

HY-CAN PCB INSTALL GUIDE

This guide provides the essential information for installing your Commтел HY-CAN systems.

To help you and your customer get the best out of the system, you can find more information: [Click here](#).

Pre-installation Notes:

- A site signal network test is to be undertaken before installation. We always recommend doing a signal test with a 4G analyser to ensure that the SIM card being used has a stable 4G connection.
- Ensure the unit is turned off before inserting/removing the SIM and plugging in or unplugging the antenna.
- We strongly recommend the PIN Defaults are changed at the point of installation.
- Auxiliary inputs are designed for volt-free exit release buttons only. Connecting a powered device or anything other than a volt-free contact may cause damage to the system.
- The 4G antenna is an external item that should be installed in the most suitable position to obtain maximum signal strength and be more than 200mm from a human body. This positioning should also allow for the avoidance of any likely vandalism.

App Initialisation and Configuration

The Commтел systems use dedicated apps for both programming and end-user control, designed to give you intuitive management and configuration.

Commтел CONFIG App (The Programming App)

- The Commтел CONFIG app provides easy remote programming to fully control and configure your system.
- To start programming the system, you will need the intercom's serial number, SIM telephone number, and an assigned name.
- For user instructions within the app, click the help icon in the top right of the screen.



You can download the Commтел CONFIG app and Commтел CONTROL app for free, from Android or iOS app stores.

Commтел CONTROL App (End User App)

- Your customers can control the entry equipment via the Commтел CONTROL app, which works using SMS commands.
- You will need to program your customers' mobile number into the unit as an authorised dial to open number for the Commтел CONTROL App to work.
- For user instructions within the app, click the help icon in the top right of the settings screen.
- Please ensure customers pay particular attention to the contents of the safety message, which can be accessed in the bottom left corner on the app's front page.

Installation Instructions

Mount the back boxes to the wall, pillar, or post, ensuring that:

- Any swarf or debris is removed from inside the back box – the speaker has a magnet and may attract metal filings.
- The unit is sealed to prevent water ingress – use electronic grade silicone sealant to seal around all rear entry holes.
- Antenna and power leads are secured using the black plastic gland supplied (M20 x 1.5mm, standard electrical thread).
- Antenna and power leads have a loop before entering the back of the unit to prevent water ingress along the cable.

Mount the Hub Box:

The Hub housing is not weatherproof and must be installed in a dry, protected location such as a gate control box or an electrical cupboard.

- Insert the SIM card into the SIM card slot.
- Connect the antenna to the MMCX connection (push on/pull off).

Relay Connections:

- Connect the Power Relay and Opto Relays to your entry equipment. Relay ratings are printed on the PCB.

The HY-CAN PCB comes with a 4G Bridge Board, Dual OPTO Relay (SLOT 1) and Single Power Relay (SLOT 2) as standard.

If a Landline Bridge Board is ordered, it will occupy the same space on the PCB as the 4G Bridge Board and will require an analogue phone line connection as opposed to a SIM Card.

Alternative Relays are:

- Lock Relay (Semiconductor Switching Device)
- Dual Power Relay (Mechanical)

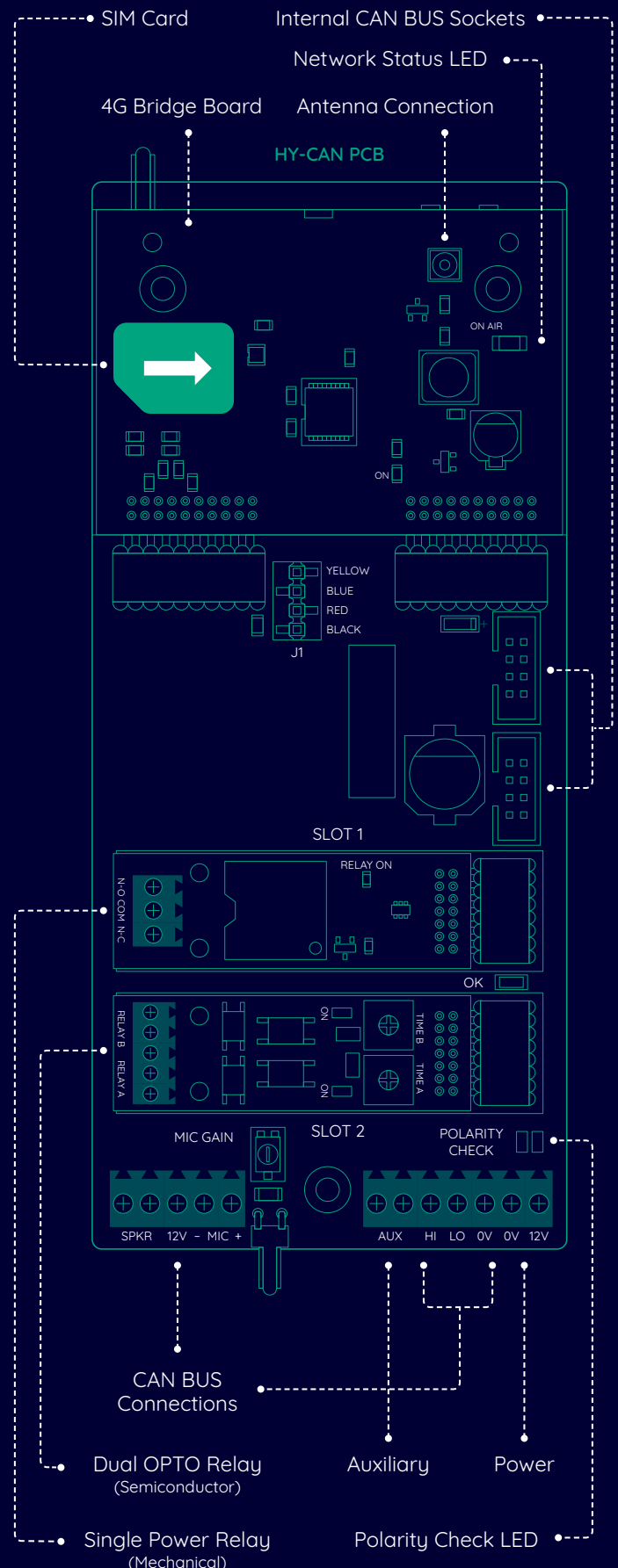
If alternative relays are ordered they will already be inserted in the slots on the HY-CAN PCB.

Connect Power:

- Connect power to the unit. The unit should begin its boot-up sequence.

Connecting a Telpad

If you are connecting a Telpad to this system, it must be wired into the CAN BUS connections on the HY-CAN board using a 4 core cable, connecting to the following terminals: 0V, 12V, HI & LO



LED Status Indicators

LED Name	Board	LED Action	Indicates
Network Status LED	4G Bridge Board	Off (No Light)	No Power
		On (Solid Blue)	Trying to connect
		Blinking Blue	Connected
'OK' LED	Main PCB - Landline Configuration	Flashing Green	Normal operation
	Main PCB	Flashing Green	Signals RSSI: 1 flash = 1 bar. Also shows correct antenna connection, correct SIM card installation, and signal strength (RSSI). Flashes with a yellow tint when receiving a text message.
	Main PCB	Flashing with 1 second pulses	Not connected to the network.
	Bridge Board	On (Solid Green)	Normal operation
Polarity Check LED	Main PCB	Solid Green	Polarity OK
		Solid Red	12V & 0V crossed over

We're Here to Support You

If you require further guidance, please don't hesitate to reach out to our trusted technical support team. We're committed to ensuring a smooth setup process.

You can reach us by calling **+44(0)1306 710120** – Option 1, or email: support@commтел.io

EU CE Declaration of Conformity and Radio Equipment Directive is available at www.commtel.io | GB-RH10 9RB



Raising Standards
Advancing Safety