Uniden®

PRO 520XL
Professional
Mobile CB Radio

Downloaded from www.cbradio.nl

INTRODUCTION

Welcome to the world of Citizens Band radio communications. Your Uniden PRO 520XL is an advanced mobile radio 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). Your PRO 520XL features a superheterodyne circuit with PHASE LOCKED LOOP techniques to assure precise frequency control. This radio has been type accepted and certified by the FCC.

WARNING

The Citizens Band (CB) Radio Service is under the jurisdiction of the FCC. Any adjustments or alterations which would alter the performance of the transceiver's original FCC type acceptance or would change the frequency determining method, are strictly prohibited.

Replacement or substitution of crystals, transistors, IC's, regulator diodes or any other part of a unique nature, with parts other than those recommended by Uniden, may cause violation of the technical regulations of Part 95 of the FCC rules or violation of type acceptance requirements of Part 2 of the rules.

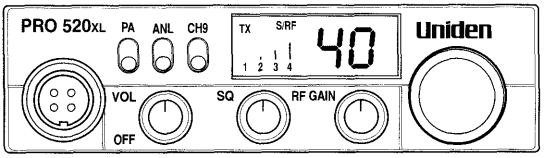
Elimination of Licensing

The FCC has ruled that CB Radio Service operators are not required to obtain an FCC license to operate the CB equipment. The FCC also permits CB station operation without station identification.

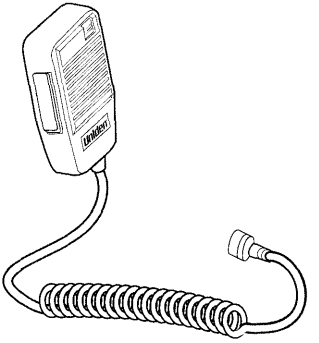
Elimination of individual station licenses results in no lessening of the operating privileges or responsibilities of CB users. An operator of an CB radio station is still required to comply with the Communications Act and with the rules of CB Radio Service.

INCLUDED IN YOUR PACKAGE

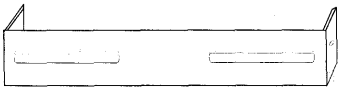
If any of these item are missing or damaged, immediately contact your place of purchase or Uniden Customer Service at: (800) 554-3988. 8:30 a.m. to 5:00 p.m., Central Time, Monday through Friday.



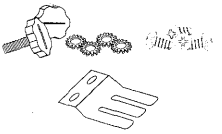
CB Radio



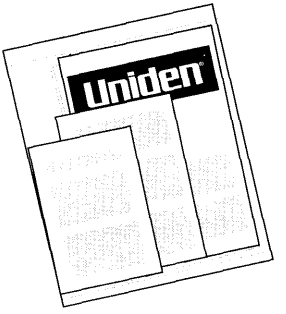
Microphone



Mounting Bracket



Mounting Hardware



Other Printed Material

Antenna must be purchased separately.

1. **PA Switch** - Select the Public Address mode when an external PA speaker is connected. When the PA mode is selected, the CB radio will be disabled. Adjust the PA output level by rotating the volume control.

2. **ANL Switch** - You can select the Automatic Noise Limiter to help reduce harsh background noise caused by a variety of interference sources.

3. **Instant CH 9 Switch** - Use this switch to override the main channel selector and instantly tune to the emergency channel 9. Switch back to return to normal 40 channel operation.

4. **TX LED** - An LED lights to indicate when the radio is transmitting.

5. **S/RF Meter** - This LED meter shows the relative strength of the received signal or the RF output.

6. **Channel Indicator** - Displays the channel currently in use.

7. **Channel Selector** - 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 FCC for emergency communications involving the immediate safety of individuals or the immediate protection of property. Channel 9 also may be used to render assistance to a motorist. **This is a FCC rule and applies to all operators of CB radios.**

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

9. **Squelch** - The squelch control is used to eliminate background noise during the absence of a transmission. Turn the control fully counterclockwise, then slowly rotate it back clockwise until the 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."

10. **Volume Control** - Rotate clockwise to turn the radio on and to increase the volume.

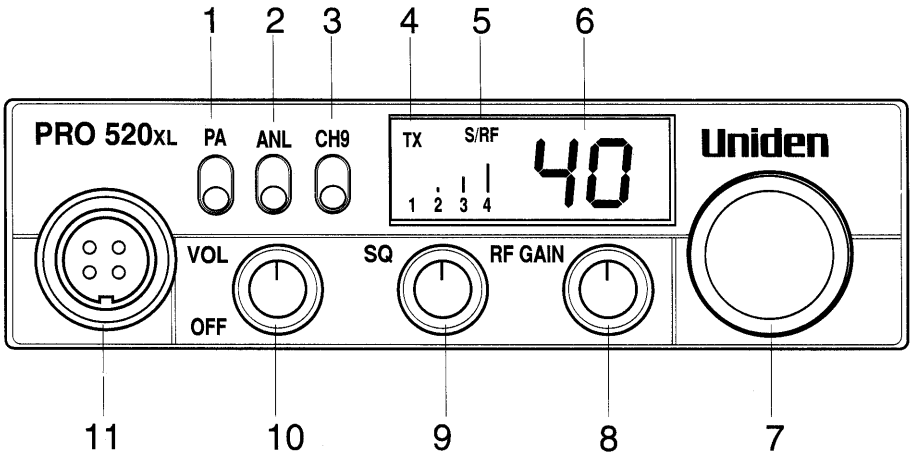
11. **Microphone Jack**- The operational mode of the CB is controlled by the push-to-talk switch on the microphone. Press the switch to activate the transmitter and disable the receiver. Release the switch to enable the receiver and disable the transmitter. When transmitting, hold the microphone about 2 inches from your mouth and speak clearly in a normal voice. The microphone included with the PRO 520XL is detachable electret type.

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

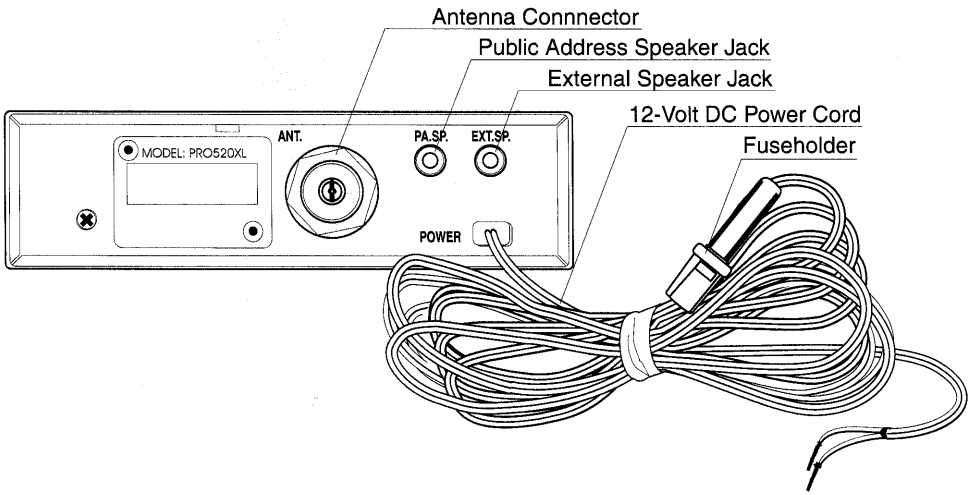
Public Address - An external 8 ohm 7-watt speaker must be connected to the "PA SP" jack located on the back of the unit. The speaker must be directed away from the mic to prevent feedback.

External Speaker - The external speaker 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.

D FUNCTIONS



FRONT VIEW



BACK VIEW

INSTALLATION

Plan the location of the radio and microphone bracket before starting installation. Select a location that is convenient for operation and does not interfere with the driver or passenger in the vehicle. The radio should be securely fastened to a solid surface using the mounting bracket and self-tapping screws which are provided.

Mobile Antenna

Since the maximum allowable power output of the transceiver is limited by the FCC, the antenna is a very important factor affecting the 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 520XL to channel 20 and make your adjustments to the antenna until the meter reads as close to 1 as possible. Your Uniden dealer is qualified to assist you in the selection of the proper antenna to meet your application requirements.

For automobile installation, the whip antenna may be used with good effect. The most efficient and practical installation is a full quarter wave whip antenna mounted on the rear deck or fender top, midway between the rear window and bumper.

A short "loaded" whip antenna maybe more convenient to install on your automobile, although the efficiency is less than a full quarter wave whip antenna.

For marine installation, consult your dealer for information regarding an adequate grounding system and prevention of electrolysis between fittings on the hull and water.

Connecting the Power Cord

With regard to the connection of the power cords, it may be possible or desirable to connect the red lead (for negative ground systems) or the black lead (for positive ground systems) to the ignition switch accessory terminal so that the radio is automatically turned off when the ignition switch (key) is turned off.

Alternately, the power lead may be connected to an available terminal on the fuse block or even to a point in the wiring harness. Care must be taken, however, to guard against a short circuit condition. When in doubt, please contact your vehicle dealer for specific information about your vehicle.

Ground Information

Most newer U.S. and foreign made cars and small trucks use a negative ground system, while some older cars and some newer larger trucks may use a positive ground system. A negative ground system is generally identified by the "-" battery terminal being connected to the vehicle motor block, but if you cannot determine the polarity of your vehicle, consult your vehicle dealer for information.

NOTE: This radio may be installed and used in any 12-volt DC negative or positive ground system.

Negative Ground System

If you are operating on a negative ground system, connect the red DC power cord from the radio to the positive "+" battery terminal or other convenient point and connect the black power lead to the chassis or vehicle frame, or the " -" terminal of the battery.

Positive Ground System

If you are operating on a positive ground system, connect the black DC power cord from the radio to the "-" battery terminal or other convenient point and connect the red power lead to the chassis or vehicle frame, or the positive "+" terminal of the battery.

OPERATION

Operating Procedure 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.

Operating Procedure to Transmit

1. Be sure the operator has read and understands part 95, FCC rules and regulations prior to operating the transmitter.

2. Select the desired channel for transmission.

3. 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 (VSWR) measurement must be performed prior to the use of the transmitter. A VSWR in excess of 2:1 may damage the transmitter. Please check your SWR reading frequently by using an SWR meter.

Preventative Maintenance

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

1. Check the Voltage Standing Wave Ratio (VSWR).
2. Inspect all electrical connections.
3. Inspect antenna coaxial cable for wear.
4. Inspect all screws and other mounting hardware.

Uniden PRO 520XL PRODUCT REGISTRATION CARD

Thank you for choosing a Uniden Personal Communications product. You have chosen one of the most sophisticated, technologically advanced electronic products available. Please fill out the requested information on this card so that we can better understand our customers and their needs. With this information we plan new products, advertising, and guide our customer service programs. Thanks for your help.

1. ❑ Mr. 2. ❑ Mrs. 3. ❑ Ms. 4. ❑ Miss

5. First Name 6. Initial 7. Last Name

8. Street 9. Apt. No.

10. City 11. State 12. Zip

13. Date of purchase: _____

14. Serial No. _____

15. Is this the first CB Radio you have purchased or received as a gift?

16. If NO, please specify brand and model number purchased.
- A. _____
- B. _____
- C. _____

17. Where did you purchase the product?
- ❑ Department Store
- ❑ Discount Store
- ❑ Catalog Showroom
- ❑ Electronics Specialty Store
- ❑ Internet
- ❑ Mail Order
- ❑ Gift
- ❑ Truck Stop

18. How did you become aware of this product?
- ❑ TV Advertisement
- ❑ Magazine Advertisement
- ❑ Newspaper Advertisement
- ❑ Store Display
- ❑ Friend's Recommendation
- ❑ Salesperson's Recommendation
- ❑ Previous Use

19. Please check two of the factors that most influenced your purchase of this product.
- ❑ Style or Appearance
- ❑ Price
- ❑ Uniden Reputation
- ❑ Warranty
- ❑ Previous Use
- ❑ Features
- ❑ Quality

20. Please check your age category
- ❑ Under 20
- ❑ 20-25
- ❑ 26-30
- ❑ 31-35
- ❑ 36-40
- ❑ 41-45
- ❑ 46-50
- ❑ 51-55
- ❑ 56-60
- ❑ 61-65
- ❑ 66 & over

21. Occupation
- ❑ Homemaker
- ❑ Teacher/Educator
- ❑ Professional Driver
- ❑ Executive/Administrator
- ❑ Civil Servant
- ❑ Sales/Marketing
- ❑ Clerical
- ❑ Farmer/Agriculture
- ❑ Military
- ❑ Technical/Professional
- ❑ Business/Professional
- ❑ Craftsman
- ❑ Machine Operator/Laborer
- ❑ Retired
- ❑ Student

22. Please check your approximate family income.
- ❑ Under $10,000
- ❑ $10,000 - 19,999
- ❑ $20,000 - 29,999
- ❑ $30,000 - 39,999
- ❑ $40,000 - 49,999
- ❑ $50,000 - 59,999
- ❑ $60,000 & Over

SPECIFICATIONS

Channels:	40 AM
Frequency Range:	26.965 to 27.405 MHz
Frequency Control:	Phase Locked Loop (PLL) synthesizer
Frequency Tolerance:	±0.005%
Operating Temperature:	-30ºC to +50ºC
Microphone:	Plug in type: dynamic
Input Voltage:	13.8 V DC nom. (+ or - ground)
Current Drain:	TX: full mod., 1.7A RX: with max. audio output, 1.7A
Size:	4-1/2" W x 6-3/4" D x 1-3/8" H
Weight:	1 lb. 10 oz.
Antenna Connector:	UHF, SO-239
LED Meter:	Indicates relative RF output and received signal strength

TRANSMITTER

Power Output:	4 Watts
Modulation:	Class B amplitude modulation
Freq. Response:	300-2500 Hz
Output Impedance:	50 ohms, unbalanced

RECEIVER

Sensitivity:	0.5µV for 10 dB; (S + N) /N typical (limit: 1.0µV)
Selectivity:	6 dB @ 7kHz, 70 dB @ 10kHz typical
Image Rejection:	80 dB typical
I.F. Frequency:	Double Conversion Superheterodyne 1st 10.692 MHz 2nd 450 kHz
RF Gain Control:	Adjustable for optimum reception
Automatic Gain Control:	(AGC): less than 10dB change in audio output for inputs from 10 to 50,000 microvolts
Squelch:	Adjustable; threshold less than1µV
Audio Output Power:	7 watts max. into 8 ohms
Freq. Response:	300 to 2000 Hz
Distortion:	less than 10% at 4 watts, 1000Hz
Internal Speaker:	16 ohms, 3 watts round
External Speaker:	(not supplied) 8 ohms
PA System:	7 watts in external 8 ohm speaker

Specifications and features are subject to change without notice.

TROUBLESHOOTING

If your PRO 520XL is not performing to your expectations, please try these simple steps. If you still cannot get satisfactory results after reading this manual and following the troubleshooting steps, please call the Uniden Customer Service Center at: 1-800-297-1023 7:00 a.m. to 7:00 p.m. Central Time, Monday through Friday.

If you determine that service is necessary, contact your local dealer or pack the unit in its original carton and send it along with a brief concise description of the problem, your name, address, phone number, and a copy of the original purchase receipt to the address listed in the warranty.

TROUBLE	*CHECK*
Unit will not turn on. No power.	1. Check power cord and all connections. 2. Check power cord fuse. 3. Check vehicle electrical system.
Poor reception	1. Check and adjust squelch. 2. Check antenna system, cable and connectors. 3. Check operation mode of the radio.
Weak transmission	1. Check antenna system, cable and connectors. 2. Check antenna grounding. 3. Check for corrosion on connectors.

Servicing Your CB

Technical information, diagrams and charts will be provided upon request. It is the user's responsibility to see that this radio is operating at all times in accordance with the FCC Citizens Radio Service regulations. We highly recommend that you consult a qualified radiotelephone technician for service and alignment of this radio. When ordering parts, it is important to specify the correct model number of this radio.

Please refer to the warning information on the first page of this manual.

TWO YEAR WARRANTY

WARRANTOR: UNIDEN AMERICA CORPORATION ("Uniden")

ELEMENTS OF WARRANTY: Uniden warrants, for two years, to the original retail owner, this Uniden Product to be free from defects in materials and craftsmanship with only the limitations or exclusions set out below.

WARRANTY DURATION: This warranty to the original user shall terminate and be of no further effect 24 months after the date of original retail sale. The warranty is invalid if the Product is (A) damaged or not maintained as reasonable or necessary, (B) modified, altered, or used as part of any conversion kits, subassemblies, or any configurations not sold by Uniden, (C) improperly installed, (D) serviced or repaired by someone other than an authorized Uniden service center for a defect or malfunction covered by this warranty, (E) used in any conjunction with equipment or parts or as part of any system not manufactured by Uniden, or (F) installed or programmed by anyone other than as detailed by the owner's manual for this product.

STATEMENT OF REMEDY: In the event that the product does not conform to this warranty at any time while this warranty is in effect, warrantor will either, at its option, repair or replace the defective unit and return it to you without charge for parts, service, or any other cost (except shipping and handling) incurred by warrantor or its representatives in connection with the performance of this warranty. Warrantor, at its option, may replace the unit with a new or refurbished unit. THE LIMITED WARRANTY SET FORTH ABOVE IS THE SOLE AND ENTIRE WARRANTY PERTAINING TO THE PRODUCT AND IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES OF ANY NATURE WHATSOEVER, WHETHER EXPRESS, IMPLIED OR ARISING BY OPERATION OF LAW, INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY DOES NOT COVER OR PROVIDE FOR THE REIMBURSEMENT OR PAYMENT OF INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow this exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

LEGAL REMEDIES: This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. This warranty is void outside the United States of America.

PROCEDURE FOR OBTAINING PERFORMANCE OF WARRANTY: If, after following the instructions in the owner's manual you are certain that the Product is defective, pack the Product carefully (preferably in its original packaging). The Product should include all parts and accessories originally packaged with the Product. Include evidence of original purchase and a note describing the defect that has caused you to return it. The product should be shipped freight prepaid, by traceable means, to warrantor at:

Uniden America Corporation
Parts and Service Division
4700 Amon Carter Blvd
Fort Worth, TX 76155
(800) 554-3988,
8:30 a.m. to 5 p.m., Central Time,
Monday through Friday

PLACE
FIRST CLASS
STAMP
HERE

Uniden®

PO BOX 8283
Denver, CO 80201-8283

ATTN: PC MARKET RESEARCH DEPARTMENT

Please do not send any products or service related correspondence to this address.

Please fold here

23. What type of credit cards do you use?

- ❑ American Express, Diners Club, Carte Blanche
- ❑ Bank Card (Master Card, Visa, etc.)
- ❑ Gasoline Card. Name_____
- ❑ Department Store Cards
- ❑ None of the above

24. What type of car(s) do you drive?

- ❑ Compact
- ❑ Mid Size
- ❑ Sports
- ❑ Full Size
- ❑ Station Wagon
- ❑ Van
- ❑ Recreation Vehicle
- ❑ Specialty
- ❑ Motor Cycle
- ❑ Pick Up

21. What magazine(s) do you read?

- ❑ Road & Track
- ❑ Car & Driver
- ❑ Motor Trend
- ❑ Auto Week
- ❑ Road Star
- ❑ Road King
- ❑ Trucker News
- ❑ Sports Illustrated
- ❑ People
- ❑ Time
- ❑ Newsweek
- ❑ Popular Science
- ❑ Popular Mechanics
- ❑ Consumer Reports

Thank you for taking the time to complete this questionnaire. If you have any other comments or suggestions please write to:

Uniden America Corporation
Product Development Dept.
4700 Amon Carter Boulevard
Fort Worth, TX 76155

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INSTRUCTIONS: Fill out both sides of card, Cut out on dashed line.
Fold on dotted line. Fold over flap and seal with glue or paste.
Affix postage and mail.

Please fold here