

# **ELITE 750**

AM/FM-stereo/Shortwave/Airwave Band Radio with SSB (Single Side Band)

**OWNER'S MANUAL** 





# DO YOU NEED HELP? Contact Us

If you need help, please contact us, Monday-Friday, 8:00 a.m.- 4:00 p.m., North American Pacific Time. 1-800-872-2228 from the U.S; 1-800-637-1648 from Canada; 650-903-3866, worldwide; FAX: 650-903-3867; web site, www.etoncorp.com;

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Etón Corporation, 1015 Corporation Way, Palo Alto, CA 94303, USA

#### WARNING

- · Do not expose this appliance to rain or moisture.
- Do not submerge or expose for extended period to water.
- · Protect from high humidity and rain.
- Only operate within specified temperature range (0 °C to 40 °C).
- Unplug immediately if liquid has been spilled or objects have fallen into the apparatus.
- Clean only with a dry cloth. Do not use detergents or chemical solvents as this might damage the finish.
- Unplug and disconnect external antennas (not included) during lightning storms.
- · Do not remove cover for backl.
- · Refer servicing to qualified service personnel.

### **ENVIRONMENT**



### Disposal

According to the European Directive 2002/96/EC all electrical and electronic products must be collected separately by a local collection system.

Please act according to your local rules and do not dispose of your old products with your normal household waste.

### **FEATURES**

Thank you for purchasing the ELITE 750. Its features and capabilities are shown below:

- Shortwave (1711-30000 KHz) with SSB (single sideband), LW, AM, FM and Aircraft Band (117-137 MHz)
- Set 9/10 KHz AM tuning; set FM tuning range starting at 87 or 88 MHz
- Dual Conversion and Single Side Band (SSB)
- · 1000 station memories
- · 360 degree, rotating AM antenna
- · Auto/Manual/Direct frequency key-in and station memory tuning
- · Auto Tuning Storage function (ATS) for FM/AM
- · Mute function
- 24 hour Clock and Dual alarm clock function
- · Line in socket (can be used as speaker for MP3)
- Line out socket (radio broadcasting can be transferred to other device)
- · External antenna jacks for SW, AM and FM
- Power source: 4D alkaline batteries; AC/DC-6V power supply
- Dimensions: 14.65" x 7.24" x 5.75" and 372mm x 184mm x 146mm (W x H x D)
- Weight: 5.25 lbs (2.38 kg)
- · Accessories: owner's manual, warranty card
- Specifications subject to change

# WHAT'S INCLUDED?

AC adapter; Owner's manual

#### **POWER SOURCES**

Power the ELITE 750 by installing 4 D alkaline, lithium or Ni-MH batteries or by plugging in the included 6 VDC AC adapter. The AC adapter plugs into the 6 Volt DC socket on the left side of the radio. A battery symbol appears in the lower right of the LCD, indicating battery or AC adapter power.

### PREVENTING BATTERY LEAKAGE

To minimize the possibility of battery acid leakage, only use high quality alkaline, lithium or rechargeable nickel-metal-hydride batteries. Never intermix old with new, or different brands or types of batteries. Damage caused by battery acid leakage is not covered by this product's warranty.

# SETTING UP AM AND FM OUTSIDE OF NORTH AMERICA

To use the ELITE 750 in North America (U.S. or Canada), no changes to the initial factory settings are needed.

In North America, AM stations are spaced by 10 KHz. In Europe and other areas, they are spaced by 9 KHz. In North America, the FM band begins at 88 MHz. In other parts of the world, it may begin at 76 MHz or 87 MHz. Follow these steps to set this for your area:

To change these settings for your area turn the ELITE 750 off. Press the ENTER button and notice that -- appears in the upper right corner of the display. While -- appears, enter 09 or 10 with the numeric keypad and press ENTER. Repeat this procedure and press 88, 87 or 76 and press ENTER.

### **TURNING THE ELITE 750 ON AND OFF**

Press the POWER button to turn it on and off.

## **VOLUME CONTROL**

With the ELITE 750 on, turn the VOLUME knob, located in the lower left front, clockwise to increase the volume, counterclockwise to decrease the volume

# SELECTING FM, MW(AM), LW, SHORTWAVE AND AIRCRAFT BAND

The ELITE 750 receives FM on 88-108 MHz, AM on 520-1710 KHz, Longwave on 100-519 KHz, Shortwave on 1711-29999 KHz and Aircraft on 118 -137 MHz.

Turn the ELITE 750 on. Select FM by pressing the FM button, MW(AM) and Longwave by pressing the MW/LW button (press it twice if necessary), Shortwave by pressing the SW button sequentially until you have selected the desired band (the band number flashes in the upper right corner of the display) and the Aircraft band by pressing the AIR button.

**NOTE:** Be sure to fully extend the telescopic antenna when listening to SW, FM and AIR. The swivel AM antenna is located at the top of the radio; swivel it for best AM reception.

The ELITE 750 receives shortwave on all meter bands and between the meter bands. A band is a frequency range that contains shortwave stations. All 14 of the international broadcast bands can be accessed. The bands are numbered 120, 90, 75, 60, 49, 31, 25, 22, 19, 16, 15, 13 and 11 meters and are commonly called 'Meter Bands'. Bands with frequencies above 13000 KHz are best during the day; below 13000 KHz are best at night. To access the beginning of a band, press SW over and over. As you press you'll see the band number on the upper right side of the display. Just go to the beginning of a band and start tuning.

### SHORTWAVE LISTENING

To learn about shortwave we recommend the two publications below, published yearly and available from major booksellers. Additionally, the Internet is a great resource for learning about shortwave.

PASSPORT TO WORLD BAND RADIO Published by International Broadcasting Services (IBS); IBS North America, Box 300, Penn's Park PA 18943. Phone: (215) 598-9018. www.passband.com.

**WORLD RADIO TV HANDBOOK** Published in the USA by Watson-Guptill Publications, 770 Broadway, 7th Floor, New York, NY 10003-9595. www.watsonguptill.com.

## **OPTIMIZING SHORTWAVE RECEPTION**

Shortwave enables listening to broadcasts over vast distances including other countries and continents. The following information will help you get the best results.

- During the day, use bands with frequencies above 13000 KHz.
- At night, use bands with frequencies below 13000 KHz.
- Around sunset and sunrise, use bands with the entire shortwave range.
- Getting very close to a window improves shortwave reception.

# SSB (SINGLE SIDE BAND) TUNING

SSB enables listening to shortwave two way communications using the single sideband mode such as amateur radio, Morse code, weather-fax transmissions and other signals often referred to as 'utility' signals. The Internet and your local library are great resources to learn more. Type 'amateur radio frequencies' or 'sideband' into an Internet search engine.

To use the SSB control, turn on the ELITE 750 and go into Short-wave. Press the SSB button and notice that USB appears in the display, to the right of SW. Press the SSB button again and notice that LSB appears to the right of SW. USB is the abbreviation for Upper Sideband, LSB is the abbreviation for Lower Sideband. You will need to use one of these methods to tune in signals. Also notice that on the lower right front of the radio is a control knob labeled SSB BFO. BFO stands for Beat Frequency Oscillator. This control knob is used to fine tune a sideband signal.

# ANTENNA ATTENUATOR (ANT.ATT) BUTTON

The ANT.ATT button, located on the upper right front of the radio, is used to attenuate a signal. Tune into a station, then press the ANT. ATT button and notice that the signal strength indicator, located on the left side of the display, changes at three levels. The maximum level is the highest gain and the lowest level is minimum gain. Use the lowest level if the signal is extremely strong and local. Use the intermediate level for average signals and use the highest level for weak signals. Experiment with this control to see how it works best with the signals you listen to and use it to your liking.

### **RF GAIN CONTROL continued**

On the right front of the radio is the RF Gain control knob. You can leave it fully counterclockwise in the AUTO position, where it will function automatically, or you can turn it clockwise and use it manually to control the RF (radio frequency) gain. Using it manually may improve the radio's rejection of interference from adjacent frequencies that may interfere, especially on Shortwave. This switch does not work in FM.

## **SQUELCH CONTROL**

Using the squelch control eliminates background noise. This control is used mainly in the aircraft band. This control is on the lower right front of the radio. To engage it, turn it on by turning the knob clockwise. Turn it off by clicking the knob fully counterclockwise.

### **TUNING IN STATIONS**

Stations are tuned using Direct Frequency Entry, the ↑ ♦ Buttons and the Tuning Knob, as described below.

### DIRECT FREQUENCY ENTRY TUNING

Use this method when the desired frequency of a radio station is known. Turn on the ELITE 750 and select the band of your choice. AM and SW frequencies are entered in kilohertz (KHz), e.g. 810 KHz or 9475 KHz.; FM frequencies are entered in megahertz (MHz), e.g. 102.9 MHz, ignoring the decimal point. Use the numeric keypad to enter the frequency.

## **♦ BUTTON TUNING**

Turn on the ELITE 750 and select the band of your choice. Quick, short, sequential presses of the ↑ buttons enables tuning up or down frequency. A longer press engages Auto Tuning. In Auto Tuning the radio scans from one station to the next, stays on the new station for 5 seconds and then moves on. To stop Auto Tuning, press either of the ↑ buttons.

#### TUNING KNOB

The tuning knob can also be used to tune stations. Select FAST or SLOW tuning with the STEP button, under the tuning knob. FAST/ SLOW tuning is shown in the chart below for each band. If you want to LOCK the tuning knob press the STEP button for about 3 seconds. Do a quick, short press to unlock it.

	FM	AM	SW	AIR	SSB
FAST	.1 MHz	10 KHz	5 KHz	.025 MHz	z 5 KHz
SLOW	.01 MHz	1 KHz	1 KHz	.001 MHz	1 KHz/BFC

# **BW (BANDWIDTH) BUTTON**

Use the BANDWIDTH button to choose wide or narrow selectivity, which is shown in the lower right corner of the display as WIDE or NARROW. This may help reduce interference on some frequencies. Using WIDE usually results in better audio fidelity, while using narrow limits the audio fidelity somewhat.

# FM ST. (FM STEREO) BUTTON

Press the FM ST. button when in the FM band to take the radio in or out of stereo reception mode. When it's in stereo mode, STEREO appears under the left side of the frequency in the display, next to FM. As long as you are not using headphones or earphones, it can be left in mono mode.

### **BASS AND TREBLE KNOBS**

Use these knobs to control the Bass and Treble to your liking. Turning clockwise increases bass or treble. Turning counterclockwise decreases bass or treble.

## STORING FREQUENCIES INTO MEMORY

Memory is divided into pages, and within the pages are the individual memories. There are a total of 1000 memories. Memories can be stored with the Keypad and  $\uparrow \downarrow$  buttons.

There are two separate sets of 500 memories, allowing for great flexibility of memory storage. Note the chart, below.

Page 00 is a band memory system of 500 memories. 100 stations can be stored on FM, Aircraft Band, Shortwave and Shortwave with SSB. 50 stations can be stored on Medium Wave (AM) and Longwave.

Pages 01-10 are 500 randomly programmable memories. They can be set up in four different ways with a system code setting (See SYSTEM CODE SETTING, below). Code 00 sets 10 pages, with 50 memories per page; this is the factory default setting. Code 20 sets 20 pages, with 25 memories per page. Code 25 sets 25 pages, with 20 memories per page. And code 50 sets 50 pages, with 10 memories per page.

# STORING FREQUENCIES INTO MEMORY continued

To manually store a frequency into a memory, first choose the page, then the memory location and then store the frequency. In the instructions below note that MEMORY=PRESET. See the instructions below.

- Turn on the radio and tune to a station that you want to store into memory.
- Shortly press the MEMORY button (the preset will flash in the right corner of the LCD).
- Shortly press the PAGE button and use the " \( \subseteq / \subseteq \sub
- Press the MEMORY button to confirm the selection (or it will automatically confirm after 3 seconds).

Store	Storage space in P0 page		Other storage space
Band	P0 (page)	ATS	
(FM)	100	√	500 MEMORIES
(SW)	100		10 pages each with 50 memories
(SW/SSB)	100		20 pages each with 25 memories
(AIR)	100		25 pages each with 20 memories
(MW)	50	√	50 pages each with 10 memories (See the system setting chart to change
(LW)	50	√	above pages)

## LISTENING TO WHAT'S STORED

- Turn on the radio and go to the correct page by pressing PAGE and entering it with the numeric keypad.
- Press and release the VM/VF button and notice that the PAGE and PRESET show in the display's upper right corner.

# **LISTENING TO WHAT'S STORED continued**

- To go from one memory to another use the Keypad, give a quick, short press to either the ↑ tuning button, or use the TUNING knob.
- To auto-scan memory press one of the ↑ ↓ tuning buttons for about 2 seconds and notice that PRESET flashes. The radio scans from one memory to another, staying on each memory for about 5 seconds. To stop the scan give the up or down tuning button a quick, short press.

# **DELETE ONE MEMORY**

- Turn on the radio and press the VM/VF button, causing PAGE and PRESET to appear in the display's upper right corner.
- Use the numeric Keypad, the TUNING knob or the ↑ ↓ tuning buttons to select the memory that you want to delete. To delete the memory press the DELETE button for about 1 second, then release it and press it again.

### **DELETE A MEMORY PAGE**

- Turn on the radio and select the page that you want to delete by pressing PAGE, note that page flashes in the display's upper right.
   While it's flashing use the numeric Keypad, the TUNING knob or the ↑ tuning buttons to select the page that you wish to delete.
- Press and release the VM/VF (Verify Memory / Verify Frequency) button so that PAGE and PRESET appear in the display's upper right corner. If - - appears above PRESET in the display's upper right corner, the page is already deleted and you don't have to continue.
- Press DELETE for about 3 seconds or until PAGE starts blinking and press DELETE again.

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# ATS (AUTO TUNING STORAGE) MEMORY STORAGE

One can automatically store the strongest LW, AM or FM stations into Page 0.

Turn on the radio and select the band that you want ATS to take place in, either MW/LW or FM. Press the MW/LW or FM for 2 seconds. Notice that page 0 (P0) appears in the display's upper right corner with the presets to the right increasing as the band is scanned and frequencies are stored into the memory.

This setting is used to store a wake-up frequency into the alarm memory. Turn the radio on. Tune in the station that you wish to wake to. Press the AL1-On/Off or AL2-On-Off button for about 1 second. This stores the frequency into alarm memory. You can now tune to other frequencies, but the one memorized for wake up will always be there until you change it.

# NEW ADDED FUNCTION - SORTING ALL STORED STATION MEMORIES AUTOMATICALLY

Utilize the [AIR] button to automatically sort stored stations [  $\square$  ]. This function is able to:

- Clearing up duplicate stations. Especially useful after storing stations manually, as you might sometimes store a station more than once.
- 2. Auto-sorting the sequence of stored stations.
- In page P0, select your desired band to find all stored stations in sequence of frequency (from small to large).
- For any Page, all stored stations are placed in sequence of frequency (from small to large), and in sequence of FM. SW. MW. Air band, LW.



Air Auto Sorting memory

### How to operate the Auto Sorting memory function:

In radio-off mode, to auto sort the memory from page to page, pressand hold the [ $\square$ ] button for 2 seconds until the memory page number in the upper right corner starts running.

# **CLOCK (TIME) SETTING**

The ELITE 750's clock is in 24-hour format and can be set with the radio on or off. When the radio is turned off the clock shows in mid-display. When the radio is turned on the clock shows in the upper right corner of the display.

#### To set the clock:

- Press the TIME button for about a second or until you see the hour flashing.
- While it's flashing turn the TUNING knob to set it to the correct hour, then press TIME and note that the minutes are flashing.
- 3. While it's flashing turn the TUNING knob to set it to the correct minutes, then press TIME.

Note that after setting the hour or minutes you can simply let the flashing number time-out, without pressing the TIME button.

#### **ALARM SETTING**

The ELITE 750 has two, independently programmable alarm timers to turn it on and off at a specified time.

#### To set an alarm:

- Press the AL.1 or AL.2 button for a second or until you see the alarm hour flashing in the upper right corner of the display. While it's flashing adjust the hour with the TUNING knob and press the AL.1 or AL.2 button. Notice that the alarm minutes are flashing.
- While it's flashing adjust the alarm minutes with the TUNING knob and press the AL.1 or AL.2 button. Notice the sleep timer flashing in the box at the top of the display.
- 3. While it's flashing adjust the time that the radio is to play with the TUNING knob and press the AL.1 or AL.2 button.

Note that after setting the hour or minutes you can simply let the flashing number time-out, without pressing the AL.1 or AL.2 button.

Once the alarm is on (by radio or buzzer), only the POWER, SLEEP, LIGHT/SNOOZE and RESET can be operated. Press the POWER or SLEEP buttons to turn off the alarm.

### ALARM BY BUZZER

Press on [AL.1 on/off] key to select "  $\Omega$  " in "Timer A" section. Now, the alarm will be on by the buzzer.

Note: In "Timer A" section:

- " ■) " Means timer is set by radio.
- "  $\ \ ^{"}$  Means timer is set by buzzer.
- " Means Timer is off.

## LIGHT/SNOOZE BUTTON

When the alarm is activated, press the LIGHT/SNOOZE button to temporarily deactivate the timer for 10 minutes. You can press the LIGHT/SNOOZE button 3 times within the alarm period, after that you can turn off the alarm by press it again.

## ALARM ACTIVATION/DEACTIVATION

For the alarm to turn on the radio, it must be activated. To activate the alarm the ELITE 750 can be turned on or off.

To activate the alarm, look at the top of the display, to the right of where it reads TIMER A and TIMER B. Use quick, short presses of the AL.1 ON/OFF or AL.2 ON/OFF buttons. When the speaker is there, it wakes you to the radio playing; when the bell is there, it wakes you to an electronic beeper; when nothing is there, the alarm is deactivated.

## SLEEP TIMER

The sleep timer enables the ELITE 750 to play any length of time from 1 – 120 minutes and then turn off.

## **SLEEP TIMER continued**

To turn on the sleep timer, press the SLEEP button on the upper, right front of the radio. Notice that the number of minutes to play appears in the display. While they appear there, press the SLEEP button over and over and it sequences through 1 to 120 minutes. Leave it on the minutes that you want it to play.

### **USING THE LIGHT BUTTON**

A quick press of the LIGHT button gives about 5 seconds of illumination to the SIGNAL strength indicator and the display. A long press lights these for as long as the radio is turned on, so be careful if you're operating on batteries, because it will make them drain faster. If you're AC adapter is connected, the light can be left on continuously.

### **EARPHONE SOCKET**

The earphone socket is on the lower left front of the radio and is labeled EAR. Plug in earphones and headphones using a 3.5 mm (1/8 inch) stereo plug. Turn the volume down before plugging them in.

## **LINE-IN SOCKET**

The LINE-IN socket is on the lower left front of the radio and allows you to route the sound from another device to the ELITE 750. Use a cord with a 3.5 mm (1/8 inch) stereo plug. This socket uses an industry standard line level input.

## LINE OUT SOCKETS

On the back of the radio are the left and right line-out sockets, labeled LINE OUT. These sockets use an industry standard line level output and can be routed to any industry standard line level input.

### **EXTERNAL ANTENNA SOCKETS**

The external antenna sockets are used to connect the ELITE 750 to advanced performance antennas.

On the right side of the radio are the 50 Ohm BNC sockets for FM and Shortwave. 50 or 75 Ohm coaxial cable can be used to feed the properly designed antenna. To find antennas we recommend that you perform a web search by typing 'FM antennas' or 'shortwave antennas' into an Internet search engine.

There is also a black and red socket, labeled 500 Ohms, designed to work with a high impedance Shortwave antenna, 300-600 Ohms, such as a long wire antenna. Plug a long piece of wire, 10 to 35 meters or 30 to 100 feet, into the red socket and position it above ground, running in as much a straight line as possible, not touching any other metal objects. If you do this indoors, position the wire as close to windows as possible. Plug a 10 to 20 meter or 30 to 60 foot wire into the black socket and let it run on the floor or ground. Or attach the black socket to a cold water pipe with as short a piece of wire as possible.

On the rotateable AM antenna, at the top of the radio, is a socket for 50 or 75 Ohm plug-in AM antennas.

When using external sockets select EXTERNAL with the selector switch on the right side of the radio. When using the internal antennas of the radio, switch it to ANTENNA.

**NOTE:** always unplug all antennas that are mounted outside when a lightning storm is predicted.

#### RESET BUTTON

The reset button is located to the left under the TUNING knob. When the unit is dead or seems to stop functioning properly, press the Reset Button to reboot the unit. Stored memories and the alarm clock settings will not be eliminated. After it's pressed the AM station spacing will have to be set again for North America.

# EMPTY COMPARTMENT ON BACK OF THE RADIO

Use the small, empty compartment next to the battery compartment as you wish.

## SYSTEM CODE SETTING

To enter different system codes turn off the radio and perform a quick, short press of the ENTER button. "\_\_" appears on the upper right corner of the display. Enter the system code as below, then push ENTER to confirm the system code.

# **SYSTEM CODE SETTING continued**

For memory page setting (500 memories)		
CODE		
00	10 pages; each page 50 memories	
20	20 pages; each page 25 memories	
25	25 pages; each page 20 memories	
50	50 pages; each page 10 memories	
	Step (AM)	
09	9kHz	
10	10kHz (North America)	
	Type of batteries	
29	Normal D size batteries (1.5V each battery)	
28	Rechargeable batteries (1.2V each battery)	
	FM frequency range	
76	76-108 MHz (Japan)	
87	87-108 MHz	

# **SPECIFICATIONS**

F			
Frequency range			
LW	100-519 kHz		
MW	522-1620 kHz – system code "09"		
	520-1710 kHz (America) -system code		
sw	"10"		
AIR	1711-29999 kHz		
FM	118-137MHz		
FIVI	87-108MHz		
	76-108MHz		
speaker	8 ohm / 2W		
	4 inches		
Earphone jack	3.5mm, stereo		
Power consumption	without back light 80mAh		
	with back light 90 mAh		
Operation Temp.	-5 to +50 C		
Weight	2.66 kg, not including batteries		
Measurements	L: 372 mm		
	H: 183 mm		
	W: 153 mm		
Power	Batteries : UM1 (alkaline) x 4		
	DC: 6V/500mA, negative polarity		
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### WARRANTY REGISTRATION

To ensure full warranty coverage or product updates, registration of your product should be completed as soon as possible after purchase or receipt. You may use one of the following options to register your product:

- 1. By visiting our website at http://www.etoncorp.com
- 2. Mail in enclosed warranty card.
- Mail your warranty card or information to following address; include your name, full mailing address, phone number, email address, model purchased, date purchased, retail vendor name:

Etón Corporation 1015 Corporation Way Palo Alto, CA 94303 USA

## LIMITED WARRANTY

Retain the warranty information from your warranty card with your proof of purchase or the Limited Warranty information can also be viewed at www.etoncorp.com.

### SERVICE FOR YOUR PRODUCT

To obtain service for your product, we recommend first contacting an Etón service representative at 1-800-872-2228 US, 1-800-637-1648 Canada, (650) 903-3866, customersvc@etoncorp.com or your respective country distributor in Europe (see enclosed list) for problem

### SERVICE FOR YOUR PRODUCT continued

determination and trouble-shooting. If further service is required, the technical staff will instruct how to proceed based on whether the radio is still under warranty or needs non-warranty service.

**WARRANTY** – If your product is still in warranty and the Etón service representative determines warranty service is needed, a return authorization will be issued and instructions will be given. DO NOT ship your radio back without obtaining the return authorization.

**NON-WARRANTY** – If your product is no longer under warranty and requires service, the Etón service representative will refer you to the nearest repair facility that will best handle the repair.

For service outside North America, please refer to the distributor information included at time of purchase/receipt.

### **FCC NOTE**

The manufacturer is not responsible for any radio or tv interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.