

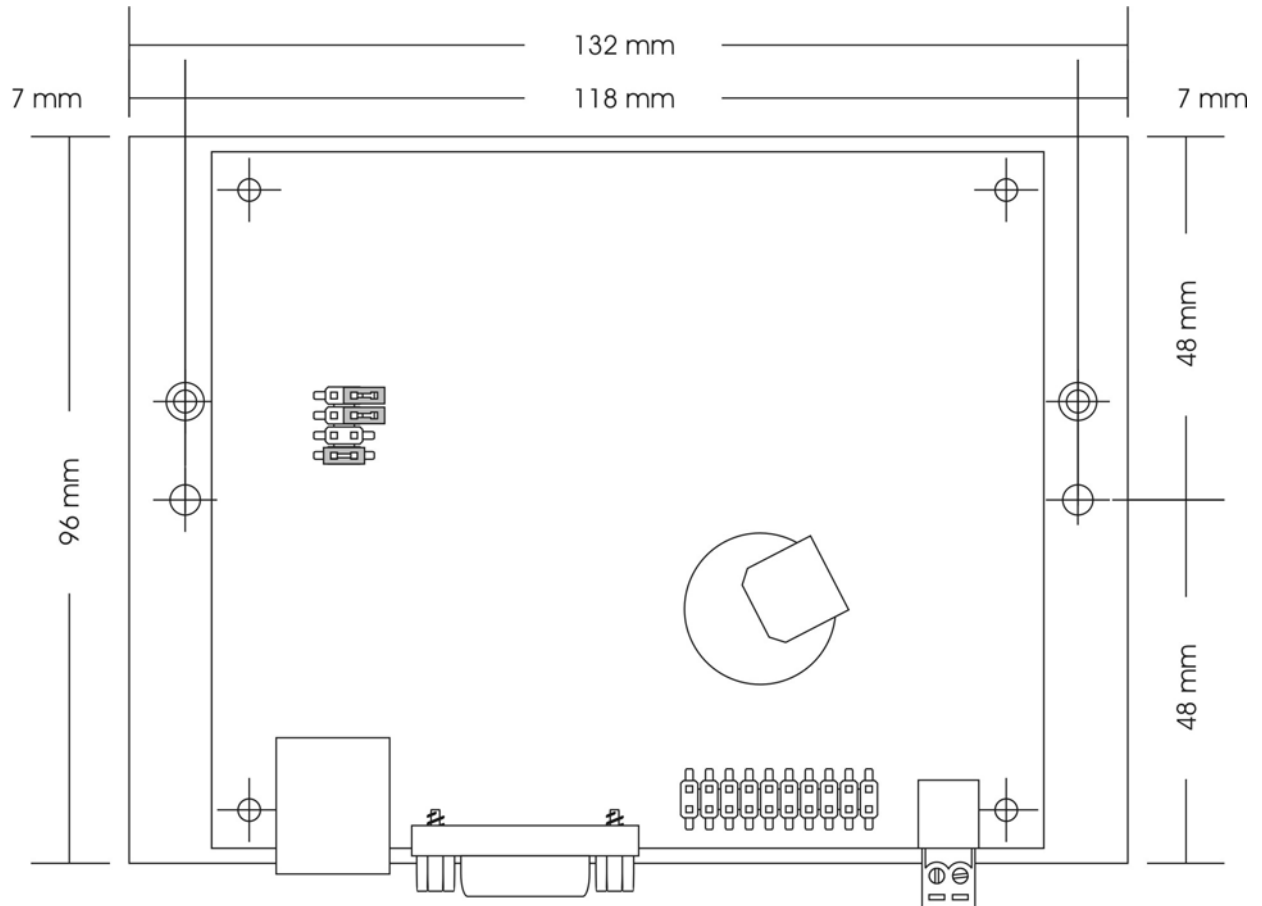
Installation Guide

Commander

Introduction

Commander provides a configurable link between an Ethernet network and RS232-based intelligent devices. It contains a driver interface that makes it specific to the particular device attached to it. This document will cover the stages needed for correctly installing Commander and should be read in full to avoid any damage during installation.

The Commander, like all electronic devices, should be handled carefully to prevent damage. The lid will need to be removed during the installation process, so care should be taken not to touch or drop anything on to the exposed circuit board.



Technical Data

Power rating	12VDC \pm 10% 500mA regulated
Mounting	2 x 4mm holes, suitable for M4 bolts. DIN-rail mounting kit available.
Ethernet connector	RJ45 10BASE-T
Device connector	RS232 9-way D-type (DTE)
Dimensions	135 x 100 x 24 mm (WxHxD)

Check before Installation

1. Ensure that the Commander is correct for the device being attached. Check the driver interface fitted from the label located on the chassis edge.



2. **IMPORTANT:** The Commander requires 12VDC (\pm 10%) and draws up to 500mA maximum. Connecting the power incorrectly or connecting an inappropriate power supply will damage the board or seriously affect its reliability.

3. Check that the location where Commander is to be installed is free from electrical noise and vibration, and is a relatively dry environment. Excessive noise can have a detrimental effect on Commander and power supplies.

Installing the Commander

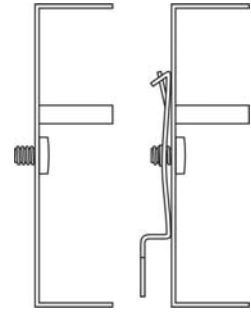
Step 1 – Mounting of the Commander

Carefully remove the Commander from its packaging. Remove the lid by unscrewing the two visible bolts. Take care not to get foreign objects on the circuit board whilst the lid is off the Commander.

If mounting Commander directly on to a wall or panel, use the chassis as a template to mark and drill two holes. Screw the Commander securely to the even surface using the mounting holes.

If using the optional DIN-rail mounting kit, order code MISC\DINKIT, attach the clips to the back of the Commander using the bolts provided. Tighten the bolts as much as necessary so the clip retains its shape. Clip the Commander on to standard symmetrical 'Top Hat' type DIN rail (TS35).

Leave a clearance of at least 10mm around the Commander, with 90mm minimum at the cable connection edge.



Step 2 – Connect to the Ethernet Network

Attach the Commander to a 10Base-T compatible Ethernet network switch or hub using a CAT-5 cable with RJ45 connectors.

Step 3 – Connect to the Third Party Device

Connect the RS232 9-way D-type connector to the third party system. See the North Helper or visit the North Web site for documentation on the driver interface installed and cable requirements.

Cables to connect Commander to the RS232 system are available from North, order code CMDR\CABLE\[system].



CAUTION! The 9-way RS232 connector on the Commander can be easily damaged. **Support the RS232 socket when plugging the cable in.**

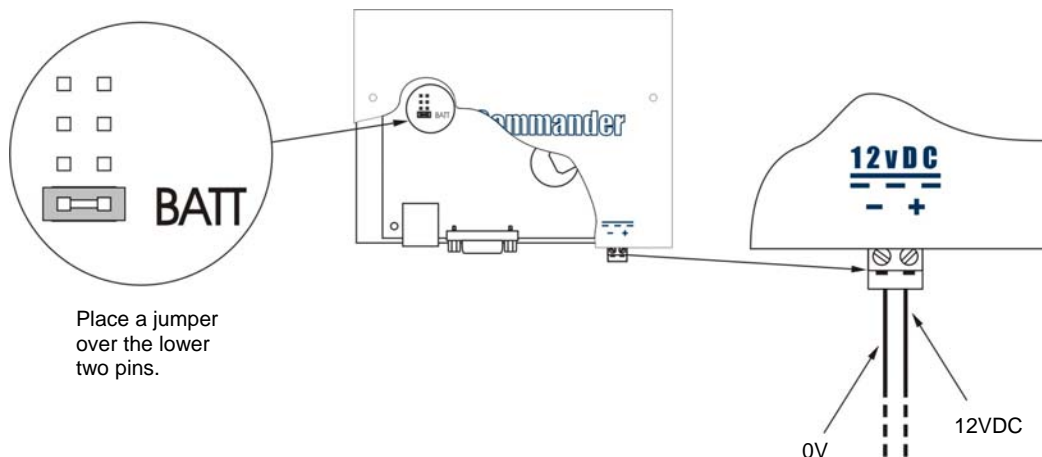
Step 4 – Apply Power

Connect the power supply to Commander as shown below and power it on.

IMPORTANT: Commander requires 12VDC ($\pm 10\%$) and draws up to 500mA maximum. **Connecting the power incorrectly or connecting an inappropriate power supply will damage the board.**

Step 5 – Enable Battery Back-up

Commander contains a lithium-ion rechargeable battery. During shipment the battery is disconnected and should be connected before engineering Commander. To connect the battery place a jumper over the lower two pins marked BATT as shown below.



Step 6 – Checking the Installation

When power has been applied to Commander, the LEDs located on the board indicate:

LED	Meaning
D1 (Green)	Flashes on power-up and indicates TX to engineering port
D2 (Green)	Flashes to indicate RX from engineering port
D3 (Orange)	Flashes on COM port activity to/from connected third-party system
D5 (Red)	On indicates CAT5 cable connected

Step 7 – Replace Lid

Replace the lid and fix in place with the two bolts removed in step 1.

Technical Support

If you require further help on installing Commander please contact our support team on +44 (0)1273 694422 or visit www.northbt.com/support.

Warranty

North warrants goods of its manufacture as being free of defective materials and faulty workmanship for one year from the date of purchase. If this product should become defective please contact our support team. This warranty becomes invalid if the product has been tampered with or used in an environment which is unsuitable.

EMC Conformance

The design and manufacture of North products conforms to the appropriate Electromagnetic Compatibility (EMC) standards, but correct installation is required to ensure that performance is not compromised.



WEEE Directive

The Waste Electrical and Electronic Equipment (WEEE) Directive requires the recycling of waste electrical and electronic equipment. Whilst the directive does not apply to some of North's products, we support its requirements as part of our environmental policy and we ask you to be aware of how you should dispose of this product. The crossed out wheelie bin symbol found on our products signifies that it should not be disposed of in general waste or landfill.



Please contact North or visit www.northbt.com/weee for more information on product disposal.