



# **BlueCAT**

## **Operating Manual**



# Introduction

Thank you for purchasing your new BlueCat module. We hope you enjoy many years of service. Please read the following instructions to help you get the most from your BlueCAT. For any questions not answered below, please visit <http://www.zbm2.com/> for further assistance.

## Overview

BlueCAT is an interface device, which allows you to connect the CAT (Computer Aided Transceiver) port of your radio, wirelessly, to Bluetooth enabled devices. It replaces the serial cable (for example YAESU CT62) you may have used to connect to your laptop, and provides new connectivity options, for mobile phones and tablet computers.

BlueCAT was developed to allow the 'Repeater' app for Android to connect wirelessly to an FT8x7 radio, allowing a simple touch of a repeaters entry to instantly setup the radio for that repeater.

However, it has proved versatile, and can also be used to wirelessly connect an FT8x7 to laptop computers (with Bluetooth) running many types of logging and computer control software.

Please check the website <http://www.zbm2.com/> for a current list of supported devices and applications, and to download the latest software.

**Please note the current version of Repeater with BlueCAT support can be downloaded from - [www.zbm2.com/apk/repeaterbc.apk](http://www.zbm2.com/apk/repeaterbc.apk)**

## Physical specifications

### Dimensions:

60x35x15mm (excluding cable)  
Cable 45 cm long

### Electrical:

Supply voltage – Derived from Radio, no external power required.  
Standby Current 7mA  
Working Current (only whilst communicating) 25-70mA

### Radio:

Bluetooth Class 2, 2.402-2.480 GHz, 2.5mW, ~10m range

### Interface:

Yaesu CAT port, 8 pin mini-DIN, 38400 Baud\*

### Operating environment:

-5°C to +55°C, 5% to 95% humidity (non-condensing)  
Sealed to IP42 – Use indoors only, protect from rain

### Compatibility:

BlueCAT connects to the CAT port of your Yaesu FT-817, FT-857 or FT-897. If you have purchased the 4800 Baud option, it will also connect to the 'Computer' (CAT pass-through) port of an LDG YT100 Autotuner.



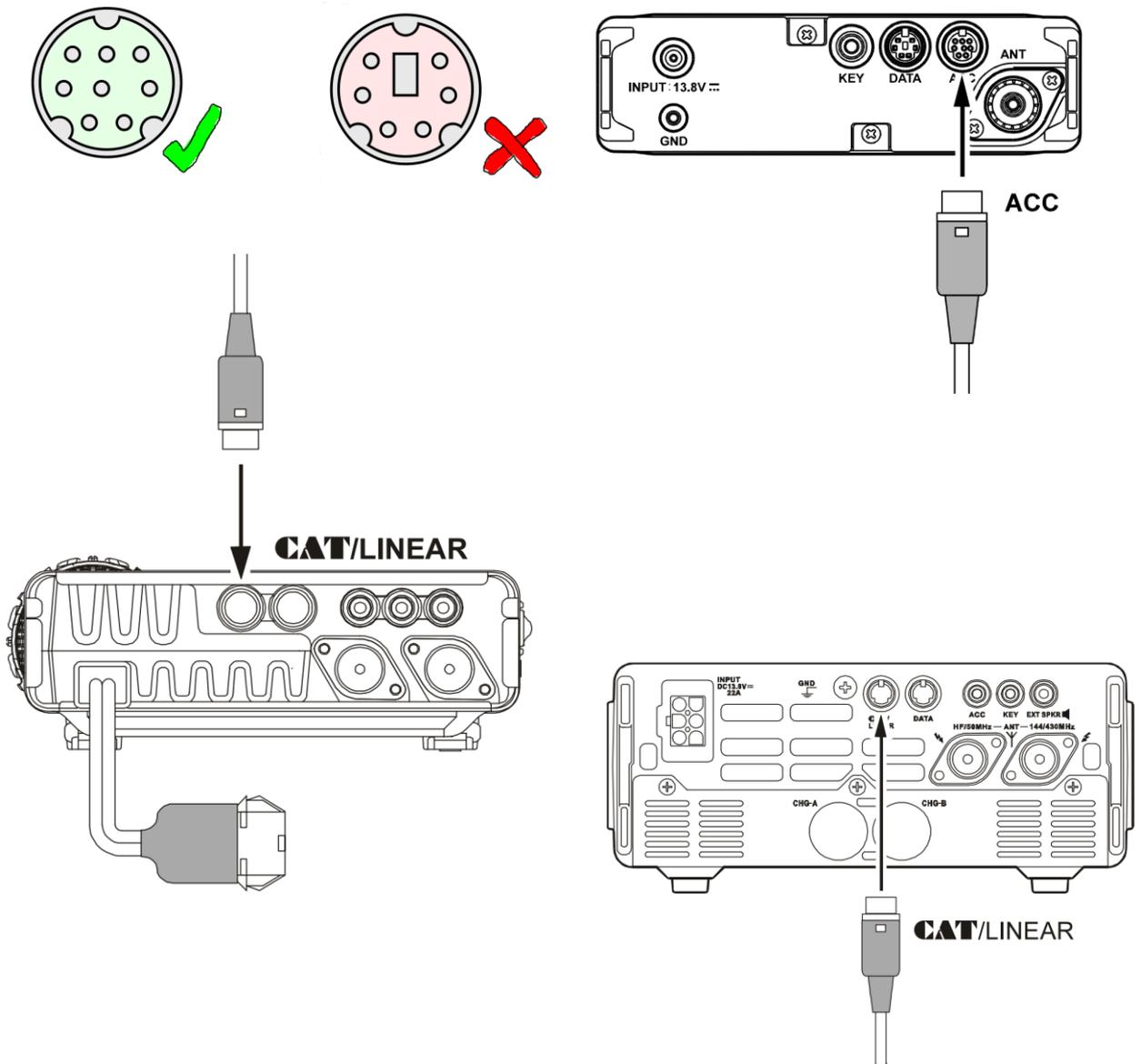
\*(4800 baud optional)

## Setup

Please read through these instructions before setting up.

### Please switch your radio OFF

Locate the ACC/CAT port on the rear of your radio. It is an **8 pin** Mini-DIN socket. Carefully line up the plug of the BlueCAT, and insert. Do not force the plug in, as this may damage it, and your radio. Do not twist the plug! Please check carefully that you are connecting to the correct socket.



If you are unsure as to the location of your CAT port, please consult your radio owner's manual. If you purchased the 4800 baud option, and wish to use BlueCAT with an LDG YT100 Autotuner, please connect BlueCAT to the port marked 'Computer' on the YT100, and connect the YT100 as normal.

**Switch your radio ON**

For the FT-817

**Select menu 14 [CAT RATE]**

This sets the transceiver's circuitry for the CAT baud rate.

Options available are 4800/9600/38400 bps

**Set it to 38400 bps.**

*N.B. If you purchased the 4800 baud option, set it to 4800bps*

For the FT-857 and FT-897

**Select menu 020, [CAT/LIN/TUN]**

This selects the device which is connected to the CAT/LINEAR jack on the rear panel.

Options available are CAT/LINEAR/TUNER

**Set it to CAT**

**Select menu 019 [CAT RATE]**

This sets the transceiver's circuitry for the CAT baud rate to be used.

Options available are 4800 bps/9600 bps/38400 bps

**Set it to 38400 bps.**

*N.B. If you purchased the 4800 baud option, set it to 4800bps*

The BlueCAT should now be showing a flashing light, and you are ready to proceed to the next step.

## Connecting

When you first switch on your radio, the indicator light inside BlueCat will flash. Once a Bluetooth connection has been made to the unit (pairing) this light will stay permanently lit. This shows that the unit has successfully connected to your bluetooth enabled device (Laptop, phone etc.). This is analogous to correctly connecting a CT62 RS232 Cable - the basic link is in place, and that's half the job done.

Once this connection is established, you must instruct your device to contact the radio using the CAT Data Protocol

**Please note the current version of Repeater with BlueCAT support can be downloaded from - [www.zbm2.com/apk/repeaterbc.apk](http://www.zbm2.com/apk/repeaterbc.apk)**

For Android Mobile Phones running the Repeater app:

Start the repeater app

Press your menu button, then select BlueCat from the menu

Select 'scan for devices'

Select your Bluecat from the list of devices

That's it!

## Troubleshooting

For the latest updates, help and information, visit <http://www.zbm2.com/>

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
BlueCAT does not light up, no response	No power	Ensure Radio is supplied with correct operating power, as specified by manufacturer.
	Radio switched off	Switch Radio ON before attempting to use BlueCAT.
	Not connected	Ensure plug is fully inserted into correct port.
	Broken pins	Check plug for broken pins, contact service centre.
	Blown internal fuse in radio	Check voltages at CAT socket, contact radio service centre.
BlueCAT light flashes, no response	Out of range	Move the device you wish to connect closer to BlueCAT. BlueCAT should work up to ~10m.
	Signal blocked	Remove RF blocking obstructions between BlueCat and device you wish to connect.
	Signal corrupted	Remove sources of interference. BlueCAT operates between 2.402-2.480 GHz.
BlueCAT light steady, but no communication	Radio CAT baud rate incorrect	Check baud rate setting matches your unit. 38400bps, unless optional 4800bps unit purchased.
	CAT/LIN/TUN incorrect	Ensure CAT is selected in menu 020
	Connecting device settings incorrect	Check the baud rate of the device you wish to connect matches the setting on your radio and unit. 38400bps, unless optional 4800 unit purchased.

YAESU, and the CAT logo are trademark Vertex Standard Co., LTD  
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