	BSPY0406001	SPEAKER	SP-406 DF45S8-1	SP501	N			1	HK05-001					
AT605ZHBYE	BWFY3000605	FLAT CABLE	WF-300 4- 60-4 20P	WF551	N	G		1						
AT605ZHBYE	BWZG1521001	CURL CORD	WZ-1521	WA506	N	G		1						
AT605ZHBYE	BWZG1529001	REMOTE CABLE	WZ-1529	WA501	N	G		1	HK04-004					
AT605ZHBYE	BWZY1366001	CODE:DC	WZ-1366	WA505	N			1						
AT605ZHBYE	BYYY1518001	INTER CONNECTOR	YY-1518	Y551	N			1						
AT605ZHBYE	BYYY1518001	INTER CONNECTOR	YY-1518	Y552	N			1						
AT605ZHMAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C801	N	G		1						
AT605ZHMAE	BCML811025G	C:CERAMIC M/L (1608) TAPE	0.001UF 50V K B	C809	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C807	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C808	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C813	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C814	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C815	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C816	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C817	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C818	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C819	N	G		1						

AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C820	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C821	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C822	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C823	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C824	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C825	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C827	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C829	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C830	N	G		1						
AT605ZHMAE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C831	N	G		1						
AT605ZHMAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C802	N	G		1						
AT605ZHMAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C812	N	G		1						
AT605ZHMAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C826	N	G		1						
AT605ZHMAE	BCSH464796Z	C:TANTALUM CHIP TAPE	4.7UF 20V M A C-122	C828	N	G		1						
AT605ZHMAE	BDAY0432004	DIODE:ZENER	HZK6C TR	D801	N			1	HK05-087		P	BDAY1187001		
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D803	N			1						
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D804	N			1						
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D805	N			1						
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D806	N			1						
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D807	N			1						
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D808	N			1						
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D809	N			1						
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D810	N			1						
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D811	N			1						
AT605ZHMAE	BDAY1203001	DIODE	LTST-C190AKT	D812	N			1						
AT605ZHMAE	BDEG4233003	INTEGRATED CIRCUIT	TC74HC166AFN(ELF,M)	IC802	N	G		1						
AT605ZHMAE	BDEG4233003	INTEGRATED CIRCUIT	TC74HC166AFN(ELF,M)	IC803	N	G		1						
AT605ZHMAE	BDEY3923003	INTEGRATED CIRCUIT	TC74HC123AFN(ELPNE)	IC801	N			1						
AT605ZHMAE	BPDG0879AAZ	PCB:MIC	PD-0879AA	B801	N	G		1						
AT605ZHMAE	BRFC160004G	R:CARBON FIXED CHIP	0 1/16W J TAPE	R805	N	G		1						
AT605ZHMAE	BRFC161004G	R:CARBON FIXED CHIP	10 1/16W J TAPE	R864	N	G		1						
AT605ZHMAE	BRFC161004G	R:CARBON FIXED CHIP	10 1/16W J TAPE	R869	N	G		1						
AT605ZHMAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R801	N	G		1						
AT605ZHMAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R811	N	G		1						
AT605ZHMAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R812	N	G		1						
AT605ZHMAE	BRFC161014G	R:CARBON FIXED CHIP	100 1/16W J TAPE	R827	N	G		1						

AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R803	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R813	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R814	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R815	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R829	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R830	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R831	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R832	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R833	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R834	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R837	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R838	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R839	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R855	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R856	N	G		1						
AT605ZHMAE	BRFC161024G	R:CARBON FIXED CHIP	1K 1/16W J TAPE	R857	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R804	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R807	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R808	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R816	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R817	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R818	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R819	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R820	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R821	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R822	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R824	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R825	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R826	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R835	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R836	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R840	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R841	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R842	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R858	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R859	N	G		1						

AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R860	N	G		1						
AT605ZHMAE	BRFC161034G	R:CARBON FIXED CHIP	10K 1/16W J TAPE	R873	N	G		1						
AT605ZHMAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R861	N	G		1						
AT605ZHMAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R862	N	G		1						
AT605ZHMAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R865	N	G		1						
AT605ZHMAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R866	N	G		1						
AT605ZHMAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R867	N	G		1						
AT605ZHMAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R868	N	G		1						
AT605ZHMAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R871	N	G		1						
AT605ZHMAE	BRFC161814G	R:CARBON FIXED CHIP	180 1/16W J TAPE	R872	N	G		1						
AT605ZHMAE	BRFC161824G	R:CARBON FIXED CHIP	1.8K 1/16W J TAPE	R802	N	G		1						
AT605ZHMAE	BRFC162214G	R:CARBON FIXED CHIP	220 1/16W J TAPE	R863	N	G		1						
AT605ZHMAE	BRFC162214G	R:CARBON FIXED CHIP	220 1/16W J TAPE	R870	N	G		1						
AT605ZHMAE	BRFC164724G	R:CARBON FIXED CHIP	4.7K 1/16W J TAPE	R806	N	G		1	HK05-022					
AT605ZHMBE	BPDG0884AAZ	PCB:MICSW	PD-0884AA	B891	N	G		1						
AT605ZHMBE	BSWG0866001	SW:TACT	SW-866 SKQGABE010	S891	N	G		1						
AT605ZHMYE	BCMM813314G	C:CERAMIC M/L (1608) TAPE	330PF 50V J CH	C901	N	G		1	HK05-079		P	BCMM813314Z		
AT605ZHMYE	BMKY0519001	MICROPHONE	MK-519 WECM-40401	MC901	N			1						
AT605ZHXYE	BWZY1362001	CORD:DC	WZ-1362	WA951	N			1						
AT605ZHXYE	BWZY1375001	CORD:ACC	WZ-1375	WA952	N			1						

BACK TOP

INQUIRY BOM BY MODEL or LOT

MODEL	UT605ZH
TOTAL	5

ASSY CODE	PARTS CODE	DESCRIPTION	SPEC	REF NO	N	G	S	QTY	REVISION	REMARKS	RP	REP1	REP2	RE
AT605ZHBYW	CZDZ071893Z	WIRES ASSEMBLED	W-071893	WA502	N			1						
AT605ZHBYW	CZDZ072134Z	WIRES ASSEMBLE	W-072134	WA503	N			1						
AT605ZHBYW	CZDZ072257G	WIRES ASSEMBLE	W-072257	WA504	N	G		1						
AT605ZHMYW	CUPJ003011Z	WIRE W-004	UL 1571 #26 3- 30- 3 WHT	W891	N			1						
AT605ZHMYW	CUPK003011Z	WIRE W-004	UL 1571 #26 3- 30- 3 BLK	W892	N			1						

BACK TOP

SPECIFICATIONS

CUSTOMER :JMC

CATEGORY :MRN

MODEL NAME :RT-2500

UNIDEN NO :UT605ZH

Please return after confirming specifications

DATE:

AUTHORIZED SIGNATURE

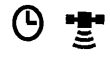
Engineer		
approved	checked	issued
'05, 3, 2 T. Fujita	'05.03.02 T. Iwasa	T. Kimura

UNIDEN CORP.

95.04 E0064R0 (JED-209Z) <E0064.DOC>

VHF MOBILE MARINE TRANSCEIVER MODEL: RT-2500(UT605ZH)

GENERAL

1. CHANNELS	: MARINE(INT)STANDARD :	
2. CONTROLS	: ON-OFF/ VOLUME, SQUELCH	
3. BUTTONS	: CHANNEL▲(UP), CHANNEL▼(DOWN), SELECT, MENU , H/L CH16/9/TRI , STEP/SCAN , MEM , PA , DISTRESS WITH BACK LIGHT	
4. DISPLAY	: LCD WITH BACK LIGHT ORG LED	
5. STATUS INDICATORS	: TX,DSC,LO,HI, TRI,MEM,	ICON: 
6. CABINET SIZE	: 63H x 159W x 183L (W/O HEAT SINK)	
7. WEIGHT	: 1100g (With MIC)	
8. SUPPLY VOLTAGE	: 13.8V NEGATIVE GROUND ONLY	
9. ANTENNA IMPEDANCE	: 50Ω NOMINAL	
10. MICROPHONE	: CONDENSER MICROPHONE WITH CURL CORD (IMPEDANCE 2KΩ) AND 10 KEY, MENU, SELECT, CHANNEL▲(UP), CHANNEL▼(DOWN),CLR	
11. SPEAKER	: 1.82 INCH, 8Ω (MYLAR CONE)	
12. STANDARD ACCESSORIES	: MOUNTING BRACKET ,MICROPHONE HANGER AND SCREWS, SPARE FUSE, ACCESSORY CABLE	
13. OPERATING TEMP.RANGE	: -15℃ ～ +55℃	
14. STORAGE TEMP.RANGE	: -30℃ ～ +60℃	
15. REGULATION	: ETSI;EN 300 698-2,EN 301 025,EN60945,EN 300 828,EN60215	

REVISION STATUS

UNIDEN CORP.

MEASUREMENT CONDITIONS

1. POWER SOURCE	: 13.8V DC
2. ANTENNA IMPEDANCE	: 50Ω
3. TEST TEMPERATURE	: 25℃±5℃
4. REFERENCE MODULATION RX & TX	: 1kHz ±3kHz DEVIATION
5. RX MEAN SIGNAL INPUT LEVEL	: 1000μV
6. RX REFERENCE AUDIO OUTPUT POWER	: 500mW
7. AUDIO OUTPUT IMPEDANCE	: 8Ω
8. STANDARD TEST METHOD	: ETSI

TRANSMITTER SECTION

ITEMS		UNIT	NOMINAL	LIMIT
1. FREQUENCY TOLERANCE AT 25℃		PPM	±1.0	±1.5 max
2. FREQUENCY STABILITY, RANGE -15 to +55℃		PPM	2.0	±10 max
3. CARRIER POWER	HI POWER	W	20	6～25
	LOW POWER	W	0.75	0.5 ～ 1.0
4. SPURIOUS EMISSION	HI POWER	uW	0.1	0.25 Max
	LOW POWER	uW	0.01	0.25 Max
5. MODULATION FREQUENCY RESPONSE 1kHz ±1.0kHz DEV.				
	300Hz	dB	-12.0	-13.5～-9.5
	500Hz	dB	-6.5	-9～-5
	2000Hz	dB	6	+3～+7
	3000Hz	dB	8.0	6.5～10.5
6. MICROPHONE SENSITIVITY MOD:1kHz. SOUND LEVEL 94dBA		±kHz	2.5	1.5～3.0
7. MAXIMUM AUDIO DEVIATION @100mV INPUT MOD 3kHz		±kHz	4.5	5.0 max
8. HUM & NOISE RATIO 750uS DEEM.		dB	50	40 min
9. MODULATION DISTORTION 750uS DEEM. 0.3kHz～3kHz B.P.F		%	1.5	10 max
10. CURRENT DRAIN @ HIGH POWER		A	4.5	6.0 max
11. ADJACENT CH PWR MOD:1.25kHz		dB	72	70 min

REVISION STATUS

UNIDEN CORP.

RECEIVER SECTION (Radio telephone)

ITEMS			UNIT	NOMINAL	LIMIT
1. SENSITIVITY	20dB SINAD		dBuV(emf)	-3	6.0 max
2. SQUELCH SENSITIVITY	TIGHT		dBuV(emf)	3.0	6.0 max
	HYSTERESIS		dB	5.0	3.0～6.0
3. AUDIO FREQUENCY RESPONSE 1kHz REFERENCE		300Hz	dB	9.0	+7.5～11.5
		500Hz	dB	5.7	+3.0～+7.0
		2000Hz	dB	-6.5	-9.0～-5.0
		3000Hz	dB	-10.7	-12.5～-8.5
4. ADJACENT CHANNEL SELECTIVITY ±25kHz(*)			dB	72	66 min
5. INTER MODULATION IMMUNITY(*)			dB	70	65 min
6. IMAGE REJECTION(1st and 2nd)(*)			dB	75	66 min
7. Co-channel REJECTION(*)			dB	-8	-14.0～0.0
8. OTHER SPURIOUS REJECTION (EXEPT 1/2 IF)			dB	90	70 min
9. HUM & NOISE RATIO			dB	50	40 min
10. CONDUCTED SPURIOUS EMISSION @ANTENNA TERMINAL			dBm	-75	-57 max
11. TOTAL HARMONIC DISTORTION @STANDARD AF OUTPUT			%	2	10 max
12. AUDIO OUTPUT POWER @10% DISTORTION			W	2.8	2 min
13. CURRENT DRAIN @NO SIGNAL			mA	550	650 max
14. CURRENT DRAIN @MAXIMUM OUTPUT			mA	1000	1300 max

(*) :Included Absolute Measurement Uncertainties(see page7)

REVISION STATUS

UNIDEN CORP.

MEASURMENT CONDITION

Supply Voltage	: 13.8V
Temperature	: 25℃ ± 5℃
PA Speaker Impedance	: 4Ω

ITEM	UNIT	NOMINAL	LIMIT
1. Output Power @ MAX VOLUME			
MIC IN 100mV , 1KHz	W	10	4
2. Distortion @ MAX VOLUME			
MIC IN 3mV , 1KHz	%	1	7

DSC DATA SPECIFICATIONS

MEASURMENT CONDITION

Supply Voltage	: 13.8V
Antenna Impedance	: 50Ω
Temperature	: 25℃ ± 5℃

ITEM	UNIT	NOMINAL	LIMIT
1. DSC DATA Sensitivity			
@ 3KHz-DEV	uV	1.0	2.0

REVISION STATUS

UNIDEN CORP.

FREQUENCY LIST

MRN BAND note : 1W = TX 1W only / DUP = RX Duplex CH / INH = TX,RX INHIBIT

MODE	INT MODE						
CH NO	TX FRQ.(MHz)	RX FRQ.(MHz)	note	CH NO	TX FRQ.(MHz)	RX FRQ.(MHz)	note
1	156.050	160.650	DUP	63	156.175	160.775	DUP
2	156.100	160.700	DUP	64	156.225	160.825	DUP
3	156.150	160.750	DUP	65	156.275	160.875	DUP
4	156.200	160.800	DUP	66	156.325	160.925	DUP
5	156.250	160.850	DUP	67	156.375	156.375	
6	156.300	156.300		68	156.425	156.425	
7	156.350	160.950	DUP	69	156.475	156.475	
8	156.400	156.400		70	DSC ONLY	156.525	DSC
9	156.450	156.450		71	156.575	156.575	
10	156.500	156.500		72	156.625	156.625	
11	156.550	156.550		73	156.675	156.675	
12	156.600	156.600		74	156.725	156.725	
13	156.650	156.650		75	156.775	156.775	1W
14	156.700	156.700		76	156.825	156.825	1W
15	156.750	156.750		77	156.875	156.875	
16	156.800	156.800		78	156.925	161.525	DUP
17	156.850	156.850		79	156.975	161.575	DUP
18	156.900	161.500	DUP	80	157.025	161.625	DUP
19	156.950	161.550	DUP	81	157.075	161.675	DUP
20	157.000	161.600	DUP	82	157.125	161.725	DUP
21	157.050	161.650	DUP	83	157.175	161.775	DUP
22	157.100	161.700	DUP	84	157.225	161.825	DUP
23	157.150	161.750	DUP	85	157.275	161.875	DUP
24	157.200	161.800	DUP	86	157.325	161.925	DUP
25	157.250	161.850	DUP	87	157.375	157.375	
26	157.300	161.900	DUP	88	157.425	157.425	
27	157.350	161.950	DUP	L1	155.500	155.500	
28	157.400	162.000	DUP	L2	155.525	155.525	
30	157.500	162.100	D,1W	L3	155.650	155.650	
31	157.550	162.150	D,1W	F1	155.625	155.625	
60	156.025	160.625	DUP	F2	155.775	155.775	
61	156.075	160.675	DUP	F3	155.825	155.825	
62	156.125	160.725	DUP	*M1	157.850	157.850	

*CH indication is M1

REVISION STATUS

UNIDEN CORP.

95.04 E0064R0 (JED-209Z) <E0064.DOC>

Absolute measurement uncertainties:maximum values (refer ETSI 301 025-1 V.1.1.1&ETSI 300 698-1 V.1.3.1)

Parameter	Maximum uncertainty
RF frequency	±0.1ppm
RF power	±0.75dB
Maximum frequency deviation	
within 300Hz to 6kHz of modulation frequency	±5%
within 6kHz to 25kHz of modulation frequency	±3dB
Deviation limitation	±5%
Adjacent channel power	±5dB
Conducted spurious emission of transmitter	±4dB
Audio output power	±0.5dB
Amplitude characteristics of receiver limiter	±1.5dB
Sensitivity at 20dB SINAD	±3dB
Conducted emission of receiver	±3dB
Two-signal measurement	±4dB
Three-signal measurement	±3dB
Radiated emission of transmitter	±6dB
Radiated emission of receiver	±6dB
Transmitter transient time	±20%
Transmitter transient frequency	±250Hz