How to Use Your Cobra 18WXST II

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Features of This Product

- 40 CB Radio Channels
- 10 Weather Channels
- Soundtracker[™]System
- Instant Channel 19 and 9
- 40 Channel Scan
- Dual Watch
- Front Firing Speaker
- Channel Saver Circuitry
- Dynamic Microphone
- 9 Foot Mic Cord
- Front Panel Microphone Connector

Installation

Mounting and Connections

Note

The transceiver is held in the universal mounting bracket by two thumb screws, permitting adjustment at the most convenient angle.

A universal mounting bracket is supplied along with self tapping screws and star washers. To mount the transceiver:

Mounting and Connections

Select a location for the transceiver and microphone bracket that is convenient for operation. In automobiles, the transceiver is usually mounted to the underneath of the dash panel, with the microphone bracket beside it.

Hold the radio with mounting bracket in the exact location desired. Remove the mounting bracket and use it as a template to mark the location for the mounting screws.



- 2 Drill necessary holes and secure mounting bracket in location.
- 3 Connect the antenna cable plug to the receptacle marked "ANT" on the back of the unit.



Installation



- Connect the orange lead to a constant 12v fuse (ie: cigarette lighter or direct to battery)
- Connect the black lead to the negative side of the automobile. This is usually the chassis. Any convenient location with good electrical contact (remove paint) may be used.



- Mount the microphone bracket on right side of the transceiver or near it using two screws supplied. When mounting in an automobile, place the bracket under the dash so the microphone is readily accessible.
- Attach the 4-pin microphone cable to receptacle on front of unit and install unit in bracketsecurely.



Mounting and Connections

Note

Before installing the CB radio, visually check the vehicle battery connections to determine which battery terminal, positive or negative (positive is the larger of the two) is grounded to the engine block (or chassis).

Turning on Your Radio

CB Antenna

Note

Cobra loaded-type antenna models HGA 1000, HGA 1500, and HGA 2000 are highly recommended for most installations. Consult your Cobra dealer for further details (or see order form at the back of this book).

3-Way Combination Antennas are available which allow operation of all three bands (AM-FM & CB), using a single antenna. However, use of this type of antenna usually results in less than normal transmit and receive range when compared to a standard-type "Single Band" antenna designed for CB only.

Turning on

Turn volume control clockwise to turn power on and set the desired listening volume.



CB Antenna

Only a properly matched antenna system will allow maximum power output.

In mobile installations (cars, trucks, boats, etc.), an antenna system that is non-directional should be used.

When installed in a boat, the transceiver will not operate at maximum efficiency without a ground plate unless the vessel has a steel hull. Before installing the transceiver in a boat, consult your dealer for information regarding an adequate grounding system.

Microphone Connector

Allows for convenient removal of the microphone plug when storage is required. The microphone MUST be connected to the unit at all times when in use, for proper operation.



Microphone Connector



Squelch

Squelch

This control is used to cut off or eliminate receiver background noise in the absence of an incoming signal. Adjust until the receiver noise disappears. This will require the incoming signal to be slightly stronger than average receiver noise. Further clockwise rotation will increase the threshold level which a signal must overcome in order to be heard. Only strong signals will be heard at a maximum clockwise setting.



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Setting Squelch

Gate closed

STRONG SIGNALS	
MEDIUM SIGNALS	Δ
	ш
	S
	0
WEAK SIGNALS	5
<u> </u>	F
NOISE	A
	6

Setting Squelch

Squelch is the "control gate" for incoming signals.

1. Full *clockwise* rotation closes the gate allowing only very strong signals to enter.



2. Full *counterclockwise* rotation opens the "gate" allowing all signals in.



Gate open



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3. To achieve the Desired Squelch Setting (DSS), turn the Squelch control *counterclockwise* until you hear noise. Now turn the control *clockwise* just until the noise stops. This is the DSS setting.



Gate set to Desired Squelch Setting (DSS)

STRONG SIGNALS MEDIUM SIGNALS WEAK SIGNALS		
MEDIUM SIGNALS	STRONG SIGNALS	
WEAK SIGNALS		
WEAK SIGNALS		
WEAK SIGNALS		
	MEDIUM SIGNALS	
	WEAK SIGNALS	
		ш
NOISE	<u>CASES CONTRACTORS</u>	
	NOISE	A
		5

Channel Selection

Channel 9/ Channel 19

CB Weather

Set CB or WX Mode

Set on CB mode. Rotate channel knob clockwise until desired channel is displayed.



Channel 9/Channel 19

Press CH 9/19 to obtain instant access to emergency channel 9. Press again for information CH 19.



CB/Weather

CB mode is for normal CB operation. Press CB/Weather again and select active Weather channel in your area.



Dual Watch

This features allows the user to scan between two selected channels.

1. Select first channel, CB mode.



- **2.** Press and hold DW until LED begins flashing and beeps once.
- Select second channel. Press DW until LED lights steady and radio beeps twice. Two channels are now stored in DW memory.

Scan

Press and release SCAN button to activate CB scan mode. If the radio is squelched, radio begins to scan.



When scan is interrupted by a signal, scan stops and holds until loss of signal. Press PTT on mic to stop scan function. Press Scan to restart CB scan.

Dual Watch

Note

The radio needs to be squelched before DW can monitor both channels.

Scan Note

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On some channels squelch setting might have to be re-set.

Soundtracker System



The SoundTracker System reduces noise while leaving the signal intact in the reception mode. In the transmission mode, it strengthens the signal, providing you with a significant reduction in noise on reception and transmission.

How SoundTracker works

On Reception–*"Cuts Noise Coming In"*

With a normal CB, distant signals fall below the squelch level and are unintelligible. With a SoundTracker CB, the noise level is cut by up to 90%, which increases the signal-to-noise ratio and dramatically improves signal clarity. This also allows you to significantly reduce the squelch level, which greatly expands your listening range.



On Transmission–"Strengthens Signals Going Out" A SoundTracker CB strengthens the transmit signal by more effectively using the available RF power output of the CB. The result is improved transmission signal clarity and an expanded transmission range.



Activating Soundtracker

1. Press the SoundTracker button on the upper left side of front panel. A red indicator will illuminate when the SoundTracker system is engaged.

Activating Soundtracker



S/RF PowerMeter

RX/TX Indicator LED

S/RF Power Meter

Shows relative transmitter RF output power and input signal strength when receiving. The LED (Light Emitting Diode) segments glow green to amber to red...this indicates receive or transmit activity.



RX/TX Indicator LED

RX indicator will light when in the receive mode. TX indicator lights when in transmit mode.



When weather channel is selected, WX indicator is illuminated, and the channel is displayed.

Rear Panel

Antenna Connector. This female connector permits connection of the transmission line cable male connector to the transceiver.



External Speaker. The External Speaker Jack is used for an external speaker. The external speaker er should have 8-ohm impedance and be rated to handle at least 4.0 watts. When the external speaker is plugged in, the internal speaker is automatically disconnected.

Power: This cable is permanently attached to the radio. If you wish to remove the radio after installation, disconnect at fuse holder and ground connector.

Antenna Connector

External Speaker

Note

Cobra external speakers are rated 15 watts

Power

Ignition Noise Interference

Note

When using the unit with cigarette adapter, turn off when not in use to avoid draining the battery.

Temporary Mobile Operation

Note

Red and Orange wires are connected to positive side of socket center tip. Black wire is connected to negative side contacts.

Note

Radio resets to CH 9 when connected to cigarette lighter plug.

Ignition Noise Interference

Use of a mobile receiver at low signal levels is normally limited by the presence of electrical noise. Under most operating conditions, when signal level is adequate, the background noise does not present a serious problem. Also, when extremely low level signals are being received, the transceiver may be operated with vehicle engine turned off. The unit requires very little current and therefore will not significantly discharge the vehicle battery.

Even though this radio has an automatic noise limiter, in some installations ignition interference may be high enough to make good communications impossible. Consult your COBRA dealer or a 2-way radio technician for help in locating and correcting the source of severe noise.

Temporary Mobile Operation

For temporary mobile operation, you may want to purchase an additional cigarette lighter adapter from your COBRA dealer. This adapter and a magnetic mount antenna allow you to quickly "install" your transceiver for temporary use.



Operating Procedure to Receive

- 1. Be sure that power cord, antenna and microphone are connected to the proper connectors before proceeding further. The weather switch should be in the "CB" position.
- 2. Turn the radio ON by rotating the VOLUME CONTROL clockwise.
- **3.** Rotate SQUELCH CONTROL counterclockwise until incoming signal is heard.
- 4. Select the desired channel.
- 5. Set VOLUME CONTROL to a comfortable listening level.
- 6. Engage the SoundTracker system by depressing the button labeled ST.

Listen to the background noise from the speaker. Turn the SQUELCH CON-TROL slowly clockwise until the noise JUST disappears (no signal should be present). Leave the control at this setting. The squelch is now properly adjusted. The receiver will remain quiet until a signal is actually received. Do not advance the control too far, or some of the weaker signals will not be heard. The revolutionary SoundTracker system allows you to reduce unwanted background noise (static) and increase the signal for better reception.

Operating Procedure to Transmit

- 1. Select the desired channel.
- **2.** The receiver and transmitter are controlled by the press-to-talk switch on the microphone. Press the switch and the transmitter is activated; release switch to receive. When transmitting (on a clear channel), hold the microphone two inches from the mouth and speak clearly in a normal voice.

Be sure the antenna is properly connected to the radio before transmitting. Prolonged transmitting without an antenna, or a poorly matched antenna, could cause damage to the transmitter.

Maintenance

Maintenance/ Adjustment

Maintenance and Adjustment

Your COBRA CB transceiver is specifically designed for the environment encountered in mobile installations. The use of all solid state circuitry and its light weight result in high reliability. Should a failure occur, however, review the following, then if necessary, replace parts only with identical parts. Do not substitute.

- Check connections to the source of power and make sure it is the 13.8 VDC required to operate your radio.
- 2. Check the fuses in the DC power cord. The main power lead (red & orange wire) has a 2 amp 3AG type fuse in its holder. Use only the above specified type and size fuse for maximum protection. Failure to do so, will void the warranty.
- 3. Make certain the microphone is properly plugged in.
- 4. Make certain the antenna is properly assembled and connected.

If you are unable to correct the problem, refer to the SERVICE INSTRUCTIONS at the end of this manual for the correct procedure for warranty and post-warranty service from COBRA.

Warning

Replacement Warning

Replacement or substitution of certain parts with replacements other than those recommended by Cobra may be a violation of the technical regulations of Part 95 of the FCC rules, or of Type Acceptance requirements of Part 2 of said rules.

When making adjustments, be sure to re-read applicable portions of this instruction manual to make certain you are following correct procedure and that the radio was properly installed, etc.

A Few Rules That Should Be Obeyed

- 1. You are not allowed to carry on a conversation with another station for more than five minutes at a time without taking a one-minute break to give others a chance to use the channel.
- 2. You are not allowed to blast others off the air by overpowering them with illegally amplified transmitter power or illegally high antennas.
- 3. You can't use CB to promote illegal activities.
- 4. You are not allowed to use profanity.
- 5. You may not play music in your CB.
- 6. You may not use your CB to sell merchandise or professional service.

Use Channel 9 For Emergency Messages Only

The FCC gives the following examples of permitted and prohibited types of communications for use on Channel 9. These are guidelines and are not intended to be all-inclusive.

Permitted: "A tornado sighted six miles of town." **Not Permitted :** "This is observation post number 10. No tornado sighted." A Few Rules You Should Know

Channel 9 Emergency Messages

Frequency Ranges

Accessories

The COBRA 18 WX ST II transceiver represents one of the most advanced AM two-way radios used as a Class D station in the Citizens Radio Service. This unit features advanced Phase Lock Loop (PLL) circuitry providing complete coverage of all 40 CB channels and all 10 weather channels as shown below.

CB Channel	Channel Freq. In MHz	CB Channel	Channel Freq. In MHz	Weather Channel	Weather Freq. In MHz
1 2 3 4 5	26.965 26.975 26.985 27.005 27.015	21 22 23 24 25	27.215 27.225 27.255 27.235 27.245	1 2 3 4 5	162.550 162.400 162.475 162.425 162.450
6 7 8 9 10	27.025 27.035 27.055 27.065 27.075	26 27 28 29 30	27.265 27.275 27.285 27.295 27.305	6 7 8 9 10	162.500 162.525 161.650 161.775 163.275
11 12 13 14 15	27.085 27.105 27.115 27.125 27.135	31 32 33 34 35	27.315 27.325 27.335 27.345 27.355		
16 17 18 19 20	27.155 27.165 27.175 27.185 27.205	36 37 38 39 40	27.365 27.375 27.385 27.395 27.405		

Specifications

Specifications

GENERAL

TRANSMITTER

POWER OUTPUT	4 WATTS
MODULATION	AM (AMPLITUDE MODULATION)
FREQUENCY RESPONSE	300 TO 3000 HZ
OUTPUT IMPEDANCE	50 OHMS, UNBALANCED

RECEIVER

SENSITIVITY	.LESS THAN 1 µV FOR 10dB (S+N)
SELECTIVITY	.6 dB @ 7 KHZ, 60 DB @ 10KHZ
IMAGE REJECTION	.60 dB, TYPICAL
ADJACENT-CHANNEL REJECTION	.50 dB, TYPICAL
ATOMATIC NOISE LIMITER	.BUILT-IN
ATOMATIC NOISE LIMITER	.BUILT-IN

WEATHER

SENSITIVITY	LESS THAN 1 µV FOR 12 dB SINAD
IF-FREQUENCY	
AUDIO OUTPUT	MAXIMUM 1 W AT 10% DISTORTION
FREQUENCY RESPONSE	300 – 3000 HZ AT -6 dB

Accessories

You can find quality Cobra products and accessories at your local Cobra dealer, or in the U.S.A., you can order directly from Cobra. See ordering info on page 22.



Replacement Microphone Bracket

741-080-9-001

\$0.45



 Replacement Mounting

 Bracket

 251-199-9-001
 \$4.50



Replacement Thumb Screws

634-081-9-001 \$0.60



4 Pin Premium Noise-Cancelling Microphone

HG M84



4 Pin Premium Noise-Cancelling Microphone \$74.95 Wood Grain HG M84W \$



5 Pin Premium Noise-Cancelling Microphone

\$74.95



4-Pin Replacement Dynamic Microphone

HG M73

namic 4-Pin No Microph \$19.95 HG M77

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4-Pin Power Microphone

\$30.95 HG M75

\$74.95

\$25.95

Accessories



21" Base Loaded Magnet Mount Antenna HG A1000 \$28

\$28.95



38" Base Loaded Magnet Mount Antenna HG A1500 \$46.95



54" Base Loaded Magnet Mount Antenna HG A2000 \$99.95



Dynamic External Speaker HG \$100 \$21.95



Noise Canceling External Speaker HG S300 \$28.95



Dynamic Noise Canceling With Talk Back External Speaker HG S500 \$32.95

Fiberglass Whip Replacement Antenna

3 Foot HG A300
 \$28.95

 Black, Red, White, Gold
 4 Foot HG A400
 \$29.95

 Black, Red, White
 4 1/2 Foot HG A450
 \$30.95

 Black, Red, White, Gold
 *30.95

62" Center-Load Replacement Antenna

HG A6000 \$89.95 Black/Clear, Black, Red, White, Gold

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Accessories Order Info

Ordering From U.S.A.

Call 773-889-3087 for pricing or visit www.cobra.com.

For Credit Card Orders

Call 773-889-3087 [Press one from the main menu] 8:00 a.m. to 6:00 p.m. Central Time, Monday through Friday.

Make Check or Money Order Payable To

Cobra Electronics, Attn: Accessories Dept., 6500 West Cortland Street, Chicago, IL 60707 U.S.A.

To Order Online

Please visit our website: www.cobra.com

ltem #	Description
251-199-9-001	Replacement Mounting Bracket
634-081-9-001	Replacement Thumb Screws
741-080-9-001	Replacement Microphone Bracket
HG A1000	21"Base Loaded Magnetic Mount Antenna
HG A1500	38"Base Loaded Magnetic Mount Antenna
HG A2000	54"Base Loaded Magnetic Mount Antenna
HG M84	4 Pin Premium Noise-Cancelling Microphone
HG M84W	4 Pin Premium Noise-Cancelling Mic Wood gr
HG M85	5 Pin Premium Noise-Cancelling Microphone
HG M73	Replacement Dynamic Microphone
HG M75	Power Microphone
HG M77	Noise Canceling/Power Microphone
HG \$100	Dynamic External Speaker
HG \$300	Noise Canceling External Speaker
HG \$500	Dynamic Noise Canceling
	With Talk Back External Speaker
HG A300	Fiberglass Whip Replacement Antenna
	Black, Red, White, Gold
HG A400	Fiberglass Whip Replacement Antenna
	Black, Red, White, Gold
HG A450	Fiberglass Whip Replacement Antenna
	Black, Red, White, Gold
HG A6000	62" Center-Load Replacement Antenna
	Black/Clear, Black, Red, White, Gold



Limited Two Year Warranty

Limited Warranty

COBRA ELECTRONICS CORPORATION warrants that its COBRA CB Transceiver, and the component parts thereof, will be free of defects in material and workmanship for a period of two (2) years from the date of consumer purchase. This warranty may be enforced by the first consumer purchaser, provided that the product is utilized within the U.S.A.

COBRA will, without charge, repair or replace, at its option, a defective CB Transceiver upon delivery to the COBRA factory Service Department, accompanied by proof of the date of first consumer purchase, such a duplicated sales receipt.

You must pay initial shipping charges required to ship the product for warranty service, but the return charges will be at COBRA'S expense, if the product is repaired or replaced under warranty.

Exclusions: This limited warranty does not apply; 1) to any product damaged by accident; 2) in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs; 3) if the serial number has been altered, defaced or removed; 4) if the owner of the product resides outside the U.S.A.

All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty.

COBRA shall not be liable for any incidental, consequential or other damages; including, without limitation, damages resulting from loss of use or cost of installation.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

Cobra®, HighGear®, SoundTracker®, Nothing Comes Close to a Cobra® and the snake design are registered trademarks of Cobra Electronics Corporation, USA. Cobra Electronics Corporation™ is a trademark of Cobra Electronics Corporation, USA.



Cobra Electronics Corporation

6500 West Cortland Street Chicago, Illinois 60707 USA The Cobra line of quality products also includes:

- CB Radios
- microTALK[®] Radios
- Radar/Laser Detectors
- Safety Alert[®] Traffic Warning Systems
- Handheld GPS Receivers
- Mobile GPS Navigation Systems
- HighGear® Accessories
- CobraMarine® VHF Radios
- CobraMarine® Chartplotters
- Power Inverters
- Accessories

Nothing Comes Close to a Cobra[®]



Cobra Electronics Corporation 6500 West Cortland Street Chicago, IL 60707 USA

If You Think You Need Service

For technical assistance, please call our Automated Help Desk which can assist you by answering the most frequently asked questions about Cobra products.

(773) 889-3087

24 hours a day, 7 days a week.

A Consumer Service Representative can be reached through this same number 8:00 am - 6:00 pm, Monday through Friday, Central Time. Technical assistance is also available on-line in the Frequently Asked Questions (FAQ) section at www.cobra.com or by e-mail to productinfo@cobra.com

If you think you need service call 1.773.889.3087

If your product should require factory service please call Cobra first before sending in your unit. This will ensure the fastest turn-around time on your repair.

You may be asked to send your unit to the Cobra factory. It will be necessary to furnish the following in order to have the product serviced and returned.

- 1. For Warranty Repair include some form of proof-of-purchase, such as a mechanical reproduction or carbon of a sales receipt. If you send the original receipt it cannot be returned.
- 2. Send the entire product.
- 3. Enclose a description of what is happening with the unit. Include a typed or clearly print name and address of where the unit is to be returned.
- 4. Pack unit securely to prevent damage in transit. If possible, use the original packing material.
- Ship prepaid and insured by way of a traceable carrier such as United Parcel Service (UPS) or First Class Mail to avoid loss in transit to: Cobra Factory Service, Cobra Electronics Corporation, 6500 W. Cortland St., Chicago, IL 60707.
- 6. If the unit is in warranty, upon receipt of your unit it will either be repaired or exchanged depending on the model. Please allow approximately 3 to 4 weeks before contacting us for status. If the unit is out of warranty a letter will automatically be sent informing you of the repair charge or replacement charge. If you have any questions, please call 1.773.889.3087 for assistance.

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Operating Instructions for your

Scobra[°] 18 WX ST II Mobile Radio



The Citizens Band Story











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The Citizens Band lies between the shortwave broadcast and 10-meter Amateur radio bands, and was established by law in 1949. The Class D two-way communications service was opened in 1959. (CB also includes a Class A citizens band and Class C remote control frequencies.)

FCC Regulations

FCC regulations permit only "transmissions" (one-party to another) rather than" broadcast" (to a wide audience). Thus, advertising is not allowed on CB channels because that is "broadcasting".

FCC Warnings

All transmitter adjustments other than those supplied by the manufacturer as front panel operating controls, must be made by, or under the supervision of, the holder of an FCC-issued general Radio-Telephone Operator's License.

Replacement or substitution of transistors, regular diodes or other parts of a unique nature, with parts other than those recommended by Cobra, 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.

You should read and understand Part 95 (included with this unit) of the FCC Rules and Regulations, before operating your Cobra radio, even though the FCC no longer requires you to obtain an operator's license.

What's included with your CB Radio:

- 1. CB transceiver
- 2. Microphone
- 3. Transceiver bracket
- 4. Microphone bracket
- 5. Operating Manual

6. FCC rules (not pictured)



Controls and Indicators

Microphone Connector.
 Off/On/Volume.
 Squelch.
 Channel 9/Channel 19
 CB/Weather
 Channel Selector Button.
 LED Channel Display.
 S/RF Power Meter.
 WX Indicator LED.
 TX Indicator LED.
 TX Indicator LED.
 Scan Button.
 SoundTracker™ Button.
 Dual Watch Button.
 Microphone

Back Side

- 16. Antenna Connector
- 17. External Speaker Connector
- 18. Power Cord







Our Thanks to You

Thank you for purchasing the Cobra 18 WX ST II CB Radio Transceiver. Properly used, this Cobra product will give you many years of reliable service.



"Cuts Static coming in, adds Punch going out!"

Technology that dramatically improves the transmission and reception of CB radio signals.

The revolutionary SoundTracker[™] System reconfigures the transmission signal which allows it to be transferred more effectively through cluttered airwaves.

At the same time, it significantly reduces the amount of static on all incoming CB signals.

The end result is a clearer, cleaner sounding reception of signals and a more powerful transmission which dramatically improve CB communications.

Customer Support

Should you encounter any problems with this product, or not understand its many features, please refer to this owner's manual. If, after referring to the manual, you still need help, call Cobra Customer Service at 773.889.3087.

Cobra Customer Service

Live operators are available M-F 8:00 am – 6:00 pm Central Time at 773.889.3087 Automated Technical Assistance available 24 hours a day, seven days a week. E-mail questions to: productinfo@cobra.com

Cobra on the World Wide Web: Frequently Asked Questions (FAQ) can be found at: www.cobra.com