



Owner's Manual

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19 DX IV EU

Printed in China Part No. 480-526-P Version C

Nothing Comes Close to a Cobra® English Nothing Comes Close to a Cobra®





# Our Thanks and Customer Assistance

Thank you for purchasing the Cobra 19 DX IV EU CB Radio Transceiver. Properly used, this Cobra product will give you many years of reliable service.

#### NOTICE!

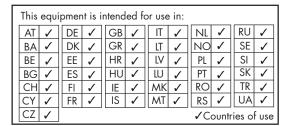
Before using this transceiver, please check that the radio has been programmed on the frequency band specifications and operating modes allowed by the regulations valid in the country where the product is used. If not, please proceed to modify the frequency band programming, as described in this owners manual page 5. This transceiver is programmed at the factory on the EU frequency band (40 CH AM 1W/40 CH FM 4W).



#### **Customer Assistance**

Should you encounter any problems with this product, or not understand its many features, please refer to this owner's manual. If you require further assistance after reading this manual, please contact your local dealer.

#### This equipment is intended for use in:



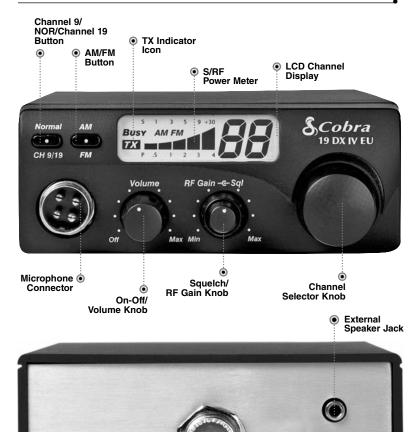
## For Warranty, Product Service and Accessory Information

Please contact your local dealer or distributor. See the enclosed leaflet that provides contact information for the Cobra international distributors.

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#### **Product Features**



Antenna (e)

Connector

Power Connection

### **Product Features**

#### **Features**

Introduction

- Instant Channels 9/19 NOR
- Compact Size
- Dynamic Microphone
- Nine Foot Microphone Cord
- Front Panel Microphone Connector
- RF Gain



### **Trademark Acknowledgement**

Cobra®, 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.

#### Introduction





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Introduction
Our Thanks to You
Customer Assistance
Product Features & Trademark Acknowledgement
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Installation and Start-Up
Mounting and Connections
Operating Your Mobile Radio
Operation
Antenna Connector
External Speaker
Power
Frequency Band/Programming Selection
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CB Antenna 5
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## Included in this Package

## **Mounting and Connections**

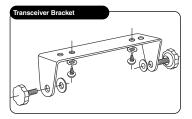
Installation and Start-Up

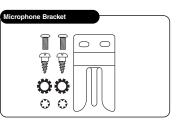
#### **Included in this Package**

#### You should find all of the following items in this package:





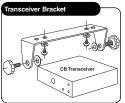


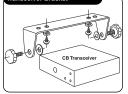




#### **Mounting and Connections**

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.









A universal mounting bracket is supplied along with self tapping screws and star washers. The transceiver is held in the universal mounting bracket by two thumb screws, permitting adjustment at the most convenient angle.

#### To mount and connect your transceiver:

- 1. 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.
- 4. Connect to power system in vehicle.
- **5.** 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.
- **6.** Attach the four pin microphone cable to receptacle on front of unit and install unit in bracket securely.

## Operation

Operating Your Mobile Radio

## Operating Your Mobile Radio

### Operation

#### Operation



#### **Antenna Connector**

This female **Connector** on the rear panel permits connection of the transmission line cable male connector to the transceiver.



#### **External Speaker**

The external speaker jack on the rear panel is used for an **External Speaker**. The external speaker 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

These wires supply **Power** to the CB radio. This cable is permanently attached to the radio.



#### **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.

#### Operation

#### NOTICE!

Before using this transceiver, please check that the radio has been programmed on the frequency band specifications and operating modes allowed by the regulations valid in the country where the product is used. If not, please proceed to modify the frequency band programming, as described below. This transceiver is programmed at the factory on the EU frequency band (40 CH AM 1W/40 CH FM 4W).



#### To Program Radio to Country of Usage:

Press and hold the CH9/Normal/CH19 button.

Turn power on to the radio.

The band ID will flash on default ID "EU" (first use only).



Turn channel selector clockwise for your ID selection.

ID sequence:  $EU \Rightarrow CE \Rightarrow UK \Rightarrow PL \Rightarrow E1 \Rightarrow I2 \Rightarrow DE \Rightarrow$ D2 ⇒ EU.

Press and release the CH9/Normal/Ch19 button again to set and exit. The 19 DX IV EU will remember this setting after power is turned off.



#### **Turning on Your Mobile Radio**

Turn the **On-Off/Volume** knob clockwise to turn the 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.

### Operation

Operating Your Mobile Radio

## Operating Your Mobile Radio

### Operation

#### Operation

#### Sauelch

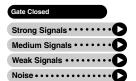
This control is used to cut off or eliminate receiver background noise in the absence of an incoming signal. Adjust until the receiver noise disappears. This will require the incoming signal to be slightly stronger than average receiver noise. Further clockwise rotation will increase the threshold level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

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

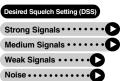


#### To squelch your radio:

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







#### **RF Gain**

This control is used to adjust receiver sensitivity. Maximum sensitivity allows weak signals to be received. However, very strong signals (such as from a nearby transmitter) can cause distortion at that setting. Adjust until the distortion disappears. Reducing the receiver's **RF Gain** eliminates distortion from very strong incoming signals.



#### To set RF Gain:

- 1. Full counterclockwise rotation minimizes gain for maximum distortion control.
- 2. To achieve the desired level of distortion control, turn the RF Gain knob counterclockwise until the distortion is eliminated.
- 3. After moving away from the strong signal, turn the **RF Gain** knob fully clockwise to receive all possible signals.

#### Operation



#### Selecting a Channel

Rotate the **Channel** knob clockwise until desired channel is displayed.



#### Channel 9/NOR/Channel 19

Set CH 9 to obtain instant access to the emergency channel.

Set **NOR** position to use the channel knob to choose any of the 40 channels.

Set **CH 19** to obtain instant access to the information and calling channel.



#### AM/FM Selection

S/RF Power Meter

increase with signal strength.

This switch allows you to select the operating mode AM Receive, if the desired y the programmed

Shows relative transmitter RF output power

and input signal strength when receiving.

The Liquid Crystal Display (LCD) segments



## **TX Indicator**

The TX Indicator will light when in the transmit mode. "Busy" will appear when TX Indicator there is an incoming signal.

Operating Your Mobile Radio

### Operation

#### Operation

#### **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 authorized Cobra dealer or a two-way radio technician for help in locating and correcting the source of severe noise.

#### Operation





#### **Operating Procedure to Receive**

Be sure that power cord, antenna and microphone are connected to the proper connectors before proceeding further. Program the radio to the frequency band allowed in the country in which the radio is to be used.

#### To receive:

- 1. Turn the radio on by rotating the On-Off/Volume knob clockwise.
- 2. Rotate the Squelch/RF Gain knob counterclockwise until incoming signal is heard.
- 3. Select the desired channel.
- 4. Set the On-Off/Volume knob and the Squelch/RF Gain knob to a comfortable listening level.

#### **Operating Procedure to Transmit**

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



#### 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.

### **Maintenance/Adjustment**

#### Operating Your Mobile Radio

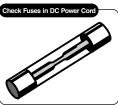
### **Specifications**

#### **Maintenance/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.



1. Check connections to the source of power and make sure it is the 13.2 VDC required to operate your radio.



2. Check the fuses in the DC power cord. The main power lead (red) has a two amp 2AG 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 product service on page A1 for the correct procedure for warranty and post-warranty service from Cobra.

#### **Specifications**

General	
Channels	40 FM/40 AM
Frequency Range	26.565 to 27.99125 MHZ
Frequency Tolerance	0.005 %
Frequency Control	PLL (Phase Lock Loop) Synthesizer
Operating Temperature Range	-30° C TO + 65° C
Microphone	Plug-in dynamic
Input Voltage	13.2 VDC nom. (negative ground)
Current Drain	Transmit: AM/FM full mod., 1.4A (maximum) Receive: Squelched, 0.9 A; full audio output, 1.2A (nominal)
Size	174.6mm D x 158.7mm W x 47.6 H
Weight	1.5 kg.
Antenna Connector	UHF; S0-239
Meter	LCD's; indicates relative power output and received signal strength

Transmitter	
Power Output	4 watts FM, 1 watt AM
Modulation	AM (Amplitude Modulation) FM (Frequency 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
Automatic Noise Limiter	Built-in



## **Frequency Ranges**



## **Frequency Ranges**

Band	Channels	Power	Country	(MHz)
EU	40 CH AM	1W	Europe/France	CEPT Frequencies
EU	40 CH FM	4W	Europe/France	CEPT Frequencies 26.965-27.405
CE	40 CH FM only	4W		CEPT Frequencies
UK	40 CH FM	4W	England (UK)	UK Frequencies
UK	40 CH FM	4W	England (UK)	CEPT Frequencies
PL	40 CH AM	4W	Poland	Polish Frequencies
PL	40 CH FM	4W	Poland	Polish Frequencies
E1	40 CH AM	4W	Italy/Spain	CEPT Frequencies
E1	40 CH FM	4W	Italy/Spain	CEPT Frequencies
12	36 CH AM	4W	Italy	Italian Frequencies
12	36 CH FM	4W	Italy	Italian Frequencies
DE	12 CH AM	1W	Germany	27.005 (CH4) to 27.135 (CH15) CEPT Frequencies
DE	80 CH FM	4W	Germany	1st 40 CH CEPT Frequencies 2nd 40 CH German Frequencies
D2	12 CH AM	1W	Germany	27.005 (CH4) to 27.135 (CH15) CEPT Frequencies
D2	40 CH FM	4W	Germany	CEPT Frequencies

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NOTE If the country of usage is not listed above, please consult with your local communication authority for frequency usage.

Fre	quency Ranges								
Band ID EU:   Band ID		d ID CE:	Band ID UK:		Band ID PL:		Band ID E1:		
EU/France			CEPT	United Kingdom		Poland		Italy/Spain	
AM	1.0W	FM	4.0W	40 CH FM 4.0W		AM 4.0W		AM 4.0W	
FM	4.0W					FM	4.0W	FM	4.0W
Ch. No.	Freq.(MHz)	Ch. No.	Freq.(MHz)	Ch. No.	Freq.(MHz)	Ch. No.	Freq.(MHz)	Ch. No.	Freq.(MHz)
1	26.965	1	26.965	1	27.60125	1	26.960	1	26.965
2	26.975	2	26.975	2	27.61125	2	26.970	2	26.975
3	26.985	3	26.985	3	27.62125	3	26.980	3	26.985
4	27.005	4	27.005	4	27.63125	4	27.000	4	27.005
5	27.015	5	27.015	5	27.64725	5	27.010	5	27.015
6	27.025	6	27.025	6	27.65125	6	27.020	6	27.025
7	27.035	7	27.035	7	27.66125	7	27.030	7	27.035
- 8	27.055	8	27.055	8	27.67125	8	27.050	8	27.055
9	27.065	9	27.065	9	27.68125	9	27.060	9	27.065
10	27.075	10	27.075	10	27.69125	10	27.070	10	27.075
11	27.085	11	27.085	11	27.70125	11	27.080	11	27.085
12	27.105	12	27.105	12	27.71125	12	27.100	12	27.105
13	27.115	13	27.115	13	27.72125	13	27.110	13	27.115
14	27.125	14	27.125	14	27.73125	14	27.120	14	27.125
15	27.135	15	27.135	15	27.74125	15	27.130	15	27.135
16	27.155	16	27.155	16	27.75125	16	27.150	16	27.155
17	27.165	17	27.165	17	27.76125	17	27.160	17	27.165
18	27.175	18	27.175	18	27.77125	18	27.170	18	27.175
19	27.185	19	27.185	19	27.78125	19	27.180	19	27.185
20	27.205	20	27.205	20	27.79125	20	27.200	20	27.205
21	27.215	21	27.215	21	27.80125	21	27.210	21	27.215
22	27.225	22	27.225	22	27.81125	22	27.220	22	27.225
23	27.255	23	27.255	23	27.82125	23	27.250	23	27.255
24	27.235	24	27.235	24	27.83125	24	27.230	24	27.235
25	27.245	25	27.245	25	27.84125	25	27.240	25	27.245
26	27.265	26	27.265	26	27.85125	26	27.260	26	27.265
27	27.275	27	27.275	27	27.86125	27	27.270	27	27.275
28	27.285	28	27.285	28	27.87125	28	27.280	28	27.285
29	27.295	29	27.295	29	27.88125	29	27.290	29	27.295
30	27.305	30	27.305	30	27.89125	30	27.300	30	27.305
31	27.315	31	27.315	31	27.90125	31	27.310	31	27.315
32	27.325	32	27.325	32	27.91125	32	27.320	32	27.325
33	27.335	33	27.335	33	27.92125	33	27.330	33	27.335
34	27.345	34	27.345	34	27.93125	34	27.340	34	27.345
35	27.355	35	27.355	35	27.94125	35	27.350	35	27.355
36	27.365	36	27.365	36	27.95125	36	27.360	36	27.365
37	27.375	37	27.375	37	27.96125	37	27.370	37	27.375
38	27.385	38	27.385	38	27.97125	38	27.380	38	27.385
39	27.395	39	27.395	39	27.98125	39	27.390	39	27.395
40	27.405	40	27.405	40	27.99125	40	27.400	40	27.405



## **Frequency Ranges continued**



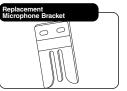
## **Accessories**

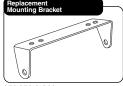
#### Band ID D2:

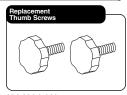
Band I	D I2: Italy	Band	d ID DE:	Band	d ID D2:
AM	M 1.0W Germany		rmany	Ge	rmany
FM	/I 4.0W 12 CH AN		AM 1.0W	12 CH	AM 1.0
		80 CH	FM 4.0W	40 CH	FM 4.0
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Dallu ID IZ. Italy			מ וט טב.				ונו וט טע.
AM	1.0W		rmany				ermany
FM	4.0W	12 CH	AM 1.0W			12 CH	AM 1.0W
		80 CH	FM 4.0W			40 CH	FM 4.0W
Ch. No.	Freq.(MHz)	Ch. No.	Freq.(MHz)	Ch. No.	Freq.(MHz)	Ch. No.	Freq.(MHz)
1	26.965	1	26.965	41	26.565	1	26.965
2	26.975	2	26.975	42	26.575	2	26.975
3	26.985	3	26.985	43	26.585	3	26.985
4	27.005	4	27.005	44	26.595	4	27.005
5	27.015	5	27.015	45	26.605	5	27.015
6	27.025	6	27.025	46	26.615	6	27.025
7	27.035	7	27.035	47	26.625	7	27.035
8	27.055	- 8	27.055	48	26.635	- 8	27.055
9	27.065	9	27.065	49	26.645	9	27.065
10	27.075	10	27.075	50	26.655	10	27.075
11	27.085	11	27.085	51	26.665	11	27.085
12	27.105	12	27.105	52	26.675	12	27.105
13	27.115	13	27.115	53	26.685	13	27.115
14	27.125	14	27.125	54	26.695	14	27.125
15	27.135	15	27.135	55	26.705	15	27.135
16	27.155	16	27.155	56	26.715	16	27.155
17	27.165	17	27.165	57	26.725	17	27.165
18	27.175	18	27.175	58	26.735	18	27.175
19	27.185	19	27.185	59	26.745	19	27.185
20	27.205	20	27.205	60	26.755	20	27.205
21	27.215	21	27.215	61	26.765	21	27.215
22	27.225	22	27.225	62	26.775	22	27.225
23	27.255	23	27.255	63	26.785	23	27.255
24	27.245	24	27.235	64	26.795	24	27.235
25	27.265	25	27.245	65	26.805	25	27.245
26	26.875	26	27.265	66	26.815	26	27.265
27	26.885	27	27.275	67	26.825	27	27.275
28	26.895	28	27.285	68	26.835	28	27.285
29	26.905	29	27.295	69	26.845	29	27.295
30	26.915	30	27.305	70	26.855	30	27.305
31	26.925	31	27.315	71	26.865	31	27.315
32	26.935	32	27.325	72	26.875	32	27.325
33	26.945	33	27.335	73	26.885	33	27.335
34	26.955	34	27.345	74	26.895	34	27.345
35	26.855	35	27.355	75	26.905	35	27.355
36	26.865	36	27.365	76	26.915	36	27.365
		37	27.375	77	26.925	37	27.375
		38	27.385	78	26.935	38	27.385
		39	27.395	79	26.945	39	27.395
		40	27.405	80	26.955	40	27.405
		-				-	

#### **Accessories**







741-080-9-001

251-353-9-001

634-081-9-001





HG M84

HG M84W Wood Grain







**HG M73** 

HG M77

HG M75





HG A1000

Dynamic External Speaker



HG S100

**HG S300** 



## **Declaration of Conformity**

#### **Declaration of Conformity**

We, Cobra Electronics Europe Limited of

**Dungar House** 

Northumberland Avenue

Dun Laoghaire

County Dublin, Ireland

Declare under our sole responsibility that the product:

19 DX IV EU

**CB** radio

to which this declaration relates, is in conformity with the following standards and/ or other normative documents when properly installed and maintained and used for their intended purpose:

EN60065 (2002)

EN62311 (2008)

EN 301 489-1 V1.8.1 (2008-04)

EN 301 489-13 V1.2.1 (2002-08)

EN 300 135-2 V1.2.1 (2008-02)

EN 300 433-2 V1.1.2 (2000-12)

We hereby declare that the above named product is in conformity to all the essential requirements of the Directive 1999/5/EC.

The conformity assessment procedure referred to in Article 10 and detailed in Annex III or IV of Directive 1999/5/EC has been followed with the involvement of the following Notified Body:

BABT, Balfour House, Churchfield Road, Walton-on-Thames, Surrey, KT12 2TD, UK

Identification mark 0168 (Notified Body Number)

The equipment will also carry the Class 2 equipment identifier:



The technical documentation relevant to the above equipment will be held at:

Cobra Electronics Europe Limited of

**Dungar House** 

Northumberland Avenue

**Dun Laoghaire** 

County Dublin, Ireland

JEAN-LOUIS POOT, Managing Director

July 2009