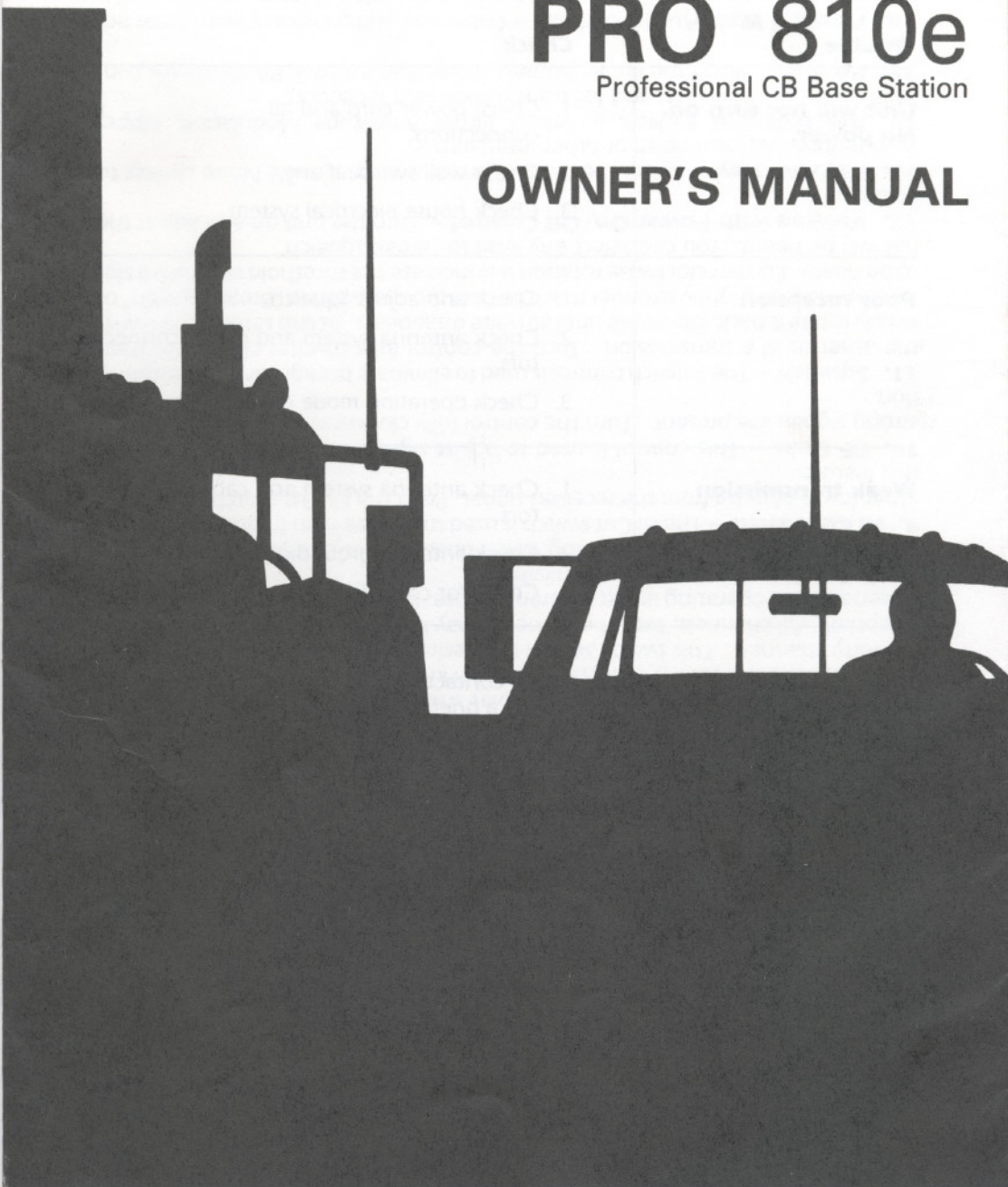


# uniden®

## PRO 810e

Professional CB Base Station

### OWNER'S MANUAL



# Welcome!

To the world of sophisticated, microprocessor controlled CB radio communications. Your Uniden PRO 810e represents the most advanced base station ever designed for use in the Citizens Band Radio Service. It will operate on any of the 40 AM, 40 USB, and 40 LSB frequencies authorized by the Department of Communications. Your PRO 810e features a superheterodyne circuit with PHASE LOCKED LOOP techniques to assure precise frequency control. This radio has been type accepted and certified by the D.O.C.

## WARNING

UNIDEN DOES NOT REPRESENT THE UNIT TO HAVE BEEN WATERPROOFED. TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



**CAUTION**  
RISK OF ELECTRIC SHOCK  
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

# Installation

Select a location that is convenient for operation and allows adequate air circulation around the unit. Do not place anything directly on top of the radio cabinet which would block the cooling vents. Avoid areas of high heat. Do not place the unit on top of radiator vents or in direct sunlight. Do not place the unit in high moisture environments such as bathrooms.

## Antenna

Since the maximum allowable power output of the transceiver is limited by the D.O.C., the antenna is a very important factor affecting transmission distance. It is for this reason that we strongly recommend that you install only a quality antenna in your new CB radio system. You have purchased a superior quality 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. We recommend that you use an SWR meter when installing your antenna. Set your PRO 810e to channel 20 and make adjustments to the antenna until the meter shows SWR = 1. Your Uniden dealer is qualified to assist you in the selection of the proper antenna to meet your application requirements.

The PRO 810e may be used with any type of 50 ohm base station antenna. A ground plane vertical antenna will provide the most uniform horizontal coverage. This type of antenna is best suited for communication with a mobile unit. For point to point operation where both stations are fixed, a directional beam will usually increase communication range since this type of antenna concentrates transmitted energy in one direction. The beam antenna also allows the receiver to "listen" in only one direction thus reducing interfering signals.

Antenna height is an important factor when maximum range is desired. Keep the antenna clear of surrounding structures and foliage. D.O.C. regulations may limit antenna height above an existing structure.

Connect the male connector (PL-259) of the coaxial cable from the antenna to the female connector on the back of the unit.

# Controls and Functions

**1. Microphone** — The operational mode of the CB is controlled by the push-to-talk switch on the mic. Press the switch to activate the transmitter and disable the receiver. Release the switch to enable the receiver and disable the transmitter. When transmitting, hold the mic about 2 inches from your mouth and speak clearly in a normal voice. The mic included with the PRO 810e is a detachable, low impedance, dynamic type.

**2. Mic Gain** — Adjust the microphone sensitivity for crisp, clear audio transmission.

**3. CH 9** — A single key gives instant access to the emergency channel 9.

**4. Illuminated S/RF Meter** — An accurate analog meter displays the signal strength of both the transmitter and receiver.

**5. TX & RX LEDs** — The TX LED lights when transmitting and the RX LED lights when receiving.

**6. Channel Display** — A large LED display shows the channel currently in use.

**7. Channel Selector** — An oversize channel knob makes it easy to select any of the forty channels. This switch selects the desired channel for transmission and reception. All channels, except channel 9, may be used for communications between stations operating under different license. Channel 9 has been reserved by the D.O.C. for emergency communications.

**8. Clarifier** — Used for fine tuning when operating in USB or LSB modes.

**9. Hi Cut Switch** — The Hi Cut switch is used to remove high frequency hiss and other forms of noise from the received signal. Press the Hi Cut switch to activate this feature.

**10. RF Gain** — This control is used to adjust signal reception in areas where strong signals are present. Turn the control fully clockwise for maximum reception.

**11. Squelch** — The Squelch control is used to eliminate background noise during the absence of a transmission. Turn the control fully counter clockwise, then slowly rotate it back, clockwise until all noise disappears. At this setting any transmission must be slightly stronger than the background noise to "Break Squelch" or to be heard. Further clockwise rotation will increase the threshold at which a signal will be heard. You can select any level to "Break Squelch"

**12. Volume with Power On/Off Control** — Turn the unit on and adjust the volume.

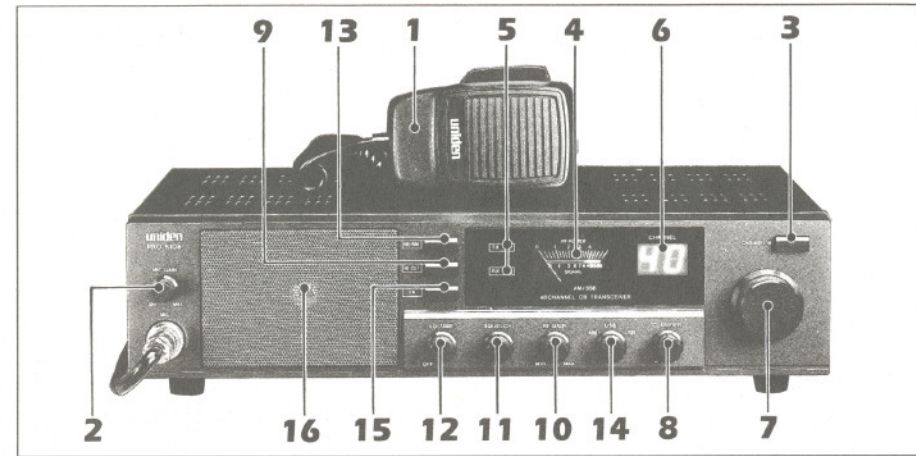
**13. NB/ANL Key** — Select the Noise Blanker and Automatic Noise Limiter to help reduce electrical noise or other interference.

**14. AM/USB/LSB Switch** — Selects either Amplitude Modulation, Upper Sideband, or Lower Sideband for transmission and reception.

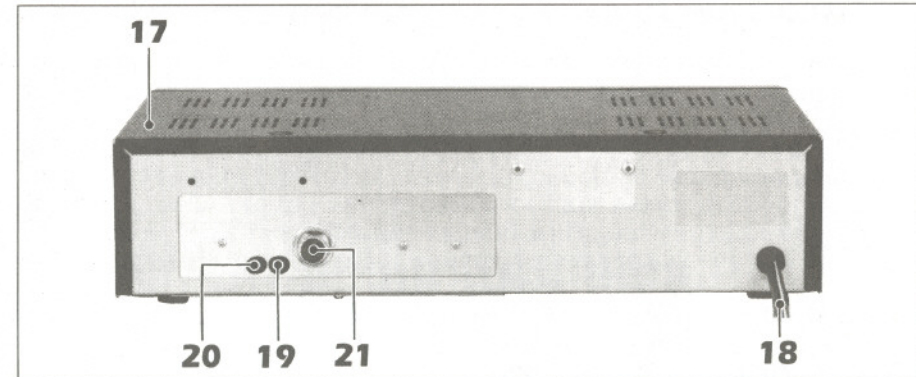
**15. PA Key** — Select the Public Address mode if an external PA speaker is connected.

**16. Power 7 Watt Audio Output** — Enhanced audio circuitry with Tone adjustment and a booming 7 watt audio output provide CB reception like you've never heard it before.

**17. Rugged Metal Cabinet** — A professional quality metal housing insures years of dependable use.



Pro 810e Front View



Pro 810e Rear View

**18. AC Power Cord** — Connect to any 240 V house hold AC outlet.

**19. PA Speaker** — An external 8 ohm 7-watt speaker must be connected to the "PA SP" jack located on the back of the unit. The speaker must be directed away from the mic to prevent feedback.

**20. External Speaker** — The "EXT. SP." jack is used for remote receiver monitoring. The external speaker should have an 8 ohm impedance and be rated at least 7 watts. When an external speaker is connected, the internal speaker is disabled.

**21. Antenna Connector** — This female connector permits connection of the transmission line cable male connector (PL-259) to the transceiver.

# Operation

## Connecting the Power

Plug the power cord into any 240 V AC outlet. Make sure the cord is not kinked or tightly wound.

## To Receive

1. Be sure that the power source, antenna and microphone are properly connected.
2. Turn the unit on by rotating the Volume control clockwise.
3. Set the channel selector switch to the desired channel.
4. Set the Volume control to a comfortable listening level.
5. Listen to the background noise from the speaker. Turn the Squelch control clockwise until the noise disappears (no signal should be present). Leave the control at this setting. The squelch is now properly set. The receiver will remain quiet until a signal is actually received. Do not advance the control too far, or some weaker signals will not be heard.
6. When a transmission is heard with annoying high frequency distortion, activate the Hi Cut feature to eliminate this. If the transmission has interference try activating the ANL and/or the NB key.

## To Transmit

1. Select the desired channel and operating mode for transmission.
2. If the channel is clear, depress the push-to-talk switch on the side of the microphone and speak in a normal voice.

**CAUTION:** The transceiver Voltage Standing Wave Ratio (V.S.W.R.) measurement must be performed prior to the use of the transmitter. A "V.S.W.R." ratio in excess of 2:1 may damage the transmitter. Please check your SWR reading frequently with an SWR meter.

## Preventative Maintenance

At six to twelve month intervals, the following system checks should be made:

1. Check the Standing Wave Ratio (V.S.W.R.)
2. Inspect all electrical connections
3. Inspect antenna coaxial cable for wear

