

Service Memo for Tactile M 4000:

Questions:

Where is the difference between the software versions V 2.10, V 2.23 and V 3.0???

Will my system be better after the new software is installed?

Can I make the update myself??

Answers:

History:

first version in M 440 was V 1.2 for U 12 and U 13 (1mB E-Proms)

first version in M 420 and M 430 was V 1.20

first version in M 410 / M 411 was V 1.0

Here I am referring to the latest versions only, i.e. from version:

V 2.10 in M 440

V 2.10 in M 420 / M 430

V 1.10 in M 410 / M 411

V 1.0 in M 411 Motor Fader Driver PCB

Compatibility:

There always was a release of "family related functions" i.e. exchanging one E-E-Prom with the new version made it necessary to exchange all E-E-Proms in the system.

When the software V.2.21 is installed inside the M 440 position U 12 and U 13 (the large 1 MB E-Proms), it was necessary to use the new software V 2.10 in The M 420 and M 430 (the normal 256 K E-Proms).

From April 1996 the software-standard was:

| | | Actual version |
|--------------------------------------|--------------------------|----------------|
| M 410 / M 411: MPU under LCD-screen: | 1 x 256 K Version 1.01 | 1.10 |
| M 411 Auto Fader PCB: | 4 x 256 K Version V 1.01 | 1.10 |
| M 470 Meter bridge: | 1 x 256 K Version 1.01 | 1.01 |
| M 440 Central computer: | 2 x 1024 KB Version 2.21 | 3.0 |
| System Control U58 | 1 x 256 K Version 1.20 | 1.20 |
| Meter Control PCB U3 | 1 x 256 K Version 2.0 | 2.0 |
| Timecode PCB U18 | 1 x 256K Version 1.01 | 1.02 |
| M 420 Sub CPU | 12 x 256K Version 2.10 | 2.20 |
| M 430 Sub CPU | 2 x 256 K Version 2.10 | 2.20 |

Important notice:

I received a number of requests if the console "will sound better" or have an updated digital output. To be honest – no IC's or transistors or A/D – D/A converters will be modified by this software, it is strictly functional updates, which are worth-while to have.

There will be some differences if updating to Master software V 3.0 in the M 440, or the Sub CPU V 2.20 in the M 420 and M 430, as well as when changing the motor fader software to the V 1.10 version, especially the “Current limiter” which will prevent the faders to be driven with full power when they got stuck e.g. under a book etc..

V 3.0: it will give you the full MIDI functions of the console, that is the “Bonus”. The adjustable parameters of AUX sends, EQ and fader levels will be more accurate, In some configurations/settings the input EQ started “ringing” or sounded like a synth, this has gone with V 3.0.

Some of the features in the system-controller have been deleted, such as the adjustable fader-travel time, fader balance etc. which was optimized in the system software and the V 2.20 for M 420 and M 430.

New functions:

You may now recall the “last scene” after switching ON the console by pressing F5 on the M411 controller,

You can cut all selected PFL or SOLO in all selected channels by pressing CLR and any SOLO switch.

The click-noise when selecting ACTIVATE or EQ ON / OFF has been reduced by more than 6 dB!!

For those of you, who like “details” I have found the original Bulletin Board for the latest software release to the existing version. Unfortunately the ink has faded, so it was not possible to scan it and put it on the web – so I typed it off the bulletin:

System Control Software Update V 3.0

1. This bulletin is for the update software V 3.00 which incorporates improvements dedicated to the model M 4000 C / M 411 motor fader controller.

Please note: you can not run this software in any way when you have connected the M 410 (VCA controller) in your system.

In the M 440:

Position U 12 SYS (**V 3.0**) system control PCB use 120 nano-sec or faster

Position U 13 SYS (**V 3.0**) system control PCB use 120 nano-sec or faster

In the M 420 / M 430

V 2.20 on the SUB CPU PCB's (total 14 pcs), use 150 nano-sec. or faster

Note:

Make sure that the EPROMS installed in the M 420 and M 430 (total 14 pcs) have to be V 2.20 when the V 3.00 is installed in the M 440 central computer. Otherwise, a malfunction in the system might be caused.

The V 3.00 SYS software has been developed based on the M 4000 C moving fader controller M 411. The additional and new features of the M 4000 C are described in the new M 4000 C owner's manual (please refer to this). The following features and functions have been added or modified in the V 3.00 software from previous versions.

As usual, the system initialisation is very important after the replacement of the software. **Please initialize your system before the new operation.**

2. List of updated functions and features in **the V 3.00** SYS software from **V 2.22**:

Additional features:

- a) we have newly added Channel Isolate Mode in SCENE RECALL of input channel. (SHIFT +ACTIVATE key for ON/OFF)
- b) we have newly added the fader-offset adjusting function available at the time of GROUPING and STEREO LINK. Adjust the offset with operating the fader as you are holding down the ACTIVATE key.
- c) We have newly added EVENT INPUT SETTING in the PANEL CONTROL menu. You can now assign the functions of input in EVENT IN/OUT on the rear panel of M 440 (25-pin SUB-D connector) and externally control GLOBAL-NEXT-PREV, and SCENE a, B, C, D etc.
- d) MON A/t is isolated from the scene recall in the MON + DIG setting menu.

Alterations:

- a) we changed the default values of the input level assignment of TAPE INPUT and LINE OUTPUT to +4dBu from 0dBu.
- b) We changed F4 CH_NAME in CHANNEL STATUS to SHIFT + F\$
- c) We have newly added EVENT PULSE WIDTH to the UTIL:CONT&RTC menu
- d) The SCENE:EVENT PTN, SCENE:COMM PTN and SCENE PROG CHANGE functions, which have been used so far, were all brought together in the SCENE ENTRY menu. The assignment of the EVENT output (RL, TTL) and the COMM_EDIT F4 function menus were newly added.
- e) We changed the assigning method in the PANEL:GROUPING menu
- f) We eliminated the method per channel assigning with R and W in the D.AUTO:READ/WRITE menu. Now the assignment can be made only with the WRITE switch above each fader.
- g) It is now possible to make ON / OFF operation of AUTO RTN and to change START TIME in the D.AUTO:RELATIVE and D.AUTO:PRO UPDATE menus.

Eliminations:

- a) we eliminated the version display of M 410 / M 411 in the UTIL:VERSION menu.
- b) We got rid of the automatic assignment available when more than one APC's are connected at the time of system initialize. Instead, the system will route the M 420 always to the first M 430 etc. unless you select a different routing.
- c) The assignments will be as follows immediately after the replacement of the new ROM's and / or at the time when the system is powered ON with the RAM-Data lost:

| | M 420 | M 430 |
|-------|-------|-------|
| Main | 1 st | 1 st |
| Exp 1 | 2 nd | 1 st |
| EXP 2 | 3 rd | 1 st |

| | | |
|-------|------|------|
| EXP 3 | 4 th | 1 st |
| EXP 4 | 5 th | 1 st |

Therefore, when you are connecting 2 or more APC's, please re-assign after initializing the system.

Others:

- a) we adopted the running status for the communication reception.
Here we say the running status is a command processing for the command that has omitted the status command. For example, when you recall SCENE PROG Nr. 1 to 5 with the command processing for the scene programme, it has now become available for the command reception as the following:

With V 2.22: c0-00-c0-01-c0-2-c0-03-c0-04 etc.

From this new version: c0-00-xx-01-xx02-xx03-xx04 etc.

It is now possible to omit from the second "c=".

- b) please note that M 4000 Communication I/F Specifications, included in Appendix of the new owner's manual so far, will be separately provided as a separate volume
- c) "Communication Operating Manual"
- d) The parameter list for receiving commands at the time when controlling APC's externally has been all the more fulfilled with VER 3.00 compared to V 2.22 or V 2.23. The needed sets of the V 3.00 SYS and V 2.20 Sub-CPU software can be ordered from your distributor, either in readily programmed E-E-proms, or on a floppy for your own E-prom programming device.

My comments:

It will not be possible to compare V 2.23 or V 2.10 or V 1.85 or other versions to the latest version V 3.0 for M 440 or V 2.20 for M 420 / M 430, as I do not have these old parameters handy.

I also can not guarantee that you will be 100% satisfied with the latest update, as you might miss some functions which have been deleted, or may not like / need some of the new functions.

So I would suggest to keep the old version on the E-E-proms and to install the new one instead. I will not be able to take back the new software, or to trade in your old E-E-Proms.

All I can say that there has been no negative response so far when the V 2.22 was exchanged to V 3.0. There will be no other updates, nor can I make any specific changes to the software. It is as it is.

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