&Cobra®

Cobra Electronics Corporation 6500 West Cortland Street Chicago, IL60707

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 da y, 7 days a week.

A Consumer Service Representative can be reached through this same number 8:00 am - 8:00 pm, Monday through F riday, CST.

Technical assistance is also a vailable on-line in the Frequently Asked Questions (F AQ) section a t www.cobraelec.com or by e-mail to productinfo@cobraelec.com

If you think you need service call 1.773.889.3087

"If your product should require fatory service please call Cobra first before sending your unit in. 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 or 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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Part No. 480-270-P-001

SCobra HH37 ST

Operating Instructions for your Cobra HH 37 ST

Citizens Band 2-Way Handheld CB Radio



The CB Story

The Citizens Band lies between the shortwave broadcast and 10-meter Amateur radio bands and was established by law in 1949. The Class D twoway communications service was opened in 1959.

FCC Regulations

FCC regulations permit only "transmissions" (one party to another) rather than "broadcasts" (to a wide audience). Advertising is not allowed on CB Channels because it is considered "broadcasting."

FCC Warnings

Replacement or substitution of transistors, regular diodes or other parts of a unique nature, with parts other than those recommended by Cobra, may cause a violation of the technical regulations of Part 95 of the FCC Rules, or violation of Type Acceptance requirements of Part 2 of the Rules.

Citizens Band (CB) Radio operators are not required to obtain an FCC license to operate their CB equipment or provide station identification.

Nevertheless, an operator of a CB radio station is still required to comply with the communic ations act and with the rules of CB Radio Operation.

What's Included with Your HH 37 ST

- 1 High Efficiency Antenna
- 2 Removable Belt Clip
- 3. Wrist Strap
- 4 12 Volt Cigarette Lighter Plug

A1

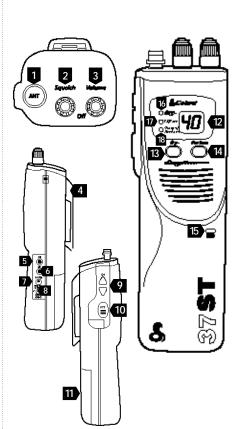


"Ingenious Products for Easier Communication."

Controls and Indicators

Our Thanks to You

- 1. BNC Antenna Connector
- 2. Squelch Control
- 3. On/Off Volume Control
- 4. Removable Belt Clip
- 5. External Speaker Jack
- 6. External Microphone Jack 7. 12 Volt DC Power Jack
- 8. NiCad Battery Charge Jack
- 9. Channel Up/Down Key
- 10. PTT (Push To Talk) Key
- 11. Battery Chamber
- 12. LED Channel Display
- SoundTracker™ Key
- 14. Power Save Key
- 15. Microphone
- **16.** SoundTracker™ LED
- 17. TX (transmit)/ Batt (battery low) LED
- 18. Battery Charge/ Power Save LED



Thank you for purchasing the Cobra HH 37 ST handheld CB. Properly used, this Cobra product will give you many years of reliable service.

SoundTracker™

"Cuts noise coming in...strengthens signals going out."

This Patent pending technology dramatically improves transmission and reception of CB signals.

The revolutionary SoundTracker™ System reconfigures the transmission signal which allows it to be transferred more efficiently through cluttered

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

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

Customer Support

Should you encounter any problems with the 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 Serviæ

Live operators are available M-F 8:00 am - 8:00 pm CST at: 773.889.3087

Automated Technical Assistance available 24 hours a day, seven days a week.E-mail questions to: productinfo@cobraelec.com

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





How to Use Your Cobra HH 37 ST

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Features of This Product

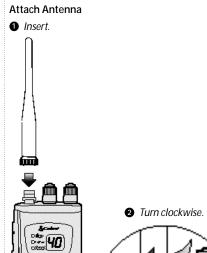
- SoundTracker[™] System
- 40 CB Channels
- Full 4 Watt RF Power
- Power Saver (HI/LOW)
- LED Channel Display
- · High Efficiency Flexible Antenna
- External Speaker/
 Microphone Jack
- NiCad Battery Charge Jack
- TX Transmit Indicator
- Omni Directional Microphone



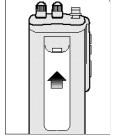
Operation

Operation

Attach Antenna



Attach Belt Clip



tab locks.



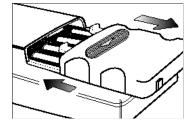
 Slide belt clip up on rails of base until
 To remove belt clip, lift tab out and slide lift tab out and slide belt clip down.

Attach Belt Clip

Note

Clip slides up to attach and slides down to remove.





- Remove battery chamber cover.
- 2 *Install* batteries by polarity markings.
- 3 Replace cover.

Battery Installation

Note

Ignoring polarity markings can cause damage to both the unit and the batteries.

The HH 37 ST requires 9'AA" alkaline or NiCad batteries (not included with the unit).

When batteries are low or need charging the TX/Batt LED will remain on. Replace alkaline batteries or recharge NiCad



878T



Operation

Operation

Turning On

Gate closed

NOISE TO THE STATE OF THE STATE

Turning On

Rotate ON - OFF Volume Control @ clockwise.



Setting Squelch

Setting Squelch Squelch is the "control gate" for incoming signals.



Turn volume up louder than normal.

4



2 Fully clockwise closes the "gate", allowing no incoming signals.

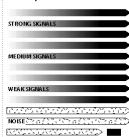


3 Fully counterclockwise opens the "gate" and all signals enter.



◆ 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 and only strong signals will enter.

Gate open



GATE OPEN

Gate set to Desired Squelch Setting (DSS)

	8898		39192	
STRONG SIGNALS			XIII	
	100	IIX	All	
MEDIU M SIGNALS	1982	1000	MILE	
			1	
	ŊQX.			
WEAK SIGNALS	1982	1100 II.		
0.050% 570.05	14	σ'n,	$\overline{\cdot \cdot \cdot}$	Н
NOISE	نم	n C		
<i>\{\alpha\}_\\\</i>		<u> 1,785</u>	>	v



Operation

Operation

Select Channel

Select Channel

1 Turn power ON.

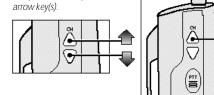
② For higher channel, push △ UP arrow key.

For lower Channel, push DOWN arrow key.

(FIII)

Note

For quick advance, push and hold



6

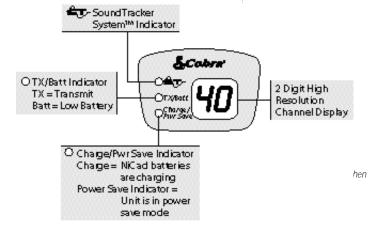
Note

When switching from one chan-nel to another, squelch will need to be reset. See Setting Squelch on page 4.

LED Display

All needed information is displayed.

LED Display



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Charge/Pwr Save Button

The Charge/Pwr Save LED will illuminate red when Power Save button is pushed or when charg-ing NiCad batteries with charger plugged in.



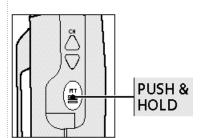
7



Operation

Transmit/Receive Transmit/Receive

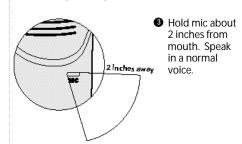
While PTT button is pressed you cannot receive transmissions.



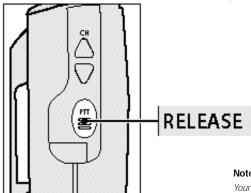
● To transmit, push and hold PTT button.



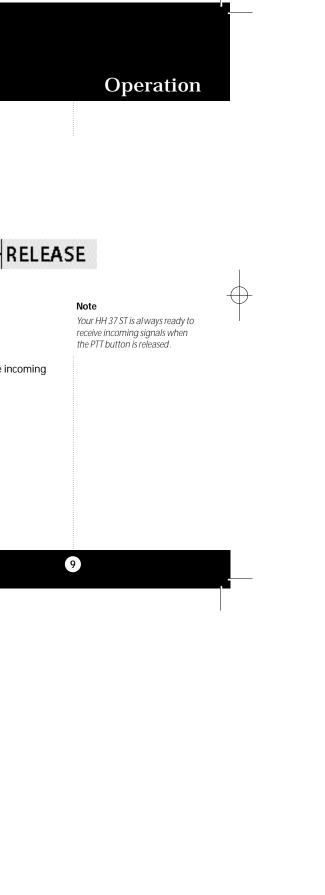
2 TX/Batt (transmit) will illuminate red.



8



• Release PTT button to receive incoming transmissions.



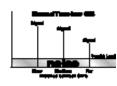
Operation

SOUND-T-RACKER

Noto

SoundTracker™ gives you clearer, cleaner reception to improve CB communications while on the air.





The SoundTracker™ System

While previous systems only "blanket out" or limit noise in higher sound frequencies, the revolutionary new SoundTracker System actually reduces noise while leaving the signal intact in the reception mode. In the transmission mode, it actually strengthens the signal, providing you with a significant reduction in noise on reception and transmission.

Sound clarity is measured by the ratio of the signal level to the noise level. The higher the signal-to-noise ratio, the better the sound.

How SoundTracker[™] Works

On Reception - "Cuts noise coming in"

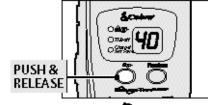
With a normal CB, distant signals fall below the squelch level and are unintelligible. With a SoundTracker™ CB, the noise level is cut up to 90%,which increases the signal-to-noise ratio and dramatically improves signal clarity. This also allows you to significantly reduce the squelch level,which greatly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

Operation

Activating SoundTracker™



Pushand release the ST key.



② The SoundTracker™ LED will illuminate red.

Activating SoundTracker™

Note

This engages the SoundTracker™ system and reduces the noise le vel.





Operation

Operation

Testing SoundTracker[™]

$Testing\ Sound Tracker^{\scriptscriptstyle{TM}}$



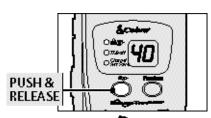
Select any unused channel on your CB.



Fully acounterclockwise opens the "gate" and all signals enter. Turn the knob until it stops.



3 *Turn* the volume up louder than your normal listening level.



4 Pushand release the ST button.

The SOUNDTracker™ LED will illuminate red. *Notice the significant reduction in noise.

⑤ To disengage SoundTracker™ *push and release* ST button again.



At times you may experience different levels of noise reduction. Different terrains and environments will effect the SoundTracker™ System's performance.





Operation

In Vehicle Use

Due to the characteristics of CB transmissions, it is neccesary to use an external car roof antenna and a BNC adapter to receive optimal performance while in your vehicle. See Accessories section on page 23.

DC/Power Cord is provided.

Power Saver-HI/LOW

Note

Battery life is increased approxi-mately 50% while in Battery Save LOW Mode. This reduces power output to 1 watt.

In Vehicle Use



The HH 37 ST can be connected to your cigarette lighter with the provided car cord. This power connection does NOT charge the batteries.

Power Saver-HI/LOW

Reduces the power to 1 watt. This does not decrease the unit's ability to receive but does reduce the transmitting range.



PWR Save button.

release

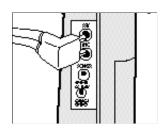


2 Power Save LED will illuminate.

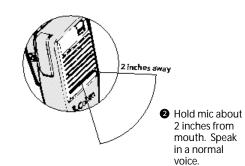
Operation

External Speaker/Microphone Jack

Your HH 37 ST can be fitted with an external speaker/microphone, (not included) freeing your hands for other tasks (like driving!).



 Locate SPK/MIC jack on side of unit and insert plug.



External Speaker/ Microphone Jack

External speaker/microphone is not included with this unit. See accessories on page 23 for available options.





How Your CB Can Serve You

How Your CB Can Serve

Α	Few	Rules
Y	ou Sh	ould
\mathbf{K}	now	

Suggest spots to eat and sleep Keep you alert while traveling

A. Conversations cannot last more than 5 minutes with another station. A one minute break is required to let others use the channel.

 Provide help in event of an emergency
 Provide direct contact with home or office
 Assist police by reporting erratic drivers Get "local information" to find destination Communicate with family and friends

- B. You cannot blast others off the air by use of
- C. You cannot use CB to promote illegal activities.
- D. Profanity is not allowed.
- E. You may not transmit music with a CB.
- prohibited.

Channel 9 **Emergency** Messages

Note

If no response on channel 9, try channels 19 or 14.

A Few Rules You Should Know

Warn of traffic problemsProvide weather and road data

- illegally amplified transmitters or illegally high an tennas.

- F. Selling of merchandise and/or services is

1. Set to channel 9 for emergencies Be sure antenna is properly connected.

2. CB Distress Data

When transmitting an emergency, you should request a "REACT BASE" and provide the CB distress data (called CLIP):

c all Sign Identify yourself.

L ocation Be exact.

I njuries Number. Type. Trapped?
P roblem Give details and help needed.

Transmit CLIP repeatedly so any monitor can assist.

The FCC gives these examples of permitted and prohibited messages for channel 9. These are only guidelines and not all-inclusive:

Permitted	Example Message
Yes	"Tornado sighted six miles north of town."
No	"Post number 10. No tornado sighted."
Yes	"Out of gas on I-95 at mile marker 211."
No	"Out of gas in my driveway."
Yes	"Four car accident on I-94 at Exit 11. Send police and ambulance."
No	"Traffic moving smoothly on I-94."
Yes	"Weather Bureau has issued thunderstorm warning. Bring sailboat into port."
No	"Attention motorists. Weather Bureau advises snow tomorrow will accumulate 4 to 6 inches."
Yes	"Fire in building at 539 Main, Evanston."
No	"Halloween patrol number 3. All quiet."





You			
+			

How Your CB Can Serve You

How Your CB Can Serve You

CB 10-Codes

	CB 10-Codes		Code	Meaning
	CBIC	-Codes	10-29	Time is up for contact
	Citizen Bands have adopted the "10-CODES" for standard questions and answers. These codes		10-30	Does not conform to FCC rules
			10-33	Emergency traffic
		le quick and easy communication, especially	10-34	Trouble at this station
		sy areas. Following are some of the more	10-35	Confidential information
	COITIII	on codes and meanings:	10-36	Correct time is
	Code	Meaning	10-37	Wrecker needed at
	10-1	Receiving poorly	10-38	Ambulance needed
	10-2	Receiving well	10-39	Message delivered
	10-3	Stop transmitting	10-41	Turn to channel
	10-4	OK,message received	10-42	Traffic accident at
	10-5	Relay message	10-43	Traffic tie up at
	10-6	Busy, stand by	10-44	Have a message for
	10-7	Out of service, leaving	10-45	All units within range please report
	10-8	In service, subject to call	10-50	Break channel
	10-9	Repeat message	10-60	What is next message number?
	10-10	Transmission completed standing by	10-62	Unable to copy. Use phone
	10-11	Talking too rapidly	10-63	Net directed to
	10-12	Visitors present	10-64	Net clear
	10-13	Advise weather/roads	10-65	Awaiting your next message/assignment
	10-16	Make pick up at	10-67	All units comply
	10-17	Urgent business	10-70	Fire at
	10-18	Anything for us?	10-71	Proceed, transmission in sequence
	10-19 10-20	Return to base My location is	10-77	Negative contact
	10-20	Call by phone	10-81	Reserve hotel room for
	10-21	Report in person to	10-82	Reserve room for
	10-23	Stand by	10-85	My address is
	10-24	Completed last assignment	10-91	Talk closer to mic
	10-25	Can you contact	10-93	Check my frequency on this channel
	10-26	Disregard last info	10-94	Give me a long count
	10-27	Moving to channel	10-99	Mission completed, all units secure
	10-28	Identify your station	10-200	Police needed at





Frequency Ranges

^{HH}37 ST Specifications

The COBRA HH37 ST 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.

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

CB - 40 CH CB - 26.965 TO 27.405 MHZ 0.005 % PLL (PHASE LOCK LOOP) SYNTHESIZER30° C TO + 50° C ELECTRET, PUSH-TO-TALK 13.0V DC, INTERNAL BATTERIES 13.8 VDC, EXTERNAL TYPE BNC
3.5 W AT 12 VDC - HIGH,0.8 W IN LOW 4.0 W AT 13.8 VDC - HIGH.1.0 IN LOW
AM
300 - 3000 HZ AT -6 DB
50 OHMS,UNBALANCED
LESS THAN 1 uV FOR 10 DB S/N
DUAL CONVERSION
1 ST - 10.690 MHZ,2ND - 455 KHZ
500 mW MAXIMUM AT 10 % DISTORTION 300 - 3000 HZ AT -6 DB
GREATER THAN 60 DB
50 DB MIN.
BUILT- IN
PLL (PHASE LOCK LOOP)
IO . 58 DB WITH ST ON
45 DB WITH ST OFF



21

Limited Two Year Warranty

Optional Accessories

Magnetic Mount

Weather Antenna



Cobra Electronics Corporation

6500 West Cortland Street Chicago, Illinois 60707

COBRA ELECTRONICS CORPORATION warrants that its ${\tt COBRA\,CB\,Radios, and\,the\,component\,parts\,thereof, will}$ be free of defects in workmanship and materials for period of two (2) years from the date of first consumer purchase. This warranty may be enforced by the first consumer purchaser, provided that the product is utilized within

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

You must pay any 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

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.



Ear Bud Mic with PTT

Integrated speaker/mic adapter that Charges 9 Ni-Cad battery cells in 24 fits in your ear. Includes shirt clip. MA-EBM \$29.95



120 Volt A/C Wall Charger with Plug

hours right in the unit. CA-25



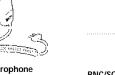
VOX (Voice Operated Transmitter) adapter allows you hands-free operation. Remote microphone/speaker







CA-40



Allows connection of the 45 WX ST to standard antennas.



(1) High Performance Ni-Cad Rechargeable Battery Cell \$3.95 ea.

212-001-N-001



Replacement Belt Clip

Long Range Antenna

Doubles the range of your HH 37 ST. CA-41 \$25.95



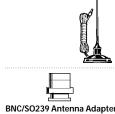
Call 1.773.889.3087

Please fill out order form on next page, and mail/fax directly to Cobra.









You Can Find These Fine Accessories At Your Local Cobra CB Dealer If you wish, you can order

Order by phone (Press 1 from the main menu) 8 a.m.-8 p.m. M-F CST.

Order by mail or fax

Accessory Order Form

Item#	Description		Cost Ea.	Qty.	Amour
MA-EBM	Ear Bud Mic		\$29.95		
MA-VOX	Vox Mic		\$49.95		
212-001-N-001	(1) Ni-Cad Rechargeable Bat	tery Cell	\$3.95		
HA-BC	Replacement Belt Clip		\$4.95		
CA-25	120 V A/C Wall Charger with	n Plug	\$10.00		
CA-40	Lapel Microphone		\$25.95		
CA-41	Long Range Antenna		\$25.95		
	Magnetic Mount Weather A		\$29.95		
CA-43	BNC/S0239 Antenna Adapt	er	\$5.95		
rices subj	ect to change without notice	<u>.</u>	Subtotal		
ax Table			(Tax if applic	able)	
llinois resider Took Co. reside	rts add 7% ents add .75% (7.75% total)		Shipping/ha	ndling	\$4.00
	nts add 1% (8.75% total)		Total		
Ohio residents Visconsin resi Or credit (idents add 6% add 6% dents add 5% :ard orders fill out order		k or money orde	er (no sta	ımps)
Minnesota residents Visconsin residents For credit of Form and For call 1.77 Press 1 fro	idents add 6% add 6% dents add 5%	payable to Cobra Acc		,	
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dinnesota residents visconsin residents visconsin residents visconsin residents or credit (form and or call 1.77). Press 1 from 2:00 am - Please Name _ Address	idents add 6% add 6% add 6% dents add 5% ard orders fill out order fax to:1.773.622.2269 3.889.3087 om the main menu) 8:00 pm,M-F, CST. print clearly s (No P.O. Box)	payable to Cobra Acc 6500 West	o: essories Dept. Cortland St. Chio	cago, IL 6	0707
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