



Owner's Manual

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MOBILE RADIO  
**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®

English

## Our Thanks and Customer Assistance

Introduction

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

### 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:

This equipment is intended for use in:

AT ✓	DE ✓	GB ✓	IT ✓	NL ✓	RU ✓
BA ✓	DK ✓	GR ✓	LT ✓	NO ✓	SE ✓
BE ✓	EE ✓	HR ✓	LV ✓	PL ✓	SI ✓
BG ✓	ES ✓	HU ✓	LU ✓	PT ✓	SK ✓
CH ✓	FI ✓	IE ✓	MK ✓	RO ✓	TR ✓
CY ✓	FR ✓	IS ✓	MT ✓	RS ✓	UA ✓
CZ ✓					

✓Countries of use

### 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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6500 West Cortland Street  
Chicago, Illinois 60707 USA  
[www.cobra.com](http://www.cobra.com)

Product Features



Product Features

Features

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



Trademark Acknowledgement

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## Introduction

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## Included in this Package

### Included in this Package

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

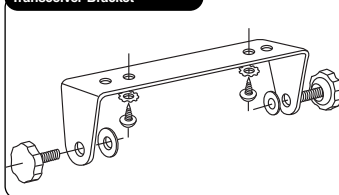
CB Transceiver



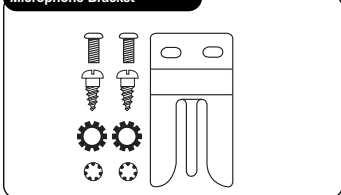
Microphone



Transceiver Bracket



Microphone Bracket



Operating Manual

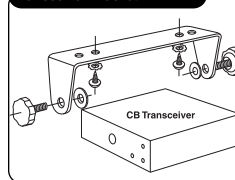


## Mounting and Connections

### 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.

Transceiver Bracket



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.

Antenna Connector



Microphone Connector



## Operation

### Operation

Antenna Connector



#### Antenna Connector

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

External Speaker Jack



#### 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 Cable



#### Power

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

Microphone Connector



#### 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

### 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).

CH9/Normal/CH19 Button



#### 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.

Channel Selector Knob



ID sequence: **EU** → **CE** → **UK** → **PL** → **E1** → **I2** → **DE** → **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.

On-Off/Volume Knob



#### 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

### Squelch

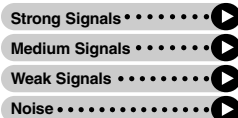
This control is used to cut **off** or eliminate receiver background noise in the absence of an incoming signal. Adjust until the receiver noise disappears. This will require the incoming signal to be slightly stronger than average receiver noise. Further clockwise rotation will increase the threshold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

**Squelch** is the “control gate” for incoming signals.

Adjust Squelch/RF Gain Knob



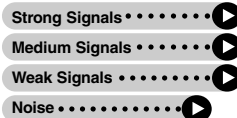
Gate Closed



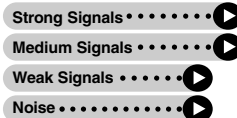
#### To squelch your radio:

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 you hear noise. Now turn the control clockwise just until the noise stops. This is the DSS setting.

Gate Open



Desired Squelch Setting (DSS)



### 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.

Adjust Squelch/RF Gain Knob



#### 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

Channel Selector Knob



### Selecting a Channel

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

Channel 9/NOR/Channel 19 Button



### 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 Button



### AM/FM Selection

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

S/Rf Power Meter



### S/RF Power Meter

Shows relative transmitter **RF** output power and input signal strength when receiving. The Liquid Crystal Display (LCD) segments increase with signal strength.

TX Indicator



### TX Indicator

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



## Operation

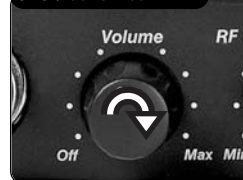
### Ignition Noise Interference

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

On-Off/Volume Knob



Adjust Squelch/RF Gain Knob



### 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.

Press-to-Talk Switch



#### 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

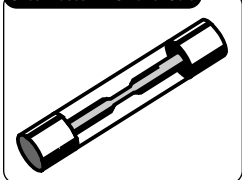
Your Cobra CB transceiver is specifically designed for the environment encountered in mobile installations. The use of all solid state circuitry and its light weight result in high reliability. Should a failure occur, however, review the following, then if necessary, replace parts only with identical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

### Check Power Source



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

### Check Fuses in DC Power Cord



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.

### Check Microphone Connection



3. Make certain the microphone is properly plugged in.

### Check Antenna Connection



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; SO-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 $\mu$ V 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

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
I2	36 CH AM	4W	Italy	Italian Frequencies
I2	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

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

# Frequency Ranges

Band ID EU: EU/France		Band ID CE: CEPT		Band ID UK: United Kingdom		Band ID PL: Poland		Band ID E1: 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

Frequency Ranges

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

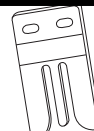


Customer Assistance

## Accessories

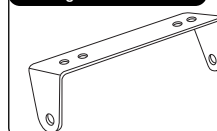
### Accessories

Replacement Microphone Bracket



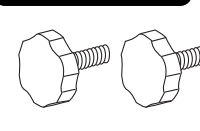
741-080-9-001

Replacement Mounting Bracket



251-353-9-001

Replacement Thumb Screws



634-081-9-001

Four Pin Premium Noise-Cancelling Microphone



HG M84

Four Pin Premium Noise-Cancelling Microphone



HG M84W  
Wood Grain

Four Pin Replacement Dynamic Microphone



HG M73

Four Pin Noise Cancelling Microphone



HG M77

Four Pin Power Microphone



HG M75

21" Base Loaded Magnet Mount Antenna



HG A1000

38" Base Loaded Magnet Mount Antenna



HG A1500

Dynamic External Speaker



HG S100

Noise Cancelling External Speaker



HG S300

## 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:



**C€0168**

**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