Ultimate DAW Solution for **d8b Mixers**

User manual

V2.03.05

Contents

1 Welcome

Thanks for purchasing the ProBox. In this document you will find a detailed description about the installation and function of the ProBox. The Probox is developed by me as a single person. I'm a professional on electronics and software development as this is my daily business in a big electronic development company.

Nevertheless there can be that there will be any strange behaviour with this product. In that case you can contact me via email. I have stored all email addresses of the probox customers to let you know when updates are released. I wish you a lot of joy and happy working with the ProBox without troubles.

The probox emulates a Mackie/Logic Control with two extensions plus a monitor controller and a generic controller for the remaining not used buttons/Vpots. As there are several DAW programs available it is not possible for me to test the proBox on all platforms. As the ProBox emulates the Mackie stuff it should work with all platforms that support the Mackie/Logic Control. The Monitor Controller is DAW / OS independent and will work everytime.

Special thanks to:

Thomas Rybka who made the logo and tested the ProBox on Mac with Logic.
system32 (in the d8b forum) for sniffing the audio protocol on the console site
Tony Harp (in the d8b forum) for for testing the HUI protocol on Protools
M.Shaw for the Sonar Professional setup
my wife for her understanding ☺

Best regards
Ralph Weritz

Ralph Weritz
Contact: probox@weritz.com

2 Important

Please read this carefully to avoid damage and problems with your ProBox or d8b.

!!! Keep Boot order. First Computer, after bootup and logon, then power d8b, when welcome screen (DAW offline) on display appears the start DAW software !!!

!!! Never connect both USB ports at the same time !!!

This can cause a damage to the ProBox or your computer via the power supply domain.

Use the Monitor Controller Section carefully. Too much level (loudness) on the Phone Output can injure your ears.

As the ProBox simulates the Mackie MCU/XT the Probox will have all issues that a Mackie MCU/XT will have with your DAW software. If you have problems I will help you, but please don't except a fix if it is a MCU related problem. I will not be able to fix that as it is not in my technical responsibility.

On Logic (and maybe other DAW programs) you might not have the full Fader range (Logic stops at +6dB). This is not a bug of the probox, Logic doiesn't send a wider range, to ensure that the level displayed in Logic fits to the marks beside the Fader. A Fader calibration will not solve this issur.

The drivers for windows 7, Mac and Linux are OS drivers. So I'm not able to do any updates on that. The ProBox is tested with these OS types and there were no issues found. If something will pop up on driver site we have to wait for driver updates. By the way, I found out that the real Mackie MCU Pro (USB Version) uses the same drivers.

The HUI mode emulates 3 HUIs in parallel. Protools seperates some functions on the three single HUI controller. E.g. you can use the multi select option when pressing the channel select button, keep it pressed and press a second one. These two channels will be selected. Protools only accepts this function per HUI unit. That means this works only in groups of channel 1-8, 9-16, 17-24.

3 Compatibility to DAW software

The Probox supports following DAW solutions. Now also HUI !!!

MCU Pro Compatibility Chart					
Software	**MCU Pro**	**XT Pro**	**MCU Mode**	**MCU Overlay**	**Docs**
Apple Logic Studio	✓	✓	Logic Control	None	User Manual Control Surface Guide
Apple Logic Express	✓	✓	Logic Control	None	User Manual Control Surface Guide
Apple Final Cut Pro	✓	✓	Logic Control	None	User Manual
Avid Pro Tools	✓	✓	HUI	Pro Tools	User Manual
Steinberg Cubase	✓	✓	Mackie Control	Cubase / Nuendo	All Documentation
Steinberg Nuendo	✓	✓	Mackie Control	Cubase / Nuendo	All Documentation
Ableton Live	✓	✓	Mackie Control	Live	User Manual
Propellerheads Reason	✓	✓	Mackie Control	Reason	All Documentation
Propellerheads Record	✓	✓	Mackie Control	None	All Documentation Control Surface Guide
MOTU Digital Performer	✓	✓	Mackie Control	Digital Performer	None
Mackie Tracktion	✓	✓	Mackie Control	Tracktion	User Manual
Adobe Audition	✓		Mackie Control	Audition	User Manual
Cakewalk Sonar	✓	✓	Mackie Control	Sonar	None
Sony Acid Pro	✓	✓	Mackie Control	Vegas	User Manual
Sony Vegas Pro	✓	✓	Mackie Control	Vegas	User Manual
Magix Samplitude	✓	✓	Mackie Control	None	User Manual
Magix Sequoia	✓	✓	Mackie Control	None	User Manual
SSL SoundScape	✓	✓	Mackie Control	None	User Manual
RML Labs SAW Studio	✓	✓	Mackie Control	SAW Studio	User Manual

See also: http://www.mackie.com/products/mcupro/mcupro_software.html

NOTE: You can find the manuals for your DAW on the CD in the folder Manuals/DAWs or on the link above.

4 Hardware Installation

!!!the probox is plug and play, so connect it and the drivers should be installed automatically !!!

4.1 What's in the box

Your package will contain:

- the probox
- USB cable (usually you will never need it. Only for windows if a normal firmware update crashes)

All manuals will be available via email and download. Firmware updates will also be available via download and email.

4.2 Connecting the d8b

- Connect the probox to the 25 female SUB-D connector marked as "*console*".
- Connect the power supply cable (the fat one with the monster plug) Mackie PSU/CPU to your console.

4.3 Connecting the audio to the d8b (Monitor controller)

The following Audio connectors can be used with the ProBox:

Connector	type	Function
2 TRACK IN A	INPUT	Input Source A
2 TRACK IN B	INPUT	Input Source B
2 TRACK IN C	INPUT	Input Source C
AUX 9	INPUT	Input for CUE AUX (note 120 Ohm Load !)
AUX 10	INPUT	Input for CUE AUX (note 120 Ohm Load !)
AUX 11	INPUT	Input for CUE AUX (note 120 Ohm Load !)
AUX 12	INPUT	Input for CUE AUX (note 120 Ohm Load !)
TALKBACK	INPUT	Footswitch Talkback
MIC1-12	INPUT	Can be accessed analogue via Insert Out
CR MAIN	OUTPUT	Main Speakers
CR NEARFIELD	OUTPUT	Nearfield Speakers
STUDIO OUT	OUTPUT	Studio Output
PHONES 1	OUTPUT	Phones 1 CUE 1 Output
PHONES2	OUTPUT	Phones 2 CUE 2 Output

5 Installation Drivers

The ProBox supports the following operating systems:

- Windows 7 64 bit (use the generic Windows driver) folder: ***Windows_64-bit***
- Linux (driver included in OS)
- MacOs (driver included in OS)

5.1 Windows XP 32 bit

Windows XP (32 bit) is not supported. There are drivers available and they work but it is not tested fully on a DAW. Never the less all my proboxes are tested on a testsoftware (all communication commands) that runs with windows XP. So XP should work

5.2 Windows 7 64 bit

Driver: Windows_64-bit

Connect the probox, windows will automatically detect the box and install the windows driver. You will gbet a message when the driver is installed properly. Additional you will find the MCU in the device manager.
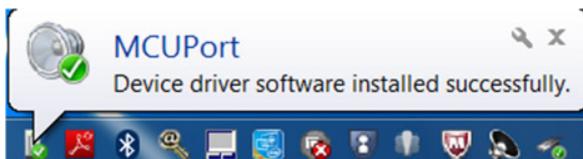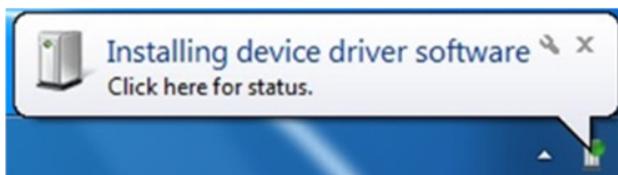
5.3   Windows 8 64 bit

Driver: includen in your OS

Connect the probox via USB port marked as "DAW". The OS should install the drivers automatically.

5.4 MacOS

Driver: includen in your OS

Connect the probox via USB port marked as "DAW". The OS should install the drivers automatically.

5.5   Linux

Driver: includen in your OS

Connect the probox via USB port marked as "DAW". The OS should install the drivers automatically.

6 Installation DAW

Please refer to the installation procedure for the Mackie / Logic Control for your DAW software.

On Windows the generic driver will show you 5 USB Midi Ports. The last port (usually numbered with 5) is not used.

On Cubase it depends how you order your 3 MCU ports to manage the channels 1-24 in groups of eight.
If you want to have the channels 1-24 of your d8b to be the channels 1-24 in Cubase you have to generate 3 Mackie Controls and match it like the table.

USB Midi Port	type	MCU	Channels
MCU Midi Port 2	XT	1	1-8
MCU Midi Port 3	XT	2	9-16
MCU Midi Port 4	MCU	3	17-24 + Master

1-8   9-16   17-24

USB Midi Port	type	MCU	Channels
MCU Midi Port 4	MCU	1	1-8 + Master
MCU Midi Port 3	XT	2	9-16
MCU Midi Port 2	XT	3	17-24

17-24   9-16   1-8

Logic should autodetect the MCU and the two XTs. You have only bring it in your preferred order.

6.1 Setting up Cubase for your ProBox

This describes the setup for your Cubase/Nuendo. The probox has to be connected and recognized by Windows. D8b should be booted up and working.

• Select "*Geräte/Devices*" and "*config Devices*" .
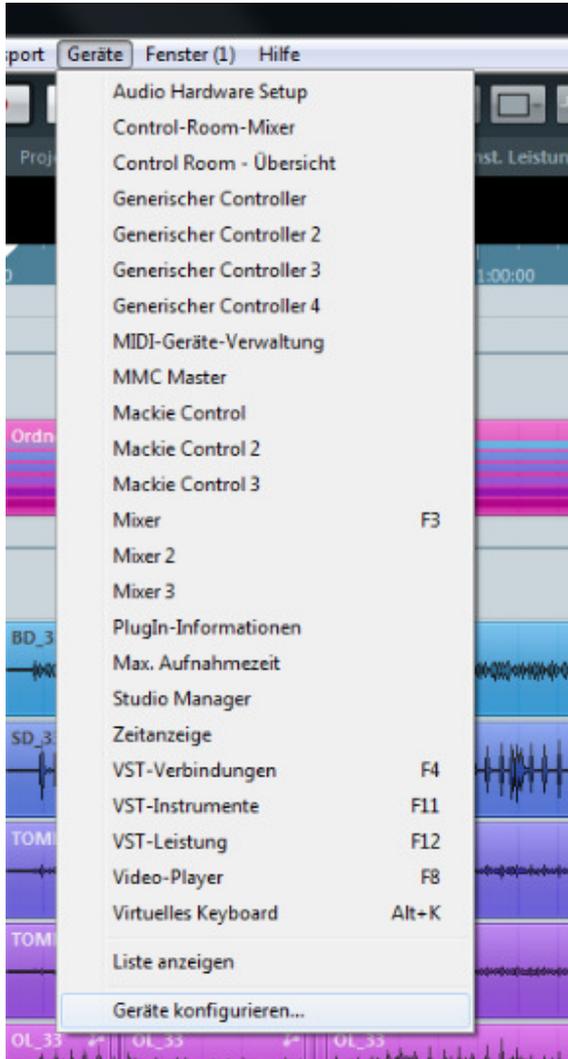
- Add 3 Mackie Controls by pressing the "*+*" Button. Then you should get three Mackie control in your list. Configure the forst to the USB Midi Port 4. Leave the setup as it is. "Kurz" means short.
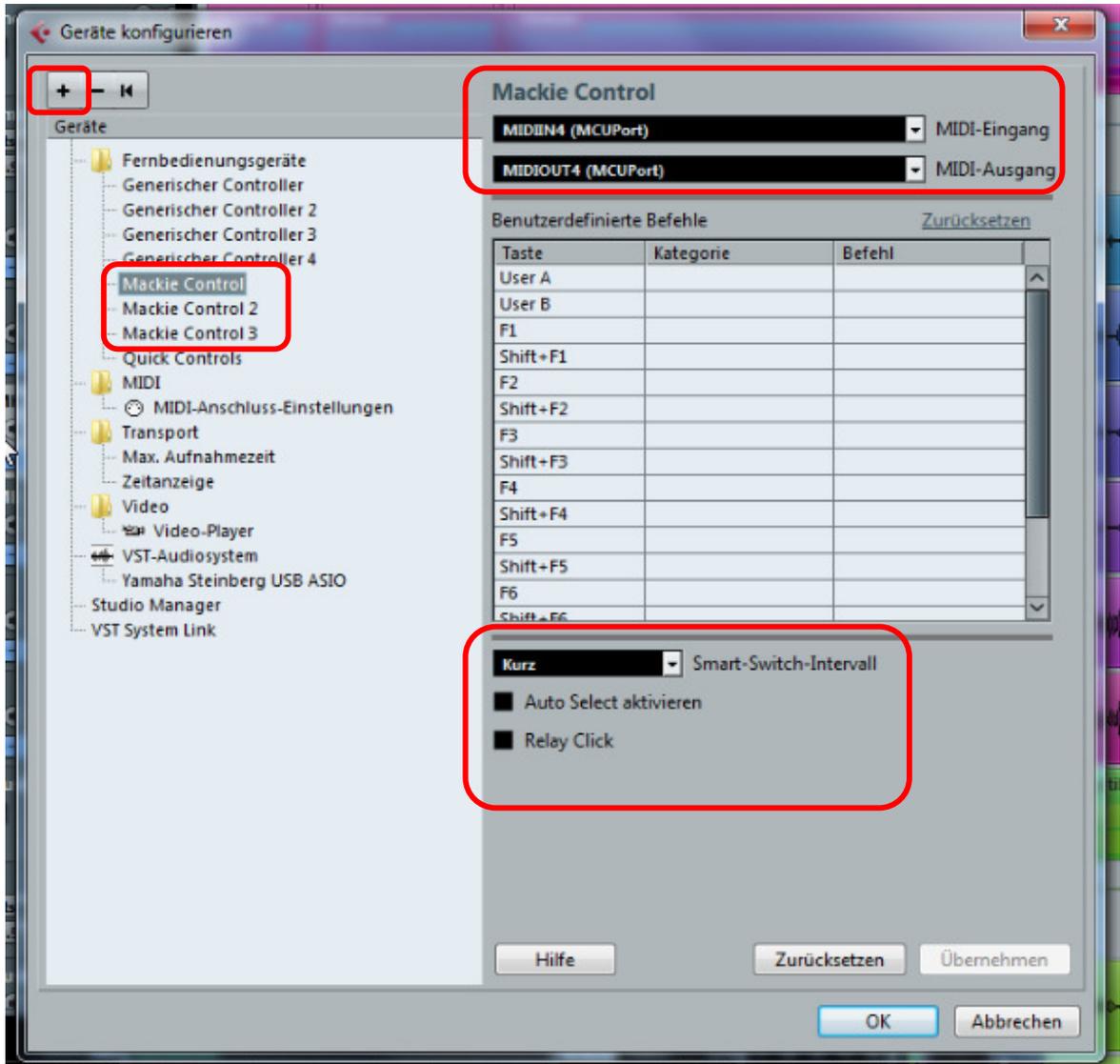
- Configure the next two Mackie Controls as following: Select Port **3**
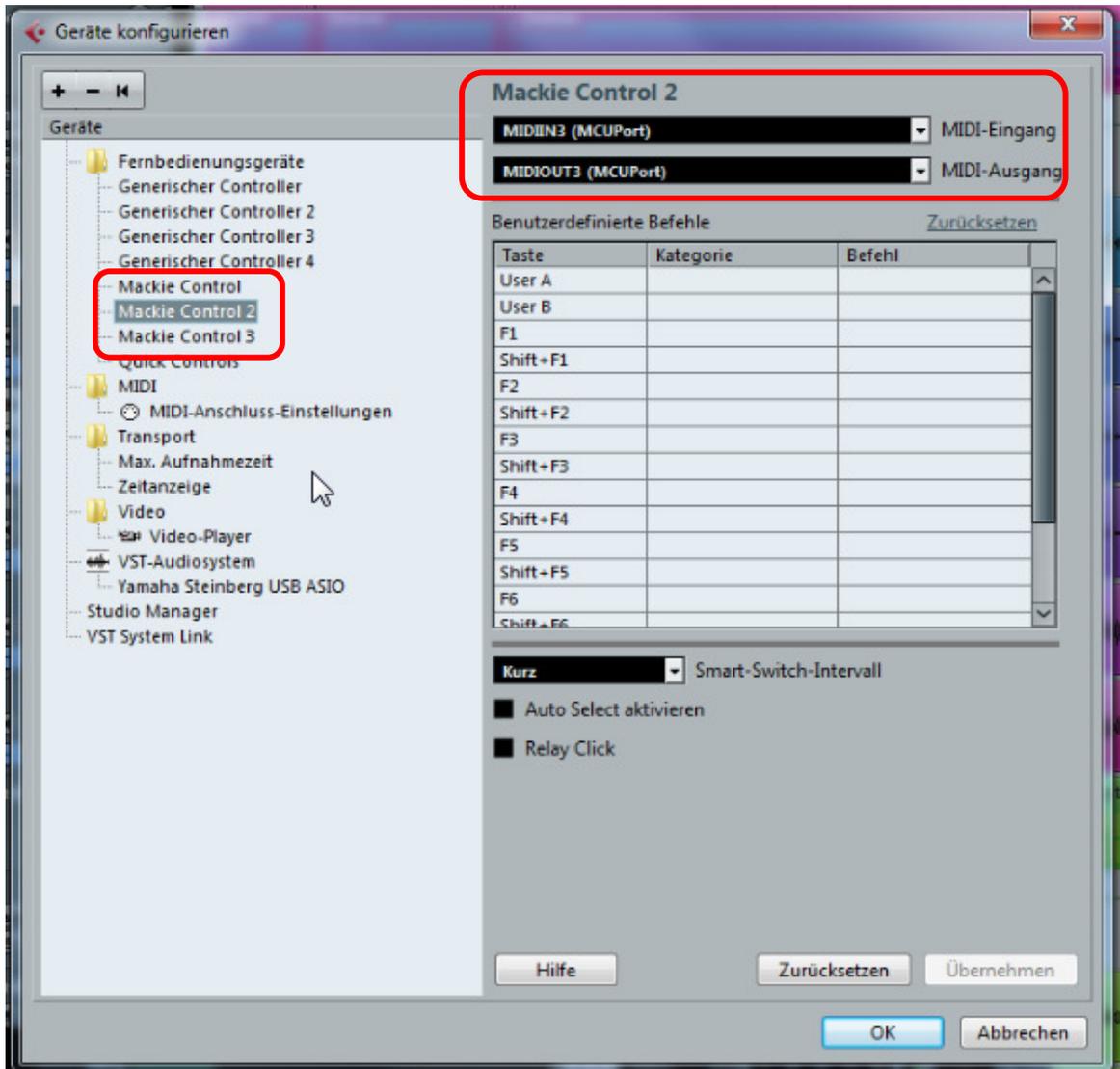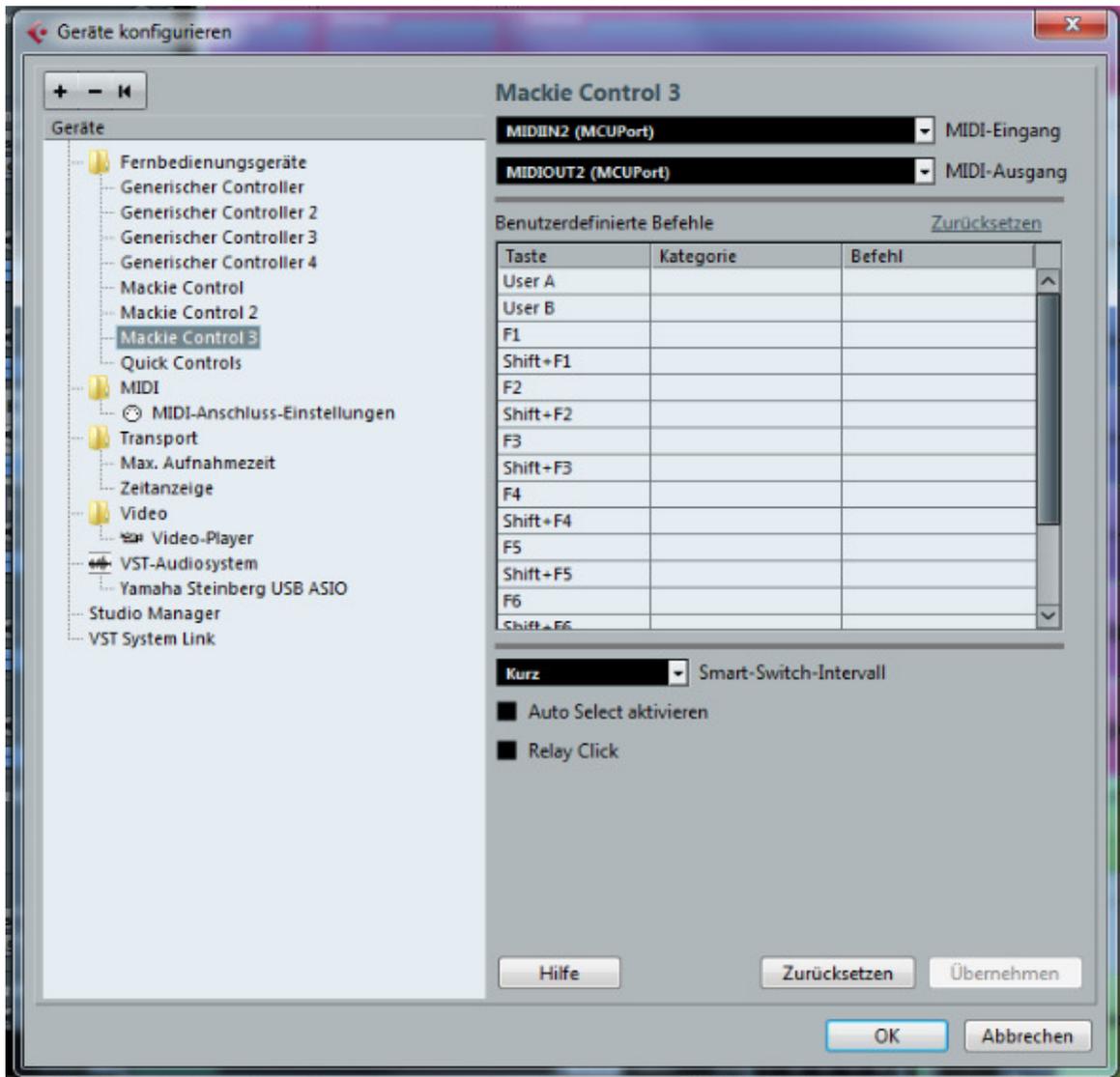
As this is the MCU and the others are the XTs you can make here your user defined setup for the F1-F9 keys (shown in **blue**).

- If you want you can add the generic controller. Press "+" and add a generic controller. Change the Midiports to the port MCU Port **5**.
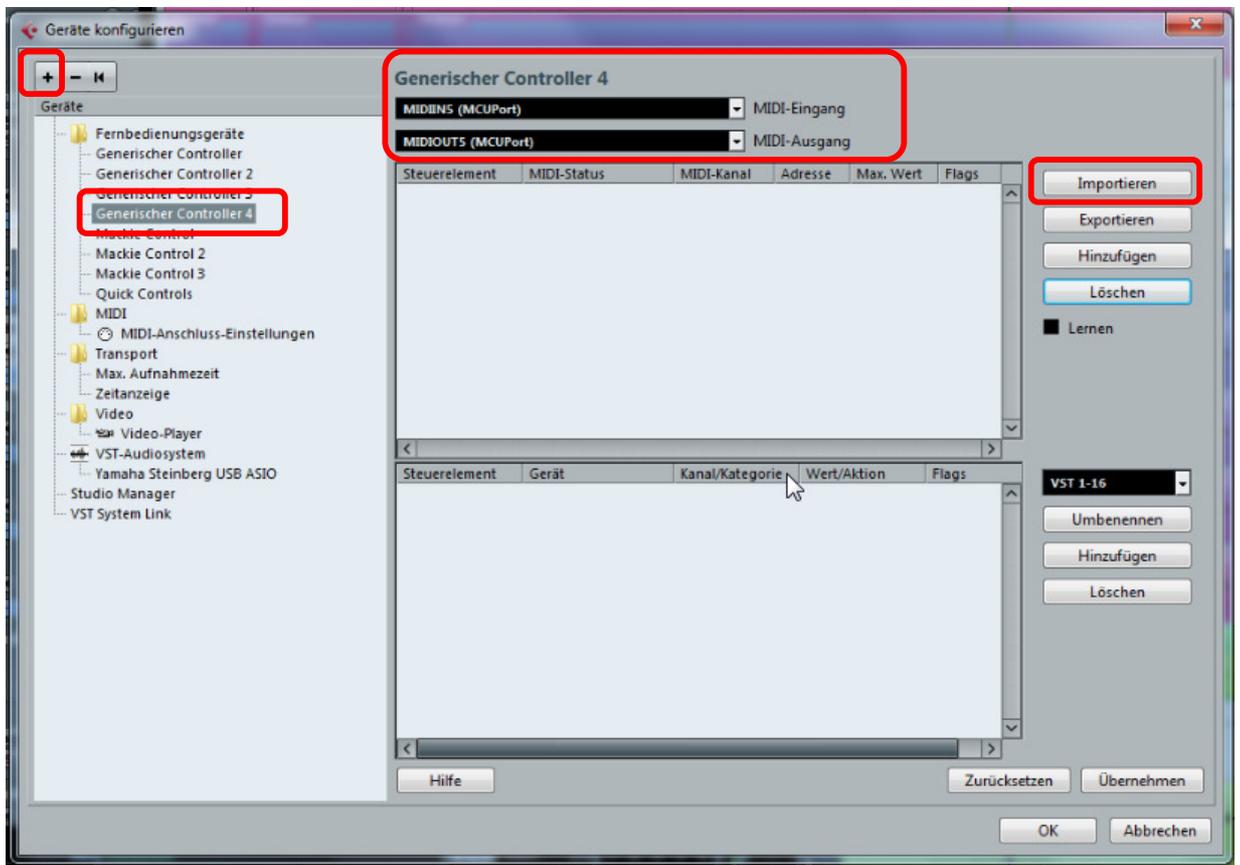
- Here you can program the additional generic functions of the probox.

6.2 Setting up for Reaper 4

For reaper 4 you have to do the following setup

Mackie MCU --> **MIDIIN4 (MCU Port) In and out**   Fader Offset = 16
Mackie XT --> **MIDIIN3 (MCU Port) In and out**   Fader Offset = 8
Mackie XT --> **MIDIIN2 (MCU Port) In and out**   Fader Offset = 0
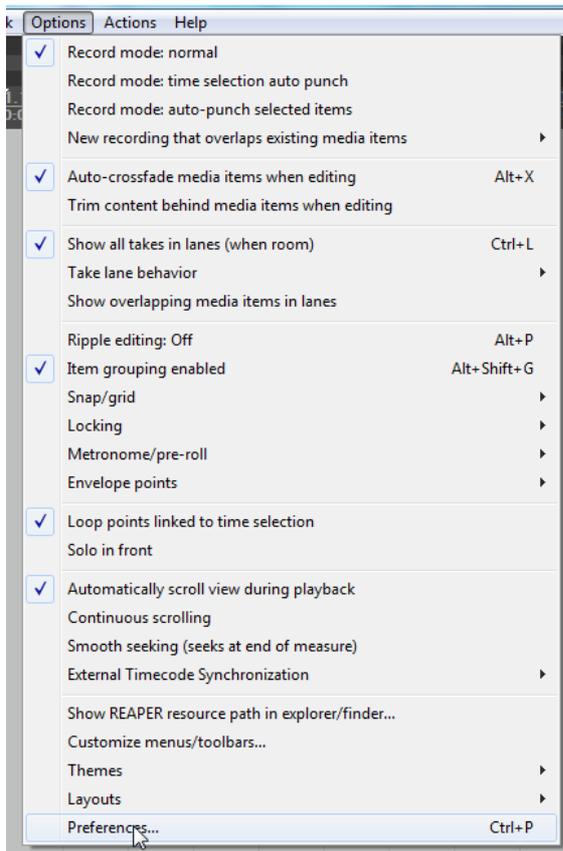
Select Options → preferences
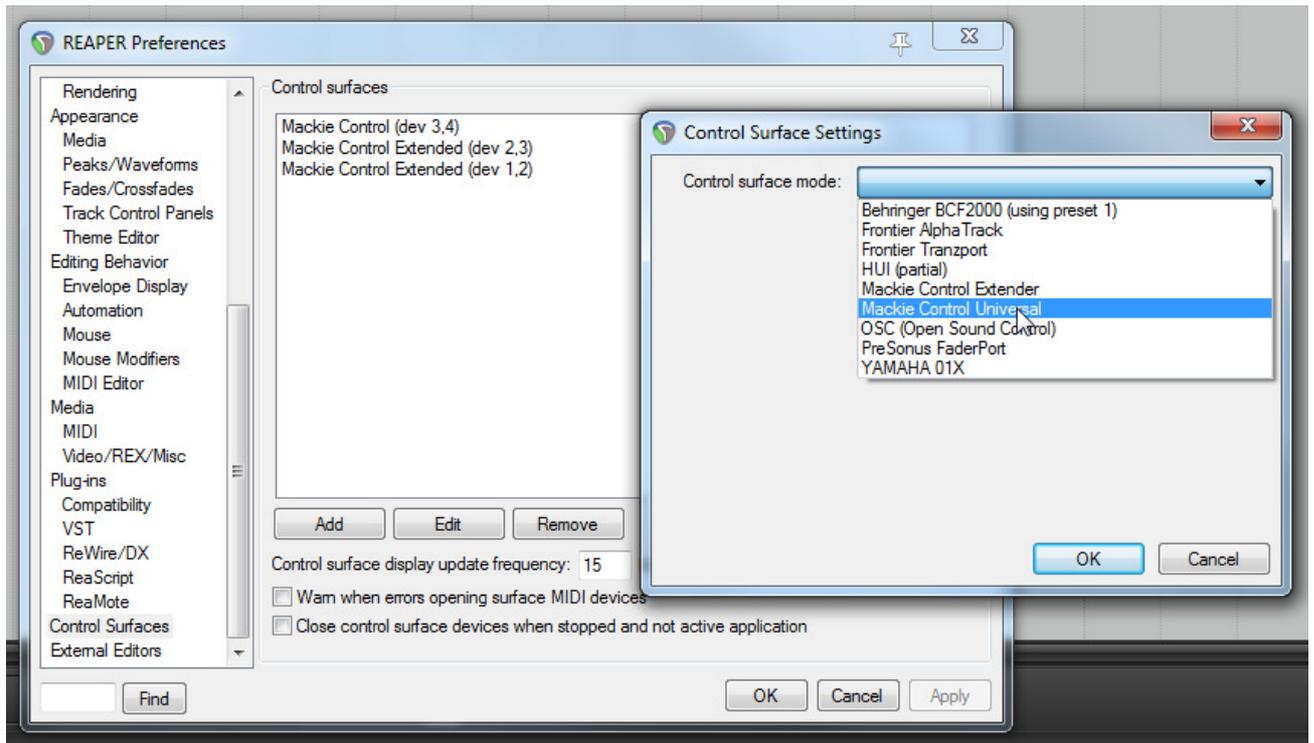
Select **Control Surfaces** and press Add to add **one Mackie Control Universal** and **two Mackie Control Extender**

Set the 3 controllers to the following options
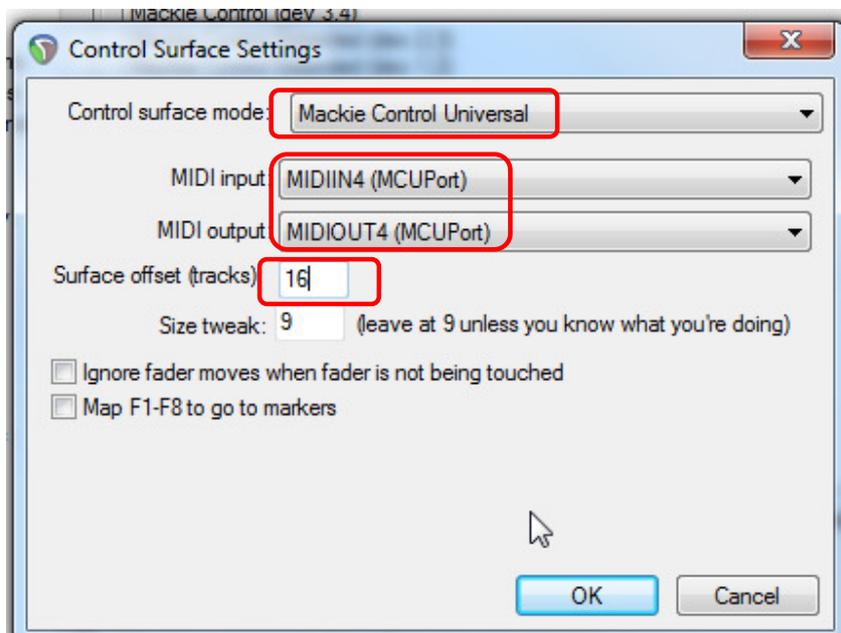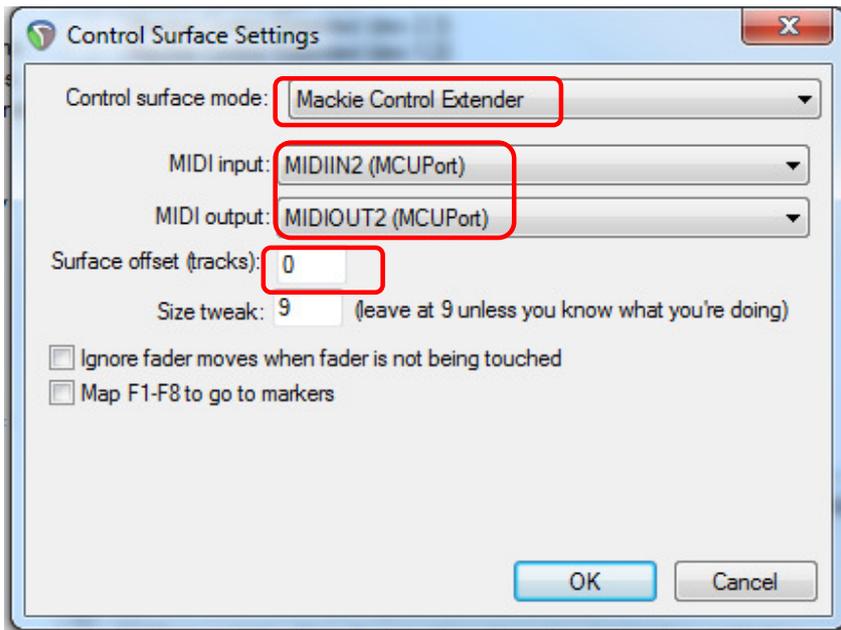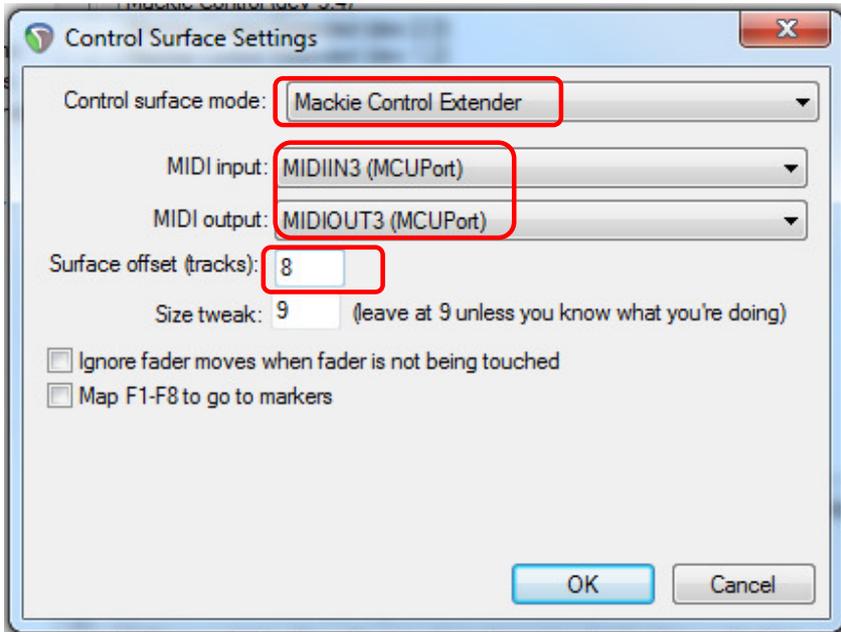
6.3 Setting up for Protools

For protools you have to do the following setup
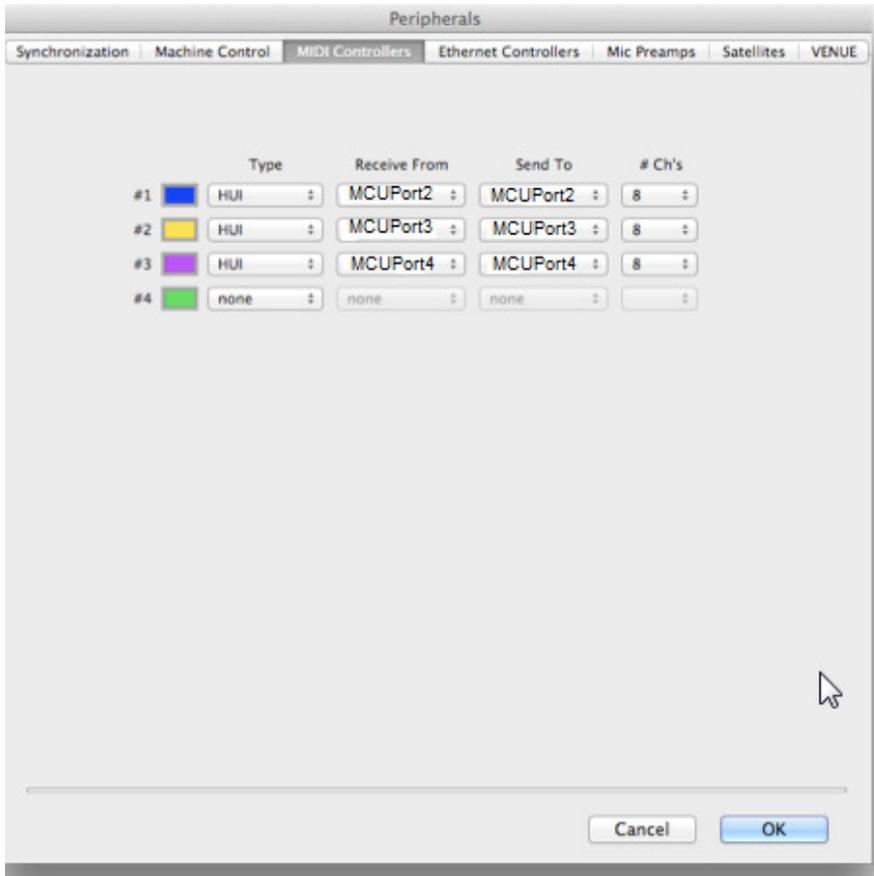
6.4 Setting up for PresonusStudio One

- For presonus studio one setup the probox protocol to Mackie Control
- Add a Mackie Control in the Add External Devices dialog
- Select the Send and receive MIDI ports MCUport4 for IN/OUT
- Add two Mackie XT controllers in the Add external device dialog
- Select send and receive MIDI Ports MCUport3 and MCUport2 for the extenders
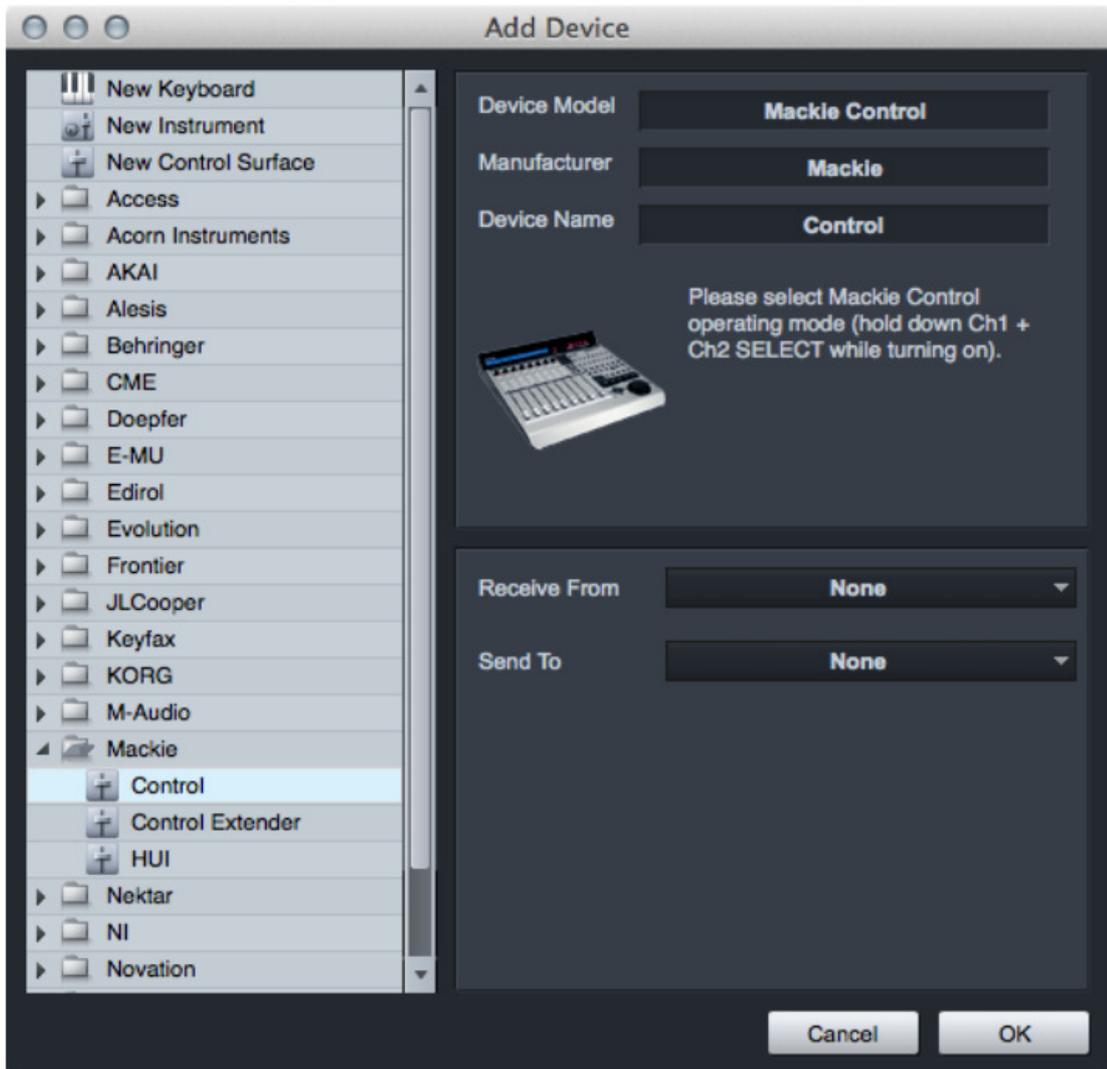
Group your Units. Use the surface Placement option to create a Group and fdefine the placement of each unit. Put all three devices in one group (Group 1) to get all channels (1-24) Note that the Extender with port MCUport2 has to be the first one, the extender with port 3 has to be the second one and the MCU on MCUport 4 the last one to have the right order !
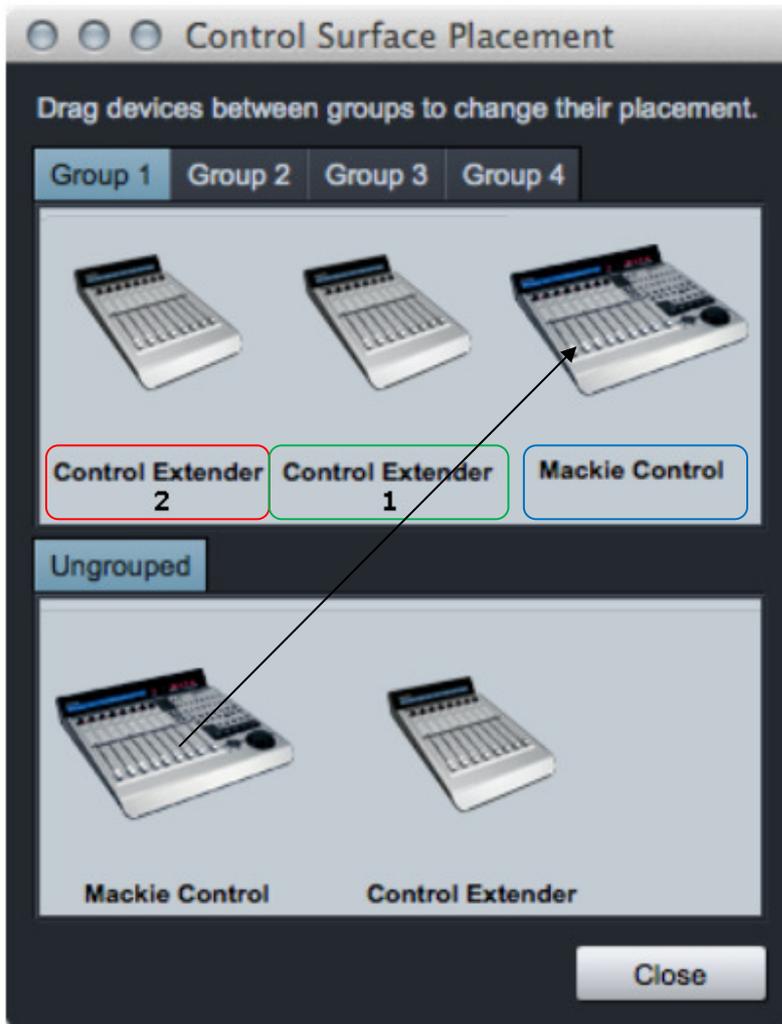
Control Extender 2 → MCUPort2→RED
Control Extender 1 → MCUPort3→GREEN
Mackie Control → MCUPort4→BLUE

6.5 Setting up for Logic

In logic the controller is auto detected and installed. It can happen that the order is wrong, e.g. channel 1-8 in Logic is 17-24 on the d8b.In this case bring the MCU and XTs into the right order (see screen shots). The screenshots are done with Logic X but are valid for all Logic versions. MCU must be right, the XTs in the middle and left, all three have to be on one group to ensure 24 channels in parallel. The MCU on the right side must have MCUPort4, the XT in the middle must be MCUPort3 and the left one must have MCUPort2.

Group
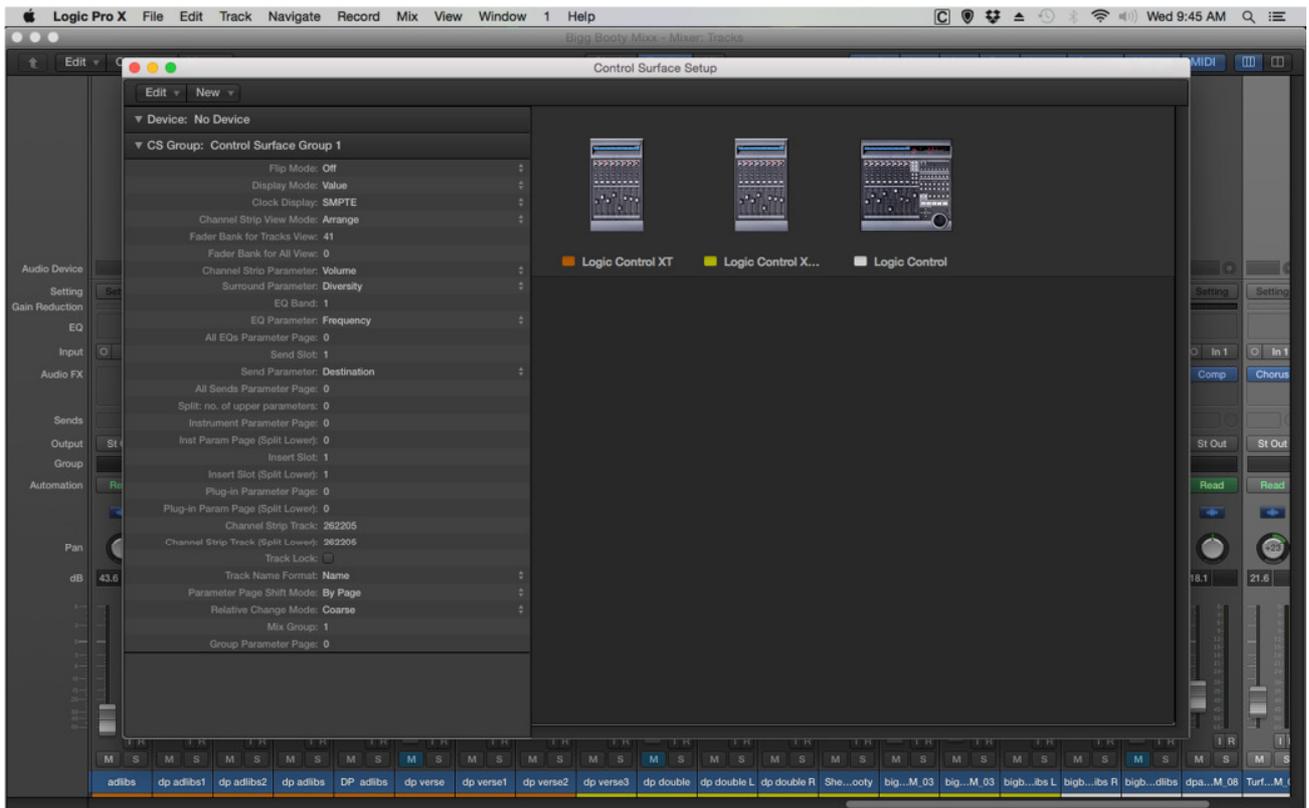
MCU
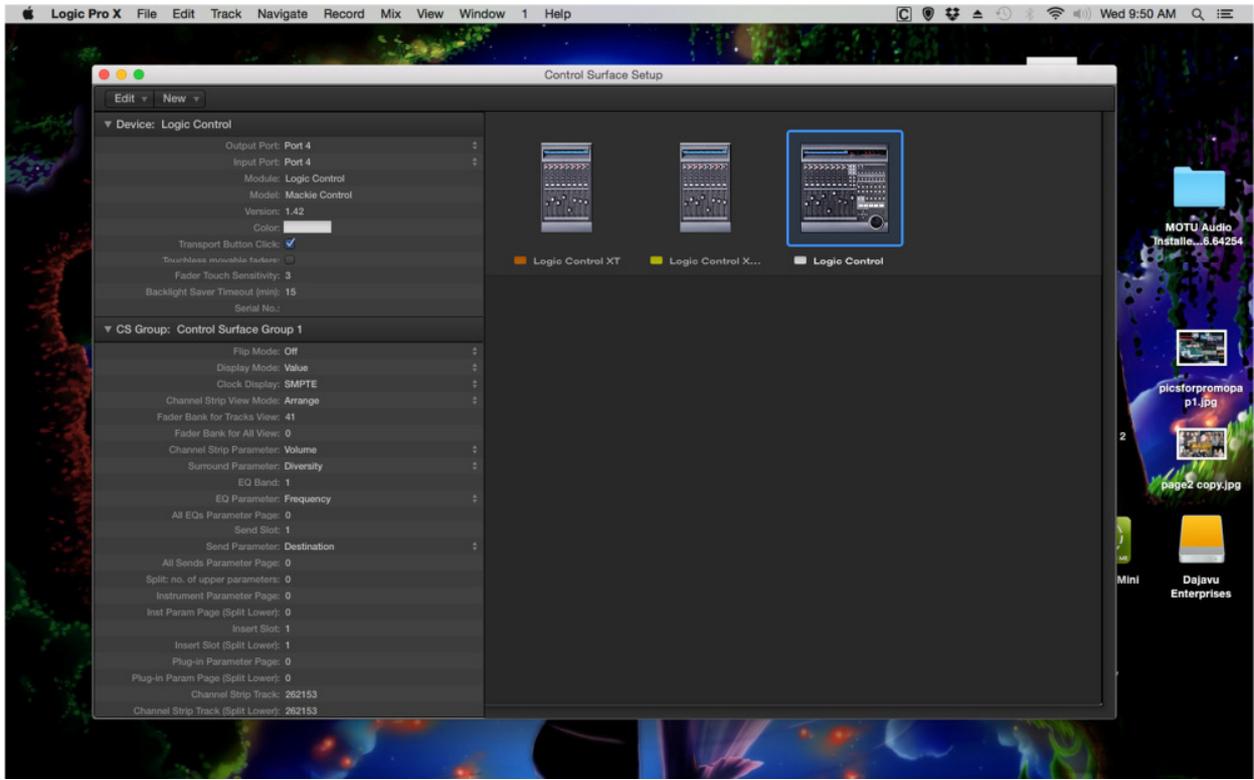
XT2
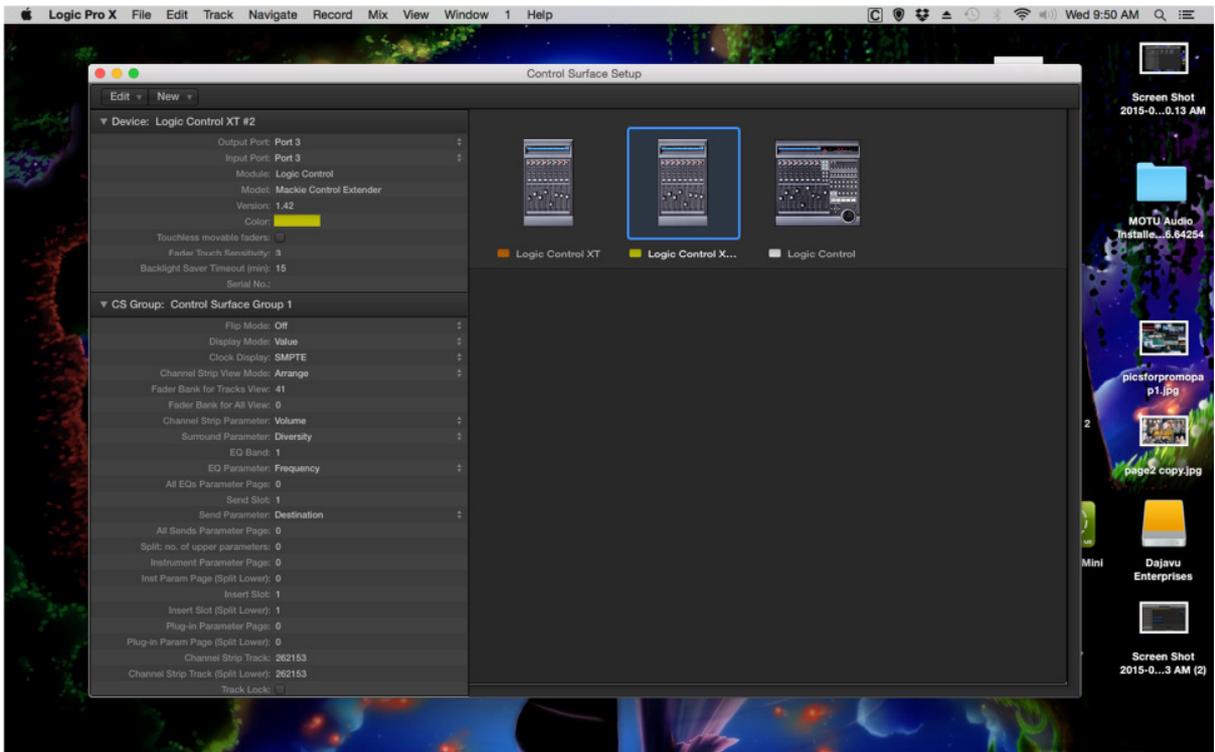
XT1
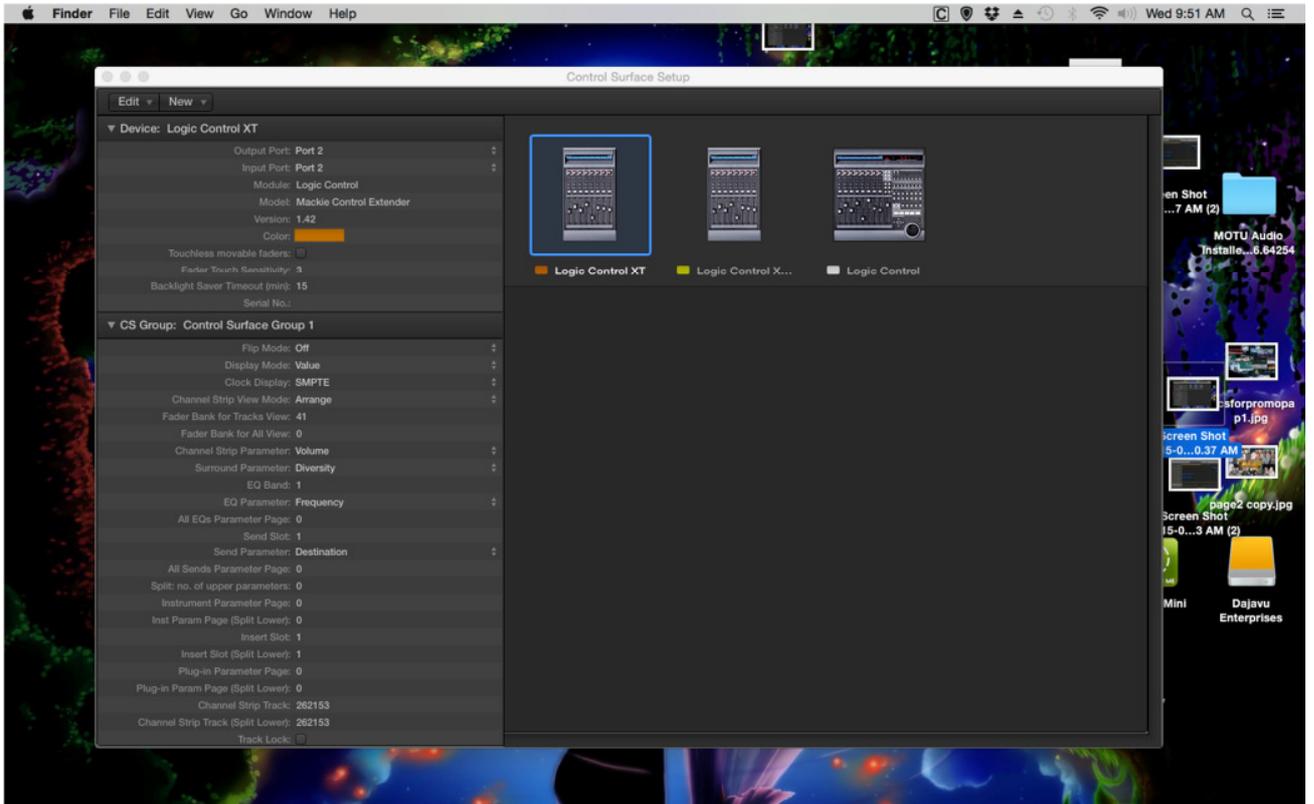
6.6 Setting up for Sonar Professional (for two proboxes)

Special thanks to M.Shaw for that !!!

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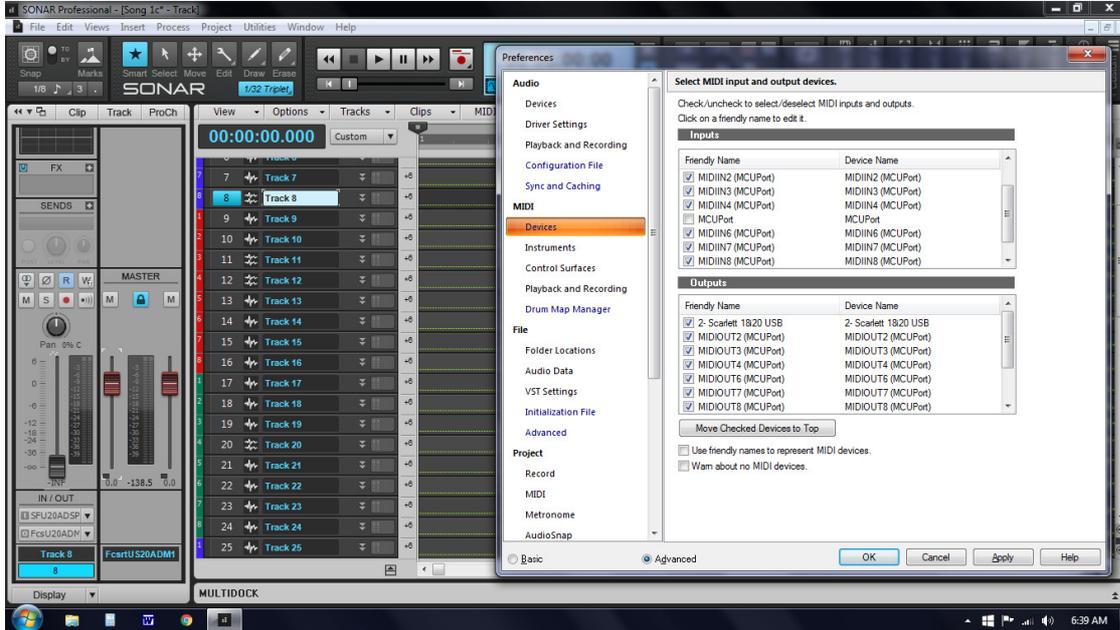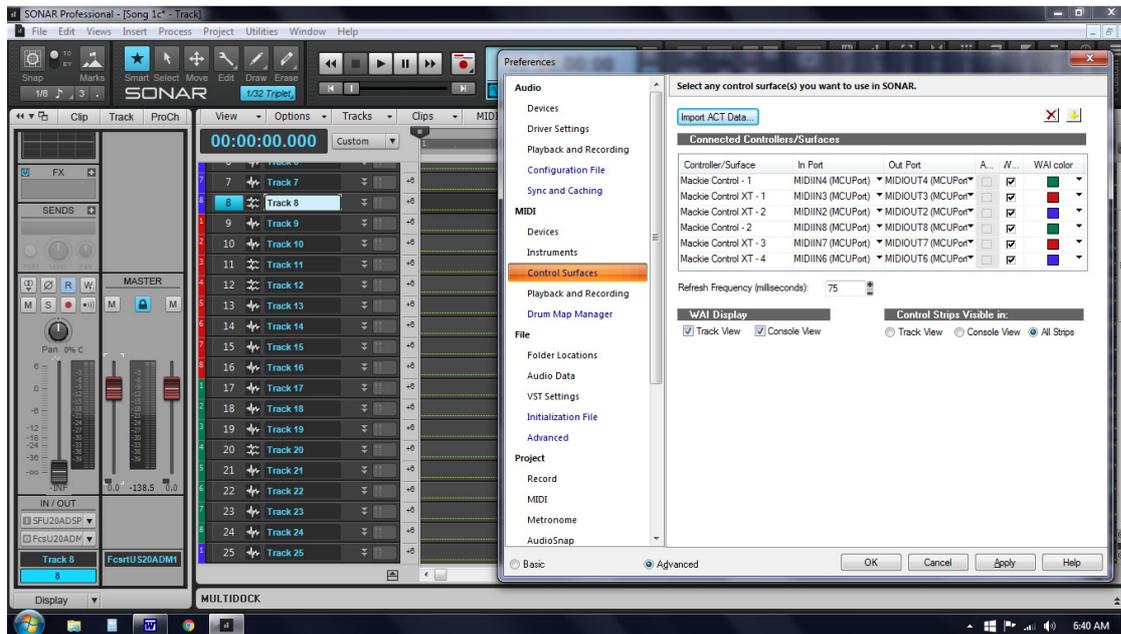
For the **first D8B** under the Sonar "Utilities" menu - "Mackie Control 1" I selected the "Configure Layout" button. On the D8B I selected the "On" button and using channel 1 Vpot to setup 1-8. On the D8B I selected the "Setup" button and channel 9 Vpot to setup 9-16, On the D8B I selected the "Memory A" button and channel 17 Vpot to setup 17-24.

For the **second D8B** under the Sonar "Utilities" menu - "Mackie Control 2" I selected the "Configure Layout" button. On the D8B I selected the "On" button and using channel 1(25) Vpot to setup 25-32. On the D8B I selected the "Setup" button and channel 9(33) Vpot to setup 33-40, On the D8B I selected the "Memory A" button and channel 17(41) Vpot to setup 41-48.

See below:
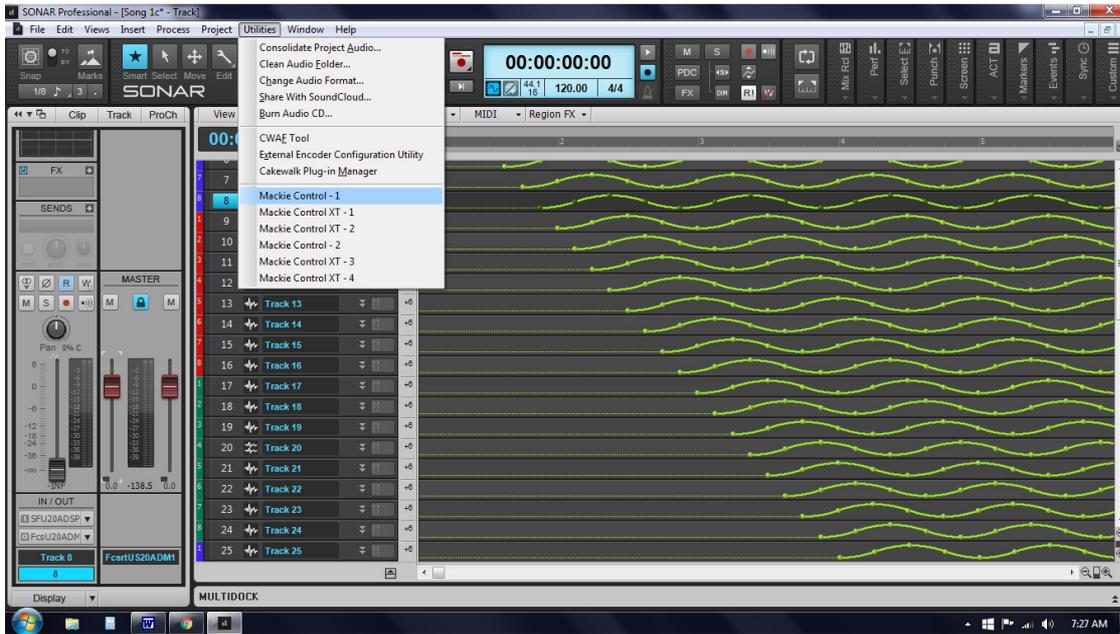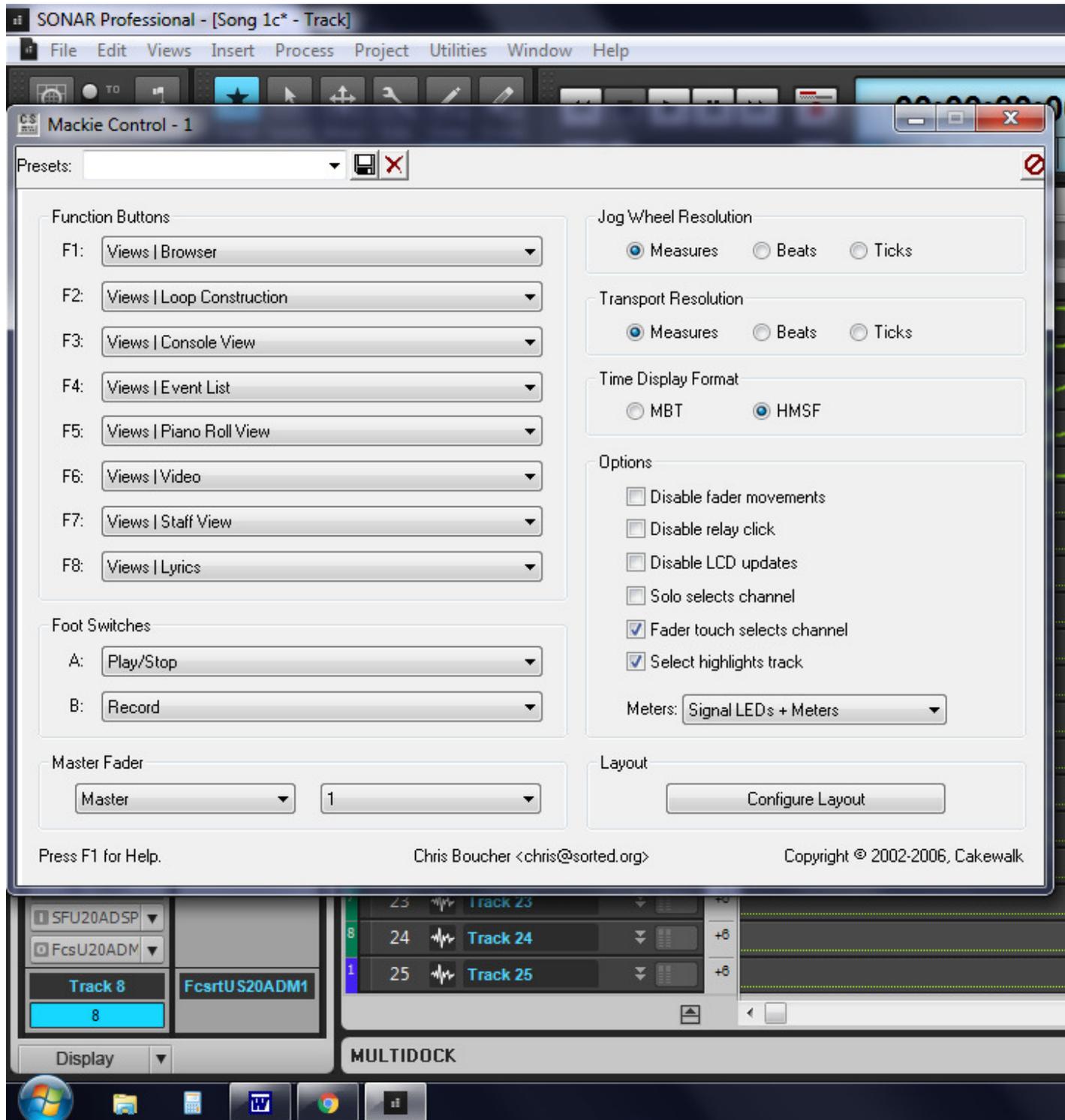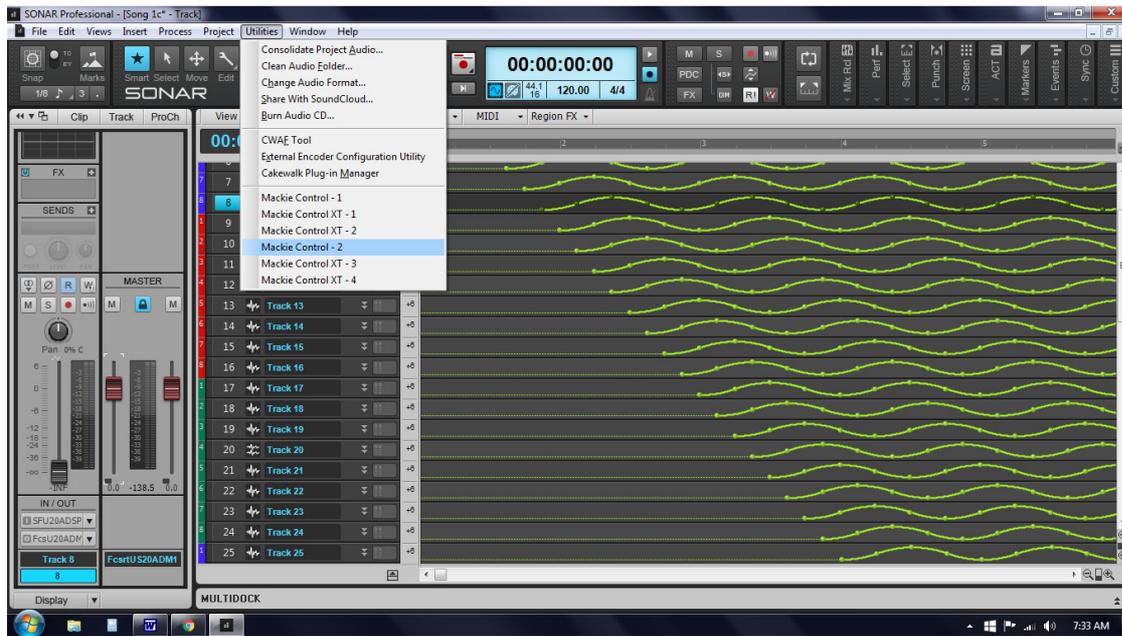
I found that using the 2 D8B's together only works correctly when I boot the computer with the 2 Probox's first, then power on the 2 D8B's, then bring up the DAW. It works consistently everytime when using this order.

Before using the DAW for the first time, I did have to cal the faders on both D8B's in order to sync up all of the faders for both D8B's. From then on everything worked perfectly.

7 Description

This chapter describes how you setup and use your ProBox.

NOTE: To use the function of the ProBox it is necessary to wait till the firmware is transmitted to the console. This is a Mackie design problem and cannot be improved by the proBox Solution.

7.1 Startup

To startup use the following order

- Power on the computer with connected probox
- Power on the d8b
    - The welcome screen should appear *" ProBox Version 2.03.05"*
        " waiting for d8b console"

- Wait till the ProBox starts to transmit the firmware to the console
    - The display should show *" ProBox Version 2.03.05"*
        " loading firmware"

- When Firmware is transmitted the d8b faders will go to 0 and the display will show **" !!! DAW offline !!!"**. At this point it is possible to configure your ProBox or use the Monitor section. Also the first 8 green channel LEds will lite.
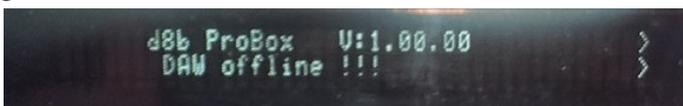
- Start your DAW application

NOTE:

After transmitting the firmware the Probox is switched to the high datarate of 230.400 Baud instead of the usual 115200 baud. If the Probox doesn't receive the heartbeat within 5 seconds of the console it switches back to 115200 Baud ensure a retransmission of the firmware.

That means, if you have problems with your d8b console you can power the console off and on again. The Probox will ensure a working system again, but it will take some seconds.

7.2 Configure your Probox

You can make some small configuration for your Probox/d8b. This is done via the config menu on the d8b. There are three configuration pages available, you can select them by pressing the "NEXT" or "PREVIOUS" button.

As some of you do not have a working VDF display it's possible to setup the box also via the MTC display. The first 8 digits display the modes in the setup mode.

Page	parameter 1	parameter 2	parameter 3
01	00	00	00

PAGE 1/6: You can select three parameters:

M-Faders	Ctl-Room	Protocol
Normal [0]	Generic [0]	Mackie [0]
Fast [1]	d8b [1]	Logic [1]
	D8b/gen[2]	HUI [2]

Faders: The motor faders will react normal or fast. It's recommended to use the normal operation, as it seems so that the d8b has a strange algorithm on the fast fader routine (drives fast near the transmitted position and then after a short delay drives slow to the dedicated point). Often the Faders jump above the dedicated position and drive back again

Monitor control: use the Audio Monitor section of the d8b or use the buttons and Vpots as generic controller. From V2-01-17 there is the possibility to use a mixture of the d8b Control Room. In this mode the Stereo VPot is used as generic controller to have a PAN for the Master Out in Cubase and the rest operates as Monitor Controller of the d8b. In this mode you do not have the Studio Input as this Vpot is used by the generic Controller.

Protocol: use Logic for Logic, in all other cases use Mackie. HUI is not available at the moment. **NOTE:** Also there is no difference at the moment between logic and Mackie (as both implementations uses both initializations). The separation is on the meterbridge. If you have clipping Logic only sends the Meter command Clip, not the full meter command anymore. This ends up in a way the the meterbridge is not updated as long you have clipping. If you select the Logic format, all LEDs of the meterbridge will be set on a clip command. So if you have Logic please select here Logic to get a proper meterbridge working. Also set the Meterbridge settings to **DAW/prob**

PAGE 2/6: You can select three parameters:

Metermode	Fadercal	useFcalib
DAW/prob [0]	Start [0]	No [0]
full DAW [1]	-30dB [1]	Yes [1]
No meter [2]	-10dB [2]	
fast prbx [3]	U [3]	
Fast DAW [4]		

Metermode: If you select "full DAW" the DAW sets and clears the Meters of the d8b. If you select "DAW/prob", then the meter is set by the DAW and cleared by the probox (no meter artifacts if meter commands are not send correctly by DAW). The settings fast prbx and fast DAW do the same, but the Leds react faster. This setting is not possible in normal Mode, only in boost. **I've observed that for Cubase the Full DAW mode seems to be better and for logic the DAW/prob is more usefull.**
If you want to use the audio part via the d8b, the dsp board may send meterbridge commands that influence your visual meterbridge. Therfore it is possible to switch that off.
Fadercal: here you can calibrate your faders. Press the button above the third vpot *"SELECT"* to start the calibration. The faders will go near the -30dB position, now move the faders manually to the -30dB. Then press the button again. The faders will go near -10dB. Proceed as you did with the -30dB on the -10dB position and also for the U position. Fader Calibration values will be stored when you leave the config setup.
NOTE: The fadercalibration will scale the fader areas to the dB marks (for Logic). If you want to use the faders without matching scaling, then set the "useFcalib" to "no" otherwise set it to "yes" if you want to use the calibration.

PAGE 3/6: You can select three parameters:

Emulation	COM-Speed	Faderfilter
MCU2XT_1 [0]	Boost [0]	0 [0]
MCU2XT_2 [1]	Normal [1]	1-5 [1-5]
3XT [2]		

MCU2XT_1 emulates one MCU and 2 XT with a dedicated serialnumber.
MCU2XT_2 emulates one MCU and 2 XT with a different dedicated serialnumber than MCU2XT_1. This is used if you want to use two d8bs with two proboxes in parallel.
3XT emulates 3 XT. This is used if you want to use two d8bs with two proboxes in parallel, but your DAW software doesn't support 2 MCUs at the same time.
NOTE: I cannot guarantee that this will work, as it depends on the DAW software how many MCUs XTs are supported at the same time.

COM-Speed: If you are an unlucky guy, your d8b console might be weak to run with the doubled baudrate. In

this case you can go back to the normal baudrate with this option. <mark>Note that in this mode, the meterbridge mode Full DAW is not supported due to bandwith limitations.</mark>

Faderfilter: here you can enable a fader touch filter (the d8b slightly changes the fader values due to stability problems. To disable this, you can activate the fader filter). The probox will then only send fader movements, if the change is bigger than the selected value. This helps to stop slightly fader changes, but makes smooth fader movement more difficult.

PAGE 4/6: You can select three parameters:

Test-LED	Test-Key	Tst_Meter
LEDS ON [0]	TEST OFF [0]	Start [0]
LEDS OFF [1]	TEST ON [1]	1-5 [1-5]

LEDS ON will switch on all LEDS
LEDS OFF will switch off all LEDS

Test-Key: If Test-Key is **TEST ON** the every button press will display 01 on the channel display. If you release the key it will go back to 00. As long you keep it pressed you will see 01

On **Tst_Meter** Press **Start** to make a full Meterbrigde light up (including clipping LEDs). The Meterbridge will fade down.

PAGE 5/6: You can select three parameters:

TalkMode	TalkDIM	
Switch [0]	off [0]	
Button [1]	DIM [1]	

Talkmode:

if you want to have a latch function on the Talkback Switch you have to configure **Switch**:

If you only want to have the talkback session as long as you keep the button pressed select **button**

TalkDIM:

If you want to DIM the Main/Nearfield Speakers during Talkback then select DIM. If you do not want to **DIM** the Speakers during Talkback then select **off**.

These function are also valid for the footswitch.

PAGE 6/6: You can select three parameters:

FdrTouch		
manual		
automatic		

manual:

As the faders are not touch sensitive on the d8b you can use the ASSIGN button to simulate the fader touch. press the button and keep it pressed, move the fader and release the ASSIGN button. The pressing will send a Fader touch signal, the release will send the release message.

automatic:

Here the fader touch is send when the probox recognizes a fader movement, the release will be sent 200ms after the last movement.

- Press the button **"MEMORY B"** marked green to access the Config Menu
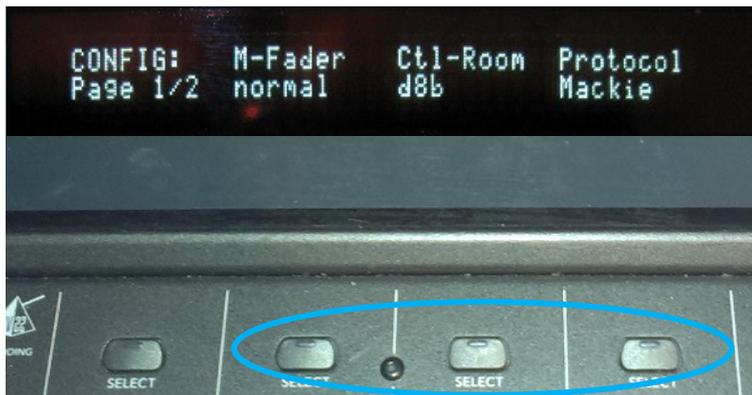
- Use one of the three **"SELECT"** buttons (marked blue) to change the setup. You will find it displayed in the second row of the display. E.g. press the left button to change between Fader normal and fader fast, the middle button for generic or d8b and the right one for the protocol. Use the **"NEXT,PREVIOUS"** button to access the Page 2 of the Setup or to get back to page 1.

CONFIG: M-Fader   Ctl-Room   Protocol
Page 1/3   normal   d8b/9en   Mackie

CONFIG: Metermode Fadercal   useFcalib
Page 2/2   full DAW   start   yes

CONFIG: Test-LED   Test-Keys Tst_Meter
Page 4/5   LEDS ON   TEST OFF   start

CONFIG: TalkMode   TalkDIM
Page 5/5   switch   DIM

CONFIG: Metermode Fadercal   useFcalib
Page 2/2   DAW/prob   -30dB   no

CONFIG: Emulation CON-Speed
Page 3/3   MCU2XT_1   boost

03 00 00 00 00 00 00

- Press one of the three red marked buttons *"ON SETUP or MEMORY A"* to get out of the config menu and store the setup.

IMPORTANT: when you step out the config setup, all changes are stored, also the actual levels of the Monitoring section (if it is enabled) except the Speakers volume. In other words, if you want to boot your probox with a dedicated Monitoring Controller setup 2 Track Input A and as output Nearfiled speaker you have to do this:

• Make your setup on the Monitoring controller section of the d8b, setup your volumes for Talkback, Phones etc..
  NOTE: Volume for Speaker out, Talkback, Mono and DIM is not important as it will always be set to 0 or Off on boot (security reasons).
• Press *"MEMORY B"* o enter the configuration menu.
• Press one of the three red marked buttons *"ON SETUP or MEMORY A"* to leave the setup and store all the settings of the monitor controller.

7.3 MCU and XT emulation

For detailed MCU XT functionality please refer to the dedicated DAW manual for the Mackie MCU/XT.
For Cubase/Nuendo I've attached this manual on the CD. I only support a Button map which button on the d8b covers the buttons on the MCU/XT.

7.3.1 Special Probox Buttons to access MCU and two XTs

As we all know, one MCU and two XTs offer 3 displays with 2x52 characters. As the d8b only has one display with 2x40 characters this display has the offer a function that makes it possible to access these 3 MCU displays.

You can access the XT1 by pressing the button *"ON"*. The XT2 is selected by pressing *"SETUP"*. **"MEMORY A"** select the MCU. As we have too less characters in the display to show all messages, you can scroll the display left and right by using the buttons **"PREVIOUS"** or **"NEXT"**. You will find **>** or **<** arrows in the display that shows you where text is hided and can be accessed by the buttons.

Additional the *"PREVIOS"* and *"NEXT"* button switches between *VPots 1-4* or *5-8*. The select buttons above are the VPot switches. The green channel LEDs will show you the selected MCU/XT in groups of 8.

NOTE: you can access the VPot switches only vie this method. The PAN Vpots of the 24 channels are equal to the MCU, XT Vpots, so you can also use them to change parameters, but you will not have any Vpot switch there.

7.3.2 Button Map d8b MCU/XT

You will find the map on the CD under documentation: Filename: *mackie_vs_d8b_buttons.pdf*

picture	d8b	MCU / Logic	Cubase/Nuendo	Digital Performer	Sonar	Tracktion	VEGAS
	Level to tape	X-	X-	X-	X-	X-	X-
	Digital trim	X+	X+	X+	X+	X+	X+
	AUX 1	Midi Track	Fader Bank 1	Record Click	new audio	fit all tracks	TRACK
	AUX 2	Inputs	Fader Bank 2	Record CountOff	new midi	zoom out	BUS
	AUX 3	Audio Track	Fader Bank 3	Record Overdub	fit tracks	prev marker	MIXER
	AUX 4	Audio Insert	Fader Bank 4	Record patch Thru	fit project	next marker	VIDEO PREVIEW
	AUX 5	Aux	Fader Bank 5	Record clear clip	ok/enter	insert tempo change	PLUGINS
	AUX 6	Busses	Fader Bank 6	transport Slave to ext sync	cancel	projects	BUS TRACKS
	AUX 7	Outputs	Fader Bank 7	transport memory link	next win		DOCK AREA
	AUX 8	Users	Fader Bank 8	transport Pre/Post Roll	close win		TRACK LIST
	AUX 9-10	Write	Write	Automation Touch	snapshot	Show meters	BYPASS FX
	AUX 11-12	Y-	Y-	Y-	Y-	Y-	Y-
	AUX 9-10 PAN	read/off	Read	Automation read/off	read/off	Show Racks	AUTOMATION
	AUX 11-12 PAN	Y+	Y+	Y+	Y+	Y+	Y+
	MASTER PAN	NONE	clr Over Leds	clr Over Leds	clr Over Leds	clr Over Leds	clr Over Leds
	MASTER SOLO	Zoom	Zoom	Zoom	Zoom	Zoom	Zoom
	Masters	Channel left	Channel left	Channel left	Channel left	Channel left	Channel left
	Shift	Channel right	Channel right	Channel right	Channel right	Channel right	Channel right
	Mic/Line	Bank left	Bank left	Bank left	Bank left	Bank left	Bank left
	Tape in	Bank right	Bank right	Bank right	Bank right	Bank right	Bank right
	Effects	Flip	Flip	Flip	Flip	Flip	Flip
	Select	Vbutton 1/5	Vbutton 1/5	Vbutton 1/5	Vbutton 1/5	Vbutton 1/5	Vbutton 1/5
	Select	Vbutton 2/6	Vbutton 2/6	Vbutton 2/6	Vbutton 2/6	Vbutton 2/6	Vbutton 2/6
	Select	Vbutton 3/7	Vbutton 3/7	Vbutton 3/7	Vbutton 3/7	Vbutton 3/7	Vbutton 3/7
	Select	Vbutton 4/8	Vbutton 4/8	Vbutton 4/8	Vbutton 4/8	Vbutton 4/8	Vbutton 4/8
	LOW	Vpot 1/5	Vpot 1/5	Vpot 1/5	Vpot 1/5	Vpot 1/5	Vpot 1/5
	LOW MID	Vpot 2/6	Vpot 2/6	Vpot 2/6	Vpot 2/6	Vpot 2/6	Vpot 2/6
	HI MID	Vpot 3/7	Vpot 3/7	Vpot 3/7	Vpot 3/7	Vpot 3/7	Vpot 3/7
	HI MID	Vpot 4/8	Vpot 4/8	Vpot 4/8	Vpot 4/8	Vpot 4/8	Vpot 4/8
	EQ	edit track / IO	First or Up LCD pages	Mode	TRACK BUS	PAN	OUTPUT/COMPOSING
	GATE	edit sends	Last or Down LCD pages	Send	SEND	AUX	INPUT/MOTIONBLUR
	COMPRESSOR	PAN	PAN	Pan	PAN	PLUG-IN	PAN/FADE TO COLOR
	Plugin	Plugin	not used	Effect	PLUG-IN	Marker	SENDS
	Load patch	EQ	Channel EQ	not used	EQ	Page L	INSERTS
	Save Patch	Instrument/Dyn	Channel FX Sends	Preset	COMPRESSOR	Page R	SETTINGS
	Bypass	Trim	Sends	automation Trim Touch	TRACK	Show filters	METRONOME
	Faders	Save	Instruments	Project Save	AUX	Auto rec	SAVE
	Mutes	Undo	master	project Audible mode	MAIN	Auto play	UNDO/REDO
	Auto touch	touch	Project	automation Overwrite	DISARM	Save	SURROUND/EXT MONITOR
	Faders Motors off	Group	Motors	automation trim latch	OFFSET	Undo	DOWNMIX/SPLIT SCREEN
	Pan	Latch	Mixer	automation latch	SAVE	Redo	DIM/OVERLAYS
	All	cancel	Solo Defeat	project undo	UNDO	Clear peaks	OK/ENTER
	Trim levels	ENTER	shift	project redo	REDO	Freeze track	CANCEL
	save	shift	undo/edit history	modifiers shift	M1	Shift	SHIFT
	save as	option	Redo	modifiers control	M2	Add marker/Insert Pitch change	OPTION TRACK ORDER
	new	control	save	modifiers option	M3	<< Nudge	CONTROL
	load	alt	revert	modifiers command	M4	Nudge >>	ALT
	set time	value	value	display level/meters	name/value	CPU%	METERS/TRACKS BUSSES
	smtpe	Bar/smtpe	Bar/smtpe	display time format	SMPTE/BEATS	SMPTE/BAR	TIMEFORMAT/SET ZERO
	enter	cycle	cycle	edit grid	SELECT	CLICK	LOOP/SELECT
	loop	drop	punch	cycle	PUNCH	SNAP	MARK IN/GO TO IN
	store	replace	previous marker	punch	JOG PARAM.	END TO FND	MARK OUT / Go TO OUT
	locator	click	Add marker	select	LOOP ON/OFF	SCROLL	EVENT TRIM / CENTER CURSOR
	snapshot	solo	next marker	solo	HOME	MTC CHASE	RTZ/END
	rew	rew	rew	rew	rew	rew	rew
	ffw	ffw	ffw	ffw	ffw	ffw	ffw
	stop	stop	stop	stop	stop	stop	stop
	play	play	play	play	play	play	play
	rec	rec	rec	rec	rec	rec	rec
	jog&shuttle	jog	jog	jog	jog	jog	jog
	Paste	marker	left / move location	RTZ	MARKER	LOOP	MARKER / CD INDEX
	Undo	Nudge	right / move location	Marker	LOOP	PUNCH	REGION / CD TRACK

7.3.3 Vpots

The VPots are rotate sensitive. That means if your turn the vpot faster, it will react with bigger jumps.
If you need real big value jumps on your vpot, press down the *"MASTER PAN"* button and keep it pressed while turning the vpot. You will change the value with a factor of 31.

7.3.4 OL /Led function

The probox has build in an additional function that is not supported by the original MCU/XT.

If the probox receives an overload message from the DAW, the red channel LED for the dedicated overloaded channel is blinking. This will be the case till it is cleared by the user by pressing the *"MASTER PAN"* button or switches between banks or makes a channel shift.

7.3.5 Faders Off function (red circle)

As some of you have problems with the faders (small changes every time) the fader send and fader receive messages can be turned on and off. Cubase and Logic has this function "build in" on the Controller, but other DAWs like Ableton do not have it. Therefore this function is implemented in the probox.

To turn off the whole faders press the **write button** on the left side of the Master fader. It will blink to indicate that the faders are off. If you want to turn them on press the button again.
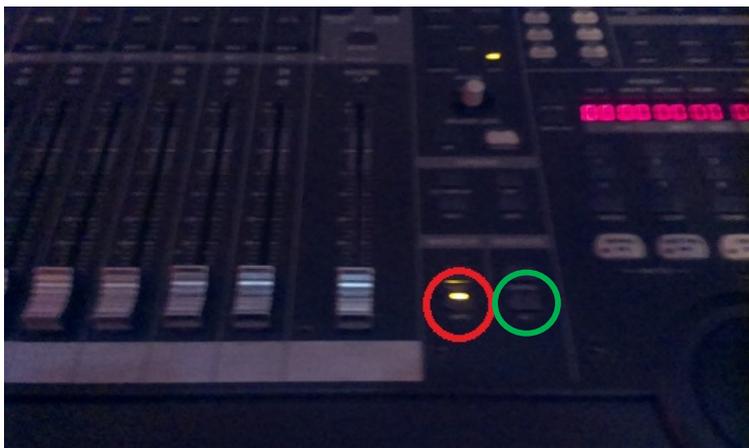
7.3.6 Meterbridge Off function (green circle) ONLY Mackie/Logic

If you want to use your audio via a switchbox, it can happen that your DSP engine disturbes your Meterbridge. With this function you can disable displaying the DAW meterbridge on the d8b ans see the pure audio signal on

the bridge. For that you have to run the probox in the normal speed (not boost) and with no meterbridge hack. press the **SHORTCUT ALT** button to disable the meterbridge.

7.4 HUI emulation

As we all know, one 3 HUI offer 3 displays with 2x80 characters. As the d8b only has one display with 2x40 characters this display has the offer a function that makes it possible to access these 3 MCU displays.

You can access the HUI1 by pressing the button *"ON"*. HUI2 is selected by pressing *"SETUP"*. **"MEMORY A"** selects the HUI3. The green channel LEDs will show you the selected HUI in groups of 8.

7.4.1 Faders Off function

As some of you have problems with the faders (small changes every time) the fader send and fader receive messages can be turned on and off. Cubase and Logic has this function "build in" on the Controller, but other DAWs like Ableton do not have it. Therefore this function is implemented in the probox.
To turn off the whole faders press the **EFFECTS 49-72** button above the Master fader. It will blink to indicate that the faders are off. If you want to turn them on press the button again.

7.4.2 Button Map HUI

d8b buttons

	0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07
00	by fader movement	Ch 01 Select	Ch 01 Mute	Ch 01 Solo	Ch 01 Write	not supported	Ch 01 Assign	Ch 01 Rec/Rdy
01	by fader movement	Ch 02 Select	Ch 02 Mute	Ch 02 Solo	Ch 02 Write	not supported	Ch 02 Assign	Ch 02 Rec/Rdy
02	by fader movement	Ch 03 Select	Ch 03 Mute	Ch 03 Solo	Ch 03 Write	not supported	Ch 03 Assign	Ch 03 Rec/Rdy
03	by fader movement	Ch 04 Select	Ch 04 Mute	Ch 04 Solo	Ch 04 Write	not supported	Ch 04 Assign	Ch 04 Rec/Rdy
04	by fader movement	Ch 05 Select	Ch 05 Mute	Ch 05 Solo	Ch 05 Write	not supported	Ch 05 Assign	Ch 05 Rec/Rdy
05	by fader movement	Ch 06 Select	Ch 06 Mute	Ch 06 Solo	Ch 06 Write	not supported	Ch 06 Assign	Ch 06 Rec/Rdy
06	by fader movement	Ch 07 Select	Ch 07 Mute	Ch 07 Solo	Ch 07 Write	not supported	Ch 07 Assign	Ch 07 Rec/Rdy
07	by fader movement	Ch 08 Select	Ch 08 Mute	Ch 08 Solo	Ch 08 Write	not supported	Ch 08 Assign	Ch 08 Rec/Rdy
00	by fader movement	Ch 9 Select	Ch 09 Mute	Ch 09 Solo	Ch 9 Write	not supported	Ch 9 Assign	Ch 9 Rec/Rdy
01	by fader movement	Ch 10 Select	Ch 10 Mute	Ch 10 Solo	Ch 10 Write	not supported	Ch 10 Assign	Ch 10 Rec/Rdy
02	by fader movement	Ch 11 Select	Ch 11 Mute	Ch 11 Solo	Ch 11 Write	not supported	Ch 11 Assign	Ch 11 Rec/Rdy
03	by fader movement	Ch 12 Select	Ch 12 Mute	Ch 12 Solo	Ch 12 Write	not supported	Ch 12 Assign	Ch 12 Rec/Rdy
04	by fader movement	Ch 13 Select	Ch 13 Mute	Ch 13 Solo	Ch 13 Write	not supported	Ch 13 Assign	Ch 13 Rec/Rdy
05	by fader movement	Ch 14 Select	Ch 14 Mute	Ch 14 Solo	Ch 14 Write	not supported	Ch 14 Assign	Ch 14 Rec/Rdy
06	by fader movement	Ch 15 Select	Ch 15 Mute	Ch 15 Solo	Ch 15 Write	not supported	Ch 15 Assign	Ch 15 Rec/Rdy
07	by fader movement	Ch 16 Select	Ch 16 Mute	Ch 16 Solo	Ch 16 Write	not supported	Ch 16 Assign	Ch 16 Rec/Rdy
00	by fader movement	Ch 17 Select	Ch 17 Mute	Ch 17 Solo	Ch 17 Write	not supported	Ch 17 Assign	Ch 17 Rec/Rdy
01	by fader movement	Ch 18 Select	Ch 18 Mute	Ch 18 Solo	Ch 18 Write	not supported	Ch 18 Assign	Ch 18 Rec/Rdy
02	by fader movement	Ch 19 Select	Ch 19 Mute	Ch 19 Solo	Ch 19 Write	not supported	Ch 19 Assign	Ch 19 Rec/Rdy
03	by fader movement	Ch 20 Select	Ch 20 Mute	Ch 20 Solo	Ch 20 Write	not supported	Ch 20 Assign	Ch 20 Rec/Rdy
04	by fader movement	Ch 21 Select	Ch 21 Mute	Ch 21 Solo	Ch 21 Write	not supported	Ch 21 Assign	Ch 21 Rec/Rdy
05	by fader movement	Ch 22 Select	Ch 22 Mute	Ch 22 Solo	Ch 22 Write	not supported	Ch 22 Assign	Ch 22 Rec/Rdy
06	by fader movement	Ch 23 Select	Ch 23 Mute	Ch 23 Solo	Ch 23 Write	not supported	Ch 23 Assign	Ch 23 Rec/Rdy
07	by fader movement	Ch 24 Select	Ch 24 Mute	Ch 24 Solo	Ch 24 Write	not supported	Ch 24 Assign	Ch 24 Rec/Rdy
08	MASTER LR WRITE	MASTER LR SELECT	CLIPBOARD PASTE	CLIPBOARD CUT	SHORTCUTS ALT	SHORTCUTS CONTROL	CLIPBOARD UNDO	CLIPBOARD COPY
09	TRANSPORT SMPTE VIEW	TRANSPORT 1	TRANSPORT 2	TRANSPORT 3	TRANSPORT 4	TRANSPORT 5		
0A	Master MASTERS	Master 1-24	Master SHIFT	Master 25-48				
0B	Master SOLO	Master Aux 11-12 PAN	Master Aux 11-12	Master Aux8	Master Aux6	Master Aux4	Master Aux2	Master 1-48 Digital Trim
0C	Master Aux9-10 PAN	Master Aux9-10	Master Aux7	Master Aux5	Master Aux3	Master Aux1	Master 1-24 Level to tape	
0D	CONTROL ROOM MASTERS	ASSIGNMENT ASSIGN BUS	CONTROL ROOM DIGITAL IN	ASSIGNMENT ASSIGN BUS	CONTROL ROOM DIGITAL IN	not supported	JOG/SHUTTLE	
0E	CONTROL ROOM TALKBACK L	TRANSPORT REWIND	TRANSPORT FAST FORWAR	TRANSPORT STOP	TRANSPORT PLAY	TRANSPORT RECORD		
0F	TRANSPORT ENTER	TRANSPORT LOOP	not supported	TRANSPORT STORE	TRANSPORT LOCATOR	TRANSPORT SNAPSHOT		
10	TRANSPORT 6	TRANSPORT 7	TRANSPORT 8	TRANSPORT 9	TRANSPORT 0			
11	CONTROL ROOM 2 TRACK	CONTROL ROOM 2 TRACK	CONTROL ROOM 2 TRACK	not supported	not supported			
12	not supported	CONTROL ROOM NEAR FIE	CONTROL ROOM MAIN	CONTROL ROOM DIM	CONTROL ROOM MONO			
13	not supported	not supported	not supported	not supported	not supported	not supported	not supported	
14	not supported	not supported	not supported					
15	not supported	not supported	not supported	not supported	not supported	not supported	not supported	
16	TRANSPORT SET TIME	not supported	not supported	not supported				
17	ASSIGNMENT ASSIGN BUS	ASSIGNMENT ASSIGN BUS	AUTOMATION BYPASS	ASSIGNMENT ASSIGN BUS	ASSIGNMENT ASSIGN BUS	AUTOMATION FADER MOTOR		
18	AUTOMATION FADERS	AUTOMATION MUTES	AUTOMATION AUTO TOUCH	AUTOMATION PAN	AUTOMATION ALL	AUTOMATION TRIM LEVEL		
19	ASSIGNMENT ASSIGN BUS	ASSIGNMENT ASSIGN BUS	SETUP SAVE	ASSIGNMENT ASSIGN L-R	ASSIGNMENT ASSIGN ROUTE T	SETUP GROUP		
1A	SETUP SAVE AS	SETUP NEW	SETUP LOAD	SETUP GENERAL	SETUP PLUG INS	SETUP DIGITAL I/O		
1B	SOLO/STUDIO MIXDOWN SO	SOLO/STUDIO CLEAR SOLO	SOLO/STUDIO PFL SOLO	SOLO/STUDIO SOLO LEVEL	SOLO/STUDIO AFL SOLO	SOLO/STUDIO STUDIO LEVEL	SOLO/STUDIO TALKBACK TO ST	SOLO/STUDIO TALKBACK LEV
1C	EQ PLUG-INS	EQ EQ	EQ SELECT1	EQ SELECT2	EQ SELECT3	EQ SELECT4	EQ COMPRESSOR	EQ GATE
1D								

Zone	0	1	2	3	4	5	6	7
0	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
1	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
2	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
3	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
4	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
5	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
6	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
7	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
0	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
1	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
2	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
3	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
4	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
5	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
6	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
7	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
0	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
1	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
2	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
3	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
4	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
5	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
6	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
7	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
8	ctrl/clt	shift/ad	editmode	undo	alt/fine	option/a	edittool	save
9	mix	edit	transprt	mem-loc	status	alt		
0a	<-CH	<-Bank	CH->	Bank->				
0b	output	input	pan	send e	send d	send c	send b	send a
0c	assign	default	suspend	shift	mute	bypass	recrdyal	
0d	down	left	mode	right	up	scrub	shuttle	
0e	talkback	rewind	FF	stop	play	record		
0f	|<rtz	end>	online	loop	qck	pnch		
10	audition	pre	in	out	post			
11	input 3	input 2	input 1	mute	discrete			
12	output 3	Output 2	output 1	dim	mono			
13	0	1	4	2	5	.	3	6
14	enter	+						
15	7	8	9	-	clr	=	/	*
16	timecode	feet	beat	rudesolo				
17	plug in	pan	fader	sendmute	send	mute		
18	trim	latch	read	off	write	touch		
19	phase	monitor	auto	suspend	create	group		
1a	paste	cut	capture	delete	copy	separate		
1b	f1	f2	f3	f4	f5	f6	f7	f8/esc
1c	ins/para	assign	select 1	select 2	select 3	select 4	bypass	compare
1d	fs/rlay1	fs/rlay2	click	|beep				

Zoomed in:

	0x00	0x01	0x02	0x03	0x04	0x05	0x06	0x07	
00	by fader movement	Ch 01 Select	Ch 01 Mute	Ch 01 Solo	Ch 01 Write	not supported	Ch 01 Assign	Ch 01 Rec/Rdy	
01	by fader movement	Ch 02 Select	Ch 02 Mute	Ch 02 Solo	Ch 02 Write	not supported	Ch 02 Assign	Ch 02 Rec/Rdy	
02	by fader movement	Ch 03 Select	Ch 03 Mute	Ch 03 Solo	Ch 03 Write	not supported	Ch 03 Assign	Ch 03 Rec/Rdy	
03	by fader movement	Ch 04 Select	Ch 04 Mute	Ch 04 Solo	Ch 04 Write	not supported	Ch 04 Assign	Ch 04 Rec/Rdy	
04	by fader movement	Ch 05 Select	Ch 05 Mute	Ch 05 Solo	Ch 05 Write	not supported	Ch 05 Assign	Ch 05 Rec/Rdy	
05	by fader movement	Ch 06 Select	Ch 06 Mute	Ch 06 Solo	Ch 06 Write	not supported	Ch 06 Assign	Ch 06 Rec/Rdy	
06	by fader movement	Ch 07 Select	Ch 07 Mute	Ch 07 Solo	Ch 07 Write	not supported	Ch 07 Assign	Ch 07 Rec/Rdy	
07	by fader movement	Ch 08 Select	Ch 08 Mute	Ch 08 Solo	Ch 08 Write	not supported	Ch 08 Assign	Ch 08 Rec/Rdy	
00	by fader movement	Ch 9 Select	Ch 09 Mute	Ch 09 Solo	Ch 9 Write	not supported	Ch 9 Assign	Ch 9 Rec/Rdy	
01	by fader movement	Ch 10 Select	Ch 10 Mute	Ch 10 Solo	Ch 10 Write	not supported	Ch 10 Assign	Ch 10 Rec/Rdy	
02	by fader movement	Ch 11 Select	Ch 11 Mute	Ch 11 Solo	Ch 11 Write	not supported	Ch 11 Assign	Ch 11 Rec/Rdy	
03	by fader movement	Ch 12 Select	Ch 12 Mute	Ch 12 Solo	Ch 12 Write	not supported	Ch 12 Assign	Ch 12 Rec/Rdy	
04	by fader movement	Ch 13 Select	Ch 13 Mute	Ch 13 Solo	Ch 13 Write	not supported	Ch 13 Assign	Ch 13 Rec/Rdy	
05	by fader movement	Ch 14 Select	Ch 14 Mute	Ch 14 Solo	Ch 14 Write	not supported	Ch 14 Assign	Ch 14 Rec/Rdy	
06	by fader movement	Ch 15 Select	Ch 15 Mute	Ch 15 Solo	Ch 15 Write	not supported	Ch 15 Assign	Ch 15 Rec/Rdy	
07	by fader movement	Ch 16 Select	Ch 16 Mute	Ch 16 Solo	Ch 16 Write	not supported	Ch 16 Assign	Ch 16 Rec/Rdy	
00	by fader movement	Ch 17 Select	Ch 17 Mute	Ch 17 Solo	Ch 17 Write	not supported	Ch 17 Assign	Ch 17 Rec/Rdy	
01	by fader movement	Ch 18 Select	Ch 18 Mute	Ch 18 Solo	Ch 18 Write	not supported	Ch 18 Assign	Ch 18 Rec/Rdy	
02	by fader movement	Ch 19 Select	Ch 19 Mute	Ch 19 Solo	Ch 19 Write	not supported	Ch 19 Assign	Ch 19 Rec/Rdy	
03	by fader movement	Ch 20 Select	Ch 20 Mute	Ch 20 Solo	Ch 20 Write	not supported	Ch 20 Assign	Ch 20 Rec/Rdy	
04	by fader movement	Ch 21 Select	Ch 21 Mute	Ch 21 Solo	Ch 21 Write	not supported	Ch 21 Assign	Ch 21 Rec/Rdy	
05	by fader movement	Ch 22 Select	Ch 22 Mute	Ch 22 Solo	Ch 22 Write	not supported	Ch 22 Assign	Ch 22 Rec/Rdy	
06	by fader movement	Ch 23 Select	Ch 23 Mute	Ch 23 Solo	Ch 23 Write	not supported	Ch 23 Assign	Ch 23 Rec/Rdy	
07	by fader movement	Ch 24 Select	Ch 24 Mute	Ch 24 Solo	Ch 24 Write	not supported	Ch 24 Assign	Ch 24 Rec/Rdy	
08	MASTER LR WRITE	MASTER LR SELECT	CLIPBOARD PASTE	CLIPBOARD CUT	SHORTCUTS ALT	SHORTCUTS CONTROL	CLIPBOARD UNDO	CLIPBOARD COPY	
09	TRANSPORT SMPTE VIEW	TRANSPORT 1	TRANSPORT 2	TRANSPORT 3	TRANSPORT 4	TRANSPORT 5			
0A	Master MASTERS	Master 1-24	Master SHIFT	Master 25-48					
0B	Master SOLO	Master Aux 11-12 PAN	Master Aux 11-12	Master Aux8	Master Aux6	Master Aux4	Master Aux2	Master 1-48 Digital Trim	
0C	Master Aux9-10 PAN	Master Aux9-10	Master Aux7	Master Aux5	Master Aux3	Master Aux1	Master 1-24 Level to tape		
0D	CONTROL ROOM MASTERS	ASSIGNMENT ASSIGN BUS	CONTROL ROOM DIGITAL IN	ASSIGNMENT ASSIGN BUS	CONTROL ROOM DIGITAL IN	not supported	JOG/SHUTTLE		
0E	CONTROL ROOM TALKBACK L	TRANSPORT REWIND	TRANSPORT FAST FORWARD	TRANSPORT STOP	TRANSPORT PLAY	TRANSPORT RECORD			
0F	TRANSPORT ENTER	TRANSPORT LOOP	not supported	TRANSPORT STORE	TRANSPORT LOCATOR	TRANSPORT SNAPSHOT			
10	TRANSPORT 6	TRANSPORT 7	TRANSPORT 8	TRANSPORT 9	TRANSPORT 0				
11	CONTROL ROOM 2 TRACK	CONTROL ROOM 2 TRACK	CONTROL ROOM 2 TRACK	not supported	not supported				
12	not supported	CONTROL ROOM NEAR FIELD	CONTROL ROOM MAIN	CONTROL ROOM DIM	CONTROL ROOM MONO				
13	not supported	not supported	not supported	not supported	not supported	not supported	not supported	not supported	
14	not supported	not supported							
15	not supported	not supported	not supported	not supported	not supported	not supported	not supported	not supported	
16	TRANSPORT SET TIME	not supported	not supported	not supported					
17	ASSIGNMENT ASSIGN BUS	ASSIGNMENT ASSIGN BUS	AUTOMATION BYPASS	ASSIGNMENT ASSIGN BUS	ASSIGNMENT ASSIGN BUS	AUTOMATION FADER MOTOR			
18	AUTOMATION FADERS	AUTOMATION MUTES	AUTOMATION AUTO TOUCH	AUTOMATION PAN	AUTOMATION ALL	AUTOMATION TRIM LEVEL			
19	ASSIGNMENT ASSIGN BUS	ASSIGNMENT ASSIGN BUS	SETUP SAVE	ASSIGNMENT ASSIGN L-R	ASSIGNMENT ASSIGN ROUTE TO	SETUP GROUP			
1A	SETUP SAVE AS	SETUP NEW	SETUP LOAD	SETUP GENERAL	SETUP PLUG INS	SETUP DIGITAL I/O			
1B	SOLO/STUDIO MIXDOWN SOLO	SOLO/STUDIO CLEAR SOLO	SOLO/STUDIO PFL SOLO	SOLO/STUDIO SOLO LEVEL	SOLO/STUDIO AFL SOLO	SOLO/STUDIO STUDIO LEVEL	SOLO/STUDIO TALKBACK TO ST	SOLO/STUDIO TALKBACK LEVEL	
1C	EQ PLUG-INS	EQ EQ	EQ SELECT1	EQ SELECT2	EQ SELECT3	EQ SELECT4	EQ COMPRESSOR	EQ GATE	
1D									

Zone	0	1	2	3	4	5	6	7
0	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
1	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
2	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
3	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
4	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
5	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
6	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
7	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
0	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
1	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
2	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
3	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
4	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
5	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
6	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
7	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
0	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
1	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
2	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
3	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
4	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
5	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
6	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
7	fader	select	mute	solo	auto	v-sel	insert	rec/rdy
8	ctrl/clt	shift/ad	editmode	undo	alt/fine	option/a	edittool	save
9	mix	edit	transprt	mem-loc	status	alt		
0a	<-CH	<-Bank	CH->	Bank->				
0b	output	input	pan	send e	send d	send c	send b	send a
0c	assign	default	suspend	shift	mute	bypass	recrdyal	
0d	down	left	mode	right	up	scrub	shuttle	
0e	talkback	rewind	FF	stop	play	record		
0f	|<rtz	end>|	online	loop	qck	pnch		
10	audition	pre	in	out	post			
11	input 3	input 2	input 1	mute	discrete			
12	output 3	Output 2	output 1	dim	mono			
13	0	1	4	2	5	.	3	6
14	enter	+						
15	7	8	9	-	clr	=	/	*
16	timecode	feet	beat	rudesolo				
17	plug in	pan	fader	sendmute	send	mute		
18	trim	latch	read	off	write	touch		
19	phase	monitor	auto	suspend	create	group		
1a	paste	cut	capture	delete	copy	separate		
1b	f1	f2	f3	f4	f5	f6	f7	f8/esc
1c	ins/para	assign	select 1	select 2	select 3	select 4	bypass	compare
1d	fs/rlay1	fs/rlay2	click	|beep				

7.5 Monitor Controller function

This option is only available when it is enabled in the config menu.

7.5.1 Monitor Section

Use the three buttons *"2 TRACK A   2 TRACK B* or *2 TRACK C"* to select your Input for the Control Room. This input signal can be switched to mono via the *"MONO"* button or be dimmed via the *"DIM"* button.

It can be sent to either the main output by pressing the *"MAIN"* button or to the Nearfield output by pressing *"NEAR FIELD"*. If you press a selected Speakers button again, the led will flush and the Output will be muted.

7.5.2 Cue Section

On the Phones/Cue Mix 1 /2 area you can select the Inputs Aux9/10, Aux 11/12 or the Signal on your Main/Nearfield Speakers by pressing *"AUX 9-10"*, *"AUX 11-12"* or *"CONTROL ROOM"*. Control the volume of the Phones via the Vpot.

Use the **Master Vpot** to control the signal on the STUDIO Out jacks. The Signal on the Studio Out will be the same as on the Speakers (vaild for Logic and Mackie Protocol).

For **HUI** use the **Main Fader** to control this audio Output, as this Vpot is used as scroll wheel for the HUI display section.

Use the *"TALKBACK"* button on the monitoring section to send the talkback mic signal to Phones/Cue 1 and 2 and the Studio Out. Control your Mic Level with the Vpot **"LEVEL"** in the Solo/Studio area.

Since Version 2.1.12 it's possible to use an additional footswitch. Connect your footswitch to the talkback jack on the back of your d8b.

Note: You can configure the Talkback Button or footswitch to act as switch (latched on/off function) or as a button (Talkback as long as you keep the button pressed). Additional you can configure an automatic Speaker DIM when pressing the talk button. Details see probox configuration: chapter 7.2 (config page 5)

7.5.3 Signal path of Monitor controller
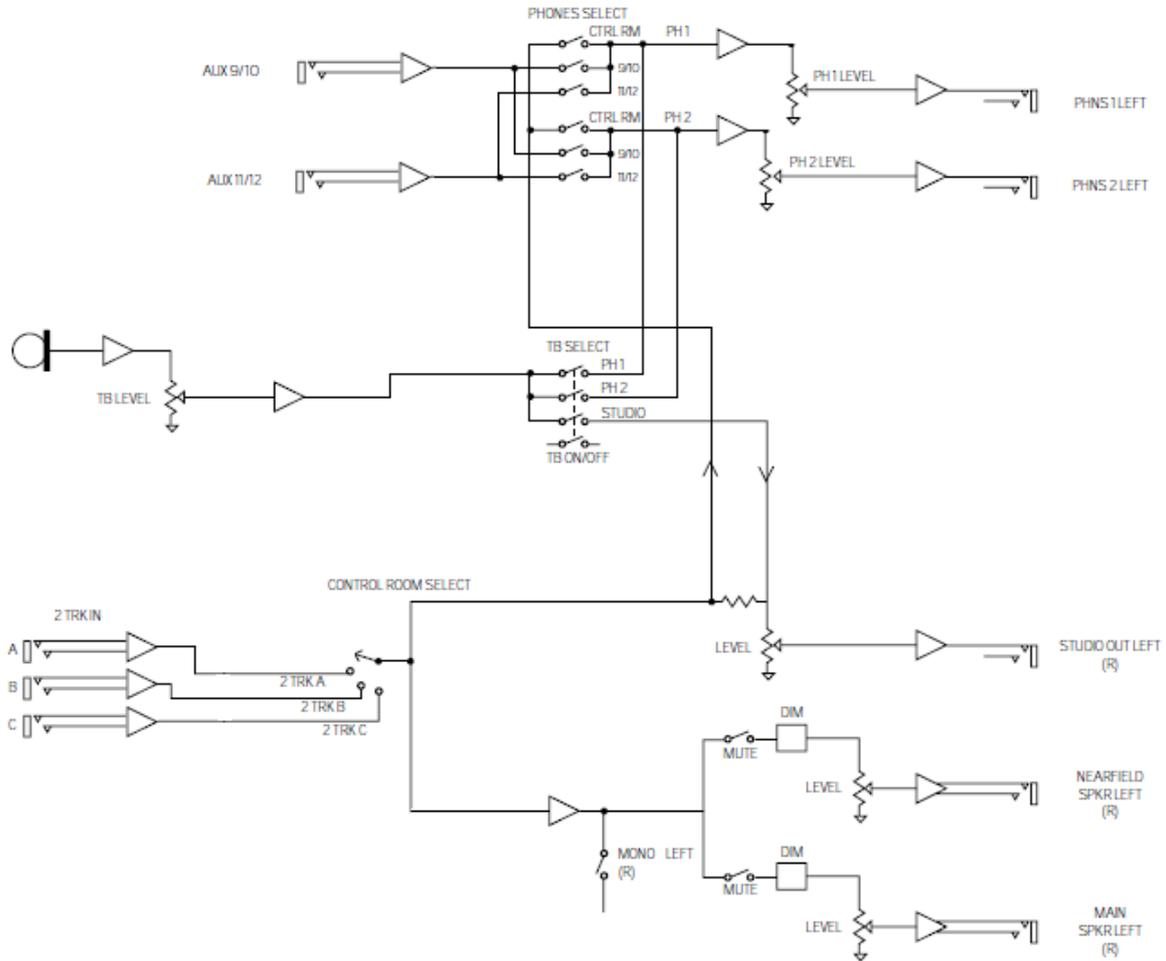
7.6 Generic Control functions

The generic controller functions are handled via the 4th USB midi port. To have a match to the MCU Bank Left/right and channel left/right functions these buttons will also send a signal on the generic USB midi port. You have to program your DAW for that.

For Cubase such a setup will be available, as I will do that for my setup.

NOTE: If you disable the Monitor Controller function on the ProBox, you will have these buttons and Vpots as generic controller (marked in green). For the implementation into your DAW please look to the chapter MIDI Implementation table

8 MIDI Implementation Table

Button/Vpot	Midi Ch	Midi			
		Command	(hex)	(dec)	values
Master Vpot Master	1	Control Change (0xB0)	70	112	0-127, 0-0x7F
SOLO/STUDIO Vpot LEVEL	1	Control Change (0xB0)	71	113	0-127, 0-0x7F
PHONES/CUE1 VPOT LEVEL	1	Control Change (0xB0)	72	114	0-127, 0-0x7F
PHONES/CUE2 VPOT LEVEL	1	Control Change (0xB0)	73	115	0-127, 0-0x7F
CONTROL ROOM SPEAKER LEVEL	1	Control Change (0xB0)	74	116	0-127, 0-0x7F
Main-Meterbridge Cubase (logarithmic) L	1	Control Change (0xB0)	75	117	0-127, 0-0x7F
Main-Meterbridge Cubase (logarithmic) R	1	Control Change (0xB0)	76	118	0-127, 0-0x7F
Main-Meterbridge (linear) L	1	Control Change (0xB0)	77	119	0-127, 0-0x7F
Main-Meterbridge (linear) R	1	Control Change (0xB0)	78	120	0-127, 0-0x7F
Assign Ch01[Automation read]	1	NoteOn (0x90)	0	0	127(0x7F) on, 0 off
Assign Ch02[Automation read]	1	NoteOn (0x90)	1	1	127(0x7F) on, 0 off
Assign Ch03[Automation read]	1	NoteOn (0x90)	2	2	127(0x7F) on, 0 off
Assign Ch04[Automation read]	1	NoteOn (0x90)	3	3	127(0x7F) on, 0 off
Assign Ch05[Automation read]	1	NoteOn (0x90)	4	4	127(0x7F) on, 0 off
Assign Ch06[Automation read]	1	NoteOn (0x90)	5	5	127(0x7F) on, 0 off
Assign Ch07[Automation read]	1	NoteOn (0x90)	6	6	127(0x7F) on, 0 off
Assign Ch08[Automation read]	1	NoteOn (0x90)	7	7	127(0x7F) on, 0 off
Assign Ch09[Automation read]	1	NoteOn (0x90)	8	8	127(0x7F) on, 0 off
Assign Ch10[Automation read]	1	NoteOn (0x90)	9	9	127(0x7F) on, 0 off
Assign Ch11[Automation read]	1	NoteOn (0x90)	0A	10	127(0x7F) on, 0 off
Assign Ch12[Automation read]	1	NoteOn (0x90)	0B	11	127(0x7F) on, 0 off
Assign Ch13[Automation read]	1	NoteOn (0x90)	0C	12	127(0x7F) on, 0 off
Assign Ch14[Automation read]	1	NoteOn (0x90)	0D	13	127(0x7F) on, 0 off
Assign Ch15[Automation read]	1	NoteOn (0x90)	0E	14	127(0x7F) on, 0 off
Assign Ch16[Automation read]	1	NoteOn (0x90)	0F	15	127(0x7F) on, 0 off
Assign Ch17[Automation read]	1	NoteOn (0x90)	10	16	127(0x7F) on, 0 off
Assign Ch18[Automation read]	1	NoteOn (0x90)	11	17	127(0x7F) on, 0 off
Assign Ch19[Automation read]	1	NoteOn (0x90)	12	18	127(0x7F) on, 0 off
Assign Ch20[Automation read]	1	NoteOn (0x90)	13	19	127(0x7F) on, 0 off
Assign Ch21[Automation read]	1	NoteOn (0x90)	14	20	127(0x7F) on, 0 off
Assign Ch22[Automation read]	1	NoteOn (0x90)	15	21	127(0x7F) on, 0 off
Assign Ch23[Automation read]	1	NoteOn (0x90)	16	22	127(0x7F) on, 0 off
Assign Ch24[Automation read]	1	NoteOn (0x90)	17	23	127(0x7F) on, 0 off
Write Ch01[Automation Write]	1	NoteOn (0x90)	18	24	127(0x7F) on, 0 off
Write Ch02[Automation Write]	1	NoteOn (0x90)	19	25	127(0x7F) on, 0 off
Write Ch03[Automation Write]	1	NoteOn (0x90)	1A	26	127(0x7F) on, 0 off
Write Ch04[Automation Write]	1	NoteOn (0x90)	1B	27	127(0x7F) on, 0 off
Write Ch05[Automation Write]	1	NoteOn (0x90)	1C	28	127(0x7F) on, 0 off
Write Ch06[Automation Write]	1	NoteOn (0x90)	1D	29	127(0x7F) on, 0 off
Write Ch07[Automation Write]	1	NoteOn (0x90)	1E	30	127(0x7F) on, 0 off
Write Ch08[Automation Write]	1	NoteOn (0x90)	1F	31	127(0x7F) on, 0 off
Write Ch09[Automation Write]	1	NoteOn (0x90)	20	32	127(0x7F) on, 0 off

Write Ch10[Automation Write]	1	NoteOn (0x90)	21	33	127(0x7F) on, 0 off
Write Ch11[Automation Write]	1	NoteOn (0x90)	22	34	127(0x7F) on, 0 off
Write Ch12[Automation Write]	1	NoteOn (0x90)	23	35	127(0x7F) on, 0 off
Write Ch13[Automation Write]	1	NoteOn (0x90)	24	36	127(0x7F) on, 0 off
Write Ch14[Automation Write]	1	NoteOn (0x90)	25	37	127(0x7F) on, 0 off
Write Ch15[Automation Write]	1	NoteOn (0x90)	26	38	127(0x7F) on, 0 off
Write Ch16[Automation Write]	1	NoteOn (0x90)	27	39	127(0x7F) on, 0 off
Write Ch17[Automation Write]	1	NoteOn (0x90)	28	40	127(0x7F) on, 0 off
Write Ch18[Automation Write]	1	NoteOn (0x90)	29	41	127(0x7F) on, 0 off
Write Ch19[Automation Write]	1	NoteOn (0x90)	2A	42	127(0x7F) on, 0 off
Write Ch20[Automation Write]	1	NoteOn (0x90)	2B	43	127(0x7F) on, 0 off
Write Ch21[Automation Write]	1	NoteOn (0x90)	2C	44	127(0x7F) on, 0 off
Write Ch22[Automation Write]	1	NoteOn (0x90)	2D	45	127(0x7F) on, 0 off
Write Ch23[Automation Write]	1	NoteOn (0x90)	2E	46	127(0x7F) on, 0 off
Write Ch24[Automation Write]	1	NoteOn (0x90)	2F	47	127(0x7F) on, 0 off
TRANSPORT 1	1	NoteOn (0x90)	40	64	127(0x7F) on, 0 off
TRANSPORT 2	1	NoteOn (0x90)	41	65	127(0x7F) on, 0 off
TRANSPORT 3	1	NoteOn (0x90)	42	66	127(0x7F) on, 0 off
TRANSPORT 4	1	NoteOn (0x90)	43	67	127(0x7F) on, 0 off
TRANSPORT 5	1	NoteOn (0x90)	44	68	127(0x7F) on, 0 off
TRANSPORT 6	1	NoteOn (0x90)	45	69	127(0x7F) on, 0 off
TRANSPORT 7	1	NoteOn (0x90)	46	70	127(0x7F) on, 0 off
TRANSPORT 8	1	NoteOn (0x90)	47	71	127(0x7F) on, 0 off
TRANSPORT 9	1	NoteOn (0x90)	48	72	127(0x7F) on, 0 off
TRANSPORT 10	1	NoteOn (0x90)	49	73	127(0x7F) on, 0 off
SOLO/STUDIO MIXDOWN SOLO	1	NoteOn (0x90)	4A	74	127(0x7F) on, 0 off
SOLO/STUDIO PFL SOLO	1	NoteOn (0x90)	4B	75	127(0x7F) on, 0 off
SOLO/STUDIO AFL SOLO	1	NoteOn (0x90)	4C	76	127(0x7F) on, 0 off
SOLO/STUDIO TALKBACK TO STUDIO	1	NoteOn (0x90)	4D	77	127(0x7F) on, 0 off
Master SOLO	1	NoteOn (0x90)	4E	78	127(0x7F) on, 0 off
SOLO/STUDIO CLEAR SOLO	1	NoteOn (0x90)	4F	79	127(0x7F) on, 0 off
SOLO/STUDIO SOLO LEVEL	1	NoteOn (0x90)	50	80	127(0x7F) on, 0 off
SOLO/STUDIO STUDIO LEVEL	1	NoteOn (0x90)	51	81	127(0x7F) on, 0 off
SOLO/STUDIO TALKBACK LEVEL	1	NoteOn (0x90)	52	82	127(0x7F) on, 0 off
PHONES 1 AUX 9-10	1	NoteOn (0x90)	53	83	127(0x7F) on, 0 off
PHONES 1 COPY TO MIX	1	NoteOn (0x90)	54	84	127(0x7F) on, 0 off
PHONES 1 AUX 11-12	1	NoteOn (0x90)	55	85	127(0x7F) on, 0 off
PHONES 1 CONTROL ROOM	1	NoteOn (0x90)	56	86	127(0x7F) on, 0 off
PHONES 2 AUX 9-10	1	NoteOn (0x90)	57	87	127(0x7F) on, 0 off
PHONES 2 COPY TO MIX	1	NoteOn (0x90)	58	88	127(0x7F) on, 0 off
PHONES 2 AUX 11-12	1	NoteOn (0x90)	59	89	127(0x7F) on, 0 off
PHONES 2 CONTROL ROOM	1	NoteOn (0x90)	5A	90	127(0x7F) on, 0 off
CONTROL ROOM 2 TRACK A	1	NoteOn (0x90)	5B	91	127(0x7F) on, 0 off
CONTROL ROOM 2 TRACK B	1	NoteOn (0x90)	5C	92	127(0x7F) on, 0 off
CONTROL ROOM 2 TRACK C	1	NoteOn (0x90)	5D	93	127(0x7F) on, 0 off
CONTROL ROOM DIGITAL IN 1	1	NoteOn (0x90)	5E	94	127(0x7F) on, 0 off
CONTROL ROOM DIGITAL IN 2	1	NoteOn (0x90)	5F	95	127(0x7F) on, 0 off
CONTROL ROOM MASTER L-R	1	NoteOn (0x90)	60	96	127(0x7F) on, 0 off

CONTROL ROOM MONO	1	NoteOn (0x90)	61	97	127(0x7F) on, 0 off
CONTROL ROOM NEARFIELD	1	NoteOn (0x90)	62	98	127(0x7F) on, 0 off
CONTROL ROOM MAIN	1	NoteOn (0x90)	63	99	127(0x7F) on, 0 off
CONTROL ROOM DIM	1	NoteOn (0x90)	64	100	127(0x7F) on, 0 off
CONTROL ROOM TALKBACK	1	NoteOn (0x90)	65	101	127(0x7F) on, 0 off
SETUP GROUP	1	NoteOn (0x90)	66	102	127(0x7F) on, 0 off
SETUP GENERAL	1	NoteOn (0x90)	67	103	127(0x7F) on, 0 off
SETUP PLUGINS	1	NoteOn (0x90)	68	104	127(0x7F) on, 0 off
SETUP DIGITAL I/O	1	NoteOn (0x90)	69	105	127(0x7F) on, 0 off
1-24 LEVEL TO TAPE	1	NoteOn (0x90)	6A	106	127(0x7F) on, 0 off
1-24 DIGITAL TRIM	1	NoteOn (0x90)	6B	107	127(0x7F) on, 0 off
Master Aux 11-12	1	NoteOn (0x90)	6C	108	127(0x7F) on, 0 off
Master Aux 11-12 PAN	1	NoteOn (0x90)	6D	109	127(0x7F) on, 0 off
MASTER	2	NoteOn (0x91)	30	48	127(0x7F) on, 0 off
SHIFT	2	NoteOn (0x91)	31	49	127(0x7F) on, 0 off
1-24	2	NoteOn (0x91)	2E	46	127(0x7F) on, 0 off
25-48	2	NoteOn (0x91)	2F	47	127(0x7F) on, 0 off

9 Support

If you have problems with your probox, please contact me via email.

I need a detailed problem description:

Checklist	Yes/no
Operating system	
DAW Software + version	
used driver version	
Picture/description of connection of the probox	
is the system booting ?	
does the config menue work?	
does the USB Midi ports are available ?	
Controller seen by DAW ?	
Video of the problem would be great	
please describe as detailed as possible the Malfunction of the system	

Support email: probox@weritz.com

10 Warranty

As this is a non commercial product I can give you no warranty. But I will help you with your problems and support firmware updates if necessary.
Anyhow, if you have a defect, I will fix your problems or exchange your box within a year. If you have problems or hardware defects afterwards, I can offer cheap repair.

Every ProBox that is delivered is tested for their 100% functionality. How is this done?
I've developed a testprogram that checks all communication commands on all four USB ports and the serial connection to the d8b console. E.g. if you press a button on your d8b it sends out a command via the serial connection to the probox. The probox translates that to a midi command on USB1-4 and sends this out. All commands that were supported by the ProBox are checked via this testprogram for every single command. So you can be sure that you received a 100% working unit.

11 Changelog

Here you can see the changes of the software updates and manual changes.

From version	To version	changes
V 1.0	*V1.01.13*	• generic meterbridge commands added *8.0 midi implementation table* • changes for protocol settings *7.2 protocol settings (Logic/Mackie)* • changelog added
V1.01.13	V1.01.17	• Main/Nearfield output swapped (now matching to the buttons) • Meterbridge can be switched off (for later d8b Audio use) • Menu added (Emulation mode two different MCU+2XT, or 3 XT) • Fader Motor Off and fader send off added • Receive and send buffer increased
V1.01.17	V1.01.18	• Baud rate selector • MTC display also usable for configuration
V1.01.18	V1.01.21	• Meterbridge can be turned off • Fader filter implemented (to ged rid of the small ghost fader changes of the d8b)
V1.1.21	V2.01.01	• HUI protocol implemented
V2.01.01	V2.01.09	• HUI protocol finalized, some fader movement bug fixed
V2.01.09	V2.01.12	• Talkback switchable with footswitch via talkback jack • MTC refresh issue in HUI mode solved
V2.01.12	V2.01.13	• Fader Filter for Reaper implemented to prevent fader movements on unused channels
V2.01.13	V2.01.17	• Generic Control and Control Room Mode added (mixture of Control Room and Generic Controller to have a PAN Pot for Generic Controller). HUI Fader release Bug fixed
V2.01.17	V2.02.03	• added code for additional LCD channel displays • added LED/Key/Meterbridge Test menu • added Talk button modes (latched, unlatched and auto DIM)

V2.02.03	V2.02.04	• Talkback button modes also available on footswitch now
V2.02.04	**V2.03.04**	• **Meterbridge improved**
		• **Fader touch setting added (manual, automatic)**