

maxon  **EUROPE**

SL7000
User Manual



maxon

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Operating Instructions

About Your SL7000 Radio

Maxon's SL7000 radio is a fully featured 255 channels. Operation and functions of this radio are outlined in this manual.

Many of the features on this radio are programmable, please check with your dealer as to the precise set-up of your radio.

We urge you to thoroughly read this manual before operating the radio

The application of some of the functions described in this manual are determined by the system you use. Your Maxon Dealer will program your radio so that you have the greatest number of functions possible relative to your needs.

SL7000 Specification

MODEL SL7000			
Equipment Type	PMR Hand Portable	12dB SINAD (nominal)	UHF: Better than – 116dBm VHF: Better than – 117dBm
Performance specifications	EN 300.086	Adjacent Channel Selectivity	12.5 kHz Better than 60dB 25 kHz Better than 70dB
Band	VHF V1 & 2 136.000-174.000 MHz UHF U1 & 2 400.000-470.000 MHz	Tone Range	67 to 250.3Hz @ 0.3% accuracy
Channel Spacing	25 KHz, 12.5 KHz	Tone Standard	ETSI 300.219
RF Output Power	VHF 1- 5 Watt UHF 1-4 Watt	MIC Sensitivity	At Accessory/Mic connector 17mV +/- 5mV Values for 60% peak dev.
Modulation Type	F3E		
Audio Power	660mW max. (Internal 6Ω speaker)	TX Spurious Emission (conducted and radiated)	Below 1GHz Better than –36dBm 1 – 4GHz Better than –30dBm
Intermediate Frequencies	45.1MHz	Hum and Noise (Residual Modulation)	Method as FTZ 17 TR 2049 July 1988 Better than 40dB (with PSOPH)
	455KHz	Power Supply	Li-ion (1500mA)
Channels	255 Channels		7.5VDC Nominal
Frequency Source	Synthesizer		+/- 10% VDC Extreme

Safety Information

WARNING

- **DO NOT** hold the radio in such a manner that the antenna is next to, or touching, exposed parts of the body while transmitting.
- **DO NOT** allow children to operate transmitter-equipped radio equipment.

CAUTION

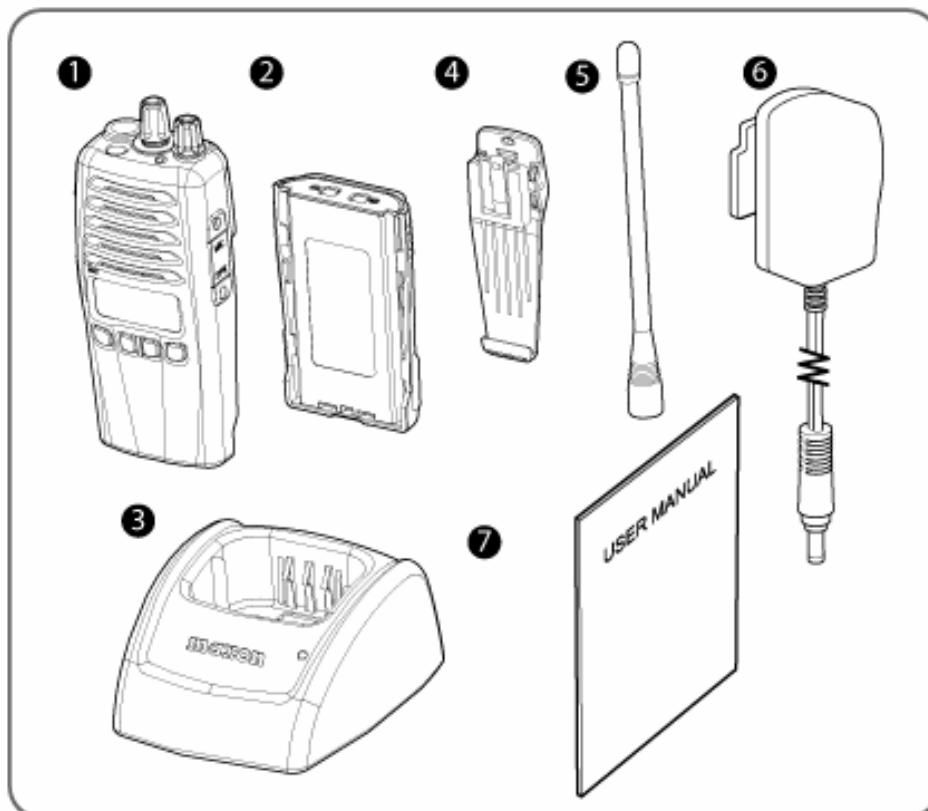
- **DO NOT** operate the radio near unshielded electrical blasting caps or in an explosive atmosphere unless it is a type especially designed and qualified for such use.
- **DO NOT** press and hold the transmit switch (P-T-T) when not actually wishing to transmit.
- **NEVER** use the radio in an aircraft.
- **NEVER** use the radio near to sensitive medical equipment or in areas where instructed not to do so, e.g. Petrol filling stations.
- When used in a vehicle, do not mount the radio unit on or near the Airbag or Airbag activation device.
- The use of an accessory not recommended or supplied by Maxon may cause damage to equipment or injury to personnel, and will invalidate warranty.
- When using any of the charging accessories, the mains socket-outlet must be installed near the equipment.
- The outlet must not be obstructed and must be easily accessible at all times.
- **Never** attempt to disassemble, modify or repair the unit unless the work is carried out by a Maxon approved Dealer.
Incorrect assembly, modification or repair may cause irreparable damage to your unit and will invalidate warranty.
For service or repair always return your radio to an authorized Maxon Dealer.

Unpacking Information

Remove and carefully inspect the contents of your package(s) for the following items:

1. Radio
2. Battery Pack
3. Battery Charger
4. Spring Belt Clip
5. Antenna
6. Battery Charger Power Supply
7. User Manual

* If any items are missing, please contact your Dealer or Maxon



SL7000 Features

5-1 Watt output power (VHF)	Monitor button
16 x groups	Facilities socket
Rotary channel & group switch	VOX (Voice operated Transmit)
Channel up/down key	Talk around
Full scanning	4 x Memory channels
Priority channel setting	Time-out timer
Lookback channel setting	Priority Channel Edit
Editable scan list	Hi/Low power Key
Group scan	Li-ion Battery
Stun and revive	Selcall
Backlight	DTMF
25 KHz, 12.5KHz channel spacing	Lone worker
Tranciver lock	Call
Password protect	ANI
Emergency call	Scrambler
CTCSS/DCS/tone signalling	Talk around
Roger Bleep	Battery indicator

SL7000 Quick start

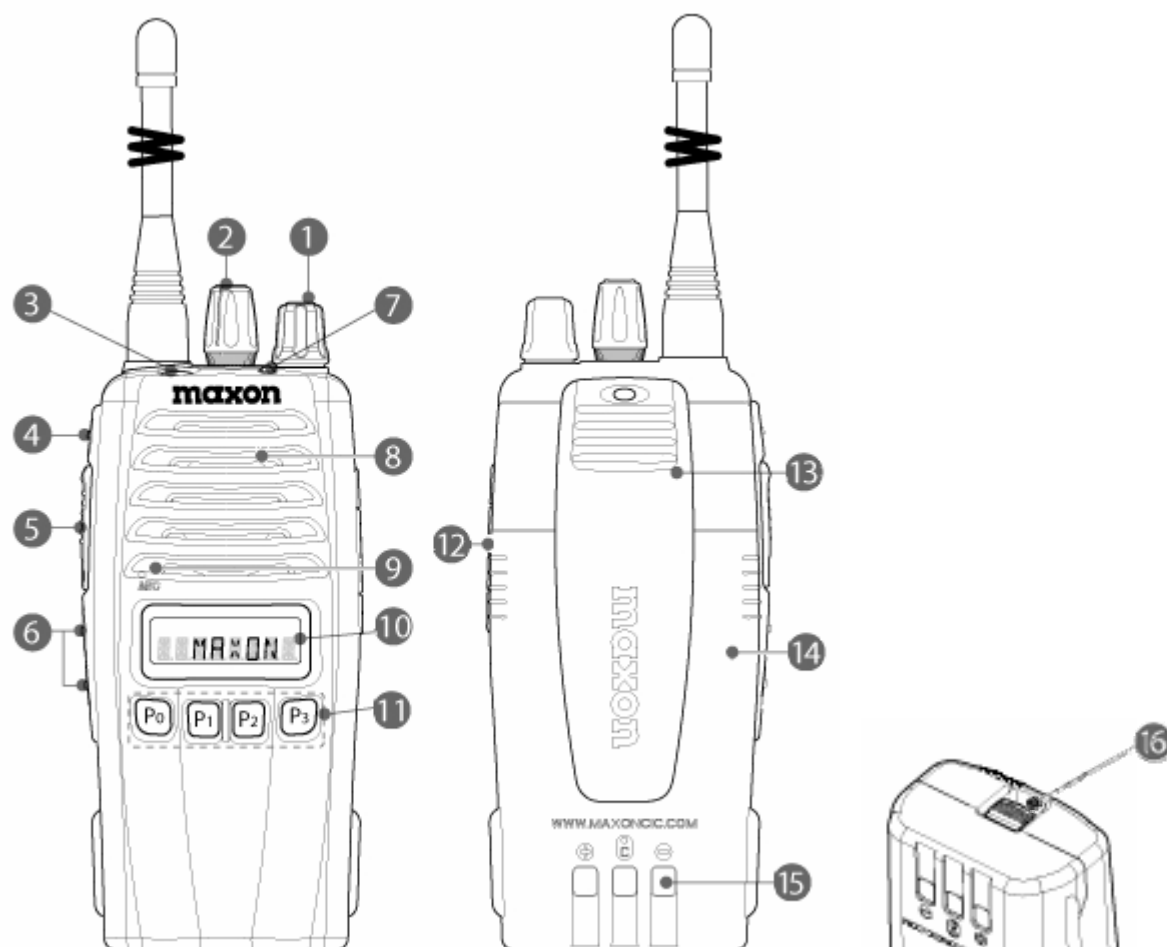


Before using your SL7000 radio for the first time check the battery has been fully charged (refer to charging instructions). To Receive a transmission rotate the volume clockwise to the half way position. A turn on beep will be heard to indicate the radio is powered.

Receive and transmit frequencies together with any privacy codes have to be programmed the same for two way conversation.

On the Transmitting radio press and hold the large PTT (Push To Talk) switch on the side of the radio. Whilst transmitting the LED will illuminate solid red.

Description of Radio Components



1. On/Off – Volume Control
2. Channel Selector Switch (Group selector)
3. Emergency Button
4. Monitor Button
5. Push-To-Talk (PTT)
6. Up/down Button
7. LED RX/TX/BUSY Indicator
8. Speaker
9. Microphone
10. LCD Display
11. P₀ –P₃ Programmable buttons
12. Accessory Connector (EXT Jack)
13. Belt clip
14. Battery
15. Battery Charge Contacts
16. Battery Latch

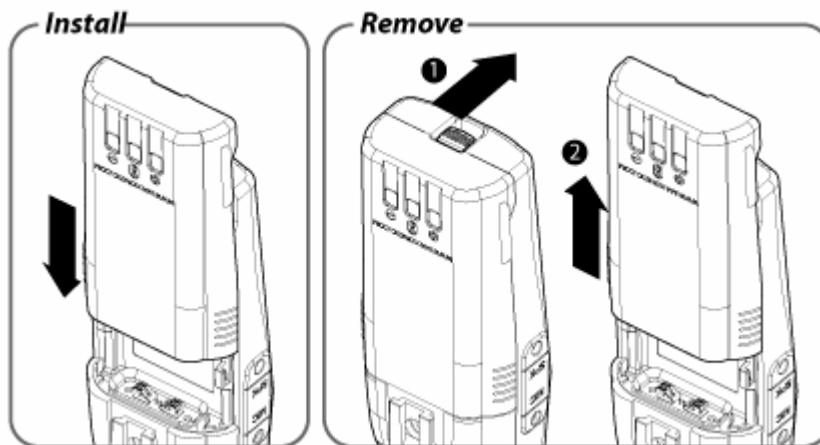
Installing and Removing the Battery Pack

To Install:

Position the guides of the battery in line with the radio battery guide rails and slide the battery into position until a click is heard.

To Remove:

Holding the radio in one hand, push and hold the battery latch button located in the lower central part of the battery pack, held as diagrams below. Hold the radio firmly and slide the battery in an upward direction whilst pushing the battery latch button.



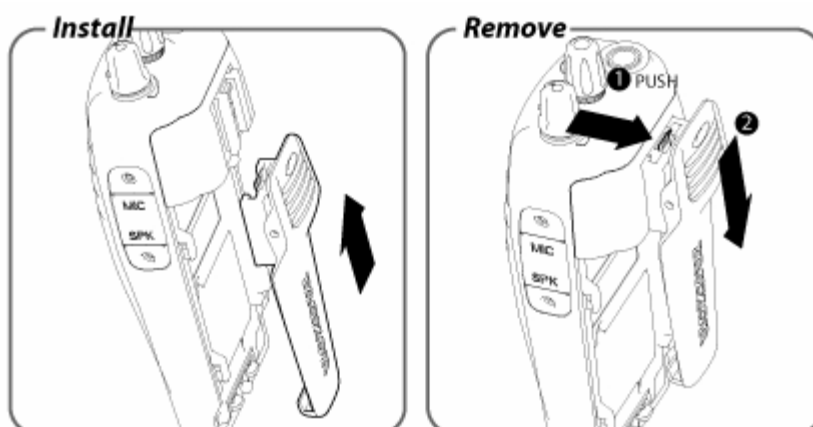
Attaching and Removing the Belt Clip

To Install:

Install belt clip onto the belt clip holder located on the upper part of the radio, held whilst looking at the back of the unit. Locate the slot on the radio and push belt clip downward until a click is heard.

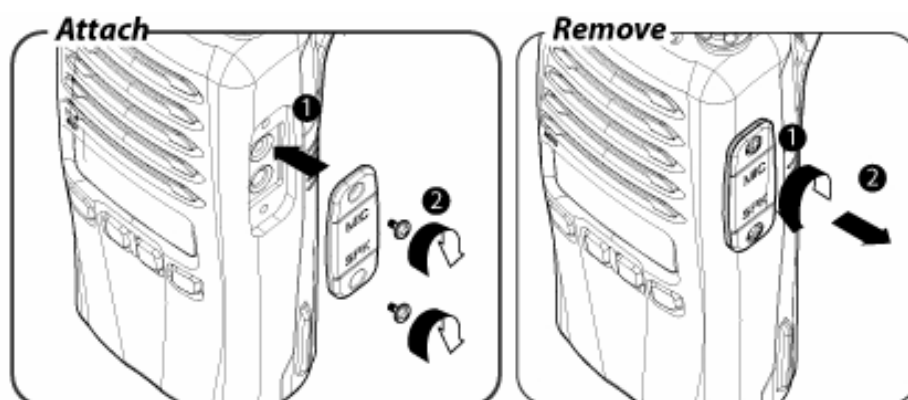
To Remove:

Push and hold the release button located at the top of the belt clip and slide the clip off the belt clip holder.



Attaching and Removing the Jack Cover

To attach accessory socket cover screw as per below drawing, in the case of using an optional audio accessory unscrew cover using a screwdriver, fit accessory and fully tighten locating pins.



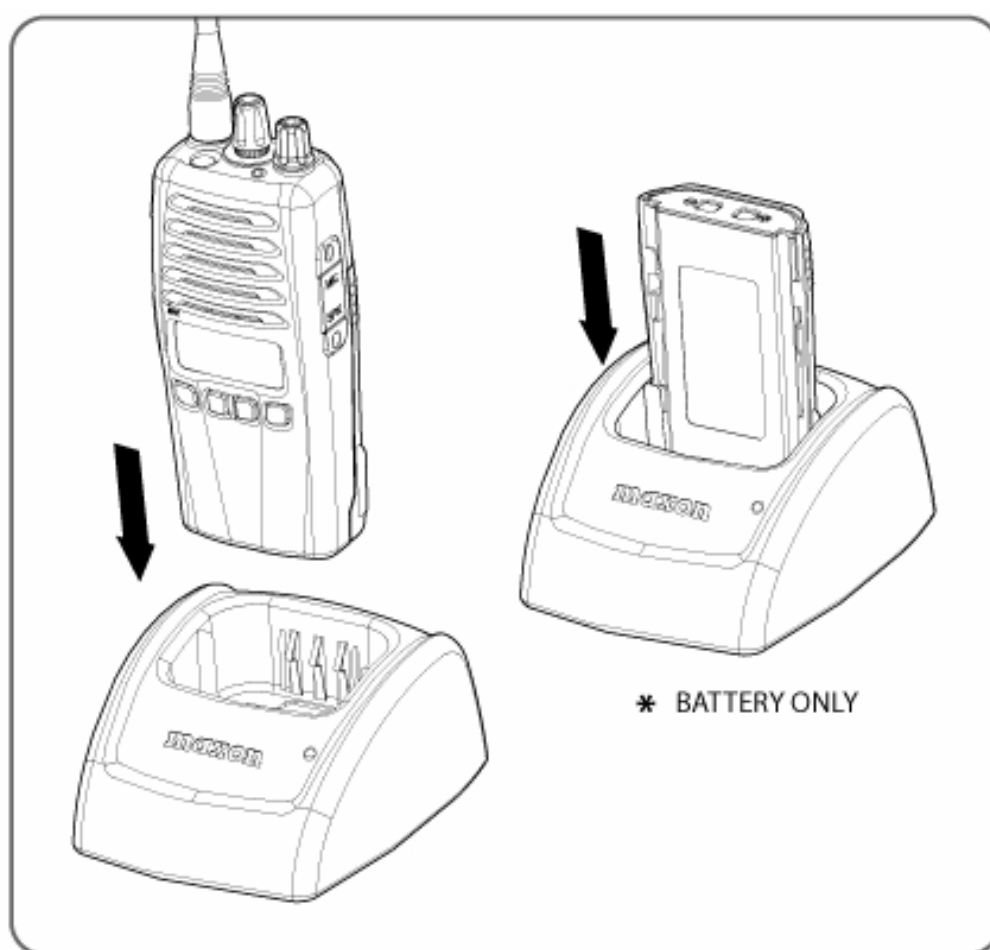
Battery Charging and Care

To ensure peak performance from your radio, the battery pack must be fully charged. Proper care and charging will allow maximum performance and life of your battery pack.

CHQ700L Desktop Charger provides 2 hours charging to one radio and one battery.

Before using your SL7000 for the first time a full two hour charge will be required for the best performance.

To ensure maximum performance from your radio and battery pack, periodically completely discharge and recharge the battery pack.



Status Indicators and Audible Alert Tones

Your SL7000 has a sophisticated microprocessor control which provides a series of audible alert tones.

Upon initial power up, a quick tone indicates that the self-test of the microprocessor functions has been completed satisfactorily. A series of tones may be sounded with any of the following conditions:

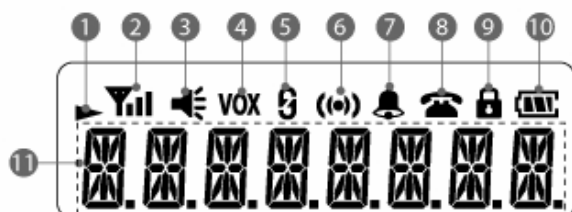
- Attempt to transmit on a channel set for receive only
- Attempt to transmit on a channel that is already in use when busy channel lockout has been programmed on the radio*
- Transmitting time has exceeded time-out timer programmed length*
- Low battery condition
- Selecting a channel with no programmed frequency

* Indicates a function that is initially programmed into the radio by your Maxon Dealer.

NOTE: All audible tones can be programmed for silent operation.

<i>Status</i>	<i>Description</i>	<i>LED Colour</i>	<i>LCD & Beep</i>
Normal	Power On Ready	N/A	Logo & 3sec 1400hz Beep
	Busy	Orange	N/A
	Transmitting	Red	N/A
	Sub-tone when Receiving	Green	N/A
	PLL Unlock	N/A	UNLOCK & 650Hz Beep
	Low Battery Power off	N/A	LOW BATT & 3 times 800Hz Beep
PC Program	Write	Red	Write & No Beep
	Read	Green	Read & No Beep
	No Program	N/A	NO PROG & No Beep
	Program Error	N/A	ERROR & No Beep
	EEPROM Error	N/A	EPP ERR & No Beep
Cloning	Write	Flashing Red	Write & No Beep
	Read	Flashing Green	Read & No Beep
	Cloning Error	N/A	ERROR & No Beep
Wireless Cloning	Master (1 to 1 mode)	Flashing Red & Green	Write & No Beep
	Slave (1 to Multi mode)	Flashing Green & Red	Read & No Beep
	Master (1 to 1 mode)	Flashing Red	Write & No Beep
	Slave (1 tot Multi mode)	Flashing Green	Read & No Beep
	Wireless Cloning Error	N/A	ERROR & No Beep

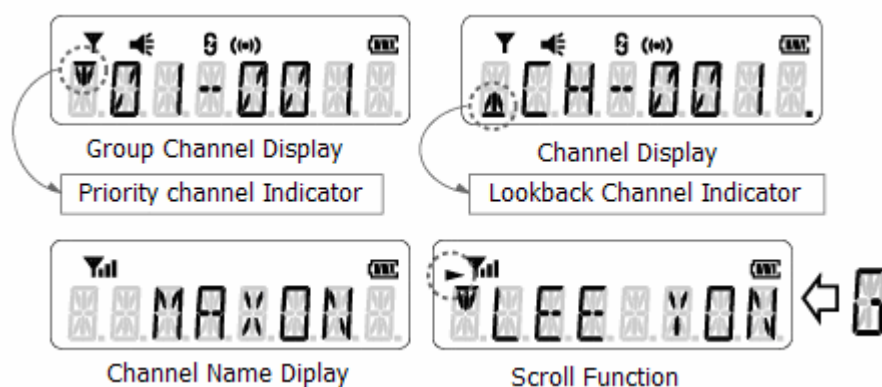
LCD Display



1. Scroll indicator
2. RSSI indicator / TX Power H/L
3. Monitor indicator
4. VOX On/Off indicator
5. Scrambler On/Off indicator
6. Compander On/Off indicator
7. Bell indicator (2-5 Tone)
8. Call indicator (DTMF)
9. Key lock On/Off indicator
10. Battery gauge
11. Channel, group, name, Message etc... Display digit

Display examples

Please note that the way the radio displays information on the LCD is dependent on programming. Please contact your Dealer for programming information and your desired set-up.



Please note: Priority and look back are scanning features.

Display Options

Display Options

There are four types of display formats Group/chn.Name, Group/chn.No. Channel Name and Channel Name only. See below for examples.

Channel Name Display

- Displays channel name only.
- Group number will display for 1 second when group is changed.
- If more than 7 characters are used scrolling will be required.



Channel Number Display

- Displays channel number only.
- Group number will display for 1 second when group is changed.
- If more than 7 characters are used scrolling will be required.



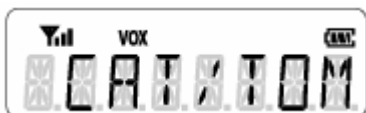
Group/Channel number display

- Displays group and channel number.



Group/Channel name display

- Displays Group/Channel name.
- If more than 7 characters are used scrolling will be required.



Basic Functions

This section provides general descriptions of the operating modes of the SL7000 Radio.

Power on/off Mode

The SL7000 shall enter off mode when the On/Off Volume knob is rotated to the most counter-clockwise position, beyond the detent. Upon entering off mode, the radio shall store its current channel (if Power on Channel function is enabled via PC Programmer).

The SL7000 shall enter Power-On mode when the On/Off Volume knob is rotated clockwise beyond the detent. Upon entry of the Power-On mode, the radio shall perform the 1 time power-on alert to indicate that it has been turned on.



Power on sequence

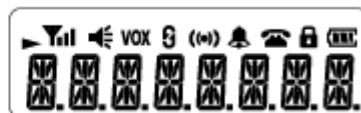
- Initialisation self tests are performed when the radio is turned on. At this time if there are any problems with the radio the relevant error message will be displayed. (Please refer to the status chart).



- Power on audible alert (optional) the beep alert will sound if the initial self test is successful.
- Start up logo will appear for a few seconds. If there is no predefined start up logo all characters and Icons will be displayed.



Start Logo

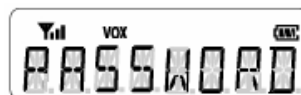
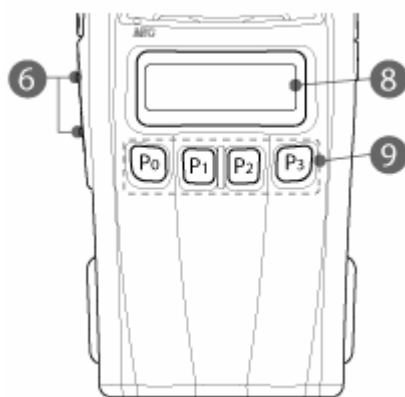


Icons

Password

If the password function is enabled, (dealer programmable) the user must enter a password for the radio to become operational. At this time you can enter the password code by using the P0-P3 buttons in the correct sequence. The Password will be shown on the display if enabled.

The password can be programmed with up to 1-4 digits, enter required code by using the P0-P3 buttons and side up/down keys see designation below. If the code is not correct, a beep will be heard and it will revert back to Password enter mode.



- P0: Confirm
- P1: Number value change
- P2: Next Digit
- P3: Delete
- Up/Down key: Number value change (can be used the same as P1).

Note: To disable or change a forgotten code the radio must be reprogrammed by an authorised Maxon dealer.

Group and Channel selection

The SL7000 can be programmed to select channel groups in several different ways.

Group selection:

- 1.) Rotary Selector: the rotary channel switch can be used to select 1-16 groups. If a blank group is selected the radio keeps the last used channel status.
- 2.) Programmable keys: P0-P3 buttons can be used to select 1-16 groups, pre-programmed key up/down the groups. If there are blank groups within the group list, the blank group is automatically skipped when group is changing.

Channel selection:

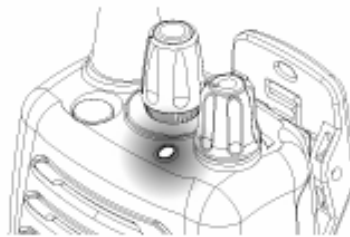
- 1.) Rotary Selector: the rotary channel switch can be used to select 1-16 channels. If a blank channel is selected the radio keeps the last used channel status.
- 2.) Programmable keys: P0-P3 buttons can be used to select 1-16 groups, pre-programmed key up/down the channels. If there are blank channels within the channel list, the blank channel is automatically skipped when the channel is changing.
- 3.) Side key channel selection: The two lower side keys can be use to select channels. If the keys are held in for one second the channels will automatically scroll.

Dealer programmable features

Busy Lockout

The busy lock out feature Busy Channel Lockout – ON: Upon PTT being pressed, if carrier is present, the LED will turn amber, the radio will not transmit and an audible alert tone will be heard.

Busy Channel Lockout – OFF: Upon PTT being pressed, the radio will transmit regardless of the presence of carrier.



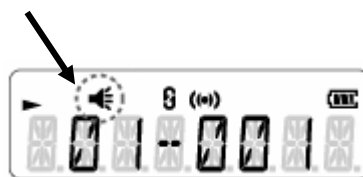
Mark Idle

Marked Idle enabled: Is usually only enabled if Busy Channel Lockout is ON. If the Busy Channel Lockout is on and carrier is detected, the radio permits transmit if the RX squelch option is valid.

Monitor

Monitor can be initiated by pressing the upper side button (monitor) above PTT, the user can override the programmed squelch operation and un-mute the speaker on the selected channel. A short press will temporarily activate the monitor and a long press will permanently activate the monitor. Not only will activity on that frequency be heard but 'white noise' will also be heard if no signal is present.

Monitor on indicator



RSSI (Received Signal Strength indicator)

Indicates the received signal strength.



Signal strength



Low to high strength

CTCSS

The SL7000 Series radio(s) support two kinds of squelch options. A different squelch options can be applied to each channel. Sub Audible Tone (SAT) codes are made up from frequencies which are below 300Hz. These frequencies are lower than the voice audio band. The two most common forms of SAT codes are CTCSS, Continuous Tone Coded Squelch System, and DCS, Digitally Coded Squelch.

CTCSS/DCS information may be added to speech during transmission. A receiving radio can then be programmed to behave according to which tones or codes are being sent by a transmitting radio.

The SL6000 Series radio(s) are capable of generating all 47 standard CTCSS tones and can also generate the 83 standard DCS codes and 83 inverted DCS codes.

CTCSS

50 kinds of TIA/EIA Standard CTCSS Tones & 12 non-standard CTCSS Tones can be set up. All tones can be set up using PC Programmer.

TX Operation: If PTT key is pressed, the radio transmits programmed CTCSS tone.

RX Operation: If a CTCSS Tone is detected, the Radio status is changed from Busy to Correct Call. If the CTCSS Tone is not detected, the radio will stay in Busy mode or change from Correct Call to Busy mode and no audio will pass through the speaker. See tone chart below:

Standard CTCSS tone chart

No.	Freq. Hz	No.	Freq. Hz	No.	Freq. Hz	No.	Freq. Hz
01	67.0	11	97.4	21	136.5	31	192.8
02	71.9	12	100.0	22	141.3	32	203.5
03	74.4	13	103.5	23	146.2	33	210.7
04	77.0	14	107.2	24	151.4	34	218.1
05	79.7	15	110.9	25	156.7	35	225.7
06	82.5	16	114.8	26	162.2	36	233.6
07	85.4	17	118.8	27	167.9	37	241.8
08	88.5	18	123.0	28	173.8	38	250.3
09	91.5	19	127.3	29	179.9		
10	94.8	20	131.8	30	186.2		

Non-standard CTCSS tone chart

No.	Freq. Hz	No.	Freq. Hz	No.	Freq. Hz	No.	Freq. Hz
39	69.4	42	171.3	45	189.9	48	206.5
40	159.8	43	177.3	46	196.6	49	229.1
41	165.5	44	183.5	47	199.5	50	254.1

DCS

The radio supports 83 kinds of TIA/EIA Normal/Inverted DCS codes.

TX Operation: If PTT key is pressed, the Radio transmits pre-programmed DCS Bit pattern.

RX Operation: If DCS Data Stream is detected, the radio status will change from busy mode to correct call. If DCS data stream is not detected, the radio will stay in busy mode or be changed from correct call back to busy mode.

No.	Freq. Hz	No.	Freq. Hz	No.	Freq. Hz	No.	Freq. Hz
01	023	27	152	53	311	79	466
02	025	28	155	54	315	80	503
03	026	29	156	55	325	81	506
04	031	30	162	56	331	82	516
05	032	31	165	57	332	83	523
06	036	32	172	58	343	84	526
07	043	33	174	59	346	85	532
08	047	34	205	60	351	86	546
09	051	35	212	61	356	87	565
10	053	36	223	62	364	88	606
11	054	37	225	63	365	89	612
12	065	38	226	64	371	90	624
13	071	39	243	65	411	91	627
14	072	40	244	66	412	92	631
15	073	41	245	67	413	93	632
16	074	42	246	68	423	94	654
17	114	43	251	69	431	95	662
18	115	44	252	70	432	96	664
19	116	45	255	71	445	97	703
20	122	46	261	72	446	98	712
21	125	47	263	73	452	99	723
22	131	48	265	74	454	100	731
23	132	49	266	75	455	101	732
24	134	50	271	76	462	102	734
25	143	51	274	77	464	103	743
26	145	52	306	78	465	104	754

Transmit options

PTT KEY (Push To Talk) Key to Transmit

VOX (Voice Operated Transmit)

P0 – P3 programmed key to send call, Transmit Selcall 5 tone, DTMF or PTT ID.

Hi / Low RF Power

If programmed a short press of the P0 – P3 programmed option keys can toggle the transmit output power between High and Low.

Each channel can be programmed via the PC programmer to be high or low power. The power can also be changed by the user to high-power output 5 Watts, and a low-power output, 1 Watt.



Low power



High power

TOT (Time Out Timer)

Once the **TOT** has been enabled, the PTT Timer can be set from 5 – 300 seconds with 5 second increments, which is the permitted time for a sustained transmission.

TOT Penalty The penalty timer restricts transmission for a set programmed time after the PTT timer has expired, to allow a cool off period for the transmitter. The settings are from 5 – 300 seconds in 5 second increments.

TX Delay

TX Delay is the delay time TX delay time when transmit. Eliminates squelch tails for SAT transmissions by removing the SAT tone for approximately 200mS before the end of the transmission. Increments of 1 second 1-30 seconds

Roger beep and Clear to talk

Roger beep:

When this option is active a tone is transmitted when the PTT is released.

Clear to talk:

This feature is used to indicate when it is ok to start conversation when transmitting. An audio alert is heard after specified clear time.

Squelch

Squelch:

When RF noise reaches a pre-defined level the speaker will mute.

The Squelch level is set by one of the pre-programmed P0-P3 buttons in user set mode.

The squelch level control can be set from 1 to 9.

Talk around

Talk around:

This function allows switching to back to back frequencies when radios are being used through a repeater. Radios can communicate directly with each other.

The receiving frequency is used for both transmitting and receiving. This function will automatically switch off when channel is changed.



Power save

Power save:

When power save is activate the radio will cycle into a power down mode. This should not affect the working of the radio in any way.

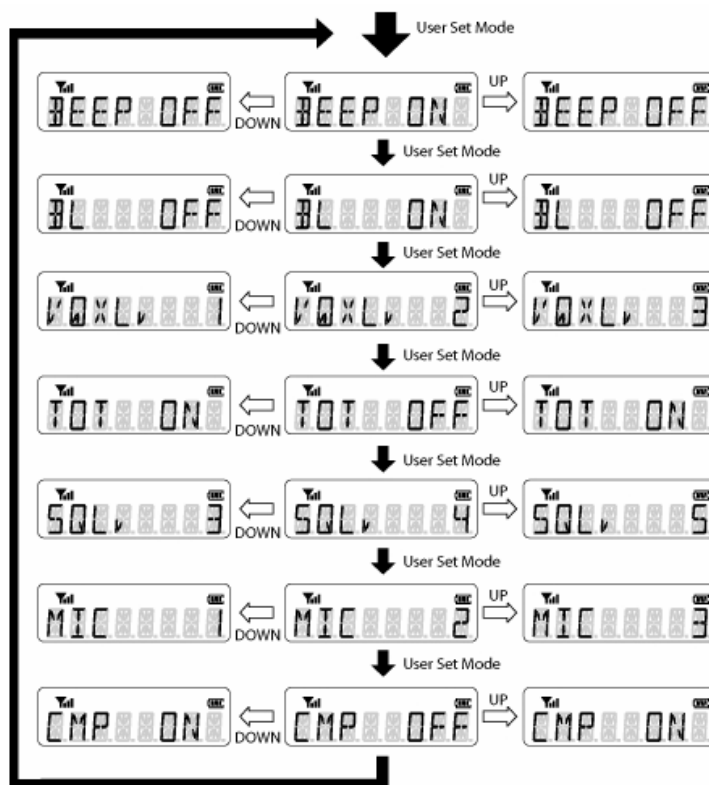
User set mode

User set mode:

This mode is to set some of the internal radio settings that are not changed very often.

Select User mode by pre-programmed key P0 – P3.

Use up/down keys to scroll the menus. See examples below



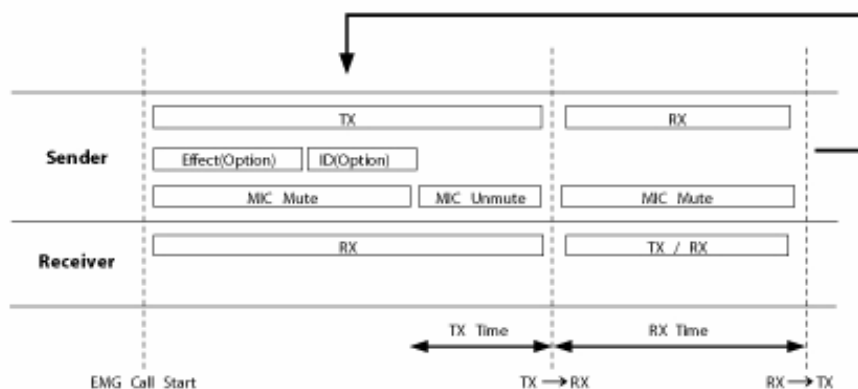
Emergency

The **Emergency** function is initiated when the upper orange button is pressed and held for two seconds; a pre-programmed sequence is sent, The emergency feature can also be programmed to transmit on either a user defined channel or the current channel.

A second press of the emergency channel will cancel the operation.

Emergency call options

- 1) Emergency Channel Type
 - **Fixed Channel** the transceiver always moves to a specific channel and tries to call when emergency is started.
 - **Current Channel** means the transceiver tries to call at current channel when emergency call is started.
- 2) Emergency Channel
 - **Emergency Channel** is programmable. The transceiver moves to this channel when emergency call is started (If emergency channel type is **Fixed Channel**).
 - Select a group first and then select a channel in that group.
 - **Emergency Channel** is displayed differently in channel window.
- 3) Cycle
 - 1 cycle consists of **TX Time** and **RX Time**. Set this value to repeat emergency call.
 - Cycle is programmable up to 256 times.
- 4) RX Time
 - The transceiver waits for this duration to receive signals after **TX Time**.
 - The transceiver goes to TX mode or finishes emergency call after this time elapsed.
 - **RX Time** is programmable 5 to 60 seconds at 5 seconds intervals.
- 5) TX Time
 - The transceiver stays in TX mode for this duration to send the beep sound or voice.
 - The transceiver goes to RX mode after this time elapsed.
 - **TX Time** is programmable 5 to 60 seconds at 5 seconds intervals.
- 6) Emergency ID
 - **Emergency ID** is programmable 3 to 16 characters and is transmitted by DTMF tone.
 - This is used for notifying the transceiver's name (ANI).
- 7) Emergency Effect
 - If this option is checked, then the **Emergency Effect** is activated. There are two effects. First one is LCD blinking at one second intervals and the other is alert beep. Do not check this option if you want to operate emergency call silently.



Scanning

Scanning is a Dealer programmable feature that allows you to monitor a number of channels. Your Dealer will help you define a scanning mode and your channel "scan list".

Scan types:

Normal Channel Scan

Once the scan list has been established, initiate scanning by pressing the pre-programmed scan key or holding the monitor button and rotate the channel switch to scan the enabled channels. Then the Green LED flashes to confirm the scanning. If a conversation is detected on any of the channels in the scan list, the radio will stop on that channel and you will be able to hear the conversation. If programmed for normal scan TX, you will be able to transmit on that active channel during the programmable scan delay time. (The scan delay time is the amount of time the radio will stay on that channel once activity has ceased. Dealer programmable, 4-7 seconds is typical). The radio will resume scanning once the scan delay time has expired, and will continue to scan until the channel is changed. The LED will flash green.

When in scan mode, if power is switch off and on, the radio reverts back to "scanning" automatically.

Nuisance Scan Delete

If there are any unwanted signals on any of the channels being scanned, they can be temporarily removed from the scan list. When the scanning feature has locked onto the unwanted signal simply press the monitor button. This will delete that channel from the scan list. When the radio is switched off and back on the channel is restored in the scan channel list.

Priority Channel Scan

A single channel may be programmed as the "Priority" channel. The radio will constantly monitor this channel while scanning. If a call is detected on the priority channel, the radio will automatically move to, and remain on, the priority channel. Activity takes precedence over all other conversations. The priority

Lookback

When using priority scan, the radio will automatically change to the priority channel when a call is received on the lookback channel. If the priority channel is not the correct call status, the radio will return to the lookback channel. After the lookback time interval the radio will repeat the above operation.

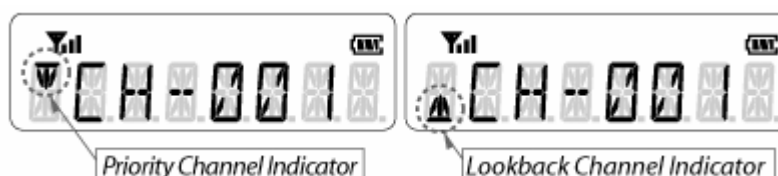
Scan list edit

The programmable P0 – P3 scan list edit can be used to add or delete the current channel to the scan list.



Priority / lookback Channel setting

The priority and lookback channels can be set to any channel using the pre-programmed P0 – P3 buttons



Scan TX options

Scan Type	TX Option	Active channel	Non-active channel
Priority Scan	Priority Scan TX	Current Chn.	Priority Chn.
	Priority Only TX	Priority Chn.	Priority Chn.
Normal Scan	Normal Scan TX	Current Chn.	TX inhibit
	RX Only On TX	TX inhibit	TX inhibit

Wireless Cloning

Purpose:

Cloning refers to taking the programming information from one radio and transferring it to another radio without the aid of a computer.

Procedure:

Before you begin, make sure both radios are of the same model and the batteries are fully charged. "Master" refers to the programmed radio that will be sending the data. "Slave" refers to the radio/radios receiving the new program.

1. Turn on the power of the "Master" while holding the P3 and Monitor buttons. The screen shows "1-M" -> "1-S" -> "B-M" -> "B-S" each repeatedly.
 - 1-M: Master to send (one radio to one radio)
 - 2-M: Slave to receive (one radio to one radio)
 - B-M: Master to send (one radio to multi radios)
 - B-S: Slave to receive (one radio to multi radios)

* B means "Broadcasting".
2. Set the Master and Slave radio to the appropriate setting as shown above by releasing the two buttons during the desired designation.
3. Next press the PTT button on the Slave(s) and the display will read "READY".
4. Now press PTT on the Master and the display will indicate "WRITE". Note: When Write is initiated the Slave(s) will automatically display "READ". This let you know the program is currently being sent to the Slave(s).
5. The process may take several minutes to complete. When completed, the Slave(s) will reset back to its normal operation. The Master will stay in the Master mode. This allows it to be available if other units need to be cloned. To reset the Master turn it off and back on again.
6. If errors are encountered it will be displayed on the Slave(s). Repeat the procedure if this occurs.

Selcall and DTMF Signalling functions

The SL7000 has a comprehensive Selective Calling system. With 12 standard tone-sets plus a user defined tone set. Features include ANI, Emergency, Stun & Revive and Selcall Text. Pre-program one of the Function Keys (P1-P3) as Selcall to activate.

Tone Sets

ZVEI1, ZVEI2, ZVEI3 DZEVI, PZVEI, CCIR1, CCIR2, PCCIR, CCITT, EEA, Eurosignal NATEL and User.

Each channel can be set to individual signally types i.e. DTMF, SELCALL Five tone or two tone.

DTMF Transmission

TX code select & enter

PTT: code save and send.

Monitor: Cancel (Exit without saving)

Up/down: Code Selection

Redial

Redial key: P0-P3

PTT: send

Monitor: Cancel (Exit without saving)

Note: The radio will give an Error tone if no redial code is present.

SELCALL 5 tone Transmission

TX code selection mode.

TX code select and enter key: Programmable P0-P3.

Up/down key: Code Selection.

Call key: Call send.

TX Code enter mode.

TX code select and enter key: Programmable P0-P3.

Up/down key: Edit the code digit.

TX code select and enter key: Change the digit.

- PTT Key: Save & exit
- Monitor key: Cancel (Exit without saving)
- Up/down
 1. Code Selection mode: code selection
 2. Code enter mode: Digit edit

Receiving Signaling

ANI (DTMF & SELCALL 5 Tone)

- Displays received code on LCD.
- Displays the associated text to received code.
- Display time is ten seconds.

Selcall (DTMF & SELCALL 5 Tone)

LED: Amber flashing

Icon: Flashing

Alert tone: Alert beep

Squelch: Squelch action.

DTMF & Selcall 5 Tone

The SL7000 has receive actions and responses pre-programmed. The following list gives correspondent action of received code.

Code match action

- LED: Amber flashing
- Icon: Flashing
- Alert tone: Alert beep
- Squelch: Squelch action.
- Transponder (DTMF only)
- Stun and revive

Selcall and DTMF Signalling functions

Stun

1. "STUN" is displayed on the LCD if radio receives correct stun code.



2. All keys are disabled except the Emergency key. (Only emergency call and receive is available when radio is stunned).
3. If any keys are pressed with acceptance to emergency key, an error alert is sounded.

Revive

1. The radio will revert to normal operation if it receives the correct revive code.
2. An audible revive alert is heard and "REVIVE" will be displayed on the LCD.



Optional Functions

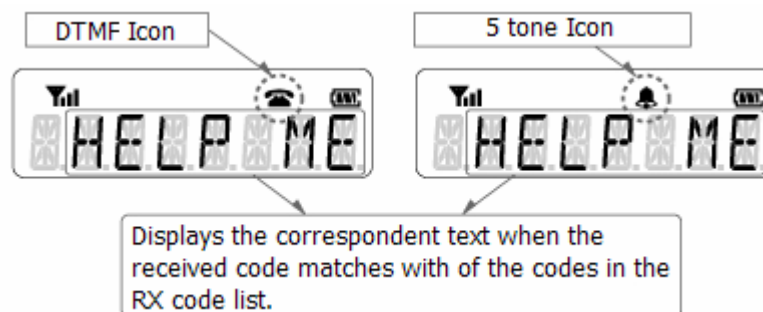
Transponder: This feature will send an acknowledge alert back to the original caller automatically if the received code matches with the current ID.

Auto reset time: After matching status (if received code corresponds with current channel ID or one of the codes in the RX code list) If the Auto reset time elapses with no active signal present the radios returns to call standby status.

Reset interrupt: Press The monitor button to return to call standby status before auto reset time has elapsed.

Remind time: If there is no key presses after correct call the correspondent call icon will flash for a set period. Push any key to stop the Icon flashing

Receiving status will be displayed on LCD



DTMF =  Selcall = 

5 Tone Selcall Tone Chart

Tone	ZVEI1	PZVEI	DZVEI	DDZVEI	PDZVEI	CCIR1	CCIR2	PCCIR	EEA	Euro signal	NATEL
0	2400	2400	2200	2400	2200	1981	1981	1981	1981	979.8	1633
1	1060	1060	970	1060	970	1124	1124	1124	1124	903.1	631
2	1160	1160	1060	1160	1060	1197	1197	1197	1197	832.5	697
3	1270	1270	1160	1270	1160	1275	1275	1275	1275	767.4	770
4	1400	1400	1270	1400	1270	1358	1358	1358	1358	707.4	852
5	1530	1530	1400	1530	1400	1446	1446	1446	1446	652.0	941
6	1670	1670	1530	1670	1530	1540	1540	1540	1540	601.0	1040
7	1830	1830	1670	1830	1670	1640	1640	1640	1640	554.0	1209
8	2000	2000	1830	2000	1830	1747	1747	1747	1747	510.7	1336
9	2200	2200	2000	2200	2000	1860	1860	1860	1860	470.8	1477
A	2800	970	825	885	825	2400	2400	1050	1055	---	1995
B	810	810	740	810	886	930	930	930	930		571
C	970	2800	2600	740	2600	2247	2247	2400	2400		2205
D	885	885	885	680	856	991	991	991	991		2437
E	2600	2600	2400	970	2400	2110	2110	2110	2110	1062.9	1805

Additional functions

Memory Channels

There are four memory channels available, which are used to switch between frequently used channels. The four programmable keys (P0-P3) can be used to change memory channels.

When the memory channels are selected the rotary switch will operate independent to the memory channel selection.

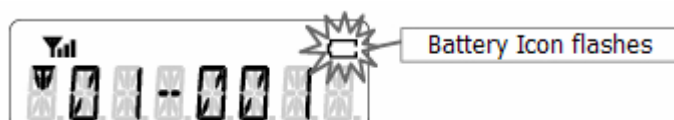
Battery indication

The battery indicator shows the battery charge level. The Icons are displayed in four steps.



Low Battery

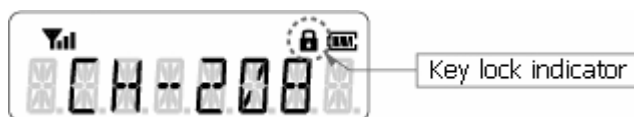
A battery Icon will flash and a warning alert will be heard when battery is low.



Low battery while transmitting, next transmission will be inhibited.

Key lock

All are locked except emergency PTT and rotary switch. This feature is set by pressing one of the pre-programmed P0-P3 buttons. To disable the key lock feature press allocated button again.



Display: The key lock icon appears when in key lock status.

Transceiver lock

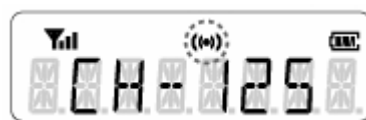
This feature affectively sets the password when the power is needed to be left switched on.



Display; The LCD displays no password if keys are press and option is active.

Compander

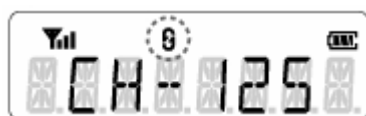
This function reduces noise components on the transmitted audio signal to give clearer voice quality



Display: the compander icon appears when compander is on

Scramble

The SL7000 comes with built in inversion scrambler this option is to prevent others from easily listening your call. Activation by pressing pre-programmed key P0 – P3.



Display: The scrambler icon appears when the scrambler is on

Man Down

→ Optional Function

Lone Worker

If there is no key input within the specified time, warning beep out while warning duration.

If there is no key input while warning duration, emergency call is transmitted automatically.

Service information

Service

Do not tamper with internal adjustments as this may cause damage to the equipment and will invalidate the warranty.

There are no user serviceable items inside the radio. It is recommended that you return your radio to a qualified Maxon dealer for any service or repairs.

Recycling/Disposal of Batteries

The battery should be recycled at the end of its useful life. Under various state or local laws, such batteries must be recycled or disposed of properly and cannot be dumped in landfills or incinerators.

For further information on how to safely dispose of your used batteries, contact your Maxon Dealer.

Maintenance

Your SL7000 Radio is designed to be maintenance free. To keep your radio in good working condition:

Clean external surfaces with a clean cloth dampened in a solution of dishwasher detergent diluted in water.

Apply the solution sparingly to avoid any moisture leaking into cracks and crevices. Do not submerge the radio.

Use a non-metallic brush to dislodge stubborn particles, if necessary.

Dry the surface thoroughly with a soft, lint free cloth.

DO NOT use solvents or spirits for cleaning – they may permanently damage the housing.

Clean the battery contacts on the back of the radio with a lint free cloth to remove dirt, grease, or other foreign material that may impede good electrical contact.

Limited Warranty

Maxon shall have no obligation to make repairs or to cause replacement required which result from normal wear and tear or necessitated in whole or in part by damage, fault or negligence of the user, improper or unauthorized alterations, repairs to the Product, use of the Product in a manner for which it was not designed, or by causes external to the Product. This warranty is void if the serial number is altered, defaced or removed.

Maxon's sole obligation hereunder shall be to repair or replace the Product covered in the agreed warranty.

CHQ700L Desktop Charger

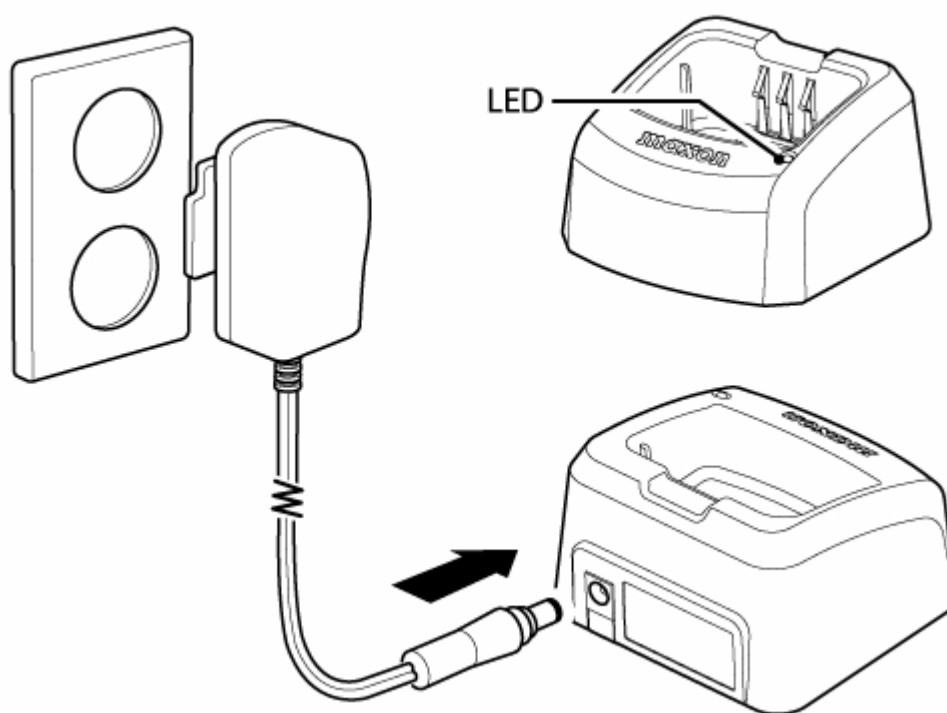
Product description

The CHQ700L is the standard charger for Maxon's SL7000 two-way radio batteries. The charger has been designed to fully charge only the Li-ion, 1500mAh battery, the front charging slot charges a battery while connected to the radio, the back charging slot charges a battery that has been removed from the radio.

For use only with power supply from the manufacturer: MaxonCIC Model: CHQ700L Use only power supplies listed in the user-instructions.

Orientation

Plug the AC adapter cable into the adapter jack locked on the rear of charger. Plug the AC adapter into an AC outlet.



Operating Instructions

- Remove the charger base and AC adapter from the packaging.
- Plug the AC adapter cable into the adapter jack located on the rear of the charger.
- Plug the AC adapter into an AC outlet
- Your charger is now ready to begin charging

Charging starts automatically when the radio/battery is placed into the charger cup. The charging time is dependent upon the charge status of the battery.

Lighting color	Description
Red	During charging
Green	Fully charged
Blinking orange	Extreme cold (under -10°C; 14°F)
	Extreme heat (over +60°C; 140°F)
Blinking red	Error

NOTE: If your battery seems to have no capacity even after being fully charged, completely discharge it, then fully charge it again. If the battery still does not retain a charge, new batteries must be replaced.

Safety information

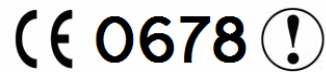
To reduce the risk of shock or injury, familiarize yourself with the correct and safe operating procedures defined in this manual. Only charge Maxon's batteries in this charger – other battery types may burst causing personal injury or damage to the charger, battery or radio.

- The CHQ700L desktop charger is rated for indoor use only.
- Do not disassemble the charger; incorrect reassembly can cause fire or electric shock.
- Do not pull output plug with excessive force.
- Do not use the charger when it is covered by objects which impede heat dispersal.
- Connect the supplied Maxon adapter only to the voltage supply as specified on it's label.
- Unplug the AC adapter from the wall outlet before attempting inspection or cleaning of the charger.
- Do not use solvents such as benzene or paint thinner to clean the charger.

MEMO

SL7000 Series

This product is marked with



in accordance with the Class II product requirement specified in the R&TTE Directive 1999/5/EC.

This equipment is intended for use in:-

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland & United Kingdom

and requires authorisation (individual licence) for use.

We hereby declare that the above named product is in conformity to all the essential requirements of Directive 1999/5/EC.

Con la presente si dichiara che il prodotto sopra menzionato è conforme ai requisiti essenziali della Direttiva 1999/5/CE.

Declaramos que el producto mencionado más arriba cumple todos los requisitos esenciales de la Directiva 1999/5/CE.

Wir möchten hiermit bekanntgeben, daß das oben genannte Produkt in Übereinstimmung mit allen erforderlichen Bedürfnissen der 1999/5/EC Direktive steht

Nous déclarons que le produit référencé ci-dessus satisfait aux exigences R&TTE 1999/5/EC qui lui sont applicables.

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