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Assembly guide for S6k MKll upgrade

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S6k MKll Upgrade
assembly guide

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Revision history

When	Who	What
2010-05-18	FNN	Document Started
2010-06-09	FNN	Minor corrections in software load section
2010-07-08	FNN	How to back-up user presets is added
2012-03-08	FNN	Replacement of fuse

References and related documents

[1]	XXX

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Receiving an upgrade kit

To be able to perform upgrades from System 6000 to a System 6000 MKll you have to buy a **Start Kit** consisting of a "Repair backup battery" and PCMCIA cards with different software. TC also advises that you are in possession of a PCMCIA Card Reader in case that the software on the PCMCIA cards got corrupted. It is important that the Card Reader is able to read and write sectors as necessary for the System 6000, therefore we advise you to buy the one found from this link: [Card Reader](#)

Beside of the Start Kit you have to buy an **upgrade kit** from TC Electronic for each system to upgrade. It is important when ordering an upgrade kit to inform what licenses you want along with the kit.

The upgrade kit contains new hardware as front PCB, PSU bracket, front, front cover, lid, PCMCIA guide, handle, insulation plate, fastener, battery, Ethernet PCB, screws etc, and different foam, stickers and brochures.

All received goods except for some of the foam pieces shall be used during the upgrade and the following shipment to the customer, so please don't throw away anything before the mission is fully completed.

Before starting the upgrade, make sure that the S6k works properly. This can be done by as a minimum checking communication to an ICON and to load engines.
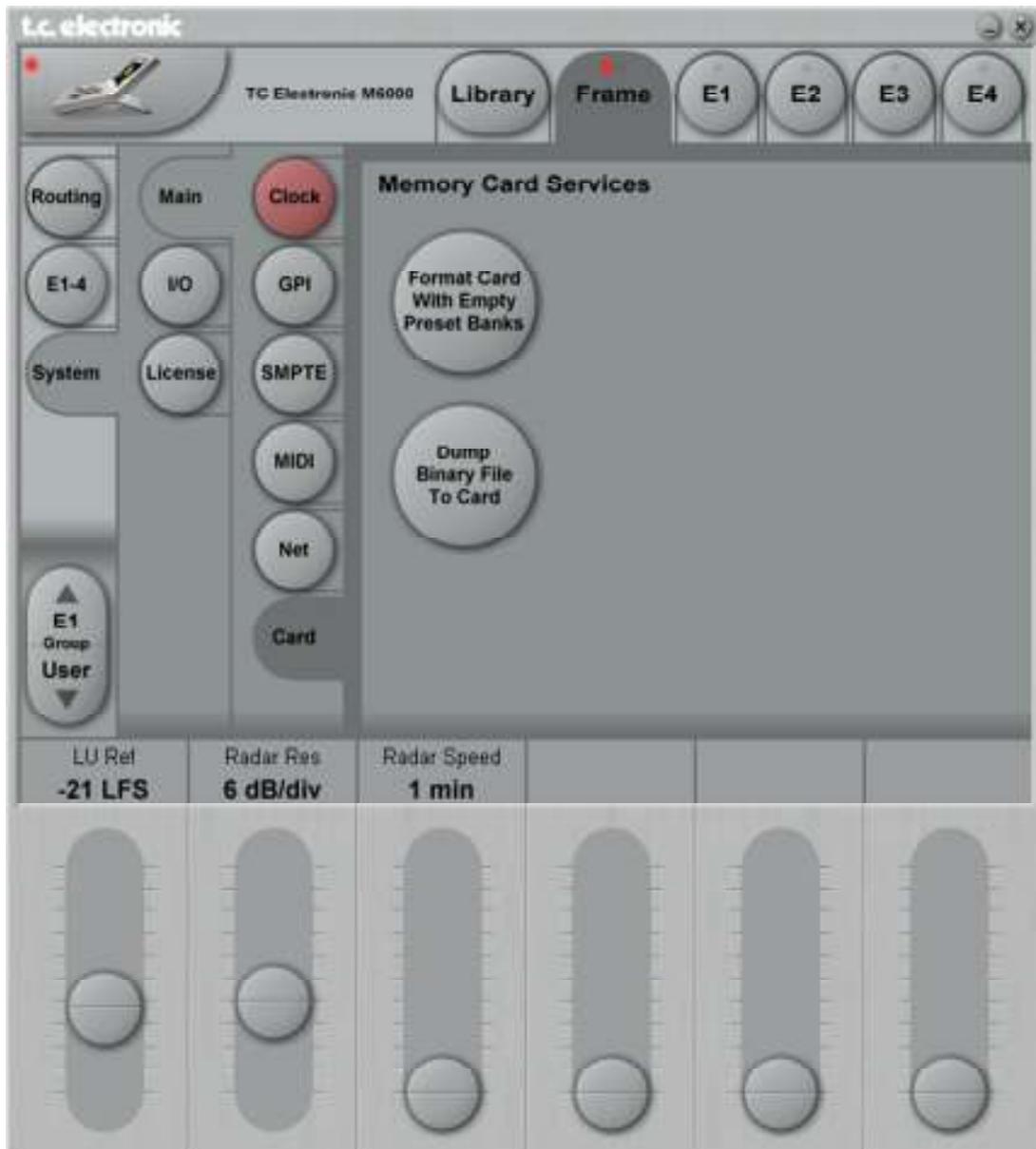
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Backing up user presets

Before disassembling the S6k a back up of user presets is strongly recommended. Turn on the system and follow the following guidelines:

Insert an empty PCMCIA card into the PC card slot.

Choose the menu: system/main/frame/card

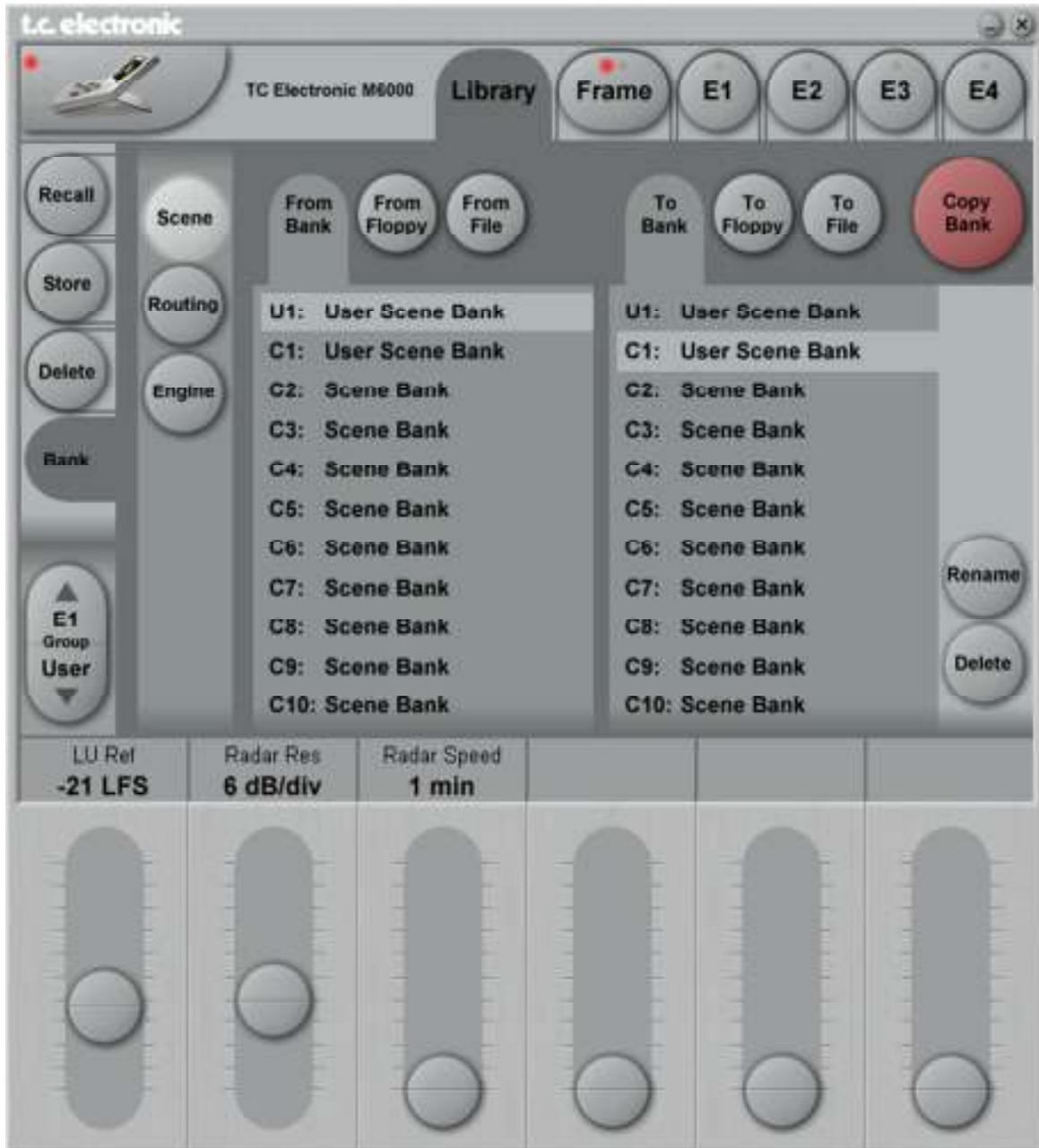Press: Format card with empty presets (all data on the card will be destroyed)

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Then go to library/bank

Chose: From bank (left side) and to bank (right side)

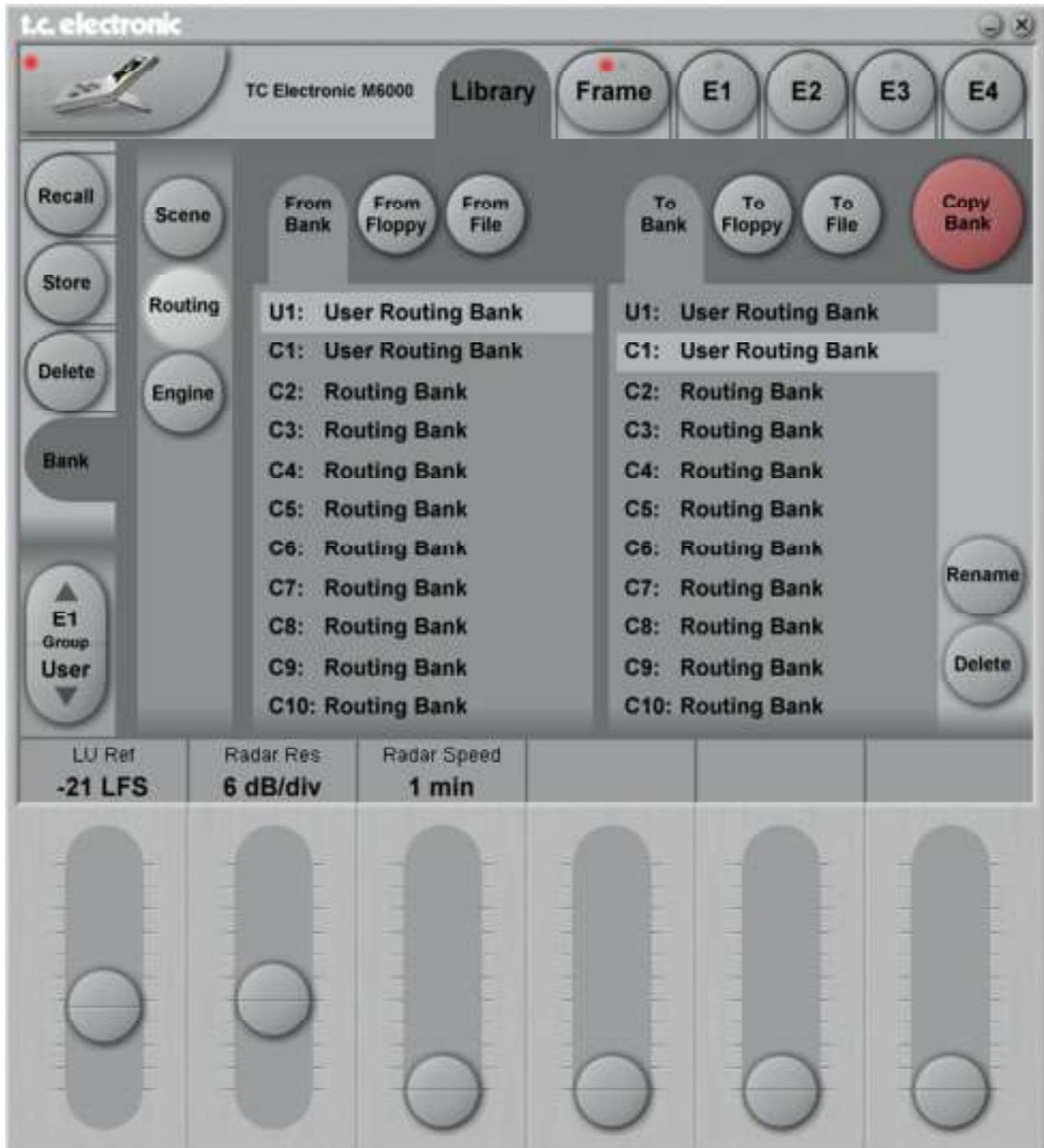You will have to make 3 savings: Scene, Routing and Engine.

Start with Scene and then on the right side choose: C1: User Scene Bank and then press copy bank.

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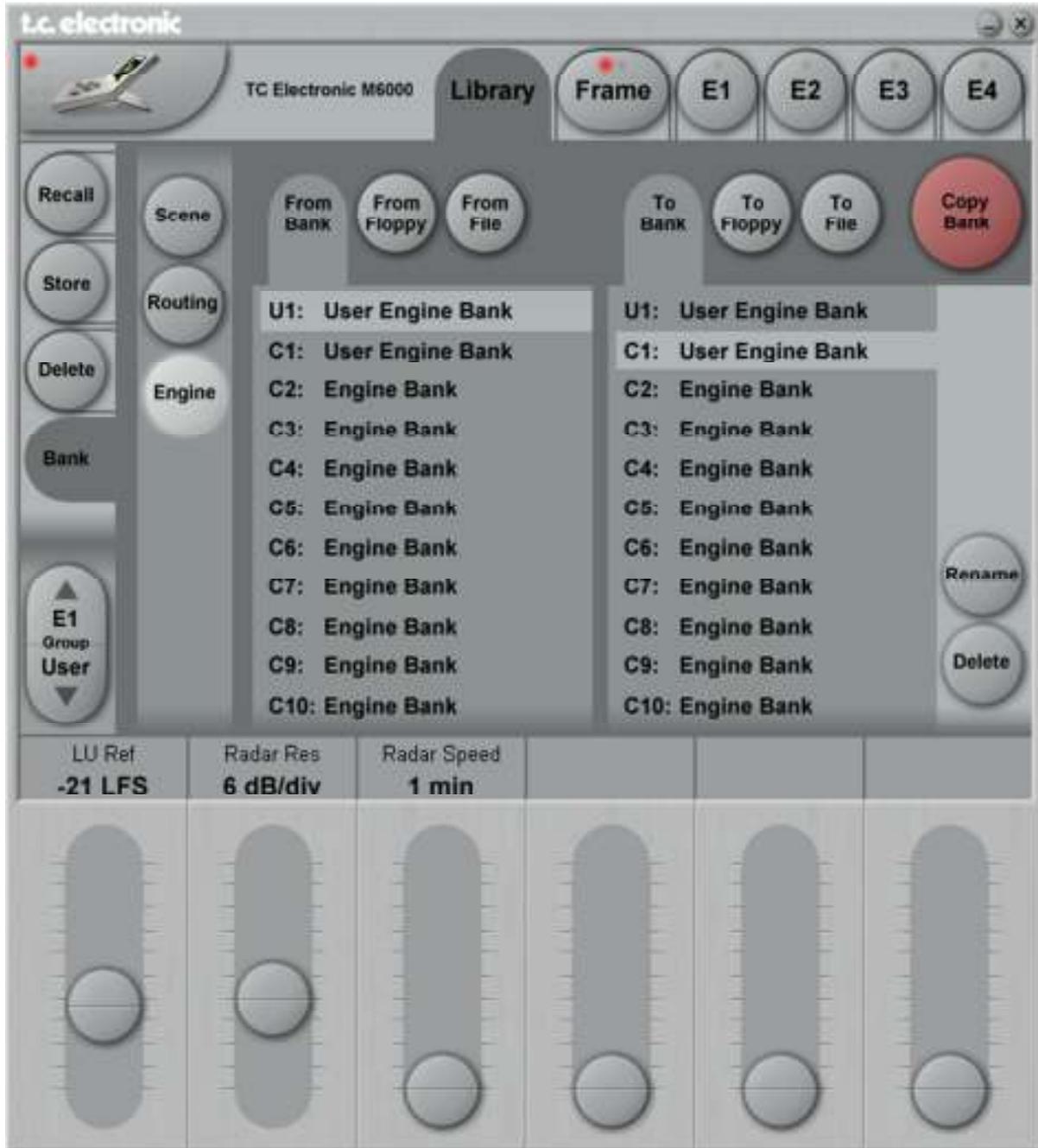
Then save Routing:

Choose Routing on the left side and C1: User Routing Bank on the right side, then copy bank.

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And last save engine:

Choose Engine on the left side and C1 User Engine Bank on the right side, then copy bank.

Now the system setting settings are saved

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Upgrade guide, mechanical

Take of the Top and the Bottom covers from the unit to be upgraded.

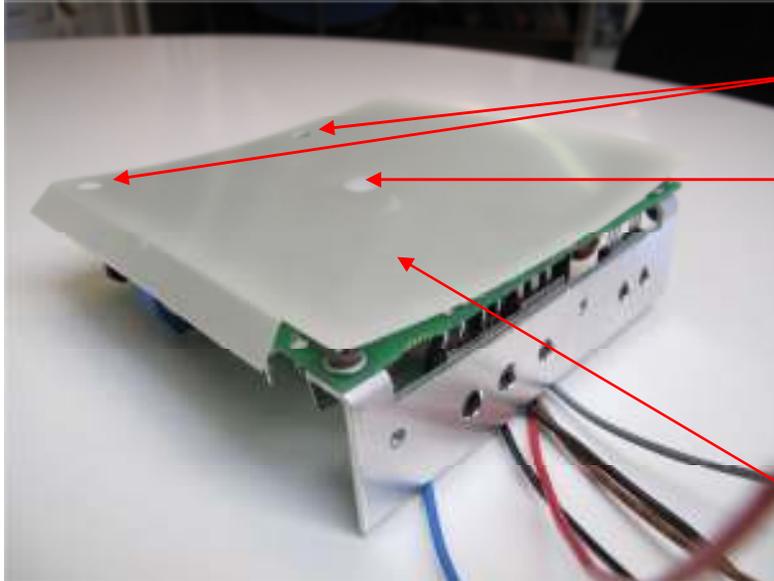Take out DSP and other I/O cards inserted.

Dismount the PSU. Disconnect the cables, except for the one to the bus PCB, and put the PSU aside as shown:

Remove the Floppy disc drive and all the cables for this.

Although the Floppy disc drive is removed and not to be mounted again the Floppy controller IC doesn't have to be removed.

Mount the new enclosed insulation plate by means of the fastener to the PSU. It can be an idea to soften the fasteners elasticity a bit by squeezing it with a flat-nose plier. Use the right hole for the fastener so the other two holes in the insulation plate fits for the holes in the PCB. See the picture below:

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These two holes must fit with holes in PCB

567030011, Fastener for mylar for PSU.

Fastener

590019513, Mylar, insulation for M6000 switch mode PSU

PSU with insulation mounted

Now, turn the S6k unit upside down and dismount the CPU/Ethernet unit.

Dismount the Ethernet board from the CPU board

The battery on the CPU board must be replaced, but before soldering out the battery, the "Repair backup battery" received in the start kit must be connected. If this is not done it will cause all licenses for S6k to disappear and the need to reinstall these again.

When working on exchanging the battery you have to be extremely careful not to short-circuit anything (soldering iron, tin solder, solder wick or alike) to the battery terminals as it may cause severe damage to the electronic components.

Connect the "Repair backup battery" as shown on the picture below. When this is done remove the old battery and mount the new one. Finally remove the "Repair backup battery".
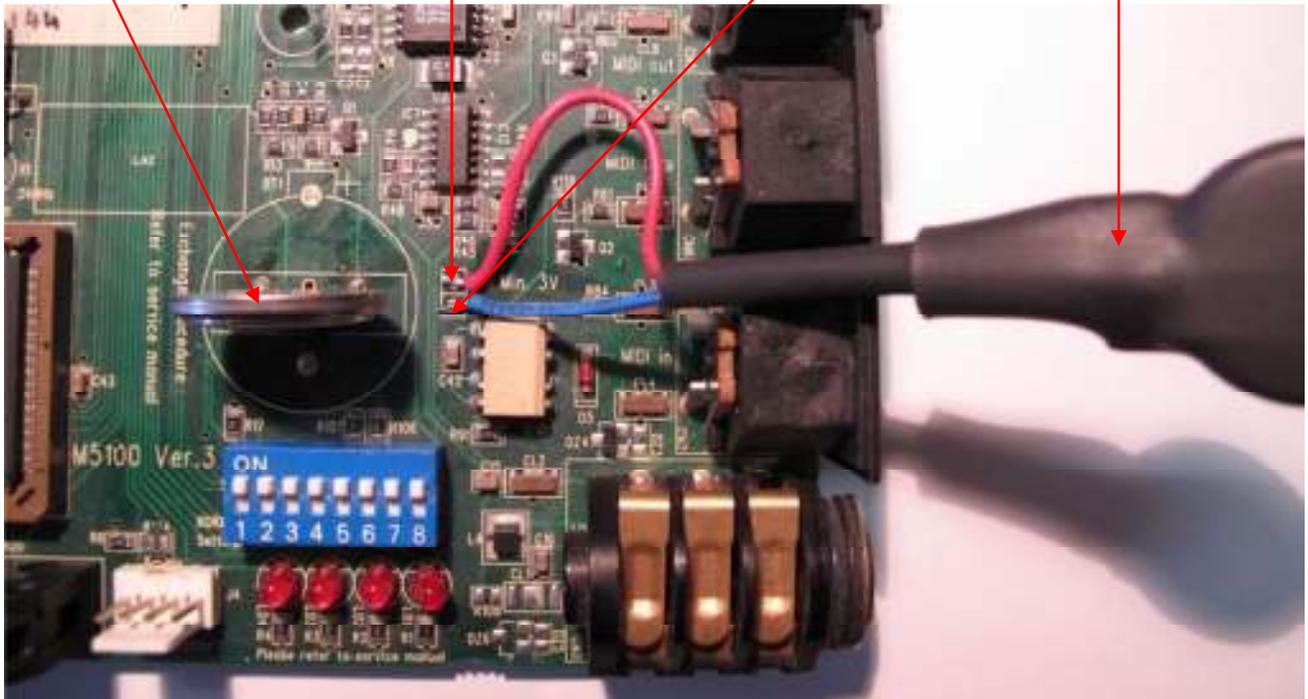
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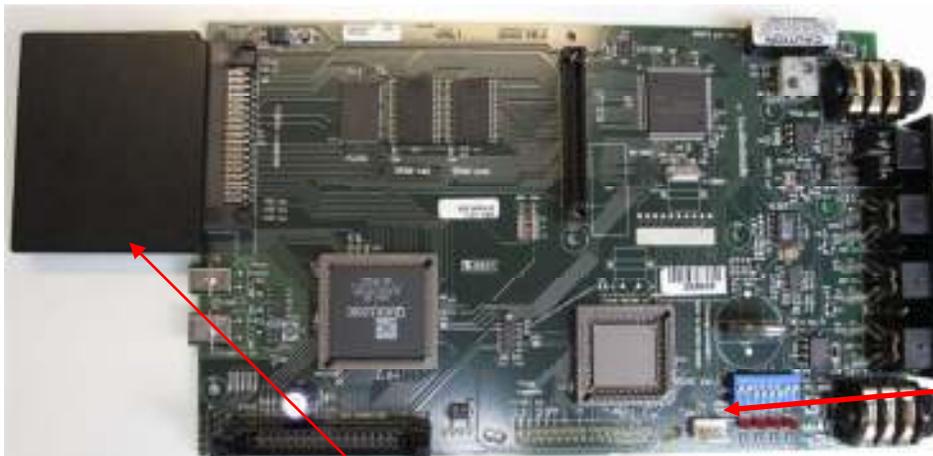Battery to be exchanged   Red wire to TP3   Blue wire to TP2   Repair backup battery

On the CPU the resistor R104 must be removed. See picture below.

R104 must be removed

Place and fasten the PCMCIA guide as shown by means of the double sided adhesive tape. When it is correctly placed you have to squeeze the guide to the PCMCIA connector quite hard for 10 – 15 seconds to be sure that the glue on the tape makes the necessary contact. The tape will harden up completely within 24 hours.

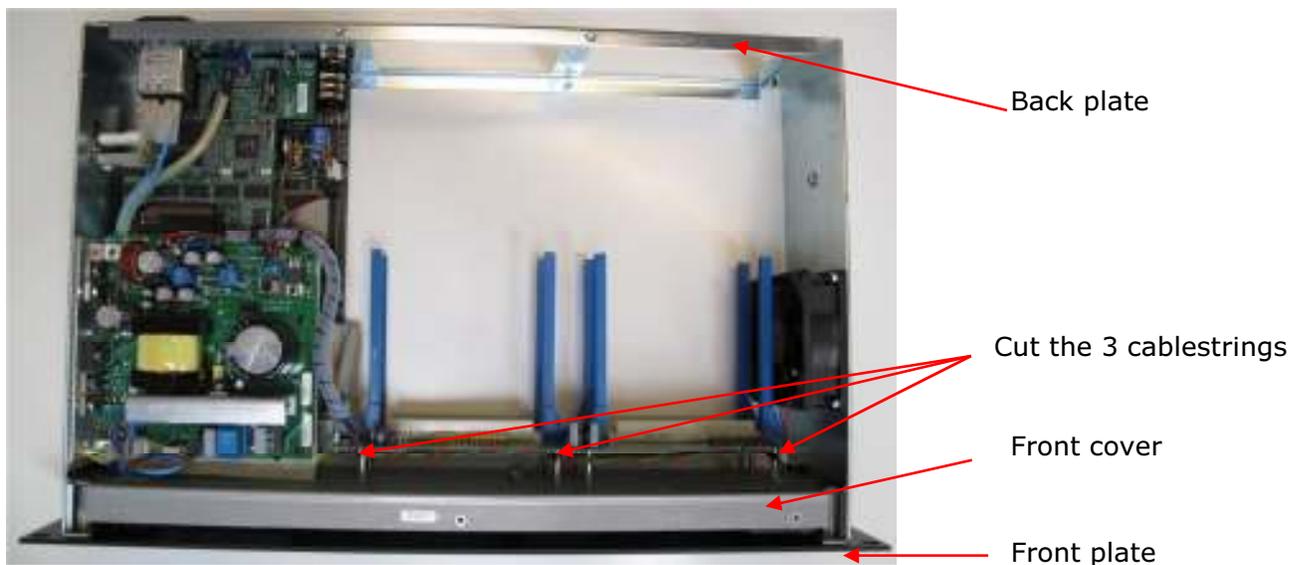**Assembly guide for S6k MKll upgrade**

Mount the new enclosed Ethernet board on to the CPU board. Reuse the old screws and washers.

Now you have to take the frame apart by removing the front plate. See picture below:

The Power switch must be dismounted from the old front and placed in the new front profile. Remember "0" on switch is facing upwards.

Dismount the front cover from the bus PCB. See picture below.
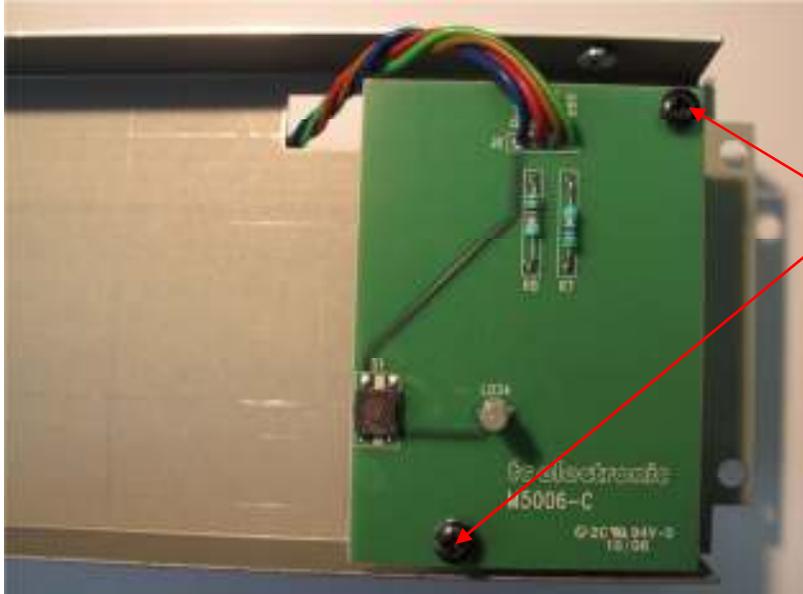
Cut the 3 cablestrings. See picture below.

Back plate

Cut the 3 cablestrings

Front cover

Front plate

Remount the bus PCB on to the new front cover.

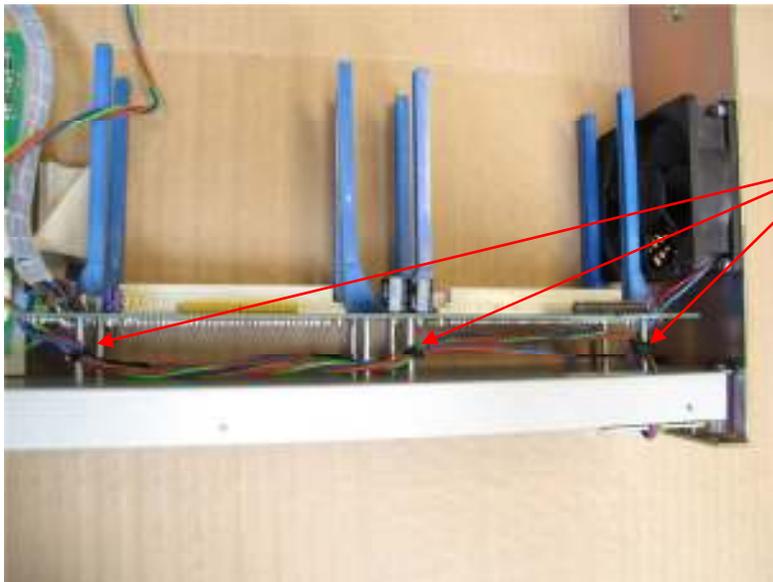Dismount the hexagon spacers, washers etc. from the old front cover and mount them on the new one.

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Mount the enclosed front PCB on to the new front cover by means of the enclosed two M3*6mm screws and starwashers. See picture below.

Mount the front board as shown by means of the enclosed screws and starwashers.

Place cable from the front PCB and fasten this with the enclosed cablestrings the proper way as shown on picture below.
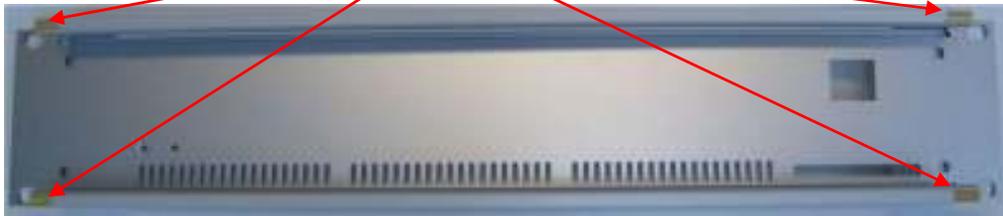

Fasten the cable with 3 cablestrings

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Put front cover in position.

Place the handle on the front as it was shipped. (See picture below).

Remove the protection film from the tape

Mount the front and connect the blue and brown wire to the power switch. When mounting the front use caution not to damage the LED on the front PCB. Use the enclosed 4 pcs. m5*12mm screws, which are a bit longer than the original screws.

To get the CPU/Ethernet unit in place you have to dismount the two screws in the back plate. When it is placed then mount it to the back panel by means of the Jack plug nuts. Also reuse the 3*6mm screws for the Ethernet board. Connect cable from front PCB to "M5000X" connector on CPU board and the ribbon cable from the bus PCB. Mount the two screws in the back plate again.

Mount the PSU bracket on to the CPU board by 2 pcs. 3*8 mm through the sideplate and 2 pcs. 3*6 mm with starwashers into the spacers on the CPU board. Reuse the spacers etc. from the old bracket. See picture below:

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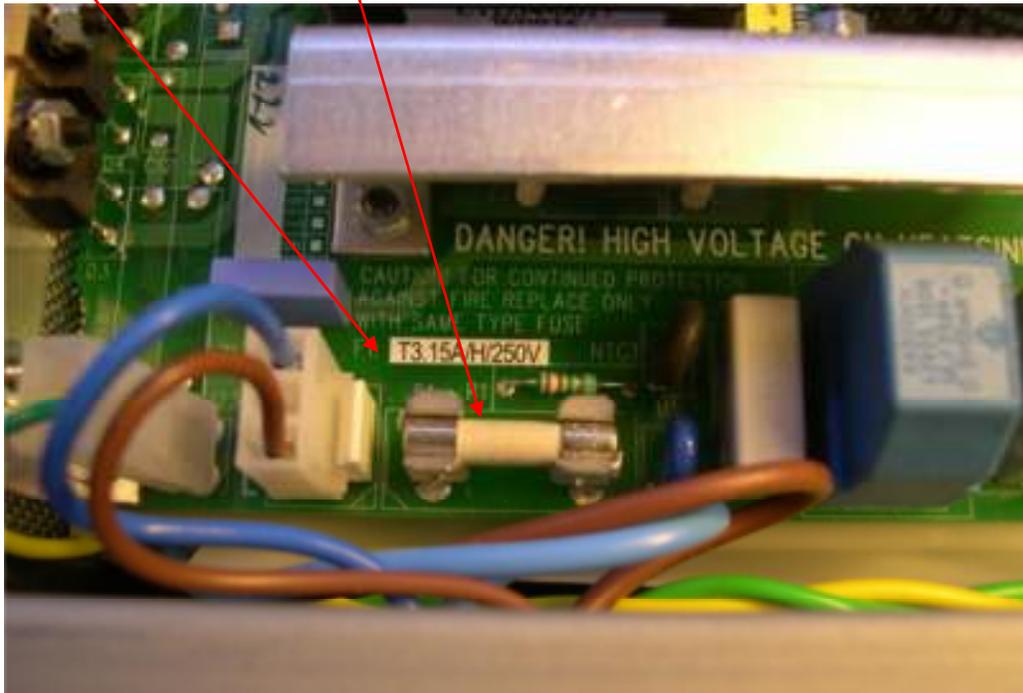Take care not to squeeze the wires

Mount the PSU in the frame again. Remember to place the dust filter between frame and PSU.

Mount cables from power switch to PSU

On the PSU you have to replace the 2A fuse to the enclosed 3,15AT H fuse and place the enclosed sticker as shown below:
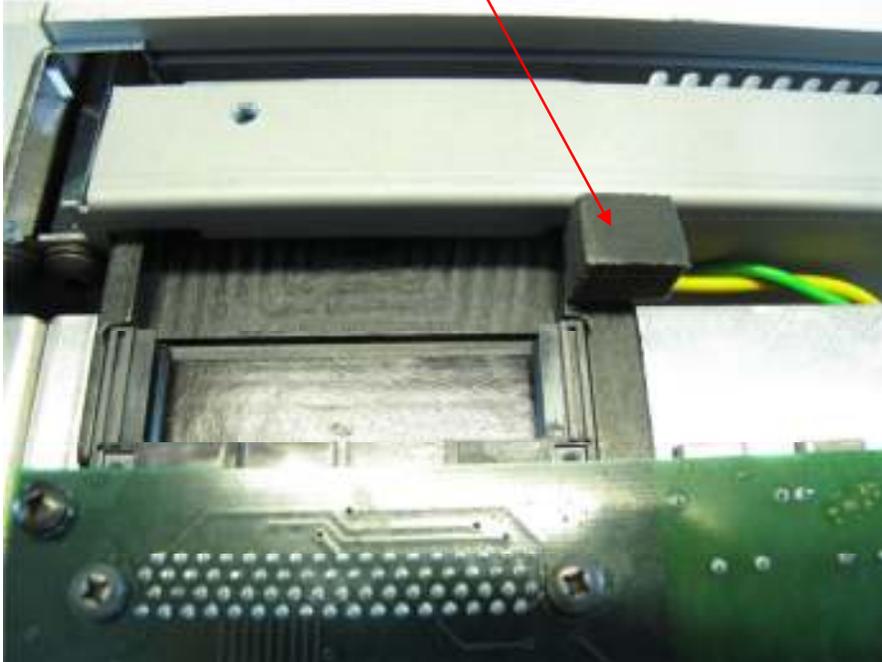
Sticker   Fuse

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To hold the PCMCIA guide in place (when the bottom lid is on) you have to fasten the distance foam block by means of the tape on it.

When you have finished the mechanical part of the upgrade you will have the following left on your working table:

> Old lid, front, frontcover with old front PCB, PSU bracket, Ethernet PCB, insulation plate, floppy drive, 10 screws for top and bottom lids, 4 screws for front, a protection nut, a plastic spacer and the old 2AT fuse.

If it despite of the backup battery happens that the licenses for the S6k are gone you have to reinstall these again. If you don't have the codes, you have to send a mail with the frames serial number along with the error code to TC support support@tc.com to get new codes.
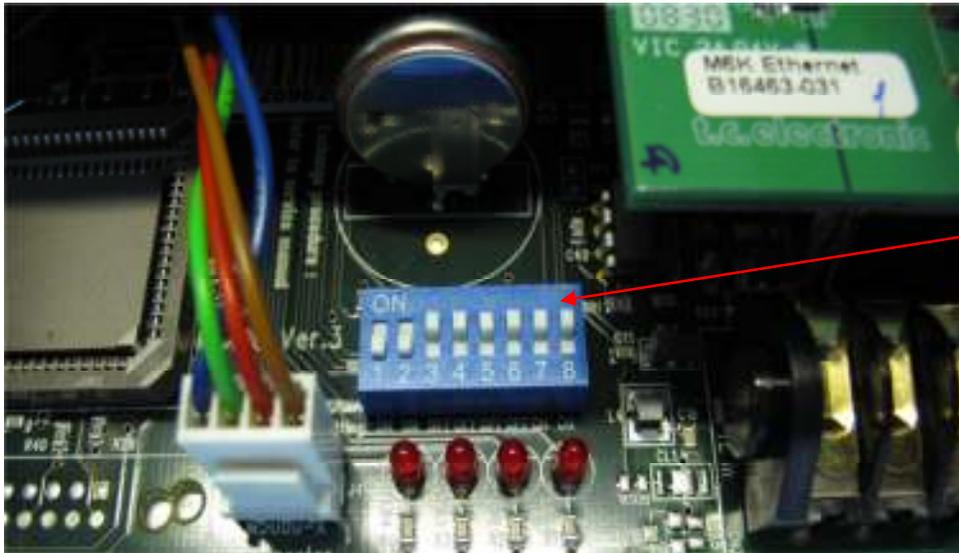
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Upgrade guide, Software

Before starting software upgrade, please make sure to back up software from all PCMCIA cards on a PC, in case the PCMCIA card software should be destroyed.

Still with the System 6000 turned off, put in the Boot PCMCIA card into the PCMCIA slot. Be aware to load the right boot (Mastering 6000 or Reverb 6000).

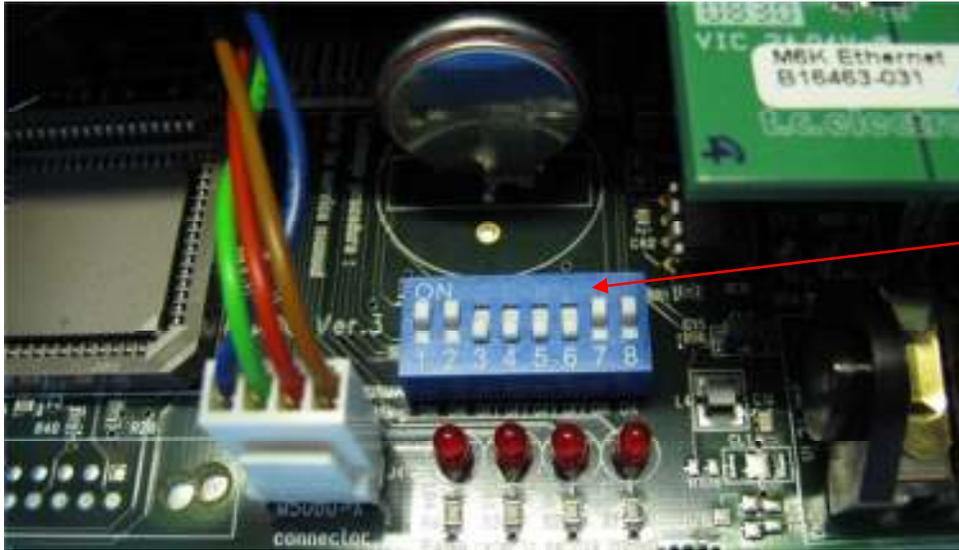Put DIP switches in the below shown position when installing the boot:

No. 1 and 2 off. No. 3, 4, 5, 6, 7 and 8 to on.

Turn on the System 6000. Observe the front LED which after 8 – 10 seconds will light steady green when the boot load is done.

Turn off the System 6000 and remove boot PCMCIA card.

Now put DIP switches in the below shown position when installing the rest of the software:

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No. 3, 4, 5 and 6 to off.

No. 1, 2, 7 and 8 to on.

Insert the PCMCIA card with Frame software (Reverb or Mastering). Turn the unit on and the software will be loaded. This takes 30 – 45 seconds. When finished the front LED will light steady green. Now turn off the unit.

The Ethernet card just installed came with software ver. 8.00 or newer and this makes it possible to update not only this software, but also DSP and Frame software to the unit via a PC. Be aware that the DSP software update takes roughly 5 minutes.

Now either use the CD which came with the upgrade kit or download from TC Homepage the newest software and then download the newest software to your S6k MKll. Please follow advises from the home page or the manual (found on the CD). Please be attentive that if you download a *.zip file you have to unpack it.

After loading all software you have to reset the System. This is done by pushing the reset switch (which is accessible through the small hole in the front) while switching on the unit. The front LED will light steady green after roughly 5 seconds when the unit is reset.

When the frame is reset be aware that the IP no. is set to default, which is 192.168.1. xx, where the "xx" is the last 2 figures in the frame serial number. However if the serial number ends with "00" the last digits in the IP address will be "100"

Please be attentive that an old ICON Editor and old ICON software also must be updated in order to work with the S6k MKll. The software must be version 5.00 or newer.

Reloading user presets

To reload user settings from PCMCIA-card you must until further notice use the special ICON Reload Presets Editor (Beta version) which is available from the Techserver. Then:
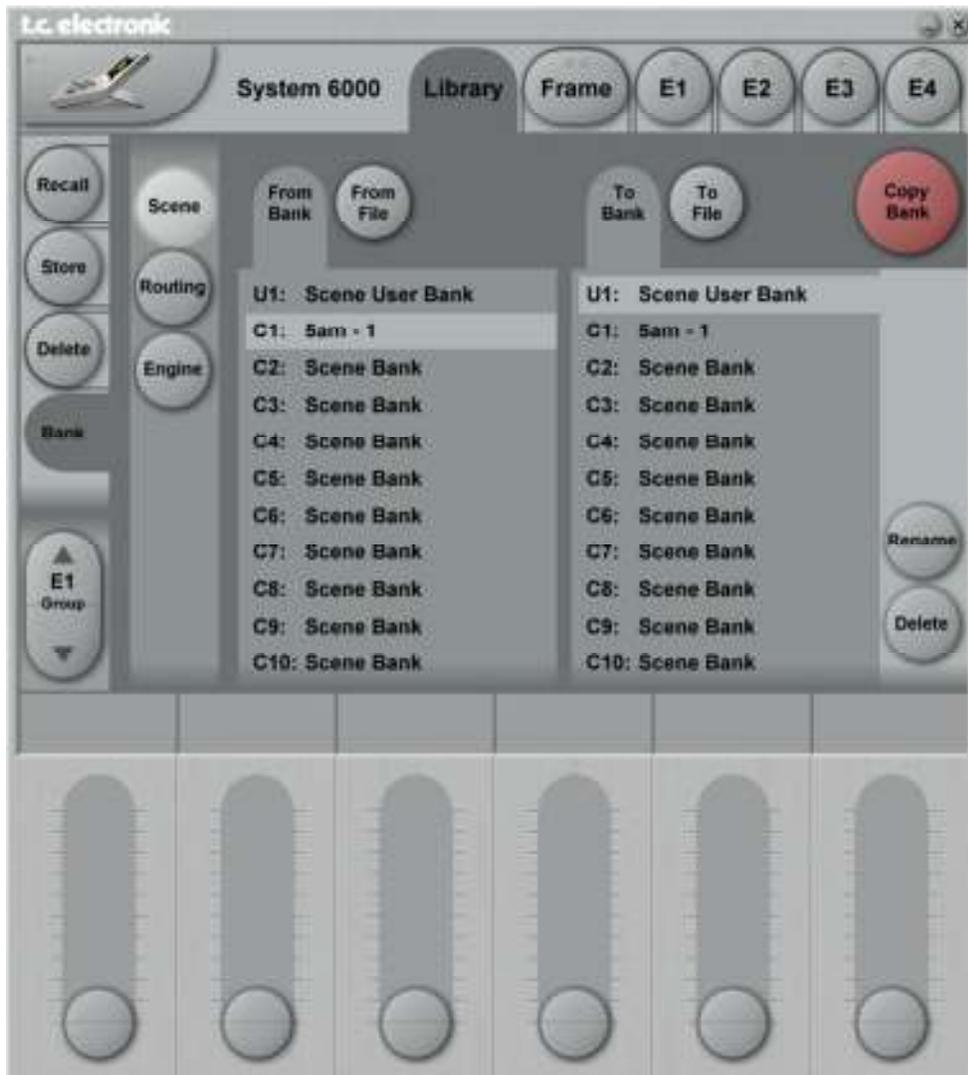

Go to the bank menu.

To reload scene:

Press scene.

On the left side select from bank and C1.

On the right side select to bank and U1.

Press copy bank, and yes.

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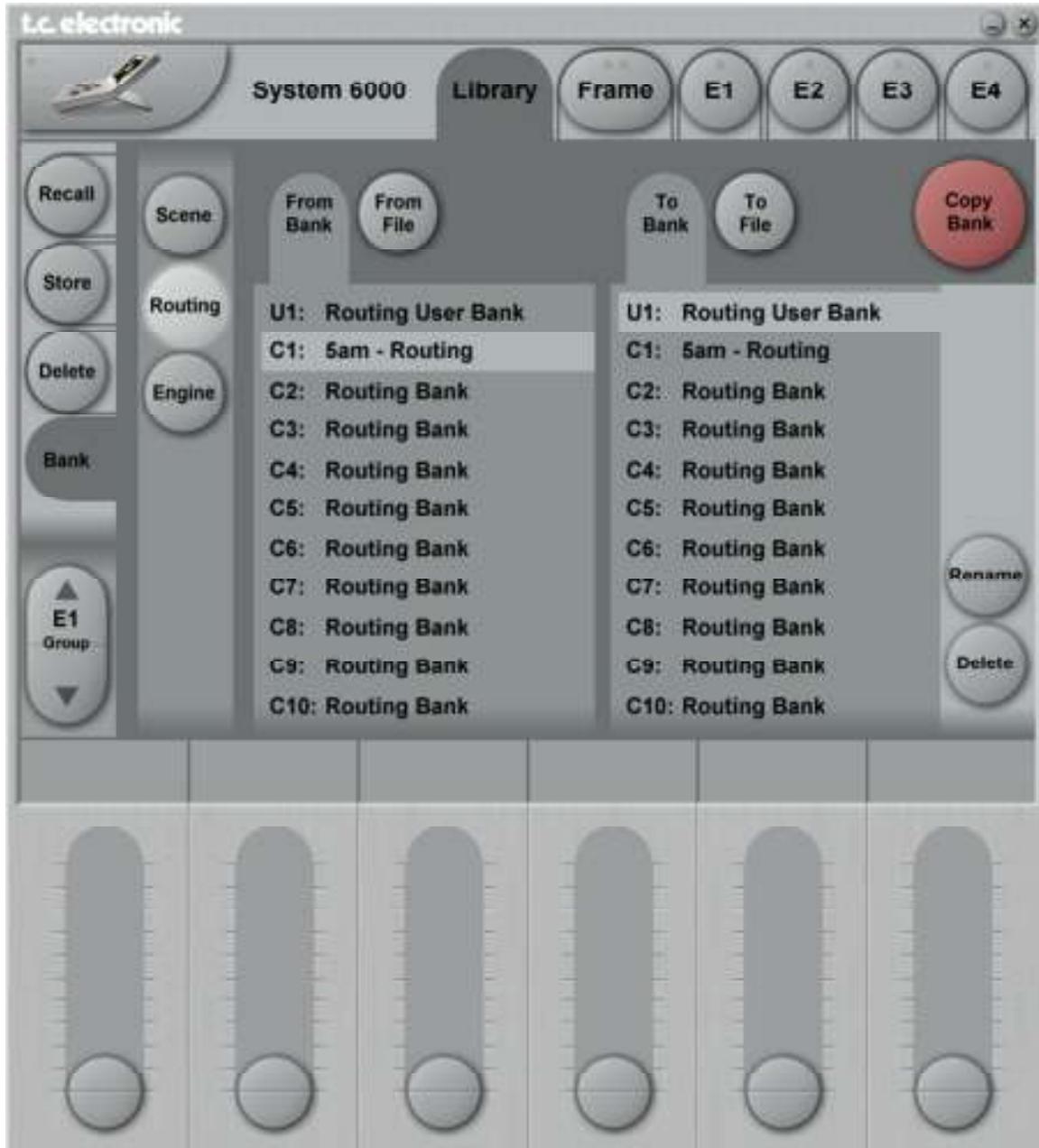
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To reload routing:

Press routing.

On the left side select from bank and C1.

On the right side select to bank and U1.

Press copy bank, and yes.
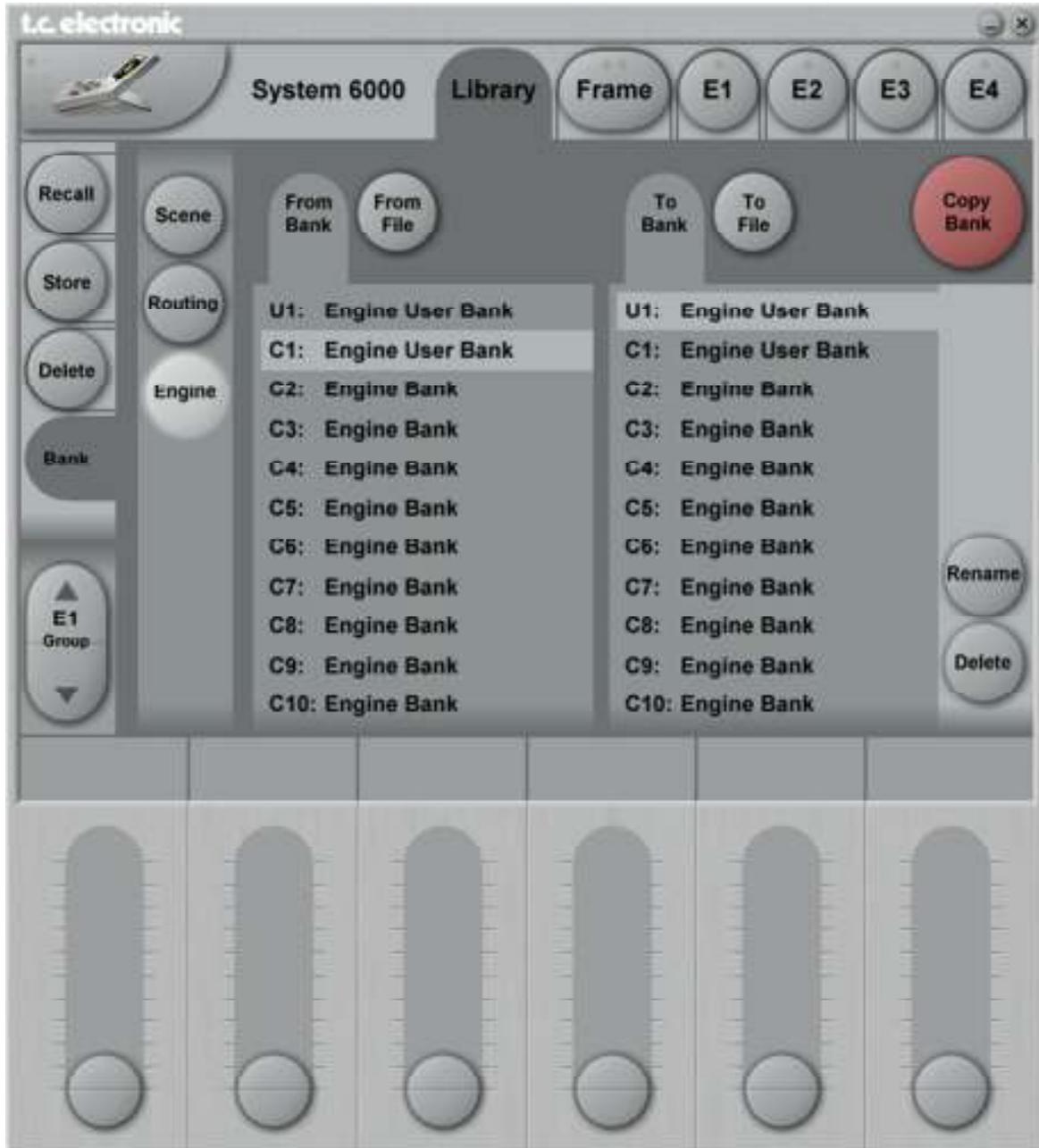
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To reload engine:

Press engine.

On the left side select from bank and C1.

On the right side select to bank and U1.

Press copy bank, and yes.

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Activate the licenses as informed by sales when the upgrade kit was ordered.

Mount the old bottom lid (new screws enclosed).

Mount the new enclosed top lid (new screws enclosed).

After testing functionality and wiping off possible dirty spots, the unit shall be placed in the plastic bag and packed into the product box.

Enclosed in the product box must be:

606101411, TC M6000 "Safety Instruction" 2.0 + DB-8

611010424, PRINT TCE Brochure System 6000 license

613175011, PRINT DYN Pamphlet Spring 2009

610013011, System 6000 MKII software package and manual

712016998, System 6000 MKll – Upgrade note for customer

If you have any questions please check our homepage or our Techserver for possible solutions, or contact our sales or support department.