Digital Broadcast Technology

DHD

Series 52

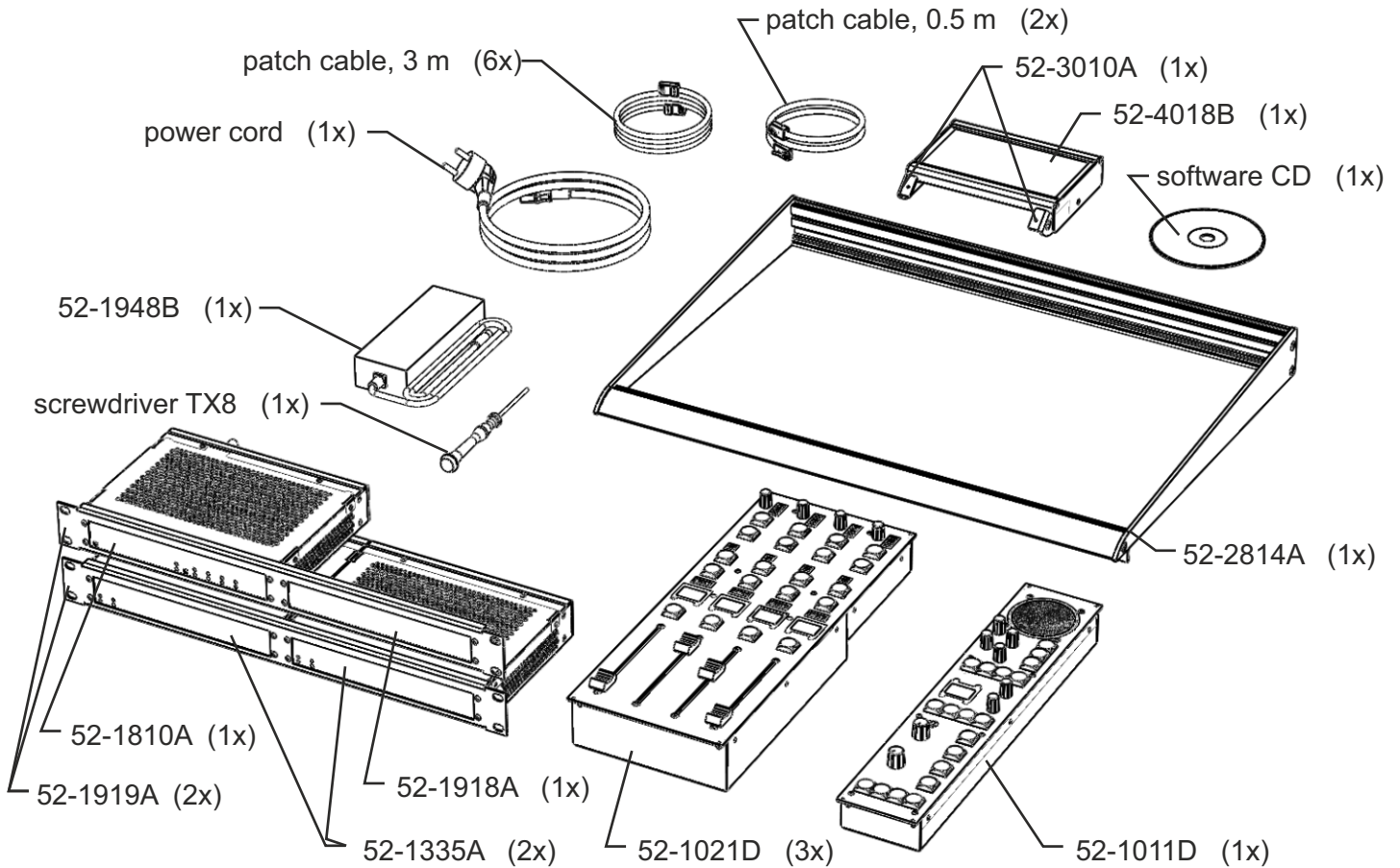# 52/SX Mixing Console
Bundle Information

Version: 1.13.0

52-1993K - SX Bundle

Package contents:

patch cable, 3 m (6x)

patch cable, 0.5 m (2x)

52-3010A (1x)

52-4018B (1x)

power cord (1x)

software CD (1x)

52-1948B (1x)

screwdriver TX8 (1x)

52-2814A (1x)

52-1810A (1x)

52-1919A (2x)

52-1918A (1x)

52-1335A (2x)

52-1021D (3x)

52-1011D (1x)

part nr.	name	qty.
52-1011D	SX Central Module	1x
52-1021D	SX Fader Module	3x
52-1335A	XS Multi I/O Box	2x
52-1810A	XS2 Core	1x
52-1918A	XS blank panel for 52-1919	1x
52-1919A	XS 19" Adapterpanel	2x
52-1948B	XS Power Supply 48V/100W	1x
52-2814A	SX Console Frame	1x
52-3010A	Console mounting kit for 52-4018	1x
52-4018B	TFT/Touch Display, 7" IPS	1x
--	Power cord	1x
--	Patch cable, CAT5, 3m	6x
--	Patch cable, CAT5, 0.5m	2x
--	Screwdriver Torx TX8	1x
--	Software CD, SX Config	1x

52-1995K - SX Bundle

Package contents:

patch cable, 3 m (6x)

patch cable, 0.5 m (2x)

52-3010A (1x)

52-4018B (1x)

power cord (1x)

software CD (1x)

52-1948B (1x)

screwdriver TX8 (1x)

52-2814A (1x)

52-1810A (1x)

52-1919A (2x)

52-1918A (1x)

52-1335A (2x)

52-1025D (3x)
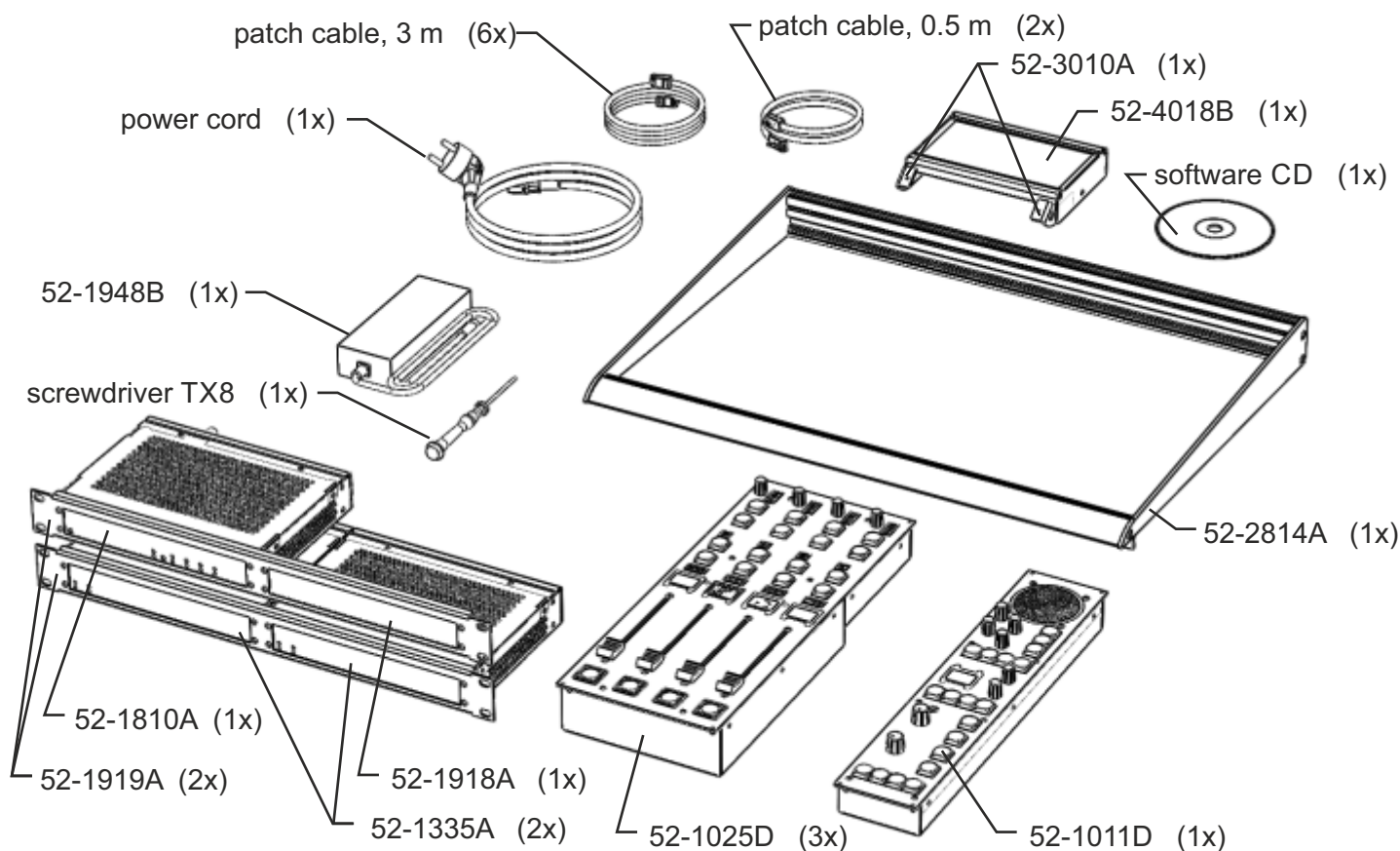
52-1011D (1x)

part nr.	name	qty.
52-1011D	SX Central Module	1x
52-1025D	SX Fader Module	3x
52-1335A	XS Multi I/O Box	2x
52-1810A	XS2 Core	1x
52-1918A	XS blank panel for 52-1919	1x
52-1919A	XS 19" Adapterpanel	2x
52-1948B	XS Power Supply 48V/100W	1x
52-2814A	SX Console Frame	1x
52-3010A	Console mounting kit for 52-4018	1x
52-4018B	TFT/Touch Display, 7" IPS	1x
--	Power cord	1x
--	Patch cable, CAT5, 3m	6x
--	Patch cable, CAT5, 0.5m	2x
--	Screwdriver Torx TX8	1x
--	Software CD, SX Config	1x

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furniture

370mm

561mm

cutout

Cutout for Console Frame 52-2814 of Mixing Console 52/SX.
For dimensions of Console Frame, see next page!
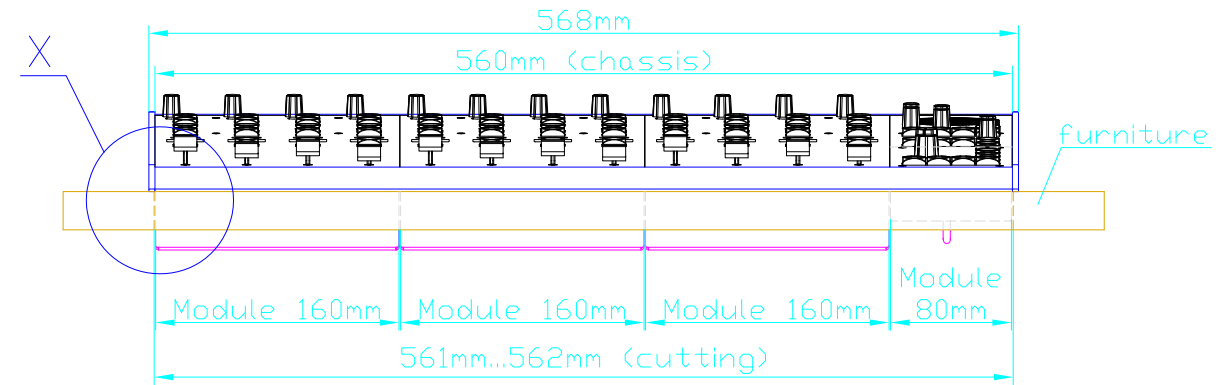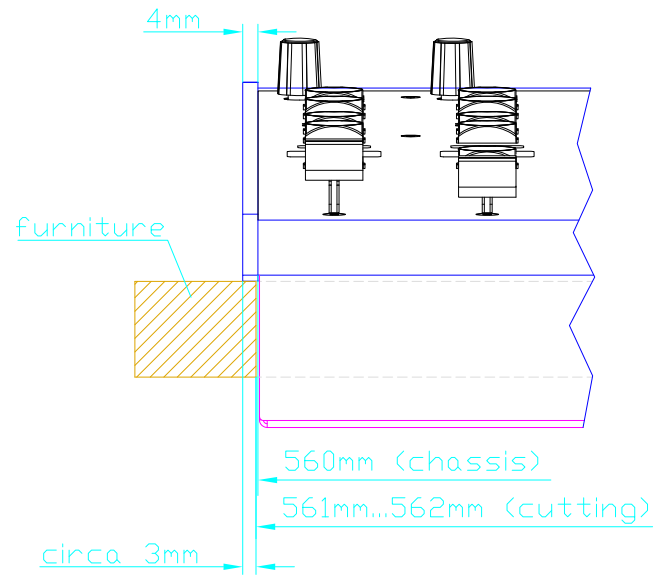
Scale: 1:5 (DIN A3)

Dimensions cutout for
Console Frame

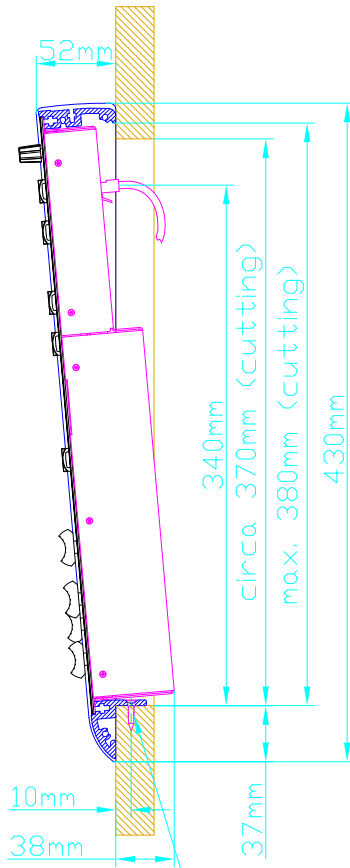Name: Miethling

Date: 26.10.2010

File: 52-2814_sx_dimension.dwg

52-2814
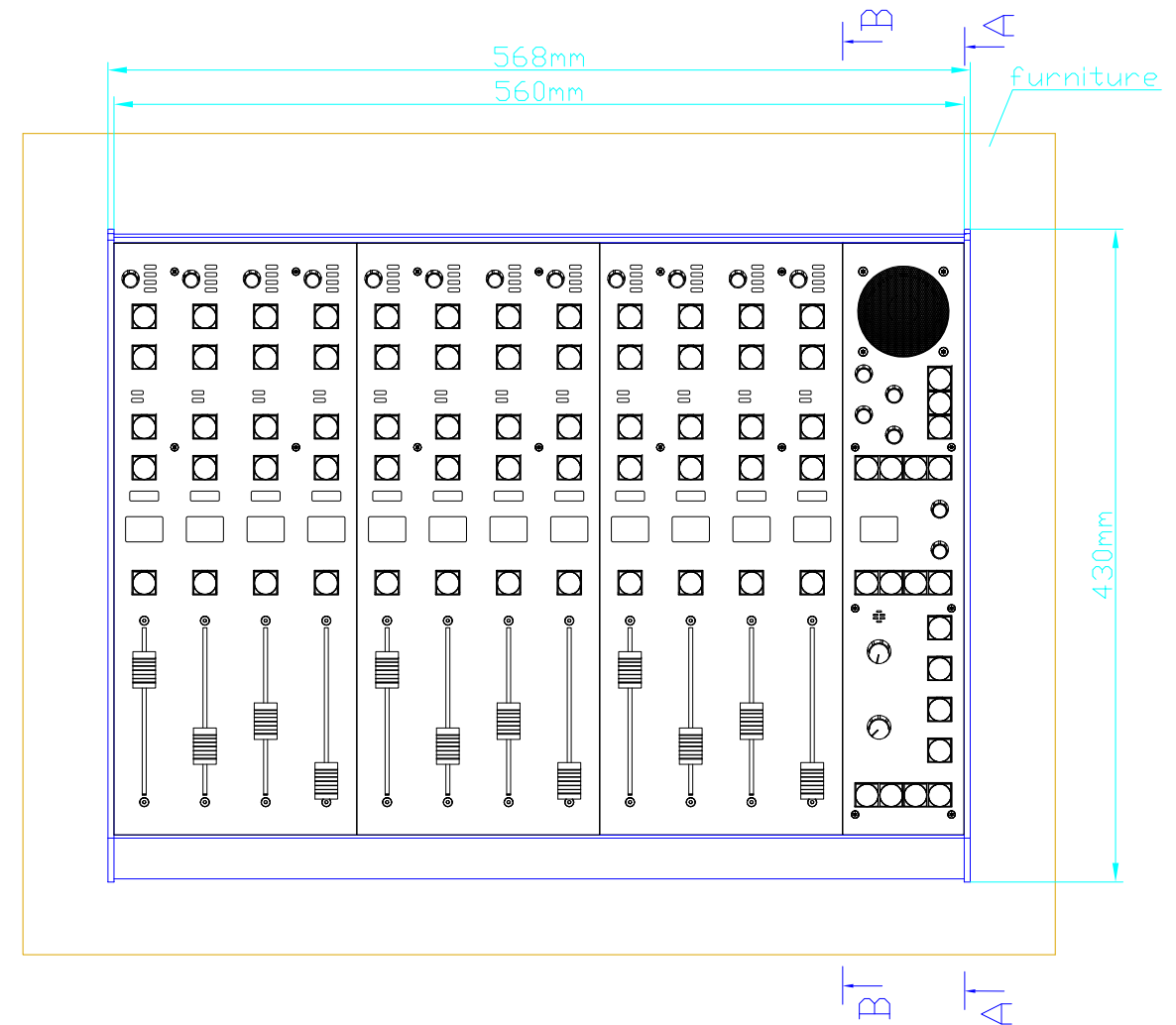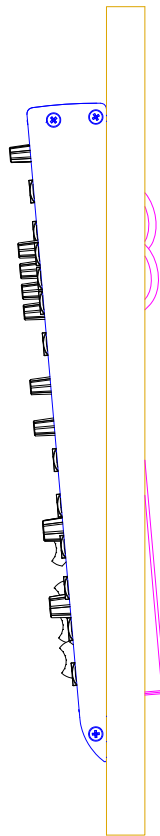(Console Frame for 3 Fader Modules
and 1 Central Module)

view X, scale 1:2
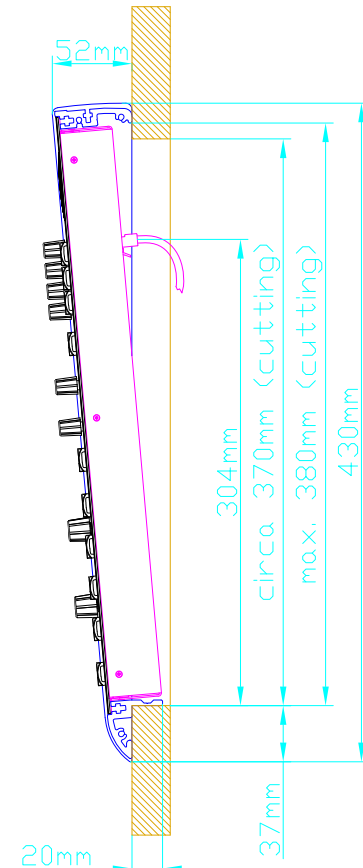
4mm

furniture

circa 3mm

560mm (chassis)
561mm...562mm (cutting)

568mm
560mm (chassis)

X

furniture

Module 160mm | Module 160mm | Module 160mm | Module 80mm

561mm...562mm (cutting)

cut B-B

52mm

340mm
circa 370mm (cutting)
max. 380mm (cutting)
430mm

10mm
38mm

37mm

cut B-B

52mm

304mm
circa 370mm (cutting)
max. 380mm (cutting)
430mm

20mm

37mm

B
A

568mm
560mm

furniture

430mm

B
A

For fixing console frame to furniture,
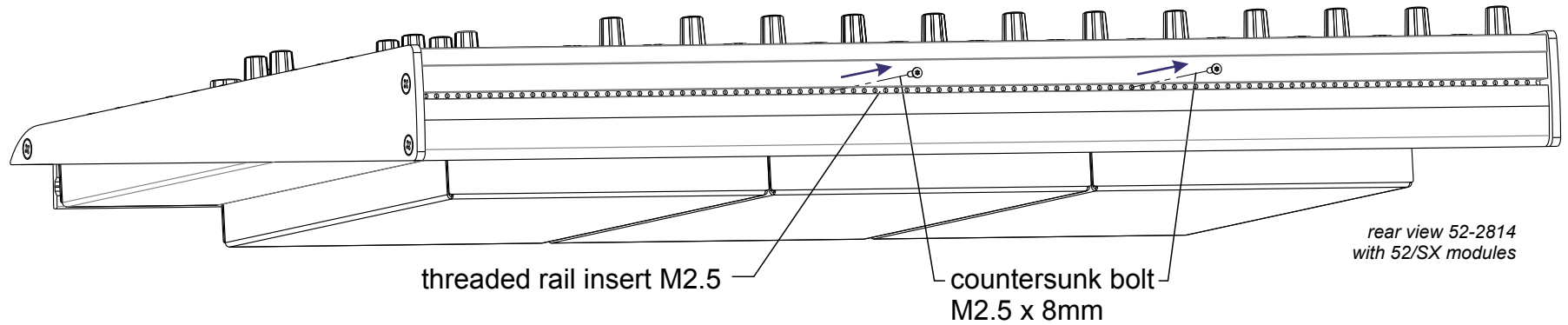please drill bore d=3,5...4mm into
aluminium profile for wooden screw.

Quick installation guide
for mounting TFT/Touch Display to console frame

step
1
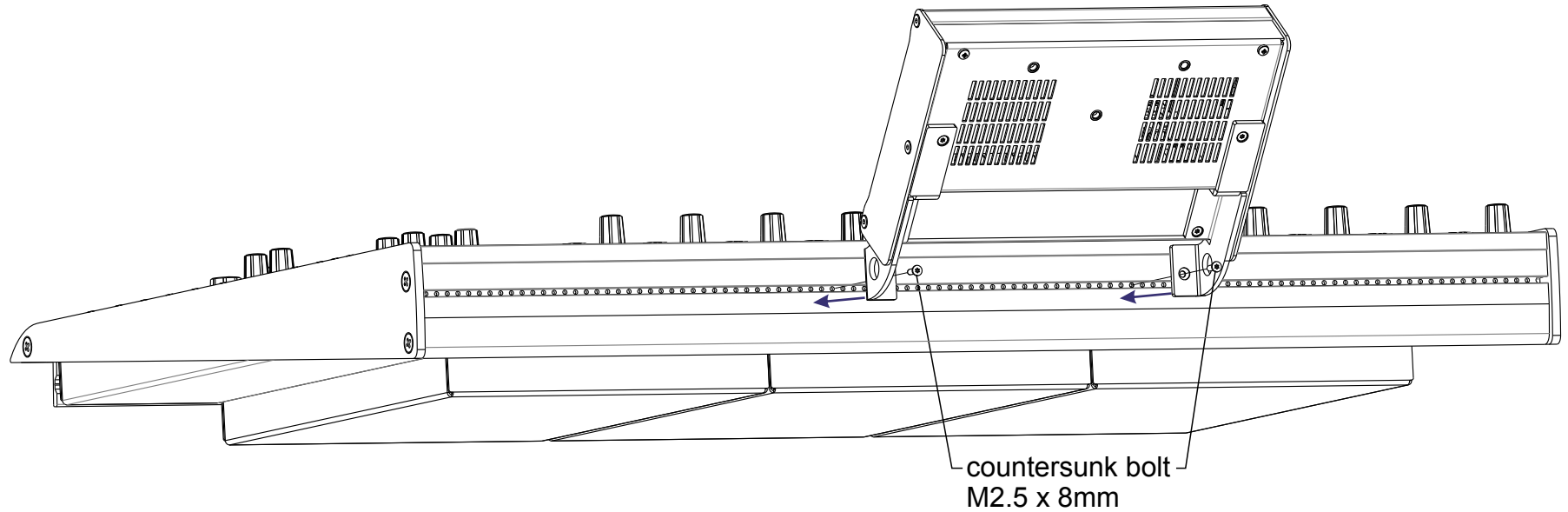
rear view 52-2814
with 52/SX modules

threaded rail insert M2.5

countersunk bolt
M2.5 x 8mm

step
2

countersunk bolt
M2.5 x 8mm

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52/SX Cabling Overview - Example 12 Fader and 2 XS Multi-I/O Boxes

TFT/Touch Display
52-4018B

Fader Module 1
52-1021D/1025D

Fader Module 2
52-1021D/1025D

Fader Module 3
52-1021D/1025D

Central Module
52-1011D
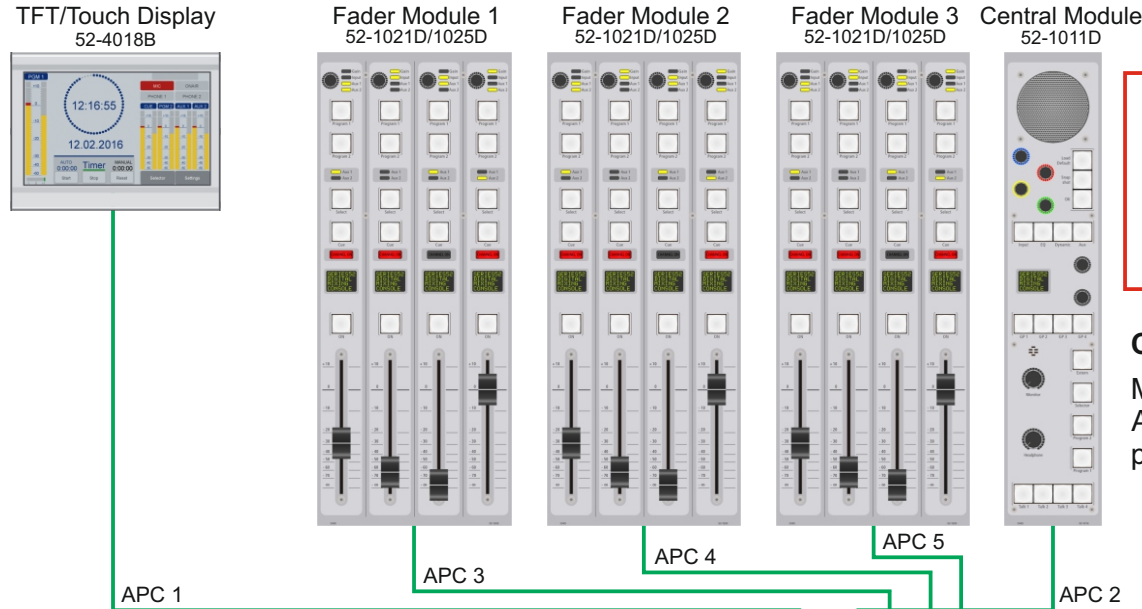
Important note:

Use minimum **Firmware version 8-2-2** and **SXConfig version 8-2-1** or the version on the CD supplied with the console, which may be a later version.

Configuration note:

Make sure, that **52-1335** is selected at APC 8 and APC 7 at the Hardware page of the SXconfig software.

APC 1

APC 3

APC 4

APC 5

APC 2

XS Multi-I/O Box 1 (or XC I/O Boxes)
52-1335A

Xs2 Core
52-1810A
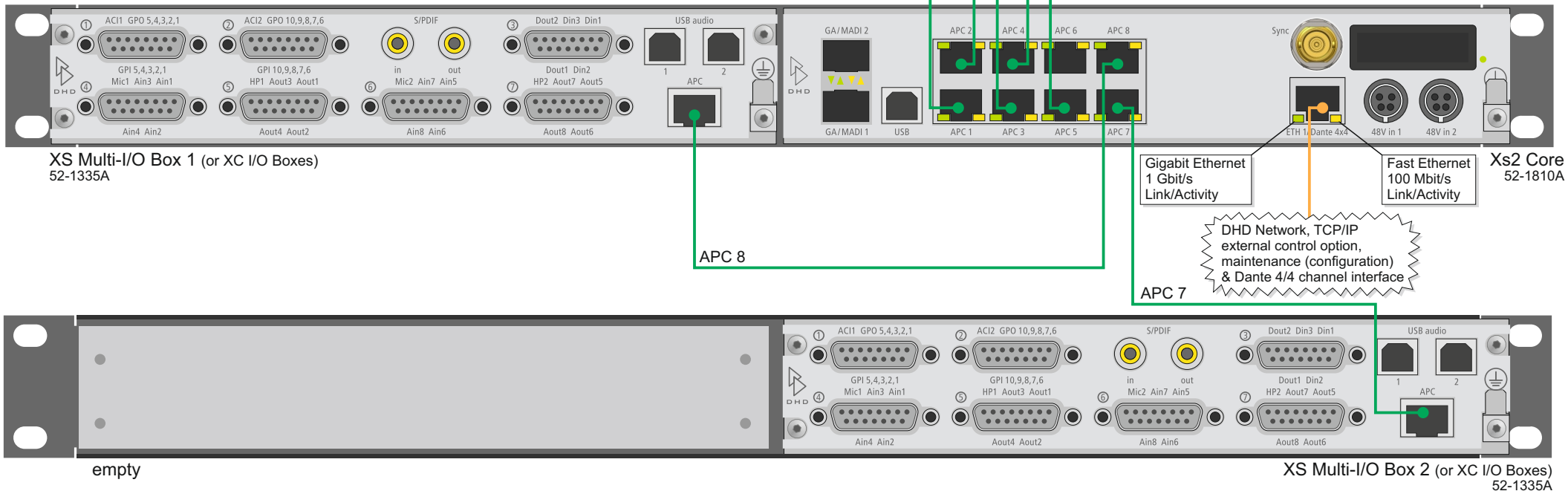
Gigabit Ethernet
1 Gbit/s
Link/Activity

Fast Ethernet
100 Mbit/s
Link/Activity

APC 8

DHD Network, TCP/IP external control option, maintenance (configuration) & Dante 4/4 channel interface

APC 7

empty

XS Multi-I/O Box 2 (or XC I/O Boxes)
52-1335A

For more cabling examples please see: http://dhd-audio.de/dhd_files/52sx/manual/html/52sx_modules_en/52sx_cabling_examples_2.pdf

DHD Network, Ethernet CAT5/6
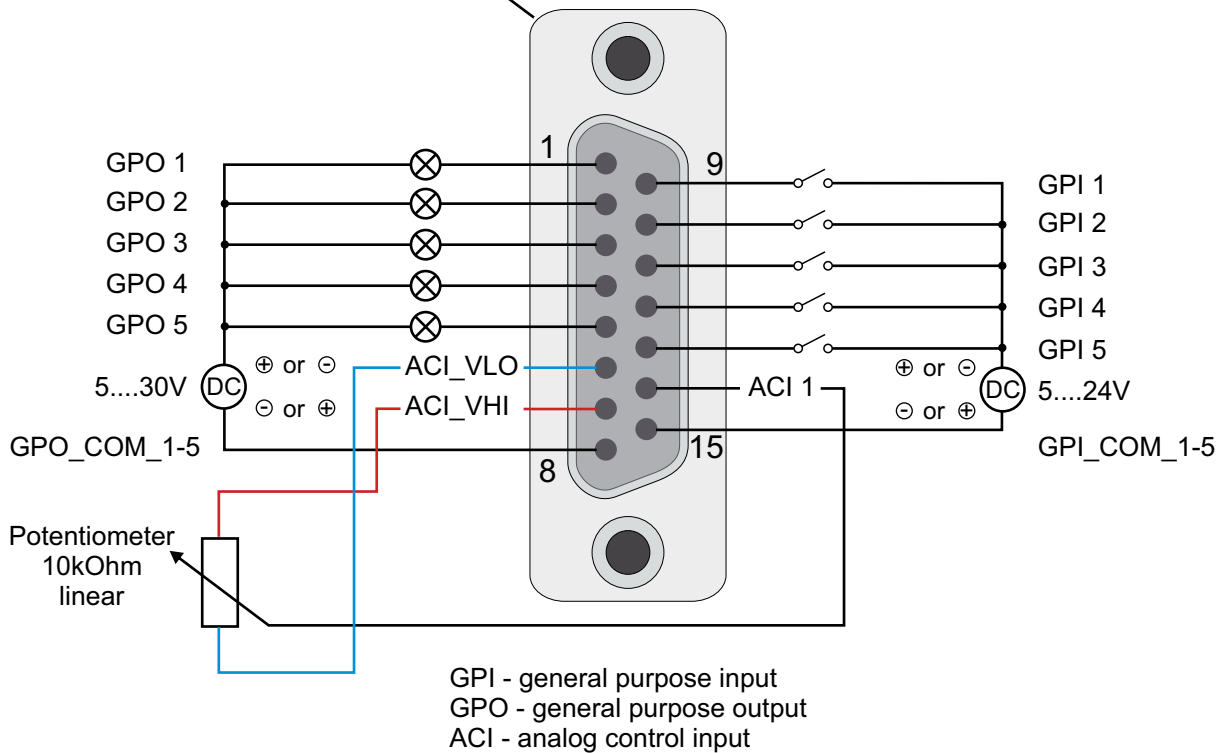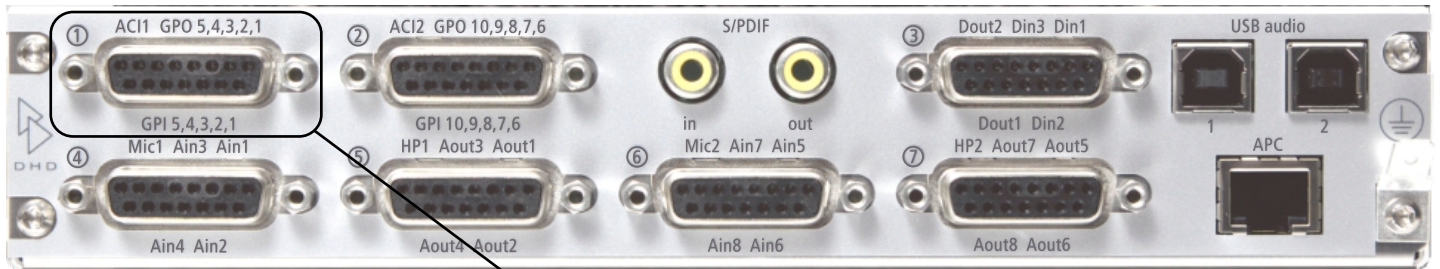APC - Audio, Power, Control, Ethernet CAT5/6

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FM; 02.03.2018; File: 52sx_cabling_12Fader_2Multi-IO_7.cdr

52-1335 Pin Assignment

D-Sub 15 - connector 1

GPI - general purpose input
GPO - general purpose output
ACI - analog control input

Notes:

GPI and GPO sections are isolated from each other and from the modules internal circuits.

GPI section uses common wire GPI_COM for all 5 GPIs.
Polarity of DC between GPIs and GPI_COM is not relevant.

GPI: ON voltage 5 V ... 24 V (DC) without external resistor, internal current limiter to 4 mA current for ON, OFF voltage: 0 V ... + 1.5 V

GPO section uses common wire GPO_COM for all 5 GPOs.
Polarity of DC between GPOs and GPO_COM is not relevant.

GPO: maximum rated current: 0,2A (resettable fuse), maximum peak switched voltage: 30V AC or DC

Do not use any of the ACI signals for other purposes than wiring to the potentiometer!

ACI_VLO must not be connected to chassis, housing, earth, shield or other common signals!

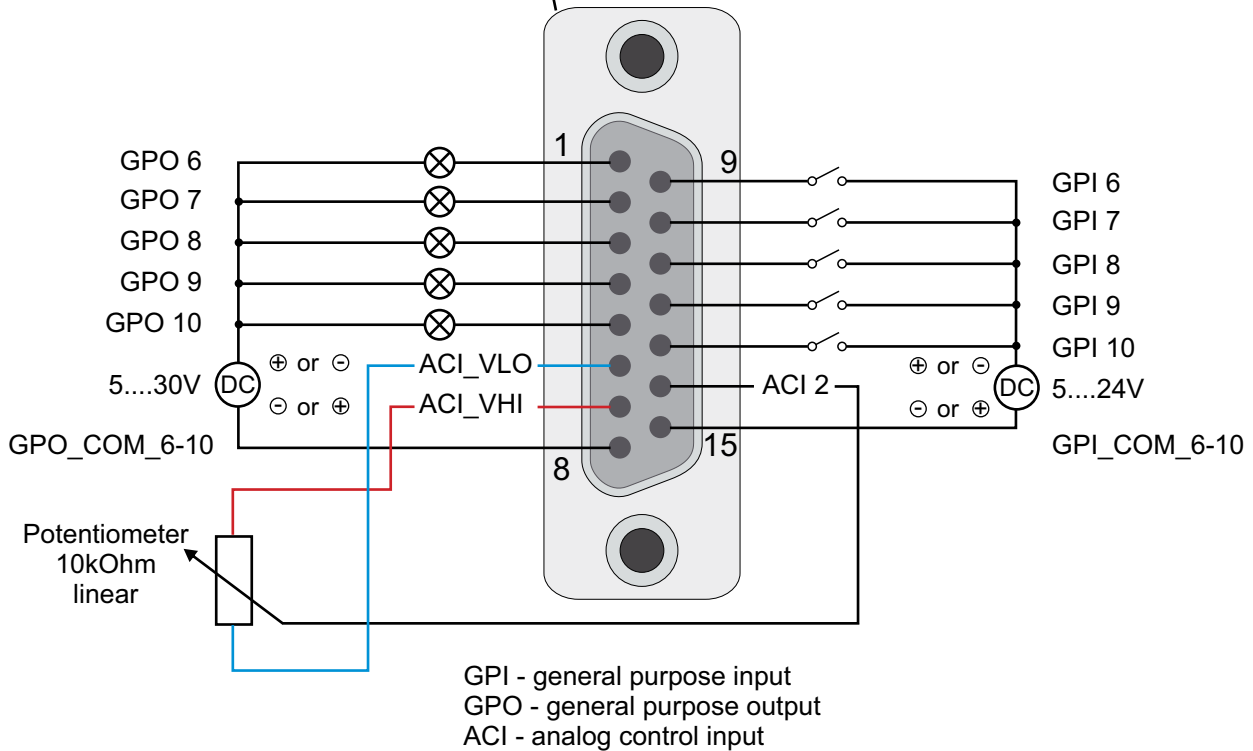The potentiometer must have a resistance value of 10kOhms (linear)!
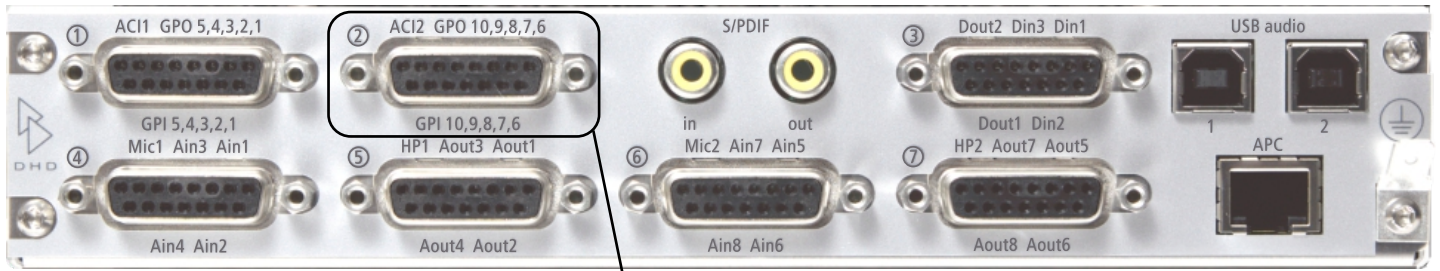
ACI_VHI, ACI_VLO of connectors 1 and 2 are internally connected.

52-1335 Pin Assignment
D-Sub 15 - connector 2

GPI - general purpose input
GPO - general purpose output
ACI - analog control input

Notes:

GPI and GPO sections are isolated from each other and from the modules internal circuits.

GPI section uses common wire GPI_COM for all 5 GPIs.
Polarity of DC between GPIs and GPI_COM is not relevant.

GPI: ON voltage 5 V ... 24 V (DC) without external resistor, internal current limiter to 4 mA current for ON, OFF voltage: 0 V ... + 1.5 V

GPO section uses common wire GPO_COM for all 5 GPOs.
Polarity of DC between GPOs and GPO_COM is not relevant.

GPO: maximum rated current: 0,2A (resettable fuse), maximum peak switched voltage: 30V AC or DC

Do not use any of the ACI signals for other purposes than wiring to the potentiometer!

ACI_VLO must not be connected to chassis, housing, earth, shield or other common signals!

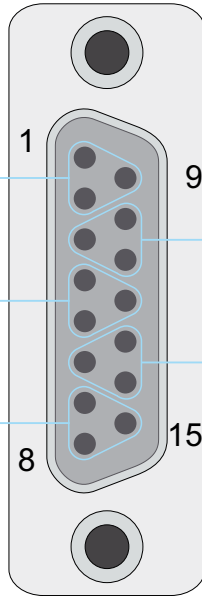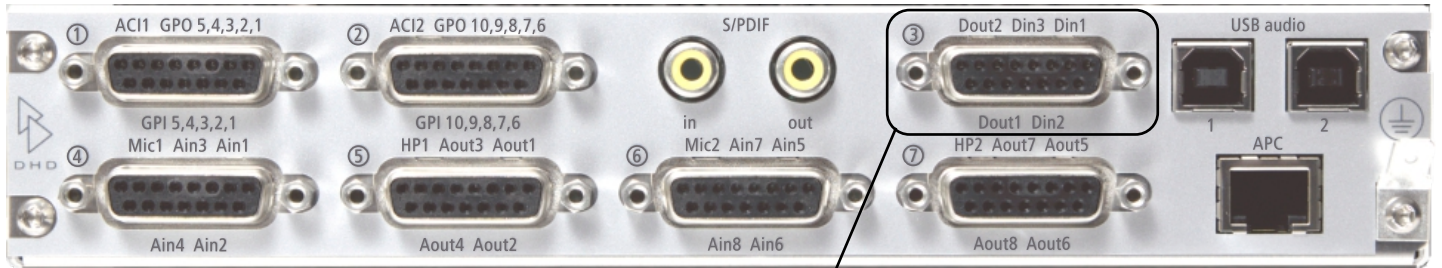The potentiometer must have a resistance value of 10kOhms (linear)!

ACI_VHI, ACI_VLO of connectors 1 and 2 are internally connected.

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www.dhd-audio.com
FM; 13.03.2014; File: 52-1335_pin-assignment-dsub-2_1.cdr

52-1335 Pin Assignment
D-Sub 15 - connector 3

Label	Type	Pin
Din1	AES3/EBU in 1+	1
	AES3/EBU in 1-	2
	SHIELD	9

Label	Type	Pin
Din3	AES3/EBU in 3+	4
	AES3/EBU in 3-	5
	SHIELD	12

Label	Type	Pin
Dout2	AES3/EBU out 2+	7
	AES3/EBU out 2-	8
	SHIELD	15

Pin	Type	Label
10	AES3/EBU in 2+	Din2
11	AES3/EBU in 2-	
3	SHIELD	

Pin	Type	Label
13	AES3/EBU out 1+	Dout1
14	AES3/EBU out 1-	
6	SHIELD	

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52-1335 Pin Assignment
D-Sub 15 - connector 4
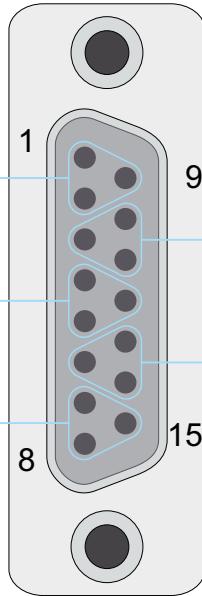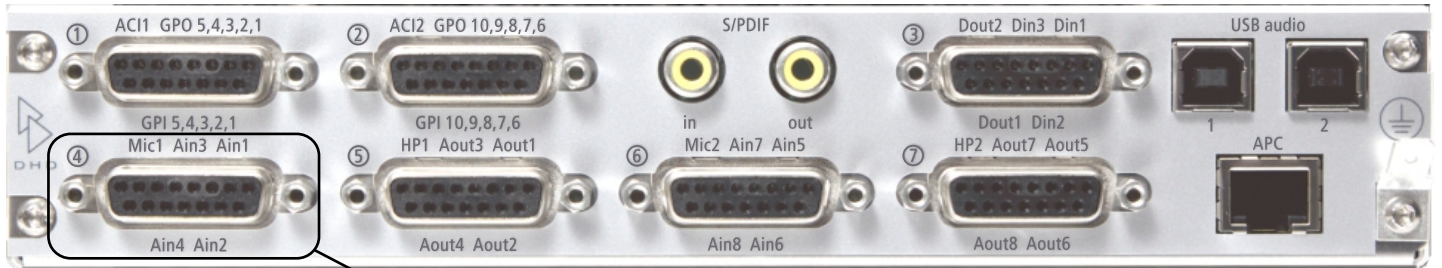
Label	Type	Pin
Ain1	LINE in 1+	1
	LINE in 1-	2
	SHIELD	9

Label	Type	Pin
Ain3	LINE in 3+	4
	LINE in 3-	5
	SHIELD	12

Label	Type	Pin
Mic1	MIC 1+	7
	MIC 1-	8
	SHIELD	15

Pin	Type	Label
10	LINE in 2+	Ain2
11	LINE in 2-	
3	SHIELD	

Pin	Type	Label
13	LINE in 4+	Ain4
14	LINE in 4-	
6	SHIELD	

52-1335 Pin Assignment
D-Sub 15 - connector 5
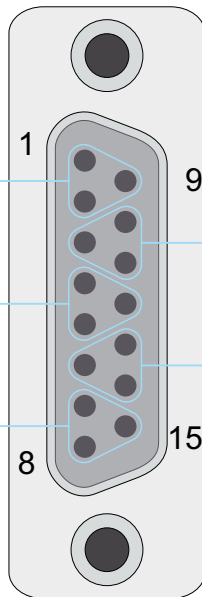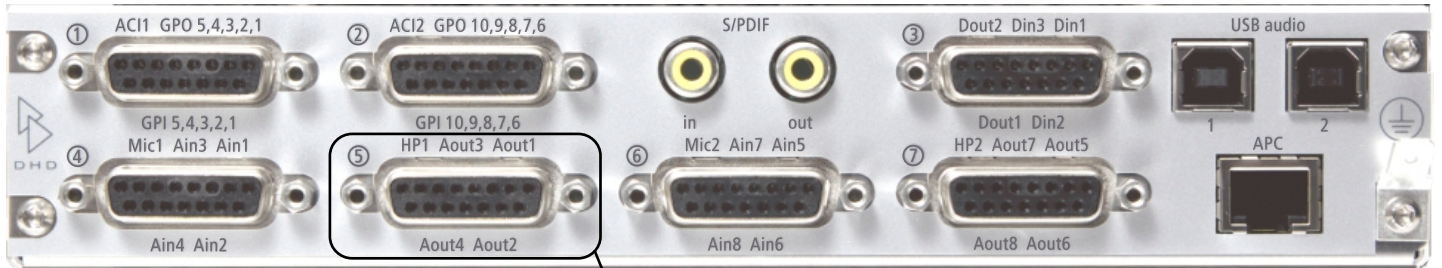
Label	Type	Pin
Aout1	LINE out 1+	1
	LINE out 1-	2
	SHIELD	9

Label	Type	Pin
Aout3	LINE out 3+	4
	LINE out 3-	5
	SHIELD	12

Label	Type	Pin
HP1	HP 1 L	7
	HP 1 R	8
	HP COM RETURN	15

Pin	Type	Label
10	LINE out 2+	Aout2
11	LINE out 2-	
3	SHIELD	

Pin	Type	Label
13	LINE out 4+	Aout4
14	LINE out 4-	
6	SHIELD	

52-1335 Pin Assignment

D-Sub 15 - connector 6
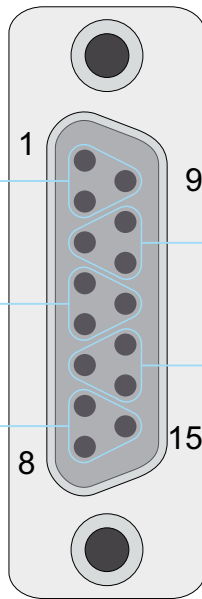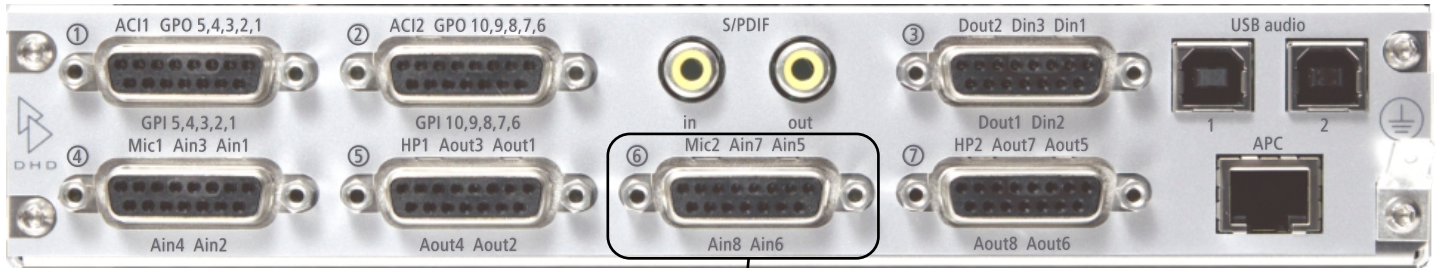
Label	Type	Pin
Ain5	LINE in 5+	1
	LINE in 5-	2
	SHIELD	9

Label	Type	Pin
Ain7	LINE in 7+	4
	LINE in 7-	5
	SHIELD	12

Label	Type	Pin
Mic2	MIC 2+	7
	MIC 2-	8
	SHIELD	15

Pin	Type	Label
10	LINE in 6+	Ain6
11	LINE in 6-	
3	SHIELD	

Pin	Type	Label
13	LINE in 8+	Ain8
14	LINE in 8-	
6	SHIELD	

52-1335 Pin Assignment
D-Sub 15 - connector 7
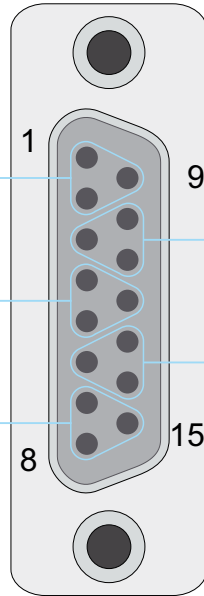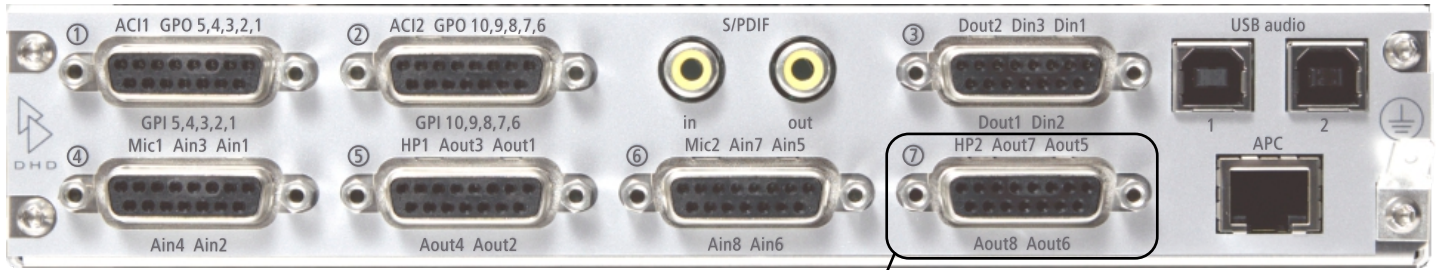
Label	Type	Pin
Aout5	LINE out 5+	1
	LINE out 5-	2
	SHIELD	9

Label	Type	Pin
Aout7	LINE out 7+	4
	LINE out 7-	5
	SHIELD	12

Label	Type	Pin
HP2	HP 2 L	7
	HP 2 R	8
	HP COM RETURN	15

Pin	Type	Label
10	LINE out 6+	Aout6
11	LINE out 6-	
3	SHIELD	

Pin	Type	Label
13	LINE out 8+	Aout8
14	LINE out 8-	
6	SHIELD	

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52-1335 Pin Assignment
S/PDIF

Label	Type
S/PDIF in	HOT
	SHIELD

in

out

Type	Label
HOT	S/PDIF out
SHIELD	

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52-1335 Pin Assignment
USB audio

The USB audio ports are fully functional digital stereo inputs and outputs. Connected to a PC or Mac, each USB audio port is recognised as an USB audio device, which can be used for playback and recording in every audio software.

> **Important**
>
> These USB audio ports can not be used for maintenance or control purposes.

The following applies to every USB audio port:

• 1 stereo input, sample rate converter
• 1 stereo output, sample rate converter (linked to associated input if activated in Toolbox)
• full-speed transceivers
• compliant with USB 2.0 specification
• bus-powered USB circuit (the windows driver still works when 52-1335 is powered off)
• default Windows or Mac USB audio device driver is used, no additional driver required

Two options for usage of USB audio are possible:

• Option 1: Each USB audio port is connected to a separate PC
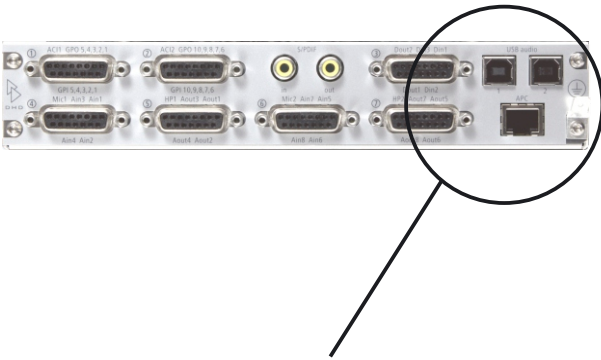
The following operation systems are supported for this option:
• Microsoft™ Windows™ 98SE/Windows Me (For Windows 98SE and Windows Me, the HID function is not fully functional with the default class driver.)
• Microsoft Windows 2000 Professional
• Microsoft Windows XP Home/Professional (For Windows XP, use the latest version of the USB audio driver available from the Windows Internet site, or apply Service Pack 1 or later.)
• Microsoft Windows Vista™ Business
• Microsoft Windows 7™ Professional
• Apple Mac OS X 10.10
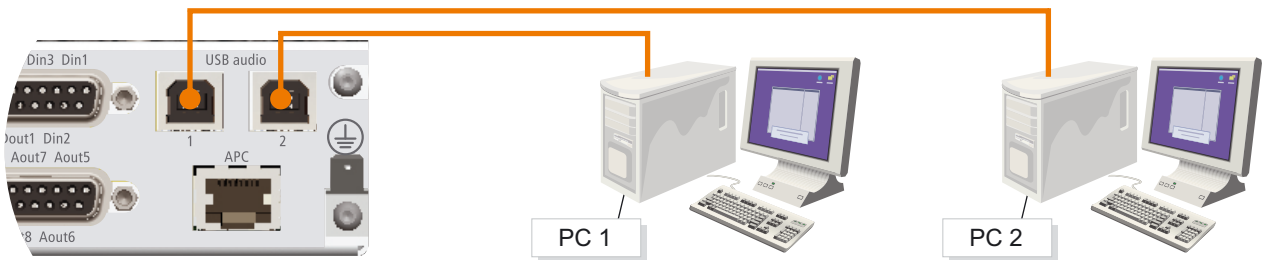
• Option 2: Both USB audio ports are connected to a single PC

Windows 7 (32Bit or 64Bit) is required for proper use of both USB audio ports on one PC.
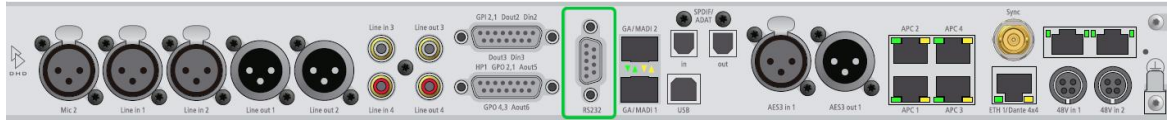*(For more information, see 52/SX manual.)*

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Serial Connectors 52/XS2

52/XS2 Cores (52-1830, 52-1810)

The 52/XS2 Cores (52-1801 and 52-1804) provide one serial port. The `Serial` port on the rear of the core is a RS232 port and can not be changed to RS422.
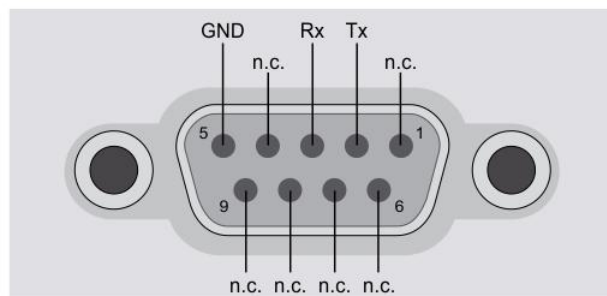

52-1830 XS2 Core - rear view with one serial RS232 port

52-1810 XS2 Core - side view with one serial RS232 port

You can find the pin assignment for the female RS232 port on the core in the following drawing:

Pin assignment of the RS232 port on the core
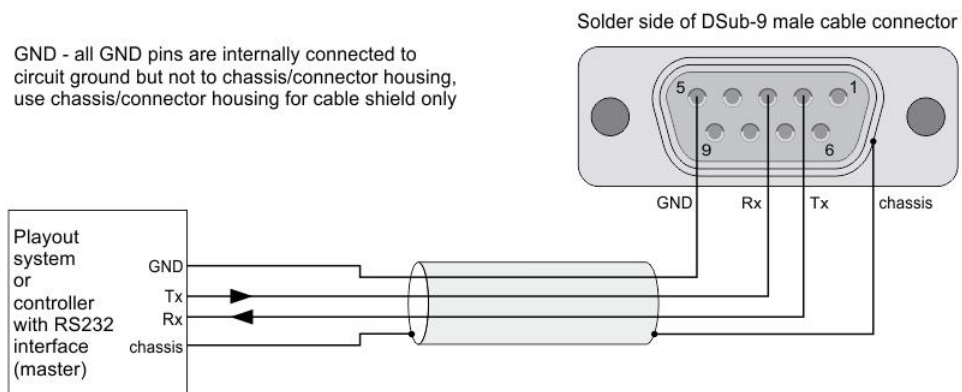
With that pin assignment a standard extension cable (uncrossed) can be directly connected to a PC.

You can find the pin assignment for a **RS232 cable connector** in the following drawing:

Pin assignment for the RS232 cable connector