

# **DeltaBox MC-4 Modem Controller**

## **Quick Start Guide**



## Preface

Thank you for purchasing a DeltaM2M product. Before usage, please, carefully read this Quick Start Guide to prohibit erroneous installation or incorrect usage of the device.

The device you have purchased operates under a certain voltage.

Incorrect manipulation of the device may result in damage to the device or injury to the person handling it.



## Important notice

1. The manufacturer is not liable for any damage caused by incorrect usage or placing the device in an unsuitable environment.
2. The device is not intended for outdoor usage.
3. Do not use the device in an environment with strong vibrations.
4. Unauthorised modification of this device can damage it or cause fire.
5. Prevent contact with fluids; do not expose the device to high temperatures.
6. Protect the device from falling.
7. Only devices approved for use in the electricity network may be connected.
8. If the device malfunctions, disconnect it from the electric power supply and contact your reseller.

## 1. Introduction

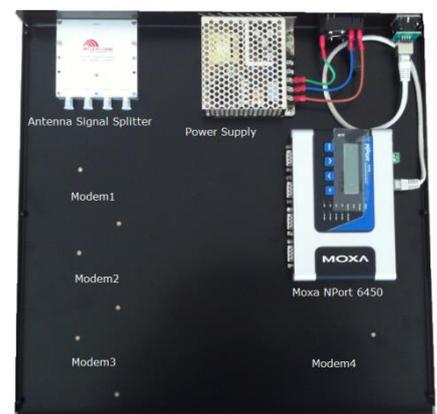
The DeltaBox MC-4 is a 19" Rackmountable Modem Controller. This device is designed to house up to 4 Cinterion modems (MC35iT, MC52iT, MC55iT or BGS2T).

The DeltaBox MC-4 contains

- Power supply
- Moxa NPort 6450
- GSM antenna splitter
- Power, Serial and Antenna cable for 4 modems
- 8 pcs. screws (M3 x 40 mm) with nuts and washers for mounting of modems

The power supply will supply the Moxa Nport 6450 and up to 4 modems.

DeltaBox MC-4 is designed for housing both Cinterion modems type MC35iT, MC52iT, MC55iT and the new BGS2T.



Please note, that the mounting holes of BGS2T is switched, so if you are mounting BGS2T in positions Modem1, Modem2 or Modem3, it must be turned so the label is visible from the top. In the position Modem4, BGS2T can be mounted with label down.

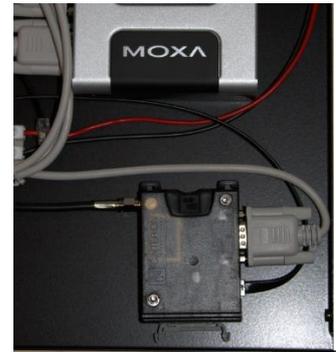
Picture is showing MC55iT mounted at position Modem1, Modem2 and Modem3.

For mounting of MC55iT, MC35iT or MC52iT use the M3 x 40 mm bolts supplied with the DeltaBox MC-4.



Picture is showing BGS2T mounted at position Modem4

Also please note that the antenna connector for BGS2T is of type SMA, whereas MC35iT, MC52iT and MC55iT are using antenna connector type FME. As standard, internal antennas connectors are type FME, so if you are mounting BGS2T, you will need a SMA to FME converter.



A BGS2T mounting kit consisting of a SMA to FME converter and 2 pcs of screws (M3 x 30mm), can be ordered from your reseller.

## 2. Mounting of modems

Mounting of modems must be done by authorized personel only. To mount modems, make sure that all external connectors to the DeltaBox MC-4 are disconnected. The DeltaBox MC-4 may need to be dismantled from the 19" Rack enclosure prior to the mounting of modems. Please make absolutely sure, that the mains input is not connected. Using a screwdriver type Phillips (not power tools), carefully loosen the 4 screws in each side of the DeltaBox MC-4 and take the top of.

Carefully connect the Serial cable, Antenna cable and the Power cable to the modem. Please observe, that the power cables have different lengths. Select cable with needed length and connect it to the power port of the modem. Especially with the power cables, do not stretch or bend, as the internal cables are quite thin and can break.

Mount the 2 screws from the downside of the MC-4 and place a washer before mounting the nut. Only tighten the screws until it is stable. If nut is tightened to hard, you can damage the modem.

Moxa NPort 6450 must be configured. Please refer to documentation from Moxa.

Make sure everything is connected properly and all cables are inside the frame.

Place the topcover, and remount 4 screws in each side. Use a screwdriver type Phillips (no power tools).

### 3. Installation in rack

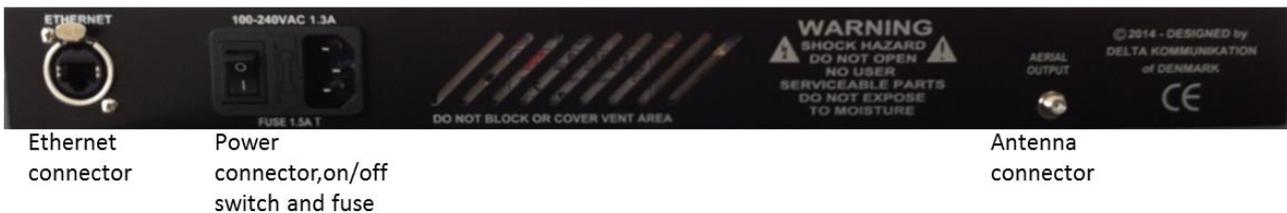
Before using the device for the first time, check whether the power supply voltage is 220-250 V AC, 50 Hz.

Place the DeltaBox MC-4 into the rack, and mount 4 screws (not included) to the rails on the front.

Connect the antenna to the DeltaBox using antenna cable with SMA-male connector. Please make sure, that the antenna cable is connected to a properly mounted antenna and that the antenna gain is adequate for supplying up to 4 modems through a GSM signal switch.

Connect the DeltaBox to the network (switches, router) using the network cable with RJ-45 connector.

Connect the DeltaBox power supply cable to the socket. Switch on the DeltaBox using the switch on the back of the device (press the I-button in).



### 4. Troubleshooting

#### 4.1 Changing the fuse

If the DeltaBox stops working, it is possible that the fuse has been blown. Before actual replacement of the fuse, check to ensure that the DeltaBox IS OFF and DISCONNECTED FROM THE POWER SUPPLY. Also disconnect all the devices connected to the outputs. To replace the fuse, unscrew the fuse holder (ideally using a flat screwdriver). Always replace the fuse with a new fuse of same type (250V 1,5A, type T). After insertion of the correct fuse, replace the plastic holder and screw it into place. Connect the power supply cable and try to switch on the device. Before reconnecting all the devices to the outputs, check whether the fuse was not blown by a fault on the connected devices.

## Please Note:

The manufacturer bears no responsibility for any technical or printing errors and reserves the right to make any changes in the product and in this user manual without prior notice. Any such changes will be announced via the manufacturer's website [www.deltaM2M.dk](http://www.deltaM2M.dk).

The manufacturer does not provide warranties of any kind whatsoever with regard to any information given in this Quick Start Guide or any derived warranties regarding product saleability or fitness for a specific purpose.

In particular, the manufacturer does not provide any warranties for defects caused by incorrect use of the product, failure to abide by the instructions and recommendations stated in the user manual and for any defects caused by unprofessional activities of third parties outside the manufacturer's authorized service shop.

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