



IP MODULE (MIP)

Firmware Updating Manual

Doc. DM304-I Ver. 4.0

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The manufacture reserves the right to introduce any changes and improvements considered necessary in both the hardware and the software of this product modifying the specifications in this manual without prior notice.

I - Updating Procedure

I - 1. Introduction

Updating the mIP/IPDACT devices firmware can be executed in two ways: from a PC or from another mIP/IPDACT, known as *master*, which already has the said firmware version.

I - 2. Identifying Device release

There are two MIP hardware versions and different releases within each version. Both the firmware to be loaded as well as the loading procedure differs according to the version.

The figure displayed below, represents the second mIP/IPDACT hardware version.



Illustration 1: mIP version 2/IPDACT

The first step before updating, independently of which mechanism you choose to execute this, is to find out which version and mIP/IPDACT board release you have. To do this, simply check the board identifier. The format seen here is TS-540/X in version 2 (mIP/IPDACT) and TS-563/X (mIPUD/IPDACT-UD) in version 3 where X is the release number.



If your board is similar to illustration 1: mIP version 2/IPDACT, the identifier is located as shown:

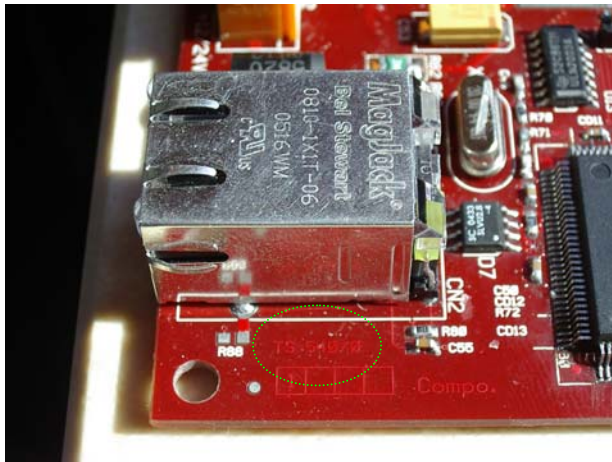


Illustration 2: Locating the Board identifier

Contrariwise, if your board is similar to illustration 3: mIP-UD/IPDACT-UD, please look at Illustration 4 in order to find the release number.

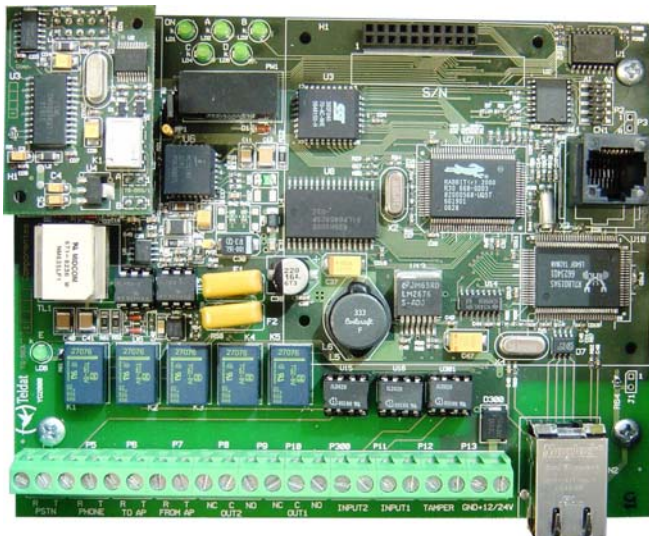


Illustration 3: mIP-UD/IPDACT-UD





Illustration 4: mIP-UD/IPDACT-UD board identification

I - 3. Connecting the loading cable

Independently of the loading method, both the mIP/IPDACT connector to be used as well as the way of connecting the corresponding cable in the said connector is the same.

Details on the said connector are displayed below (circled in green or red) for the different versions and in each case pin 1 being indicated by an arrow.

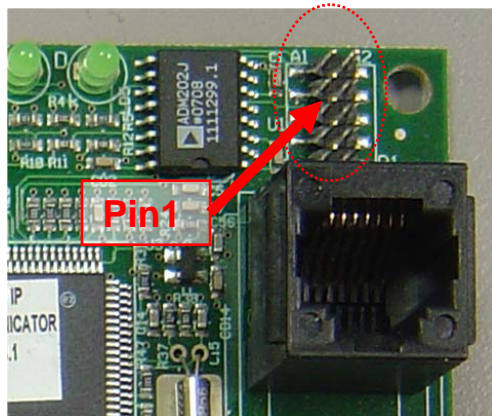


Illustration 5: mIP/IPDACT loading connector



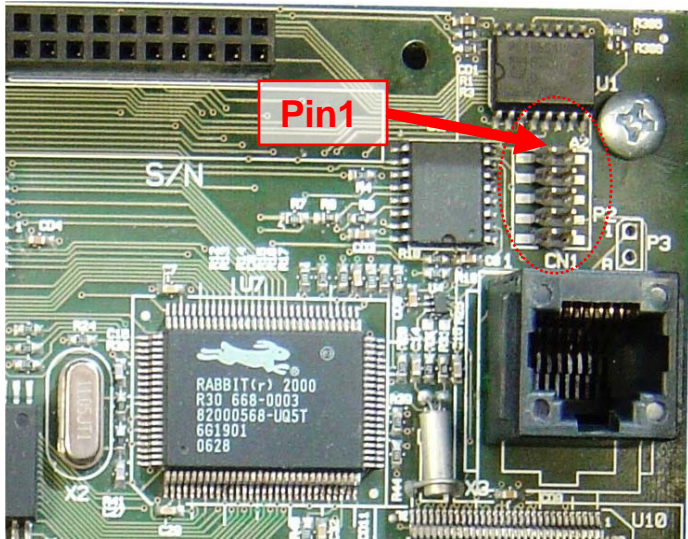


Illustration 6: mIP-UD/IPDACT-UD loading connector

With regards to the cable connection, this must be connected so that the red cable wire is connected to connector pin 1.

Below you will see some illustrations showing two devices connected by a loading cable.

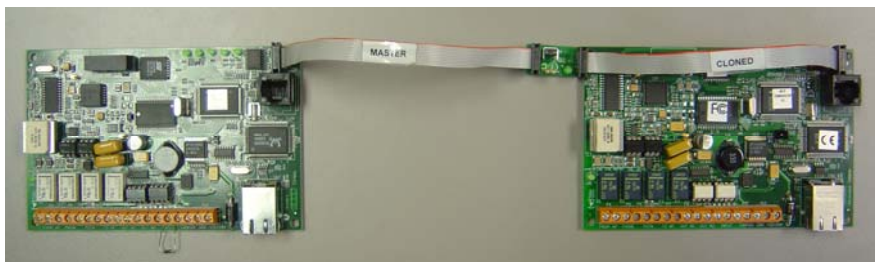


Illustration 7: Connections for cloning a mIP/IPDACT (Version 2)



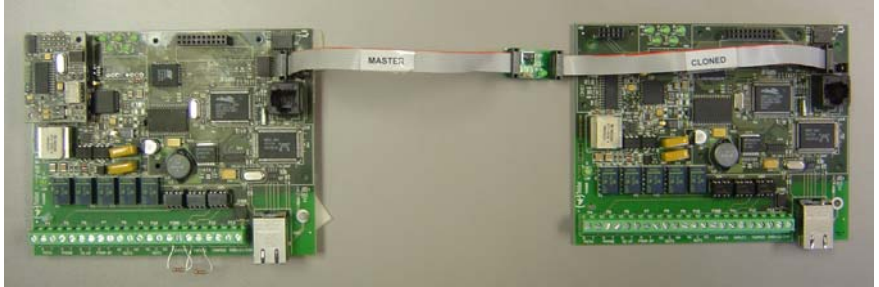


Illustration 8: Connections for cloning a mIP/IPDACT (Version 3)

In cases where a mIP-UD/IPDACT-UK can clone device, you need to disable the device's watchDog. This is achieved by bridging the P3 bridge with a jumper, as shown in the following figure:

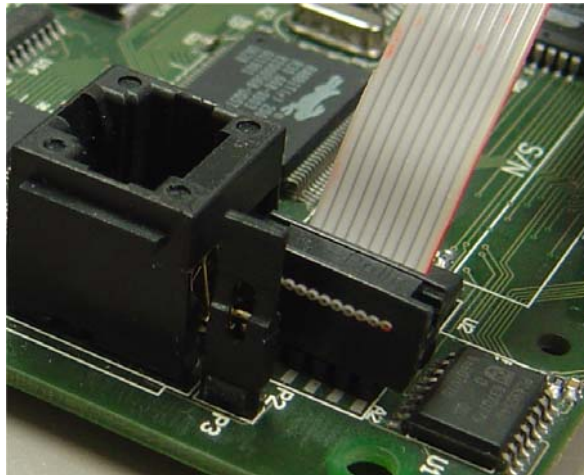


Illustration 9: Jumper to position while cloning a mIP-UD/ IPDACT-UD

WARNING: Devices with identifier TS563/1 cannot be cloned as they do not have a P3 bridge.



I - 4. Updating with another MIP

The following elements are required when updating from another mIP/IPDACT which already has the required firmware version.

- The mIP/IPDACT containing the updated software release, denominated *master*.
- The mIP/IPDACT device you wish to update, from here on denominated *destination* mIP.

Before executing loading with another MIP, check the compatibility table for the hardware versions and releases displayed below. Should an update be carried out between two incompatible devices, you could irreversibly damage the devices.

Model	Device to clone	Compatible master devices
mIP/IPDACT (version 2)	TS540/2	TS540/2
mIP-UD/IPDACT-UD (version 3)	TS563/1	Cannot be cloned
	TS563/2	TS563/2

- A MIPs “cloning “ cable.

The cable must be supplied by Teldat or an authorized distributor. The following figures shows the said cable and a photo of it.

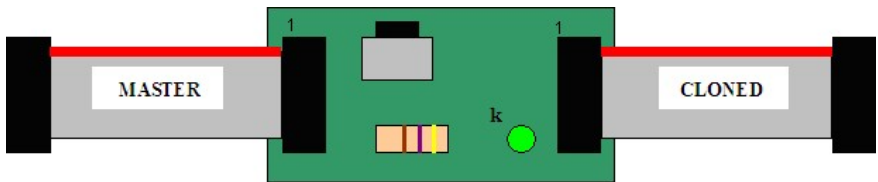


Illustration 10: Cloning card schema



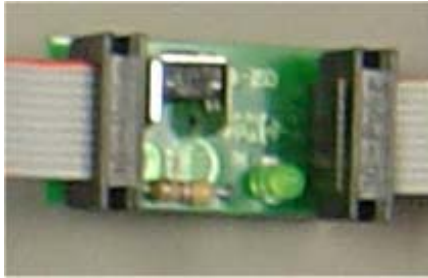


Illustration 11: Cloning card

The updating process is as follows:

- Connect the cable end labeled MASTER (see the above figure) to the *master* mIP/IPDACT loading connector carrying out the instructions given above.
- If the devices are model TS563/2, connect a bridge pin in the P3 connectors for both the *master* and *destination* mIP/IPDACTs.
- Connect the other end of the cable to the *destination* mIP/IPDACT loading connector.

WARNING. It is **EXTREMELY IMPORTANT** to connect each mIP/IPDACT to the correct cable end. Contrariwise you will copy the destination mIP/IPDACT firmware to the master consequently losing the latest firmware version.

- Connect both mIP/IPDACTs to the power supply.
- Press the cable pushbutton. At this point the loading should begin. During this process, the cable LED will flash on and off approximately once per second.
- The process has completed when the cable LED remains lit up and the *destination* mIP/IPDACT reboots, showing a burst of LEDs A, B, C and D off and on. If the cable LED begins to flash, this is a signal that some type of error has occurred. Check that the connections are correct and repress the cable pushbutton.
- Disconnect both cable ends.
- If the devices are model TS563/2, disconnect the bridge pin in the P3 connectors for both the *master* and *destination* mIP/IPDACTs.

