CB Electronics

TMC-1/A-Mon/Xpand

Release

Programming Guide

Version 2.0
CB Electronics

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Firmware Updates

The USB Port is used to update the TMC-1, A-Mon and XPand firmware. You should not need a driver as it uses a standard Midi Interface. Firmware updates are posted on the appropriate product page:

TMC-1-XMon - [http://www.colinbroad.com/cbsoft/tmc1/tmc1.html](http://www.colinbroad.com/cbsoft/tmc1/tmc1.html)

TMC-1-Penta - [http://www.colinbroad.com/cbsoft/tmc1/tmc1penta.html](http://www.colinbroad.com/cbsoft/tmc1/tmc1penta.html)

TMC-1-DMon - [http://www.colinbroad.com/cbsoft/tmc1/tmc1dmon.html](http://www.colinbroad.com/cbsoft/tmc1/tmc1dmon.html)

A-Mon and TMC-1-AMon - [http://www.colinbroad.com/cbsoft/amon/amon.html](http://www.colinbroad.com/cbsoft/amon/amon.html)

XPand - [http://www.colinbroad.com/cbsoft/amon/xpand.html](http://www.colinbroad.com/cbsoft/amon/xpand.html)

You will find both a Mac and Windows version of “midiupd” on the same page which should be used to send firmware updates to the TMC-1

Midiupd includes a help screen; you can find screen shots below
Opening Screen if Midi ports not found

Input port selection screen with TMC-1 input and output screens.
Opening screen with Midi ports selected. The Read key has been clicked to check the current software revision.
### Programming Screen

![Programming Screen](image)

#### TMC-1

TMC-1 screen after [Enable] clicked.

#### A-MON & XPAND

On the A-Mon and XPand the Mute LED will flash approximately once per second – Ready to program.

1. Click Enable – The connected device will switch to software update (check the display or LED’s).
2. Click File – Then select the firmware file ???.bin (unzip if necessary).
3. Click Start – You should then see the byte count and status bar increasing.
4. When "Finished" is displayed click on [Reset] to restart the unit.
5. For major upgrades you should then click on Factory Defaults to reset all functions.

In case of problems:

### Update Firmware

- **Enable**
- **File**
- **Start**
- **Factory reset**
- **Reset**

Byte Count: 0

Core build: 23/12/2014
Software Download: $000000
Ready to Update

- flashpage: 02F2 00 00
- flashmode: 02F6 00
- flashtest: 02F7 00
- pageofst: 02F0 00 00
The firmware files are posted as a zip file; You should extract the .bin file before use.

In case of problems:

1. Click Enable – The connected device will switch to software update (Check the display or LED's).
2. Click File – Then select the firmware file ???.bin (unzip if necessary)
3. Click Start – You should then see the byte count and status bar increasing.
4. When "Finished" is displayed click on [Reset] to restart the unit.
5. For major upgrades you should then click on Factory Defaults to reset all functions.

Programming
Note: the progress bar on the TMC-1 shows the total memory space available and will not reach the end.

The Progress bar on “midiupd” shows the update length and will be cleared once finished.

Finished,

Now depress [Reset]
For Major upgrades you should now reset to factory defaults and then setup the User keys and menu options.

Where the TMC-1 has a ethernet port fitted a upgrade may be purchased to upgrade to TMC-1-Penta or TMC-1-DMon software. To obtain the key use midiupd to read the signature and send with the serial number to support@colinbroad.com.

Without the correct key the software will not run. TMC-1-XMon and TMC-1-AMon software does not require a key.
TMC-1 Recovery

In the case of power failure or other problems when updating the TMC-1 firmware.

1. Abort and exit from “midiupd”

2. Unplug the USB then reconnect whilst depressing [Select] and [Ctrl]. The Software Download screen will be displayed.

3. Restart “midiupd”. You will need to select the CBCore MIDI ports

A-Mon and XPand Indication

The Mute LED is used to indicate the Programming mode as follows

- Mute LED Flashing approximately once per second – Ready to program
- Mute LED Flashing approximately twice per second – Programming
- Mute LED Flashing approximately once per two seconds – Finished programming

A-Mon and XPand Recovery Mode

If for any reason there is a problem when reprogramming (eg. Power Failure) a recovery mode is provided.

To enter recovery mode, disconnect the power for at least 5 seconds, then reconnect with the Mute key depressed. You will need to reselect the USB port used by MidiUpd.

The Mute LED will flash at approximately 1 second intervals to indicate that the device is ready to program.