Ins-60007-GD-US

3G Modem Installation Guide

Paxton BLU

Mobile Reception Test

To check mobile reception either use a mobile GPRS signal strength tester such as the Sequoia SWGPRS023 device, Wilson Electronics 460118 Pro Signal Meter, or if not available, use a mobile phone operating on the same network (Typically AT&T or T-Mobile). GSM and GPRS are typically co-located; meaning typically that a good GSM (phone) coverage would indicate good GPRS coverage. Any concerns with signal strength and/or coverage would need to be addressed with the cellular provider prior to installation. Paxton cannot control the signal strength of a specified provider in a specified area.

Best practice is to check for good GSM/GPRS signal strength, 50% or better, or two bars of a four bar display on your mobile phone, prior to installation of the Paxton BLU system.

Connection of the GSM/GPRS Modem

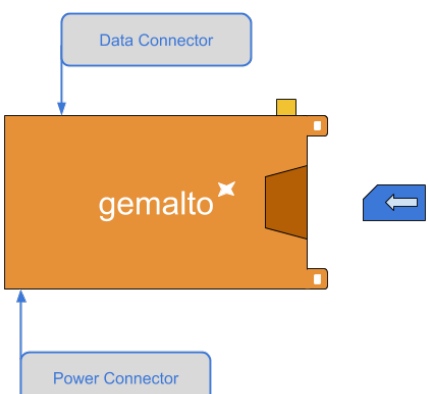
The cable for the connection of the GSM/GPRS modem should be pre-terminated when you receive it as part of the GSM Kit. Plug the corresponding plugs to both the Paxton BLU Master Control Unit and the GSM modem.

Modem Top-Down View

The Paxton BLU 3G Modem kit comes ready to connect to a Paxton BLU master controller.

The kit should include:

- 1 X Gemalto 3G Modem (pictured below).
- 1 X T-bar antenna.
- 1 X Cable assembly with 3 connectors
  - Green paxton connector (4-way)
  - RJ12 Connector
  - Black & Orange Weidmuller Connector



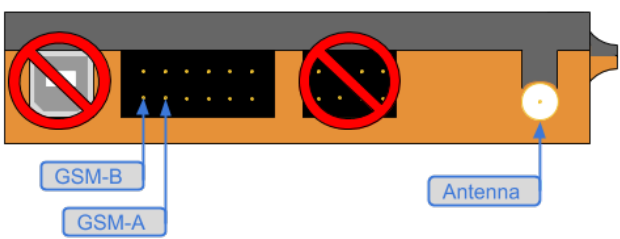
Modem Power Connections

Insert the cable terminated with an RJ12 connector into the socket indicated on the diagram below.

Modem Data Connections

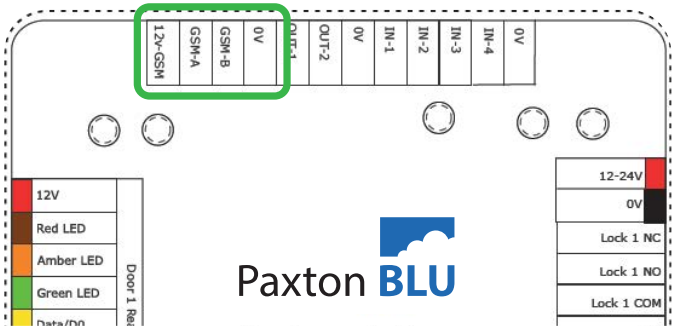
Insert the cable terminated with the black and orange weidmuller connector into the socket indicated on the diagram below.

Ensure that the wires in the black and orange connector are connected to the two pins indicated below.



Controller connections

The 4-way green connector should be connected to the 4 pins highlighted in green below.



The modem cable should arrive pre-terminated so that it can be simply plugged in for installation. Should it need to be re-terminated for any reason, the connections should be made as follows:

For data connections, Belden 9842 (or an equivalent suitable for RS485) should be used, with the same twisted pair used (i.e. Blue and White/Blue, or Orange and White/Orange).

Paxton BLU Master ACU	Gemalto GSM/GPRS Modem
12V - GSM	RJ12, pin 1("PLUS")
	RJ12, pin 2 ("PLUS")
	RJ12, pin 4 ("IGN_IN")
GSM - A	GPIO, 12-pin, pin 5 ("A+(RS-485)")
GSM - B	GPIO, 12-pin, pin 6 ("B-(RS-485)")
0V	RJ12, pin 5 ("GND")
	RJ12, pin 6 ("GND")
	Data cable screen

Other signals in the GPIO interface should be left unconnected, since they are not used, as per the Modem Hardware interface description.

The Antenna

The T bar GSM/GPRS antenna supplied should be mounted outside the metal enclosure. Should low signal strength be a problem, consider using a non-standard high gain alternative antenna or signal booster (not a Paxton offered item).

Install the Antenna Outside the Cabinet

Remove the antenna connector from the GSM/GPRS modem on the cover of the enclosure. Place the antenna connector through a hole in the cabinet (you can use the knock-outs if you wish) and secure to the GSM/GPRS modem on the cover tightening to finger tightness (do not overtighten as damage may occur).

Find a suitable location for mounting the antenna. Avoid large obstructing objects particularly if they are of metal construction, lighting and other electrical equipment, placing the antenna up high helps, check the location chosen with your phone or mobile signal strength tester.

Peel back the protective cover on the underside of the antenna to reveal the adhesive. Secure the antenna, using the adhesive, in a vertical orientation (cable exiting from the side).

Ensure that the cable is free from obstruction, secured, and out of the path of people and objects that could come into contact and cause damage.

Made in the UK

BLU

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3G Modem Kit
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