Uniden®



PC68LTX

Owner's Manual



CUSTOMER CARE

At Uniden®, we care about you!

If you need assistance, please do NOT return this product to your place of purchase.

Quickly find answers to your questions by:

1. Reading your owner's manual.

Images in this manual may differ slightly from your actual product.

Save your receipt/proof of purchase for warranty.

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Features, specifications, and availability of optional accessories are all subject to change without notice.

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DESCRIPTION

Your Uniden PC68LTX represents the highest quality communications device designed for use in the Citizens Band Radio Service. It will operate on any of the 40 AM frequencies authorized by the Federal Communications Commission (FCC).

The Citizens Band Radio Service is under the jurisdiction of the Federal Communications Commission (FCC). Any adjustments or alterations which would alter the performance of the transceiver's original FCC type acceptance, or which would change the frequency determining method, are strictly prohibited. Replacement or substitution of crystal, transistors, ICs, regulator diodes, or any other part of a unique nature, with parts other than those recommend by Uniden, may cause violations of the technical regulations in Part 95 of the FCC Rules or in violation of type acceptance requirements in Part 2 of the rules.

EMERGENCY OPERATIONS

- 1. Set the switch to CH9 or turn Channel Selector knob to Channel 9.
- Press PTT switch on microphone and speak clearly.
- 3. If there is no response, select an active channel and ask that party to RELAY YOUR EMERGENCY BROADCAST ON CHANNEL 9.

All channels, except Channel 9 may be used for normal communication. Channel 9 is reserved by the FCC for emergency communications involving the immediate safety of individuals or protection of property. Channel 9 may also be used to render assistance to a motorist.

This is an FCC rule and applies to all operators of CB radios.

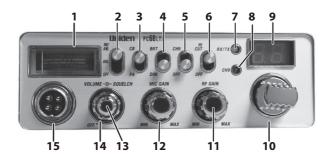
WHAT'S IN THE BOX

Carefully unpack your PC68LTX and check the contents against this list:

- PC68LTX CB 2-way mobile radio
- Microphone
- Mounting Bracket Kit
- DC Power Cord
- Reference Guide
- Part 95 Subpart D (FCC Rules)

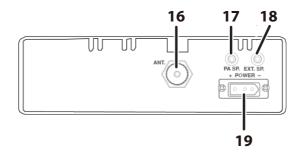
Never use damaged products!

FRONT VIEW



Item	Definition
1	Function Meter: Measures RF and S signal strength.
2	NB/ANL/ANL/OFF : Reduces external noise and interference from vehicle ignition systems. Select OFF to turn off this function.
3	CB/PA: Selects the PA (Public Address) or CB (Citizens Band).
	Do not use PA function unless an external speaker is connected.
4	BRT/DIM : Adjusts the brightness of LED Channel Display and RF Signal Meter.
5	CH9/OFF : Instantly tunes to emergency CB Channel 9. Turn off to resume normal channel operations.
6	HI CUT/OFF: When turned on, cuts high audio frequencies.
7	RX/TX Indicator: Red-transmitting; green-receiving.
8	CH 9 Indicator: Red-Channel 9 switch is on.
9	Channel Display: Displays current channel selection.
10	Channel Knob: Selects transmission and reception channels.
11	RF GAIN : Improves reception in strong signal areas.
12	MIC GAIN: Adjusts microphone sensitivity.
13	On/Off - Volume: Turns the radio on or off and adjusts the speaker volume.
14	SQUELCH : Reduces background noise when there is no incoming signal.
15	Microphone Jack

REAR VIEW



Item	Definition
16	Antenna Jack
17	PA SP : Connects optional external 8-ohm, 4-watt speaker for use as a public address system.
	To prevent acoustic feedback, separate the microphone from the speaker when operating the PA at high output levels.
18	<i>EXT. SP</i> : Connects an 8-ohm 4-watt speaker to remotely monitor the receiver.
	When the external speaker is plugged in, the internal speaker is off.
19	POWER : Connects DC power to transceiver.

INSTALLATION

MOBILE INSTALLATION

Plan the location of the transceiver and microphone bracket before beginning installation.

- 1. Select a location that is convenient for operating the radio but does not interfere with the driver or passenger.
- 2. Install bracket with self-tapping screws provided.
- 3. Connect power cords (see page 8).
- 4. Attach the microphone bracket to side of the radio.
- 5. Attach radio to bracket.

Mobile Antenna

WARNING! The antenna used for this radio must be installed at least 16.92 inches (43 cm) away from all persons. The antenna must not be collocated or used with any other antenna or transmitter.

CAUTION: Never operate your radio with no antenna or with a damaged antenna cable. This can damage the radio.

You must purchase an antenna to operate this radio. Because the maximum power output of the transmitter is limited by the FCC, the quality of your antenna is very important. To achieve the maximum transmission distance, Uniden strongly recommends that you install only a high quality antenna. You have just purchased a superior transceiver - don't diminish its performance by installing an inferior antenna.

Only a properly matched antenna system will allow maximum power transfer from the 50 ohm transmission line to the radiating element. Your Uniden dealer is qualified to help you select the proper antenna for your requirements. A whip style antenna may be used for automobile installation.

A short 'loaded' whip antenna is easier to install on an automobile, but its efficiency is less than that of a full quarter-wave whip antenna.

Connecting the Power Cords

Uniden recommends connecting the power lead to the Ignition Switch Accessory Terminal. This way, the transceiver is automatically turned off when the ignition switch is turned off.

As an alternative, the power cord may be connected to an available terminal on the fuse block or to a point in the wiring harness. However, caution must be taken to prevent a short circuit. If in doubt, contact your vehicle dealer for information.

Ground Information

This transceiver may be installed and used in any 12-volt DC negative ground system vehicle.

Negative Ground System

With a negative ground system, the negative (-) battery terminal is usually connected to the vehicle motor block. OR OR

Connect the red DC power cord from the transceiver to the positive (+) battery terminal or other convenient point. Then connect the

black power cord to the vehicle chassis or negative (-) battery terminal.

RED

USING YOUR PC68LTX

TURN PC68LTX ON/OFF

Turn the **VOLUME** knob clockwise until the unit turns on and the display backlight turns on.

Turn the **VOLUME** knob counter-clockwise to turn the unit off.

CB MODE

Be sure that the power source, antenna, and microphone are properly connected before proceeding.

- 1. Turn unit on. Set volume to a comfortable level.
- 2. Set switch to *CB*.
- 3. Turn the CH knob to select a CB channel.
- 4. Set noise limitations switch to NB/ANL.
- 5. Adjust squelch.
 - Turn SQUELCH knob fully clockwise so only strong signals can get through.
 - Turn SQUELCH knob fully counterclockwise until you hear a hiss. Everything gets through - noise, weak signals, and strong signals
 - Turn SQUELCH knob clockwise until the hiss stops. Only clearer signals get through.

Set SQUELCH only when the radio is not receiving a strong signal.

- 6. Press and hold **PTT** and check the multifunction meter. It will show the RF output power.
- 7. Turn **RF GAIN** knob to set RF gain sensitivity. Normally, the knob is

- turned clockwise to maximum.
- 8. Turn *MIC GAIN* knob to adjust microphone sensitivity for transmission. Normally, the knob is turned clockwise to maximum.
- 9. Set the brightness (**BRT** or **DIM**).

PA MODE

Using the PA mode requires an optional speaker.

- 1. Switch to **PA**.
- 2. Press and hold **PTT** to speak.
- Release when finished.

To prevent acoustic feedback, separate the microphone from the speaker when operating the PA at high output levels.

If you are in PA mode but not pressing PTT, the radio receives CB transmissions and transmits them through the PA speaker. You cannot respond to the transmission.

HICUT/OFF

The Hi Cut function reduces high frequencies. Switch to *HI CUT* to turn off higher frequencies.

TO TRANSMIT/RECEIVE

Perform a voltage Standing Wave Ratio (SWR) measurement prior to using the transmitter. An SWR ratio in excess of 2:1 may damage the transmitter.

Be sure to read and understand Part 95, FCC Rules and Regulations before operating your transmitter.

- 1. Select a channel.
- 2. Adjust MIC GAIN.
- 3. When the channel is clear, press the microphone **PTT** and speak.
- 4. Release **PTT** when you are finished speaking to listen for the response.

PREVENTIVE MAINTENANCE

Every six months:

- Check the Standing Wave Ratio (SWR).
- Be sure all electrical connections are tight.
- Inspect antenna coaxial cable for wear or breaks in shielding.
- Be sure all screws and mounting hardware are tight.

The PC68LTX is designed to give you years of trouble-free service. There are no user-serviceable parts inside. Except for the fuse in the DC power cord, no maintenance is required.

To replace a blown fuse:

- 1. Press ends of the fuse holder together. Twist to open. Carefully separate the two pieces.
- 2. Remove the fuse and inspect. If blown, replace with the same type fuse.

Use only the fuse specified for your PC68LTX. Failure to do so may void your warranty.

TROUBLESHOOTING

In the event of system malfunction, perform the following procedures:

Problem	Suggestion
Unit does not power up	Check ignition key position. Check power cord connections. Check fuse. Check vehicle electrical system.
No reception	Check microphone connection. Set <i>CB/PA</i> to <i>CB</i> . Check <i>VOLUME</i> and <i>SQUELCH</i> . Check antenna. Check antenna connection. Adjust <i>RF Gain</i> .
Poor Reception	Check VOL and SQ . Adjust RF Gain . Be sure antenna SWR is normal.
No Transmission	Set <i>CB/PA</i> switch to <i>CB</i> . Check microphone connection. Adjust <i>MIC Gain</i> .

Problem	Suggestion
Low Transmission	Be sure antenna SWR is normal.
	Adjust <i>MIC Gain</i> .

SPECIFICATIONS

GENERAL

Channel: 40

Frequency Range: 26.965 - 27.405 MHz
Frequency Control: PLL Synthesizer

Antenna Impedance: 50 ohms
Power Input: 13.8VDC

Current Drain

TX: AM Full Modulation: 2.2A (max)

RX: At no signal: 400mA

Squelch: 250mA

Operating Temperature: -22°F to 140°F (-30°C to 60°C)

Accessories: DC Power Cord

Microphone

Microphone Hanger Mounting Bracket

Size (W x D x H): 6.3 in. x 6.4 in. x 2.2 in.

(without knobs and jacks)

(160 mm x 162.5 mm x 55.8 mm)

Weight: 3 Pounds

TRANSMITTER

Output Power: 4 watts
Emission Type: 6K00A3E

Hum and Noise: Better than 40 dB

Frequency Tolerance: $\pm 0.002\%$ Modulation Percentage (Peak): 100% Spurious Rejection: -70 dB

Output Impedance: 50 ohm, unbalanced

RECEIVER

Sensitivity at 10 dB S+N/N: $0.5 \mu V$

Sensitivity at 500 mW Audio Output: 0.5 μV Squelch Threshold: 0.5 μV Antenna Impedance: 50 ohms Squelch Tight: 1000 μV Signal Meter S-9: 100 μV Audio Output Power (max.): 5 watts Audio Output (10% Dist.): 4 watts Adjacent Channel Rejection: 60dB Image Rejection: 70dB Internal Speaker Impedance: 16 ohms External Speaker Impedance: 8 ohms

PUBLIC ADDRESS

Output Power at 10% Distortion: 4 watts

Specifications shown are typical and subject to change without notice.

RADIO CODE DEFINITIONS

10-CODES

The following list contains common "10-Codes" used by CB radio operators for faster communication and better understanding.

Code	Meaning	Code	Meaning
10-1	Received poorly	10-27	I am moving to channel
10-2	Receiving well	10-28	Identify your station
10-3	Stop transmitting	10-29	Time is up for contact
10-4	OK, message received	10-30	Does not conform to FCC rules
10-5	Relay message	10-32	I will give you a radio check
10-6	Busy, stand by	10-33	EMERGENCY TRAFFIC
10-7	Out of service, leaving air	10-34	Trouble at this station
10-8	In service, subject to call	10-35	Confidential information
10-9	Repeat message	10-36	Correct time is
10-10	Transmission completed, standing by	10-37	Wrecker needed at
10-11	Talking too rapidly	10-38	Ambulance needed at
10-12	Visitors present	10-39	Your message is delivered
10-13	Advise Weather/ Road conditions	10-41	Please turn to channel
10-16	Make pickup at	10-42	Traffic accident at
10-17	Urgent business	10-43	Traffic tie up at
10-18	Anything for us?	10-44	I have a message for you
10-19	Nothing for you, return to base	10-45	All units within range please report
10-20	My location is	10-50	Break channel
10-21	Call by telephone	10-60	What is next message number
10-22	Report in person to	10-62	Unable to copy, use phone
10-23	Stand by	10-63	Net directed to
10-24	Completed last assignment	10-64	Net clear
10-25	Can you contact	10-65	Awaiting your next message/assign- ment
10-26	Disregard last information	10-67	All units comply

Code	Meaning	Code	Meaning
10-70	Fire at	10-85	My address is
10-71	Proceed with transmission in sequence	10-91	Talk closer to microphone
10-77	Negative contact	10-93	Check my frequency on this channel
10-81	Reserve hotel room for	10-94	Please give me a long count
10-82	Reserve room for	10-99	Mission completed, all units secure
10-84	My telephone number is	10-200	Police needed at

FCC PART 15/IC COMPLIANCE

FCC COMPLIANCE

FCC Compliance Statement: This device complies with Part 15 of the FCC rules. Operation is subjected to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

IC COMPLIANCE

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any

interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.