

SP-0402

Synthesized Scanning Radio

MAXON CIC

FCC RF EXPOSURE COMPLIANCE REQUIREMENTS FOR OCCUPATIONAL USE ONLY

The Federal Communications Commission (FCC), with its action in General Docket 93-62, November 7, 1997, has adopted a safety standard for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC regulated equipment. Proper operation of this radio will result in user exposure far below the Occupational Safety and Health Act (OSHA) and Federal Communications Commission limits.

DO NOT transmit for more than 50% of total radio use time (50% duty cycle). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded.

- This radio is NOT approved for use by the general population in an uncontrolled environment. This radio is restricted to occupational use, work related operations only where radio operator must have the knowledge to control the user's exposure conditions for satisfying the higher exposure limit allowed for occupational use.
- When transmitting, hold the radio in a vertical position with its microphone 1 inches (2.5 cm) away from your mouth.
- The radio is transmitting when the red LED on the front of the radio is illuminated. You can cause the radio to transmit by pressing the PTT bar on the radio.
- These are required operating configurations for meeting FCC RF exposure compliance. Failure to observe these restrictions mean violation.

Safety Information

The Federal Communications Commission (FCC), with its action in General Docket 79-144, March 13, 1985, has adopted a safety standard for human exposure to Radio Frequency (RF) electromagnetic energy emitted by FCC regulated equipment. Maxon subscribes to the same safety standard for the use of its products. Proper operation of this radio will result in user exposure far below the Occupational Safety and Health Act and Federal Communications Commission limits.

WARNING - DO NOT hold the radio in such a manner that the antenna is next to, or touching, exposed parts of the body, especially the face or eyes, while transmitting.

WARNING - 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.

CAUTION - DO NOT press and hold the transmit switch (P-T-T) when not actually wishing to transmit.

NOTE: This radio operates in FCC regulated frequency bands. All radios must be licensed by the FCC before use. Because this radio contains a transmitter, Federal law prohibits unauthorized use or adjustments of this radio.

Operating Instructions

About Your SP-0402 Radio

Maxon's SP-0402 radio feature up to 16 channels. Operation and functions for Maxon's SP-510 radios are described in this manual.

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

Application of some of the functions described in this manual is 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.

Should you have questions regarding the operation of the radio please consult your Maxon Dealer.

SP-0402 Specification

MODEL:	SP-0402
MODEL CODE:	7840
EQUIPMENT TYPE:	Hand portable
PERFORMANCE SPECIFICATIONS:	TIA/EIA-603
BAND:	UHF2(440~470Mhz)
CHANNEL SPACINGS:	12.5KHz / 25KHz PROGRAMMBLE
RF OUTPUT POWER:	5 / 1 WATT
MODULATION TYPE:	F3E
AUDIO POWER:	500mW (EXT WITH 8 OHM) 1W (INT WITH 4 OHM)
INTERMEDIATE FREQUENCY:	45.1MHz 455KHz
CHANNELS:	16 Channel
FREQUENCY SOURCE:	SYNTHESIZER
POWER SUPPLY:	Ni-MH(1550mA) 7.5 VDC NOMINAL EXTREME +/- 10% VDC EXTREME

Unpacking Information

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

- Radio
- Battery Pack
- Battery Charger
- Battery Charger Power Supply
- Antenna
- Spring Belt Clip
- Operating Instructions

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

SP-0402 Features

- Wideband frequency separation
- 1 or 5 W programmable output power
- Programmable 12.5/25 kHz channel spacing
- Channel scan
- Priority channel scan
- Look back channel
- CTCSS/DCS/ tone signaling
- Busy channel lockout
- Time-out timer
- Priority Channel Edit

Description of Radio Components

- 1) Antenna Receptacle
- 2) Channel Selector Switch
- 3) On/Off - Volume Control
- 4) RX/TX Indicator
- 5) Battery Latch
- 6) Push-To-Talk (PTT)
- 7) Monitor Button
- 8) Option Button
- 9) Emergency Button
- 10) Microphone
- 11) Accessory Connector (EXT Jack)
- 12) Belt Clip
- 13) Battery
- 14) Battery Charge Contacts
- 15) Speaker

Antenna Installation

Fasten the antenna to the radio by turning the antenna clockwise into the receptacle on top of the radio.

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 radio in one hand, push and hold battery latch button located in the upper right hand corner of the battery pack, held as if looking at the back of the unit. Hold radio firmly and slide battery in downward direction while 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 left hand corner of the radio, held as if looking at the back of the unit. Locate slot location in belt clip and push belt clip until a click is heard.

To Remove:

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

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.

SPC-5000 Desktop Charger provides 2 hours charging to one radio and one battery.

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

Status Indicators and Audible Alert Tones

Your SP-0402 has a sophisticated microprocessor control which provides a series of audible alert tones.

Upon initial power up, a quick melody 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 into 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 off for silent operation.

Status	Decription	LED color	Audible Tone
Normal	Power On - Ready	N/A	Melody
	Call Received	Orange	N/A
	Correct Call	Green	N/A
	Busy Channel	Orange	N/A
	Transmit	Red	N/A
	Transmit not allowed	Red Flashing	Two beeps
Scanning	Normal Scan mode	Green Flashing	N/A
Warning	Low Battery	Red Flashing	2 beeps repeated
	Busy Channel lockout	orange	2 beep repeated
	TX Inhibit	N/A	Two beeps
	Time-out-timer	N/A	Single beep/3 beeps repeated
Error	Unlock	N/A	Two beeps

Operation Mode

This section provides general descriptions of the operating modes of the SP-0402 Radio.

Power Off Mode

The SP-0402 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 disabled via PC programmer).

Power On Mode

The SP-0402 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.

High / Low Power

The radio shall be capable of programmable output power. Each channel can be programmed via pc programmer to have either high or low power. Or it is set by pressing option button.

Cloning

Frequencies and functions can be programmed from radio to radio by using a cloning cable.

Password

Password function is the function that the user knows the password can use the radio. You can set password enable and the password code at pc program. And you can set password enable/disable by programmable key (password and menu option). At this time you can enter the password code by using EMG/PTT/MON/OPTION button. When you press the last 4th place after enter the all code, if the code is not correct, and then blinking the LED red and repeat 2 times error beep. To disable password function, you can select On/Off by using Menu or programmable key (password option). If you enable password at the Menu Mode of the radio programmed without password, then default password code set "NONE"

Fixed Key

(PTT)

- ① Press and Hold to transmit. Release to receive mode.
- ② Power on with press and holding PTT Key to see software version

(MONITOR)

Release squelch and tone circuit to check whether you can use or not current channel.

(OPTION)

Short pressing: scan operaitng
Look Back channel edit
Tx power H/L

(EMG)

Transmit EMG ID 5 times and generate warning audio alert during 7secs

Licensing and Service Information

FCC Licensing

The Federal Communications Commission requires that the operator of this radio be properly licensed under the applicable Part and/or Parts of the FCC Rules and Regulations.

Consult with your Maxon Dealer, or contact the nearest FCC Field Office for information about obtaining a license.

Service

Do not tamper with internal adjustments. Damage to the equipment and/or improper operation may result. 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 U.S. Environmental Protection Agency (EPA) classifies used Ni-MH batteries as hazardous waste, unless certain exemptions apply.

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.

Maxon America, Inc. fully endorses and encourages the recycling of Ni-MH batteries. A national program to collect and recycle used Ni-MH batteries is being implemented by the Rechargeable Battery Recycling Corporation (RBRC Ö). This program is being funded through the use of license fees paid by the battery and product manufacturers to place the RBRCÖ Seal on the batteries.

The following is a list of facilities where the batteries can be shipped to be recycled. Contact these facilities for proper packaging and shipping guidelines.

Software Copyrights

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Maintenance

Your SP-0402 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 catastrophe, 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 above warranty.

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This warranty is void for sales and deliveries outside of the United States.