SX2

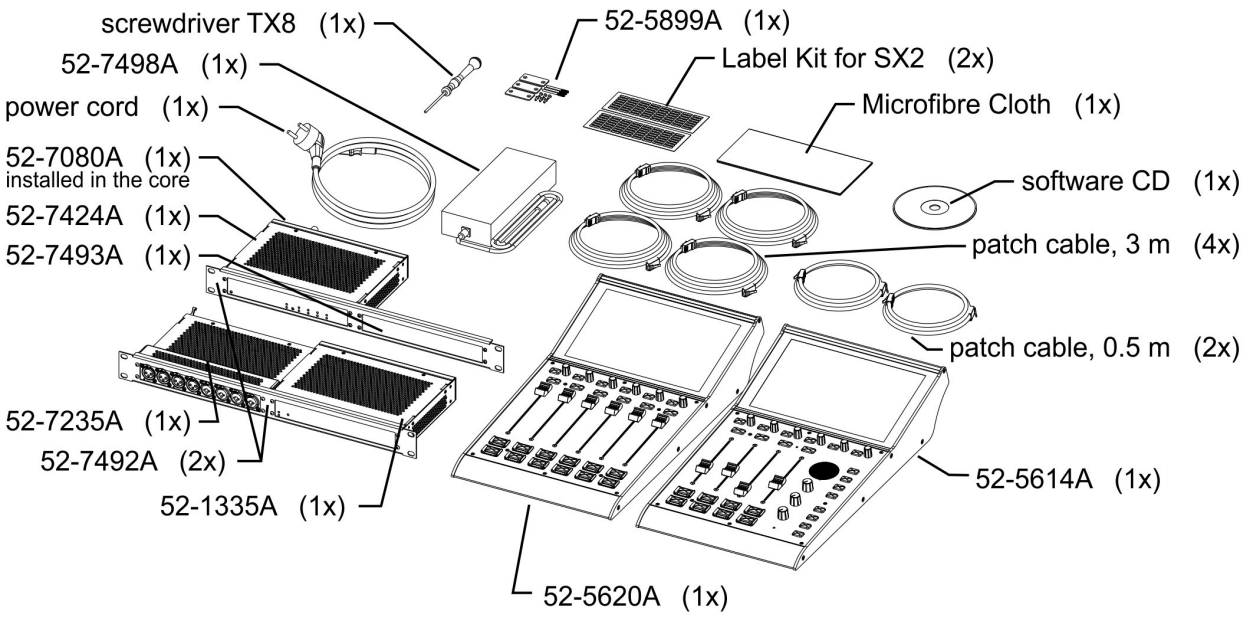
Mixing Console Bundle Information

Table of Contents

Package Contents

52-1989A - SX2-Bundle

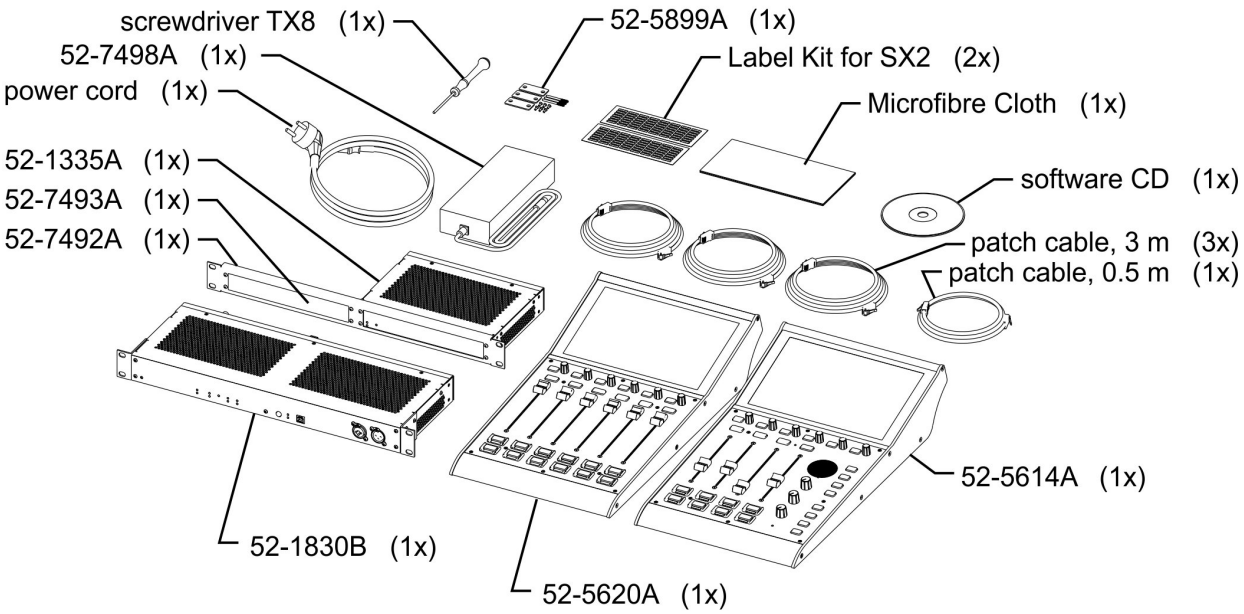
Package Contents



part nr.	name	qty.
52-5614A	SX2 Central Module	1x
52-5620A	SX2 Fader Module	1x
52-7424A	XC2 Core	1x
52-1335A	XS Multi I/O Box	1x
52-7235A	XC Mic/Headphone Module	1x
52-7080A	Dante IP Audio Interface (built in XC2 Core)	1x
52-7492A	XC 19“ Adapterpanel flat	2x
52-7493A	XC blank panel	1x
52-7498A	XC Power Supply 48V/150W	1x
52-5899A	Console Chaining Kit	1x
—	Power Cord	1x
—	Patch cable, CAT5, 0.5m	2x
—	Patch cable, CAT5, 3m	4x
—	Microfibe Cloth	1x
—	Screwdriver Torx TX8	1x
—	Label Kit for SX2	2x

52-1998A - SX2-Bundle

Package Contents



part nr.	name	qty.
52-5614A	SX2 Central Module	1x
52-5620A	SX2 Fader Module	1x
52-1830A	XS2 I/O Core	1x
52-1335A	XS Multi I/O Box	1x
52-7492A	XC 19“ Adapterpanel flat	2x
52-7493A	XC blank panel	1x
52-7498A	XC Power Supply 48V/150W	1x
52-5899A	Console Chaining Kit	1x
—	Power Cord	1x
—	Patch cable, CAT5, 0.5m	1x
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—	Microfibe Cloth	1x
—	Screwdriver Torx TX8	1x
—	Label Kit for SX2	2x

52-1999A - SX2-Bundle

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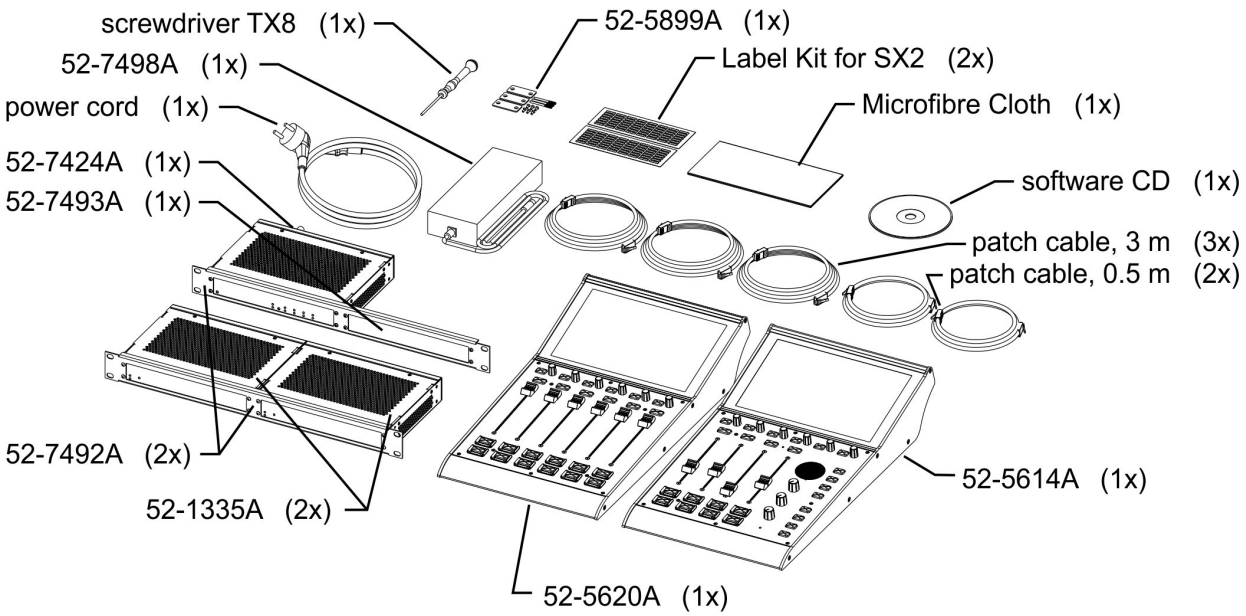

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52-5614A	SX2 Central Module	1x
52-5620A	SX2 Fader Module	1x
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52-7493A	XC blank panel	1x
52-7498A	XC Power Supply 48V/150W	1x
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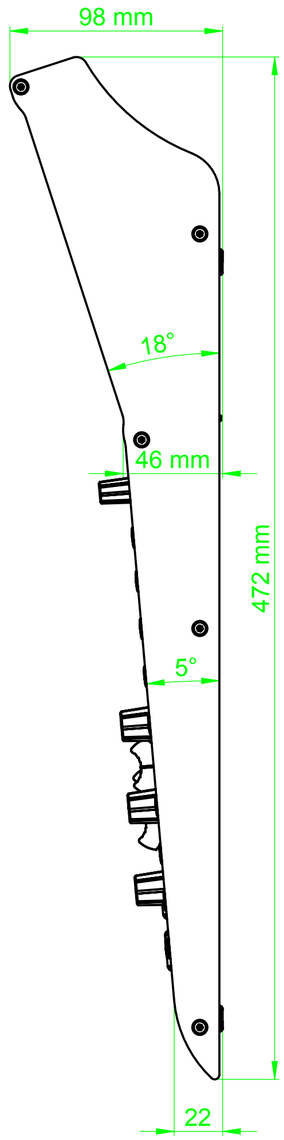
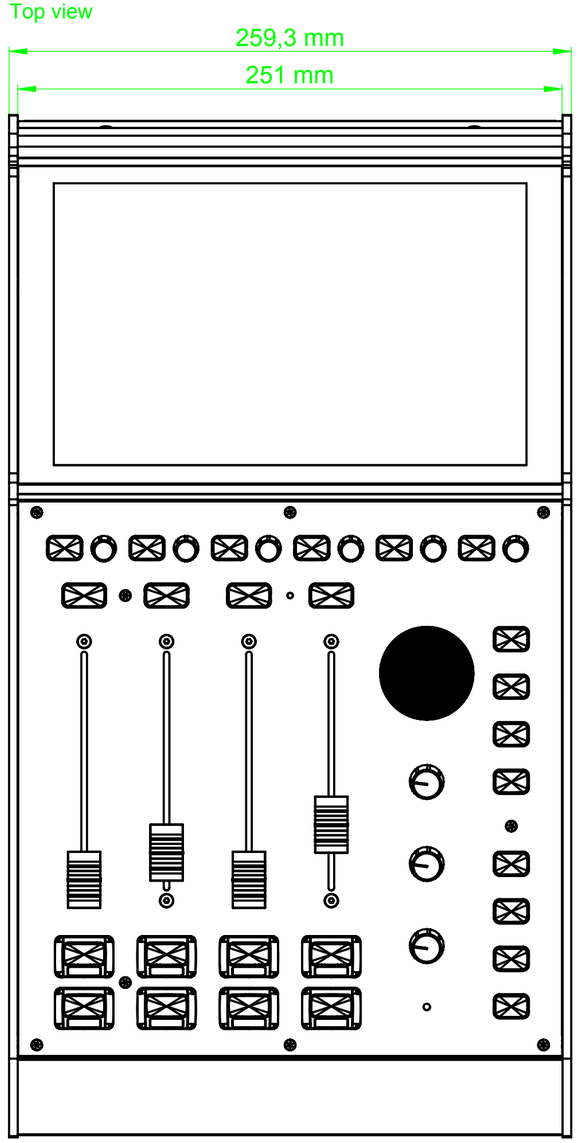
—	Power Cord	1x
—	Patch cable, CAT5, 0.5m	2x
—	Patch cable, CAT5, 3m	3x
—	Microfibe Cloth	1x
—	Screwdriver Torx TX8	1x
—	Label Kit for SX2	2x

Control Module Dimensions

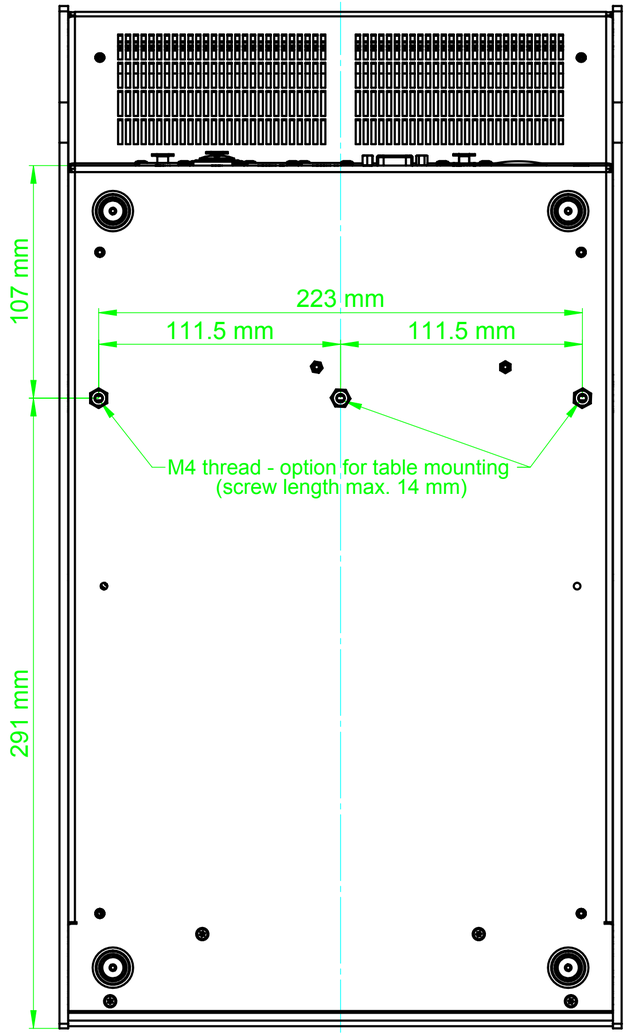
Side view



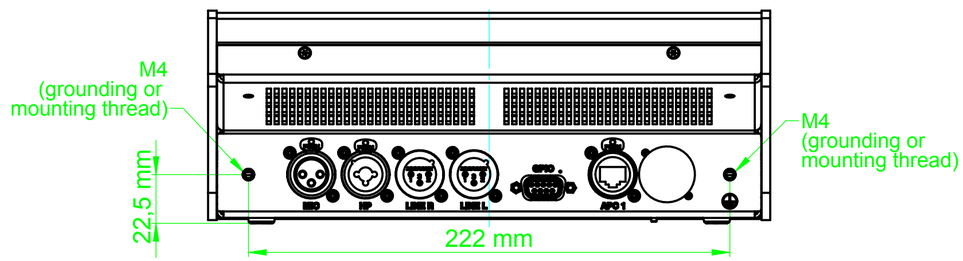
Top view



Bottom view



Rear view



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E-Mail: dhd@dhd-audio.de
web: www.dhd.audio

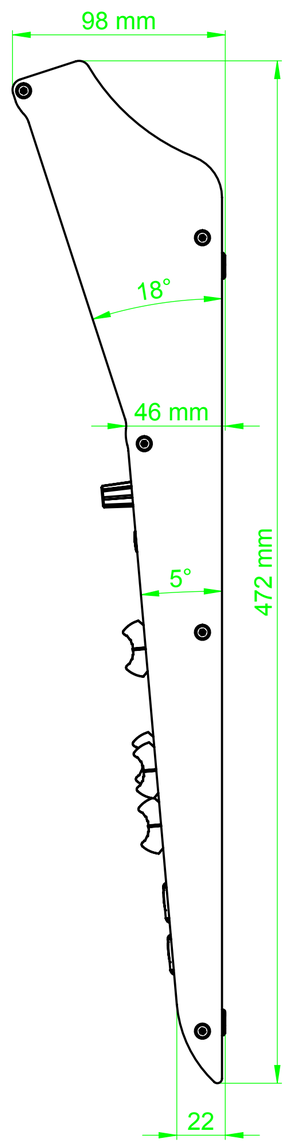
			date	name
		drawn	25.09.18	FM
modification	date	Index A		

scale: 1:1 (for DIN A2 size)

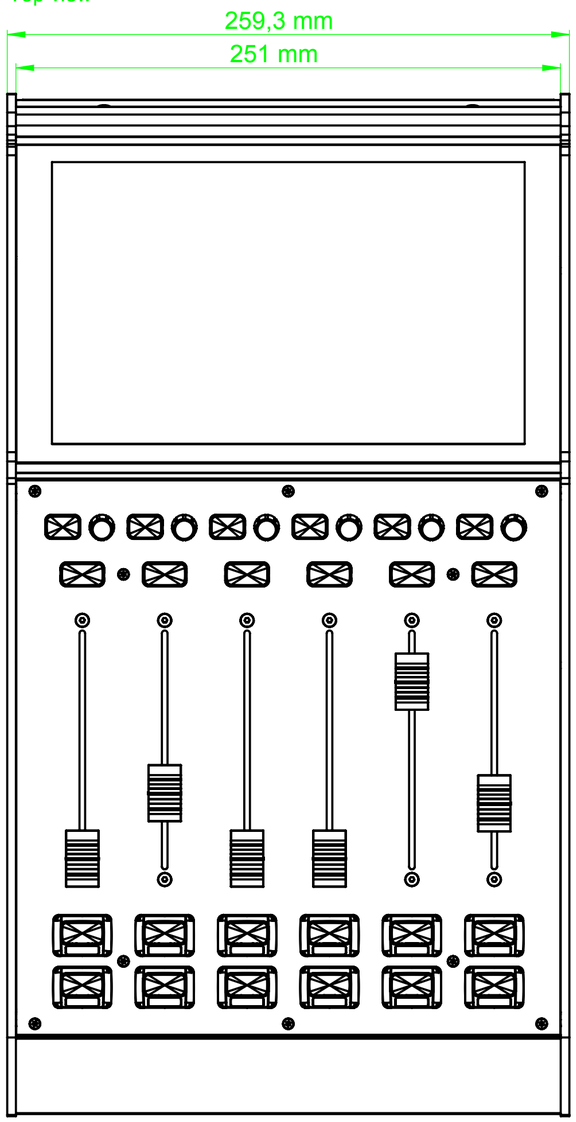
name: 52-5614 Dimension SX2 Central module

file name: 52-5614_dimension.dwg

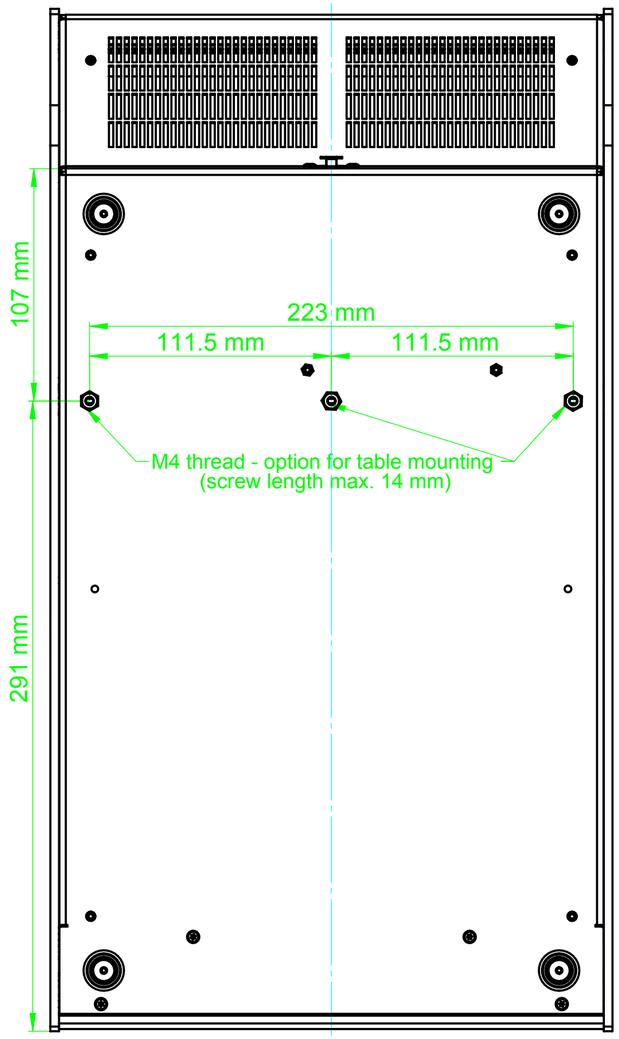
Side view



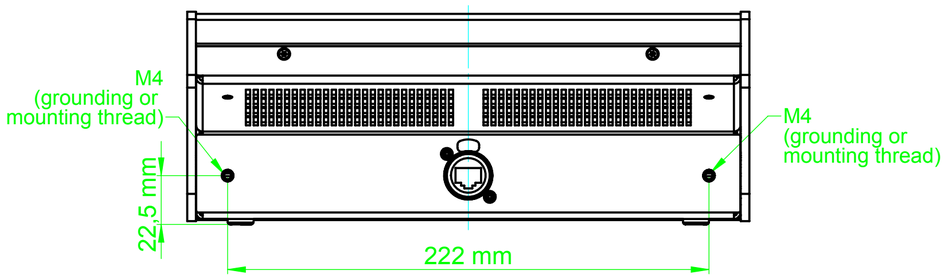
Top view



Bottom view



Rear view



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web: www.dhd.audio

			date	name
		drawn	25.09.18	FM
modification	date	Index A		

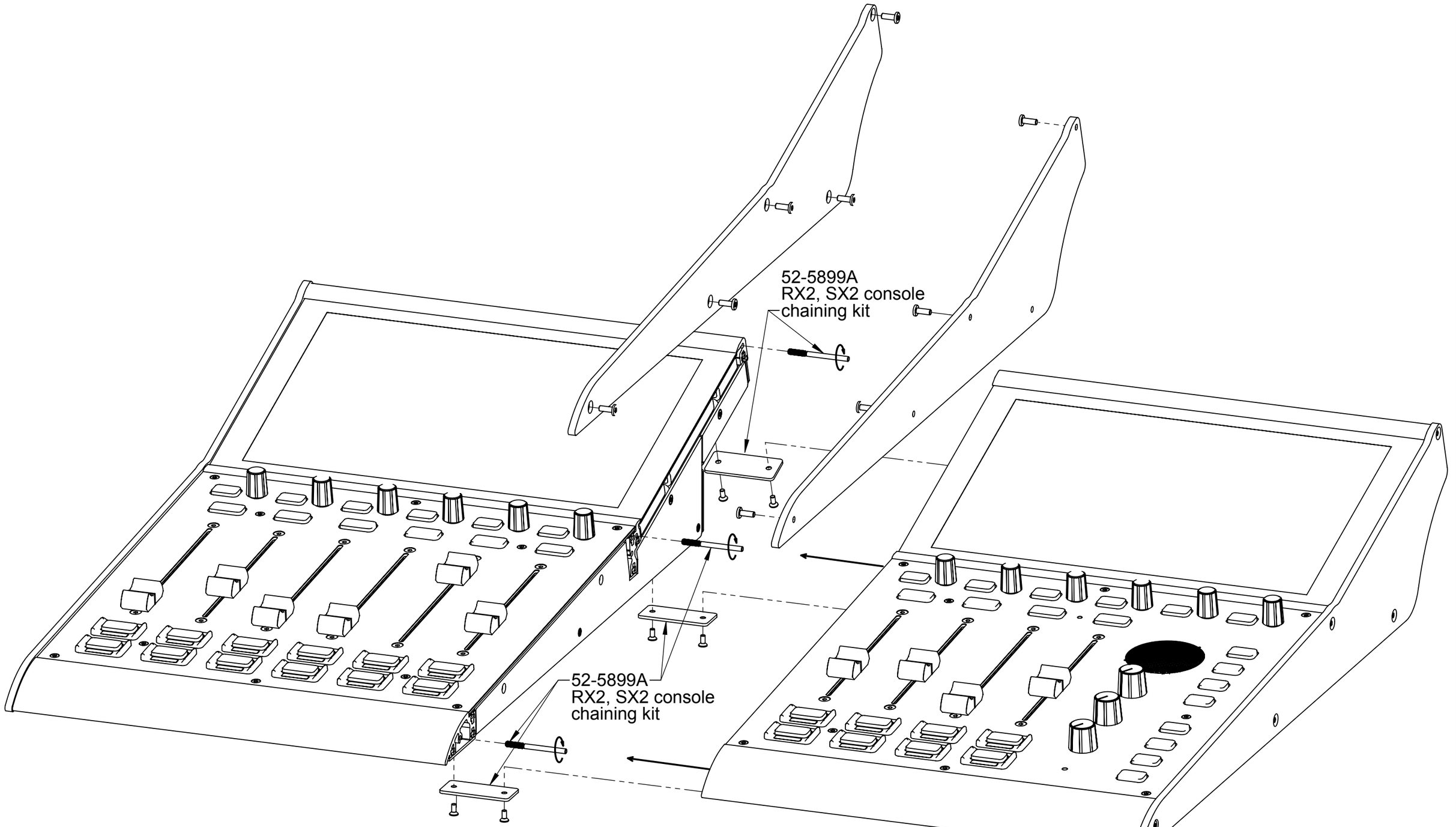
scale: 1:1 (for DIN A2 size)

name:

52-5620/5820 Dimension SX2/RX2 Fader module

file name: 52-5620-5820_dimension.dwg

Chaining of Control Modules



1. Remove the side covers on the connection side.
2. Screw the 3 centering pins (parts of chaining kit) into the aluminium profiles.
3. Screw the 3 connecting plates (parts of chaining kit) to one of the housings.
4. Push the housings together, inserting the centering pins into the aluminium profiles of the second module.
5. Screw the 3 connecting plates to the other housing.

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Internet: www.dhd-audio.com

Name: Mie.

Date: 21.03.2019

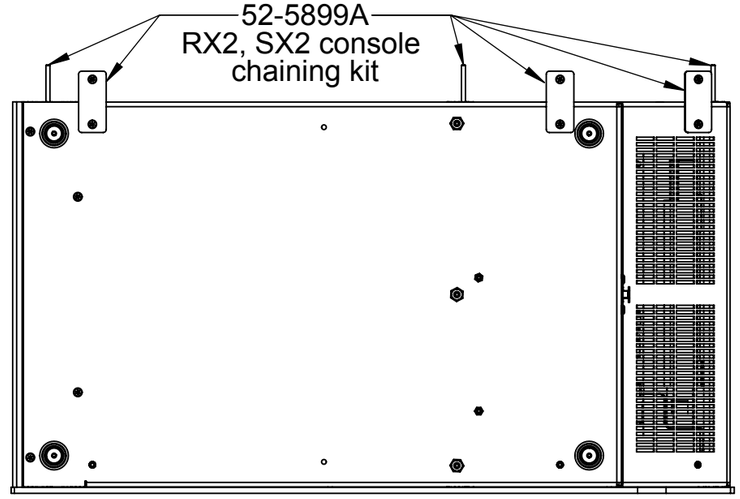
File: 52-5614_52-5620_chaining_1.*

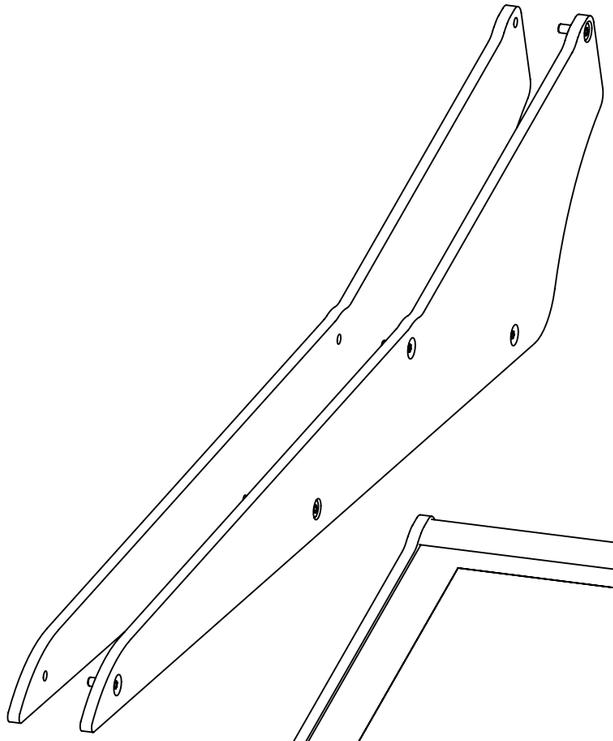
Scale:

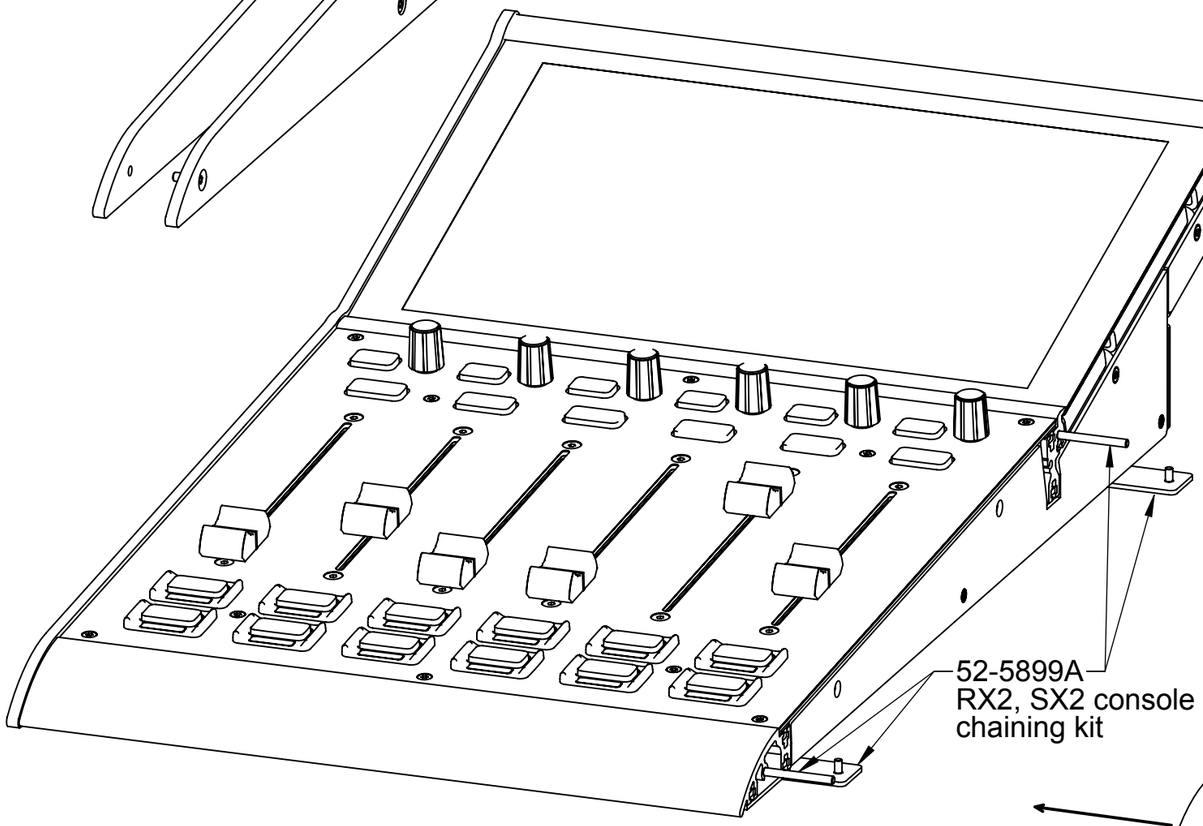
Chaining of two or more modules SX2 and RX2 mixing consoles

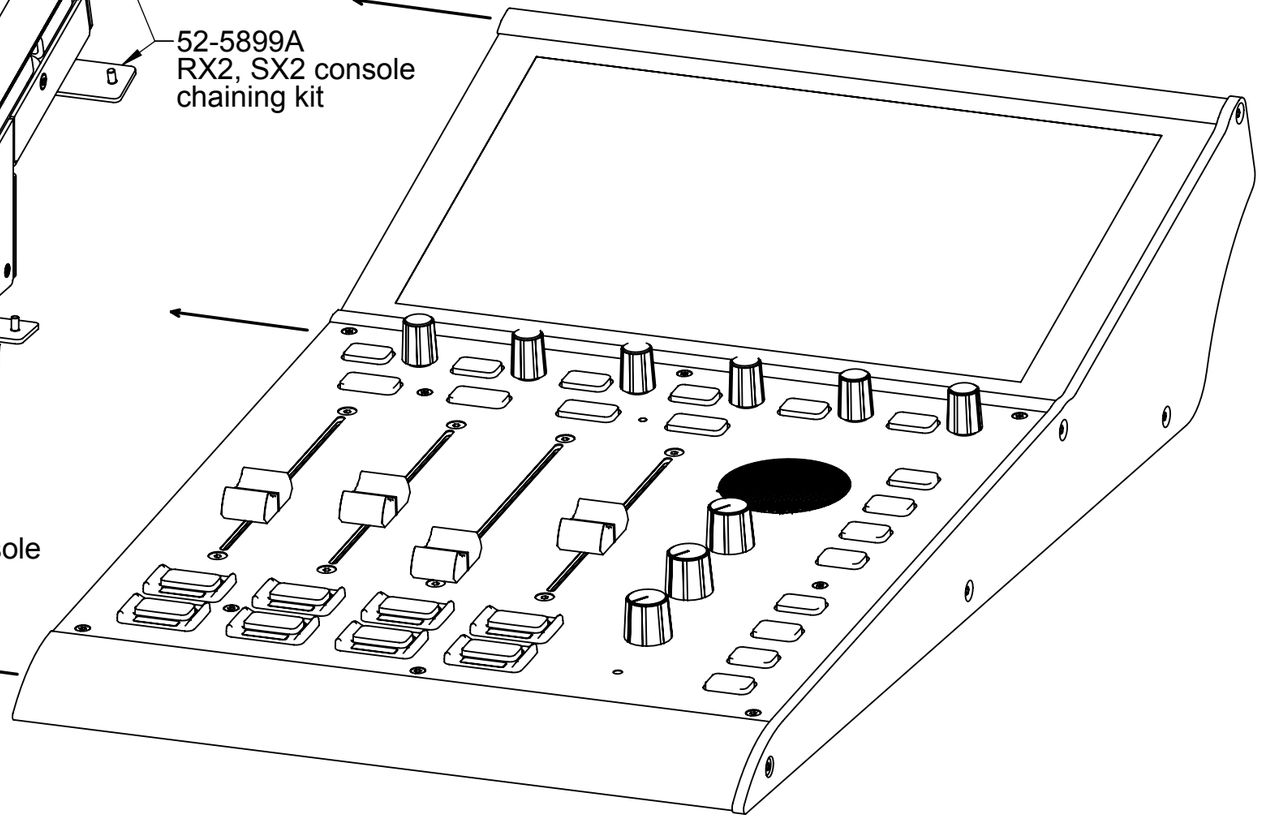
Example 52-5614 and 52-5620

Bottom view:









1. Remove the side covers on the connection side.
2. Screw the 3 centering pins (parts of chaining kit) into the aluminium profiles.
3. Screw the 3 connecting plates (parts of chaining kit) to one of the housings.
4. Push the housings together, inserting the centering pins into the aluminium profiles of the second module.
5. Screw the 3 connecting plates to the other housing.

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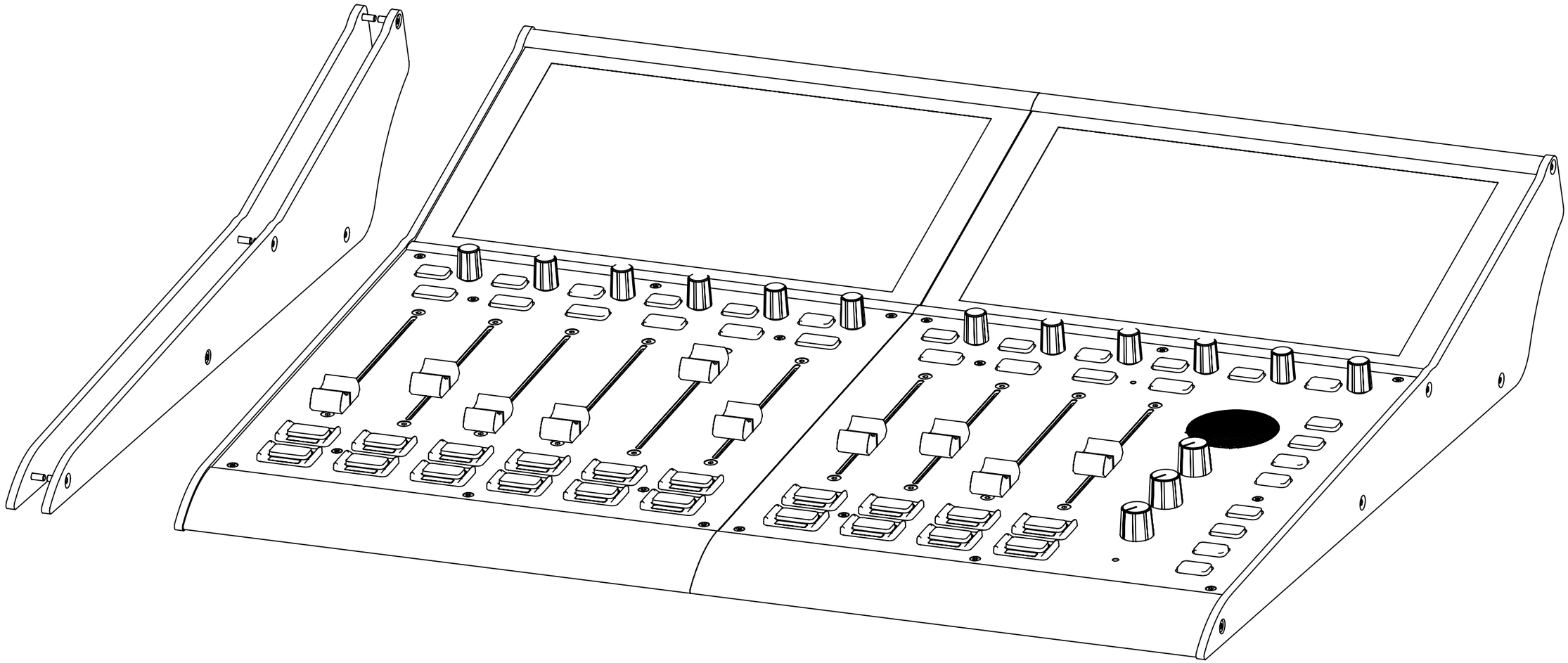
Internet: www.dhd-audio.com

Scale:

Chaining of two or more modules
SX2 and RX2 mixing consoles

Name: Mie.
Date: 21.03.2019
File: 52-5614_52-5620_chaining_2.*

Example 52-5614 and 52-5620



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Scale:

Chaining of two or more modules SX2 and RX2 mixing consoles

Name: Mie.

Date: 21.03.2019

File: 52-5614_52-5620_chaining_3.*

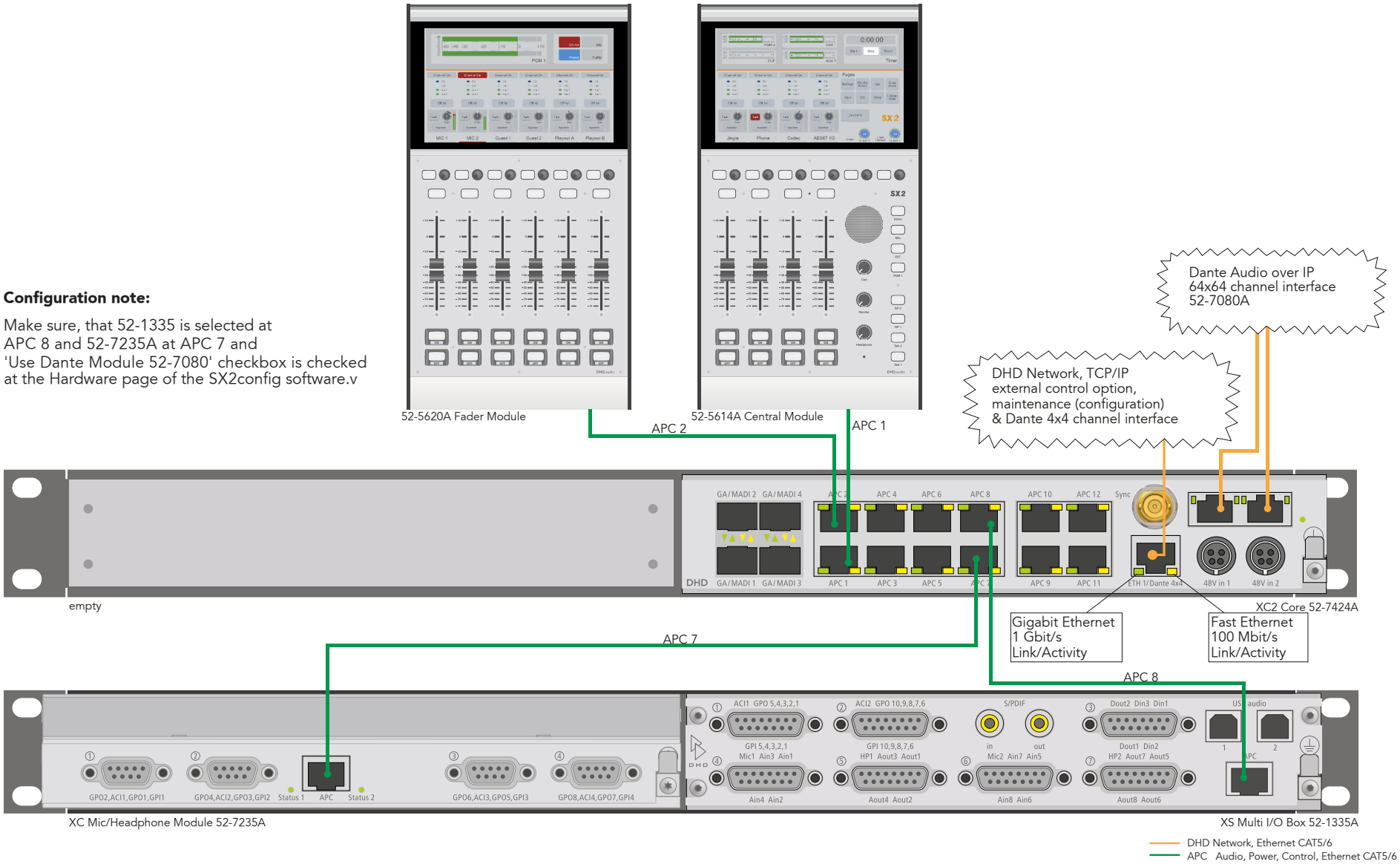
Example 52-5614 and 52-5620

Cabling of SX2 Bundles

52-1989A - cabling overview

Configuration note:

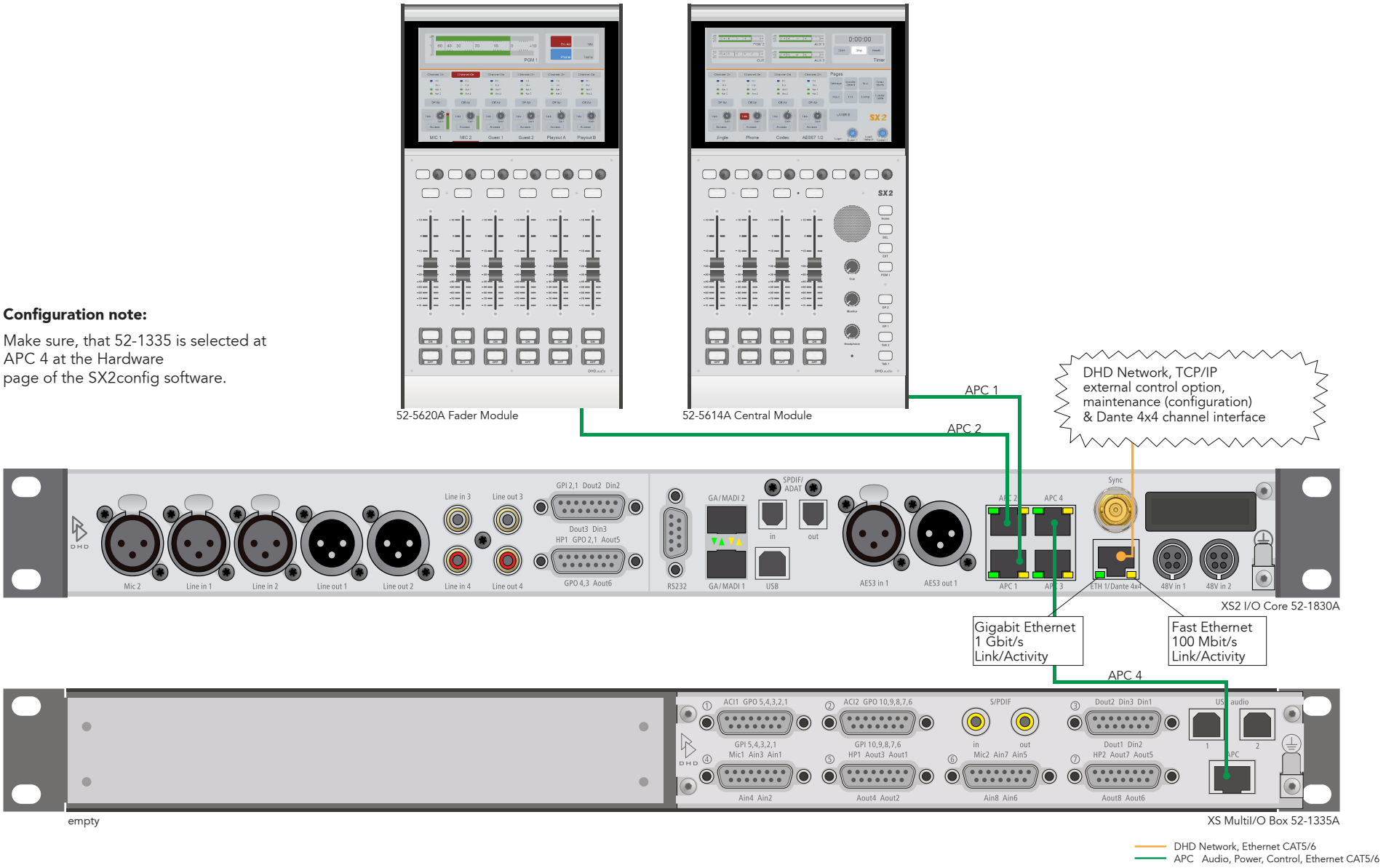
Make sure, that 52-1335 is selected at
APC 8 and 52-7235A at APC 7 and
'Use Dante Module 52-7080' checkbox is checked
at the Hardware page of the SX2config software.v



52-1998A - cabling overview

Configuration note:

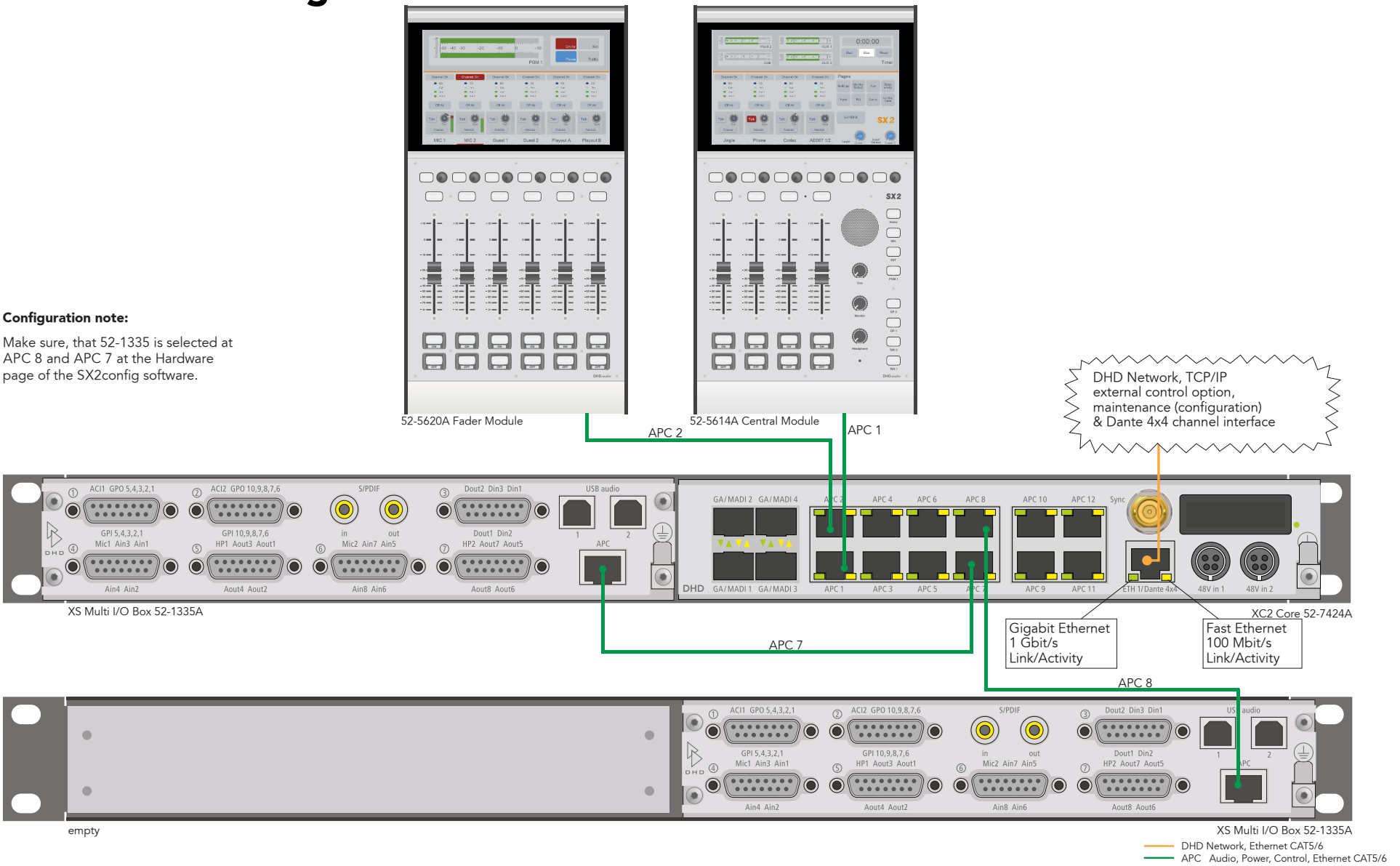
Make sure, that 52-1335 is selected at APC 4 at the Hardware page of the SX2config software.



52-1999A - cabling overview

Configuration note:

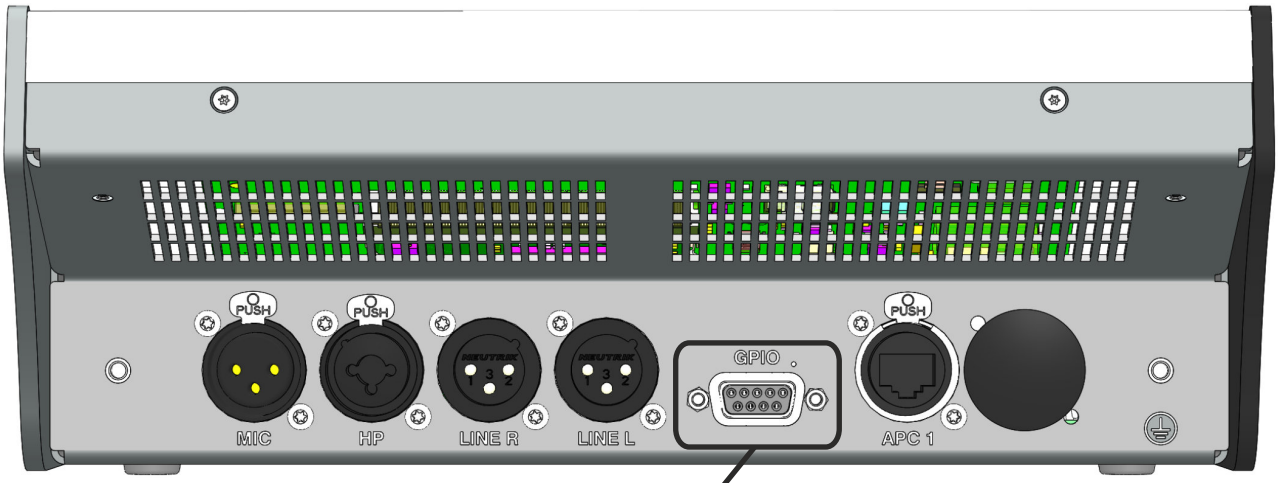
Make sure, that 52-1335 is selected at APC 8 and APC 7 at the Hardware page of the SX2config software.

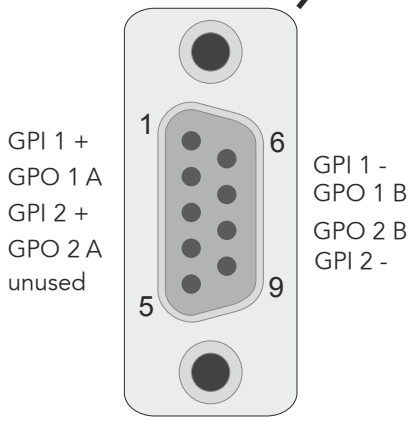


Pin Assignments

52-5614 Pin Assignment

D-Sub 9 - connector





GPI 1 +
GPO 1 A
GPI 2 +
GPO 2 A
unused

GPI 1 -
GPO 1 B
GPO 2 B
GPI 2 -

SubD-9 connector female

Pin	Type	Label
1	GPI 1 +	GPI1
6	GPI 1 -	
2	GPO 1 A	GPO1
7	GPO 1 B	
3	GPI 2 +	GPI2
8	GPI 2 -	
4	GPO 2 A	GPO2
9	GPO 2 B	
5	unused	

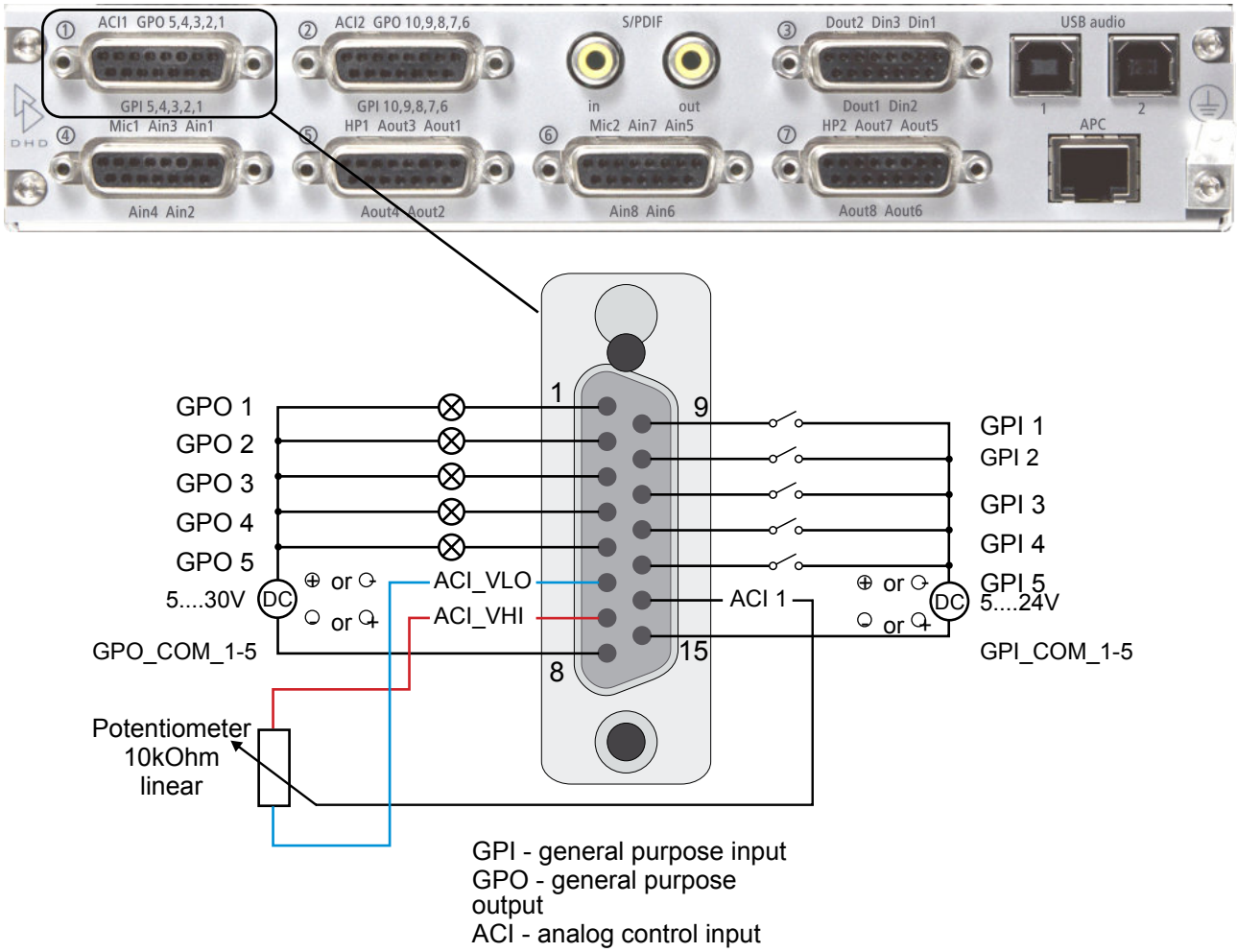
GPI - general purpose input
GPO - general purpose output

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

52-1335 Pin Assignment

D-Sub 15 - connector 1



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!

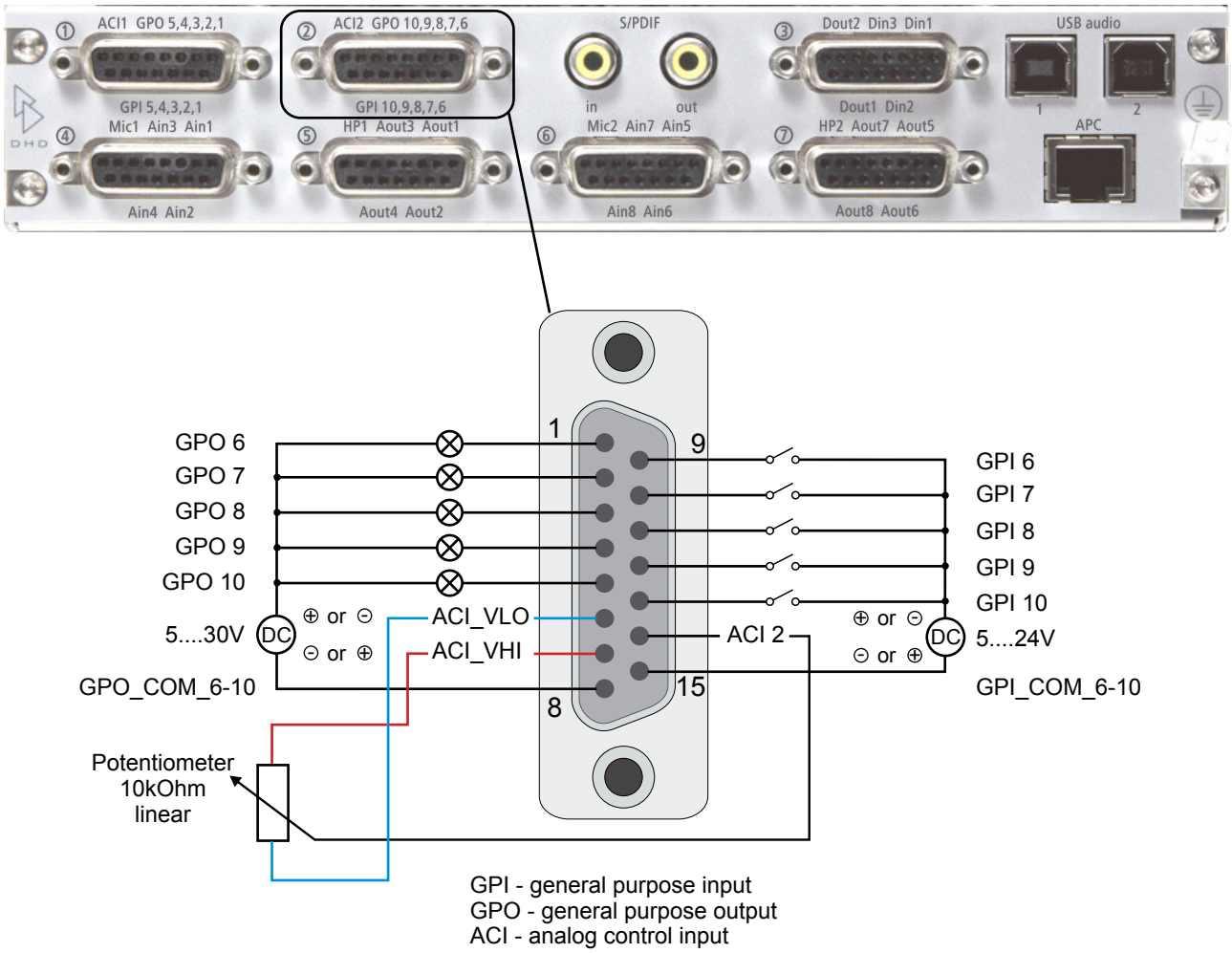
ACI_VLO must not be connected to chassis, housing, earth, shield or other common signals!

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



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!

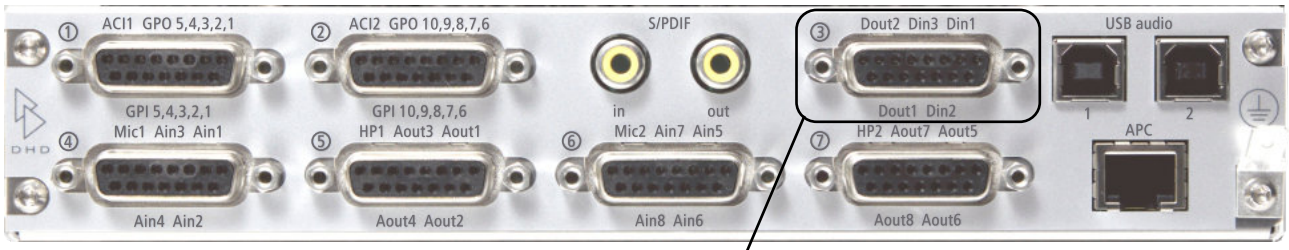
ACI_VLO must not be connected to chassis, housing, earth, shield or other common signals!

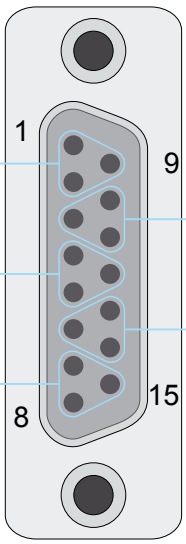
The potentiometer must have a resistance value of 10kOhms (linear)!

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

52-1335 Pin Assignment

D-Sub 15 - connector 3



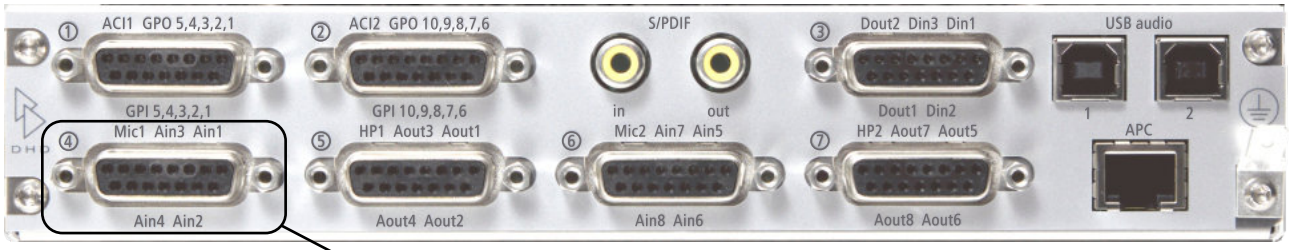


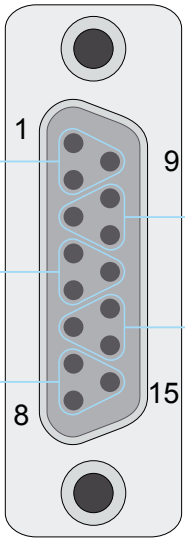
Label	Type	Pin
Din1	AES3/EBU in 1+	1
	AES3/EBU in 1-	2
	SHIELD	9
Din3	AES3/EBU in 3+	4
	AES3/EBU in 3-	5
	SHIELD	12
Dout2	AES3/EBU out 2+	7
	AES3/EBU out 2-	8
	SHIELD	15

Pin	Type	Label
10	AES3/EBU in 2+	Din2
11	AES3/EBU in 2-	
3	SHIELD	
13	AES3/EBU out 1+	Dout1
14	AES3/EBU out 1-	
6	SHIELD	

52-1335 Pin Assignment

D-Sub 15 - connector 4



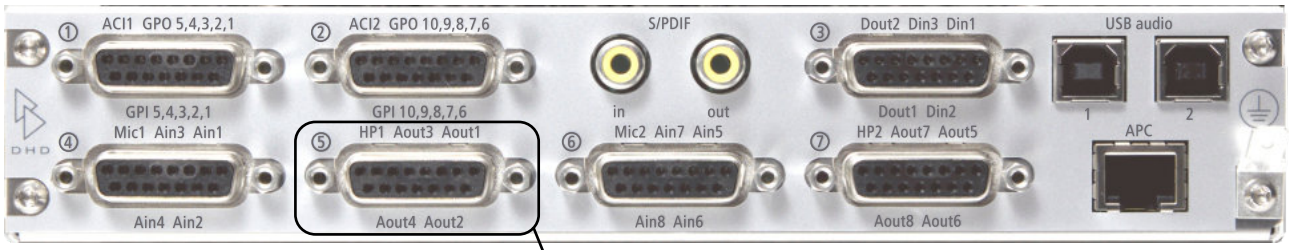


Label	Type	Pin
Ain1	LINE in 1+	1
	LINE in 1-	2
	SHIELD	9
Ain3	LINE in 3+	4
	LINE in 3-	5
	SHIELD	12
Mic1	MIC 1+	7
	MIC 1-	8
	SHIELD	15

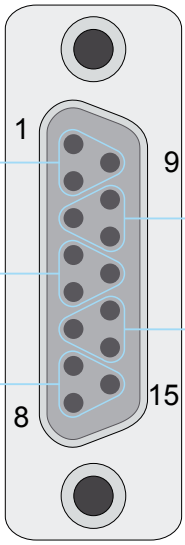
Pin	Type	Label
10	LINE in 2+	Ain2
11	LINE in 2-	
3	SHIELD	
13	LINE in 4+	Ain4
14	LINE in 4-	
6	SHIELD	

52-1335 Pin Assignment

D-Sub 15 - connector 5



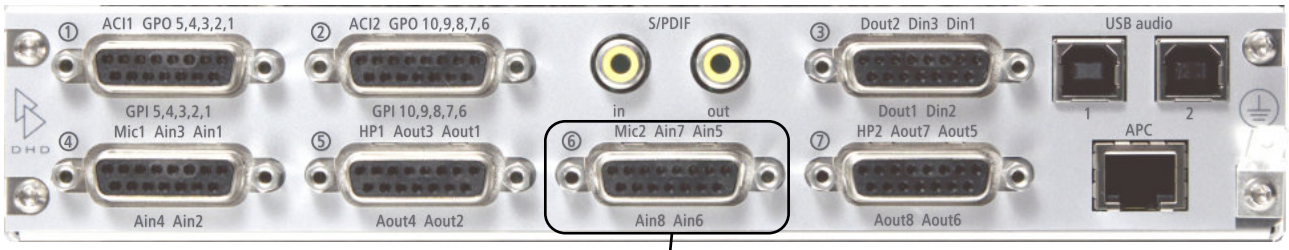
Label	Type	Pin
Aout1	LINE out 1+	1
	LINE out 1-	2
	SHIELD	9
Aout3	LINE out 3+	4
	LINE out 3-	5
	SHIELD	12
HP1	HP 1 L	7
	HP 1 R	8
	HP COM RETURN	15

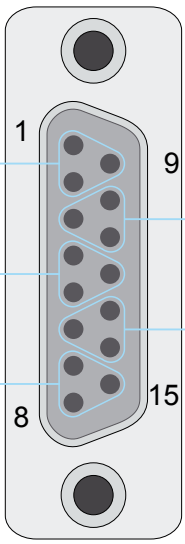


Pin	Type	Label
10	LINE out 2+	Aout2
11	LINE out 2-	
3	SHIELD	
13	LINE out 4+	Aout4
14	LINE out 4-	
6	SHIELD	

52-1335 Pin Assignment

D-Sub 15 - connector 6



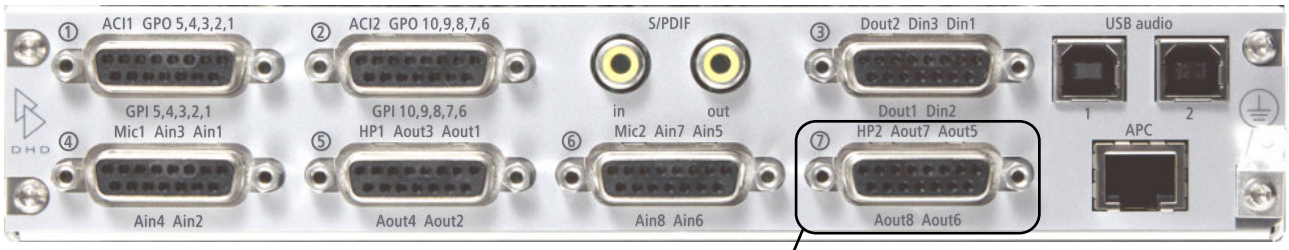


Label	Type	Pin
Ain5	LINE in 5+	1
	LINE in 5-	2
	SHIELD	9
Ain7	LINE in 7+	4
	LINE in 7-	5
	SHIELD	12
Mic2	MIC 2+	7
	MIC 2-	8
	SHIELD	15

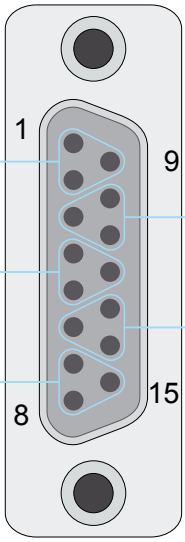
Pin	Type	Label
10	LINE in 6+	Ain6
11	LINE in 6-	
3	SHIELD	
13	LINE in 8+	Ain8
14	LINE in 8-	
6	SHIELD	

52-1335 Pin Assignment

D-Sub 15 - connector 7



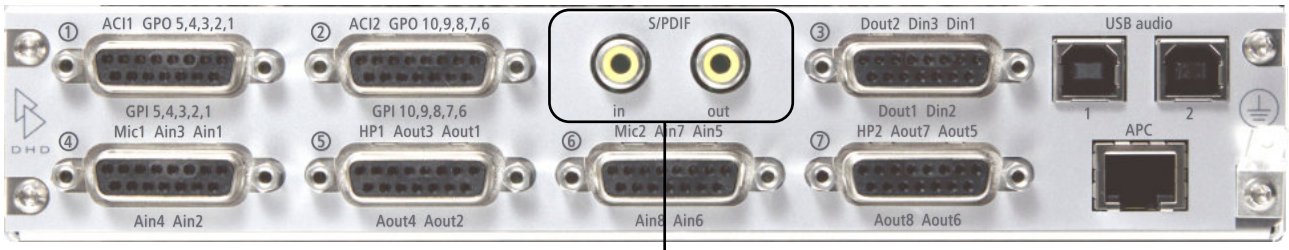
Label	Type	Pin
Aout5	LINE out 5+	1
	LINE out 5-	2
	SHIELD	9
Aout7	LINE out 7+	4
	LINE out 7-	5
	SHIELD	12
HP2	HP 2 L	7
	HP 2 R	8
	HP COM RETURN	15

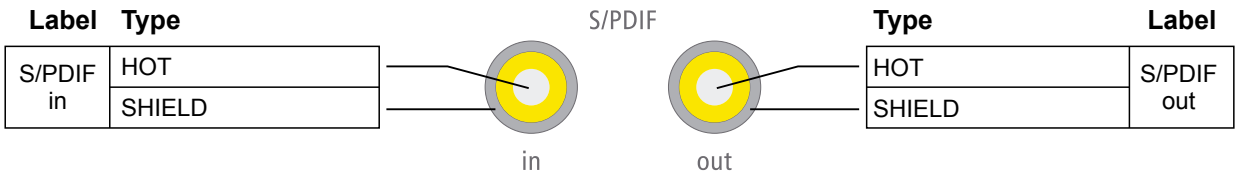


Pin	Type	Label
10	LINE out 6+	Aout6
11	LINE out 6-	
3	SHIELD	
13	LINE out 8+	Aout8
14	LINE out 8-	
6	SHIELD	

52-1335 Pin Assignment

S/PDIF





52-1335 Pin Assignment

USB Audio

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

Important

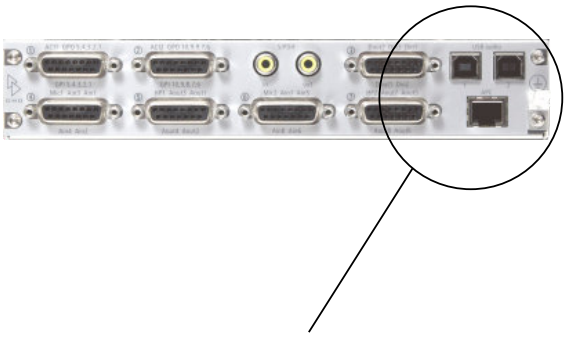
These USB audio ports can not be used for maintenance or control purposes.

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 USB audio device driver is used, no additional driver required

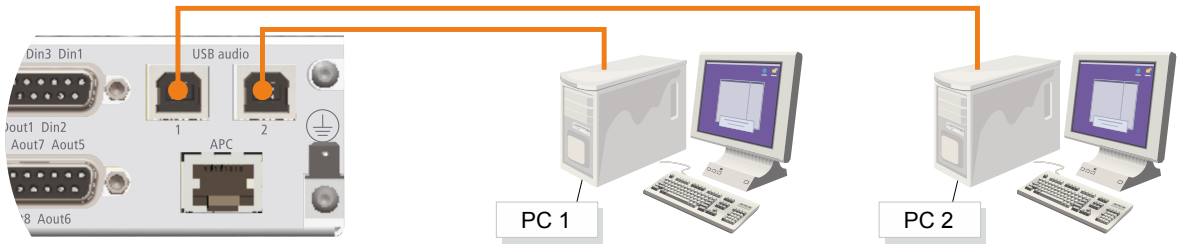
Two options for usage of USB audio are possible:

- **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

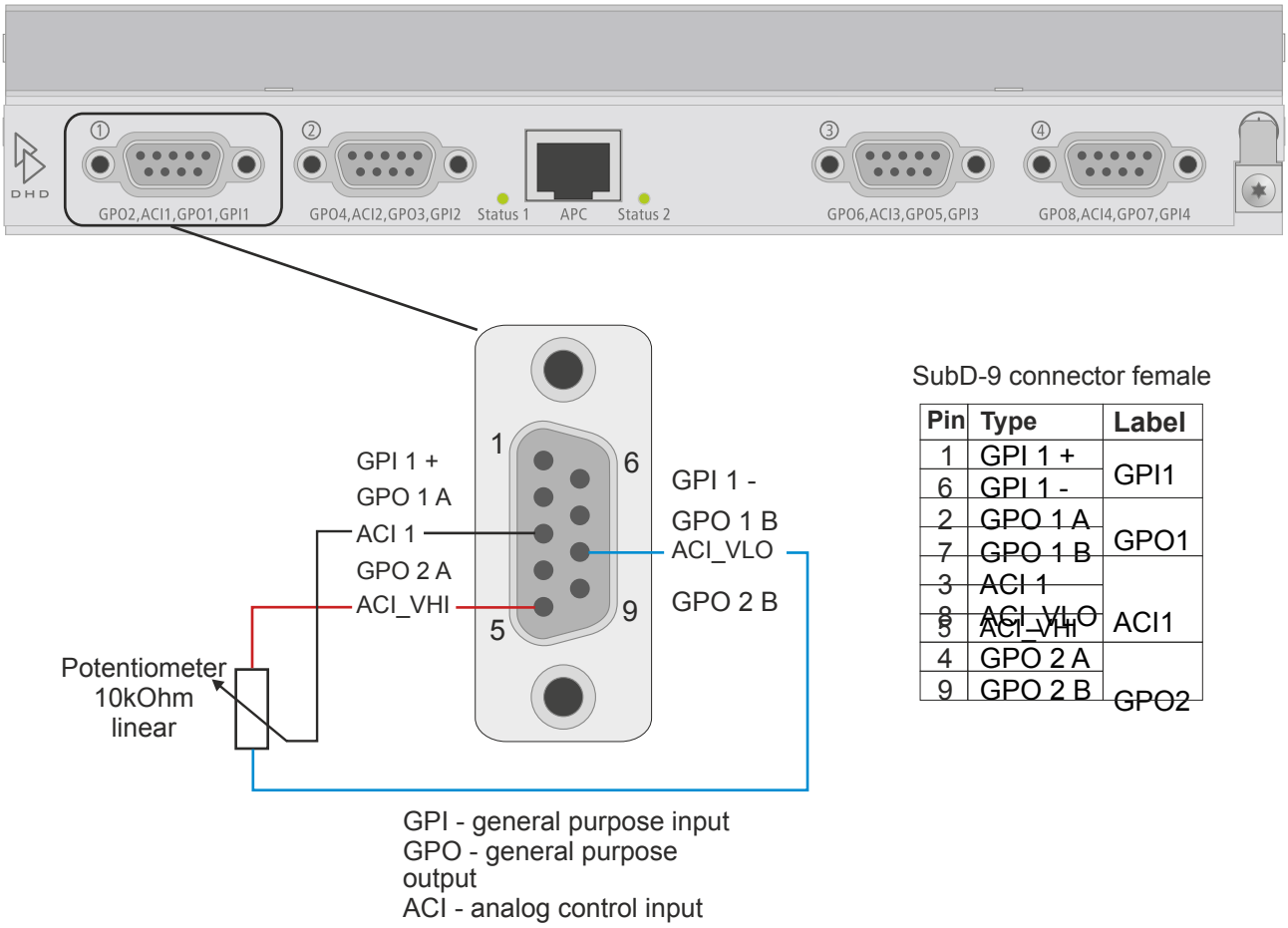


- **Option 2: Both USB audio ports are connected to a single PC**

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.)

52-7235 Pin Assignment

D-Sub 9 - connector 1



SubD-9 connector female

Pin	Type	Label
1	GPI 1 +	GPI1
6	GPI 1 -	
2	GPO 1 A	GPO1
7	GPO 1 B	
3	ACI 1	ACI1
8	ACI_VLO	
5	ACI_VHI	
4	GPO 2 A	GPO2
9	GPO 2 B	

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

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

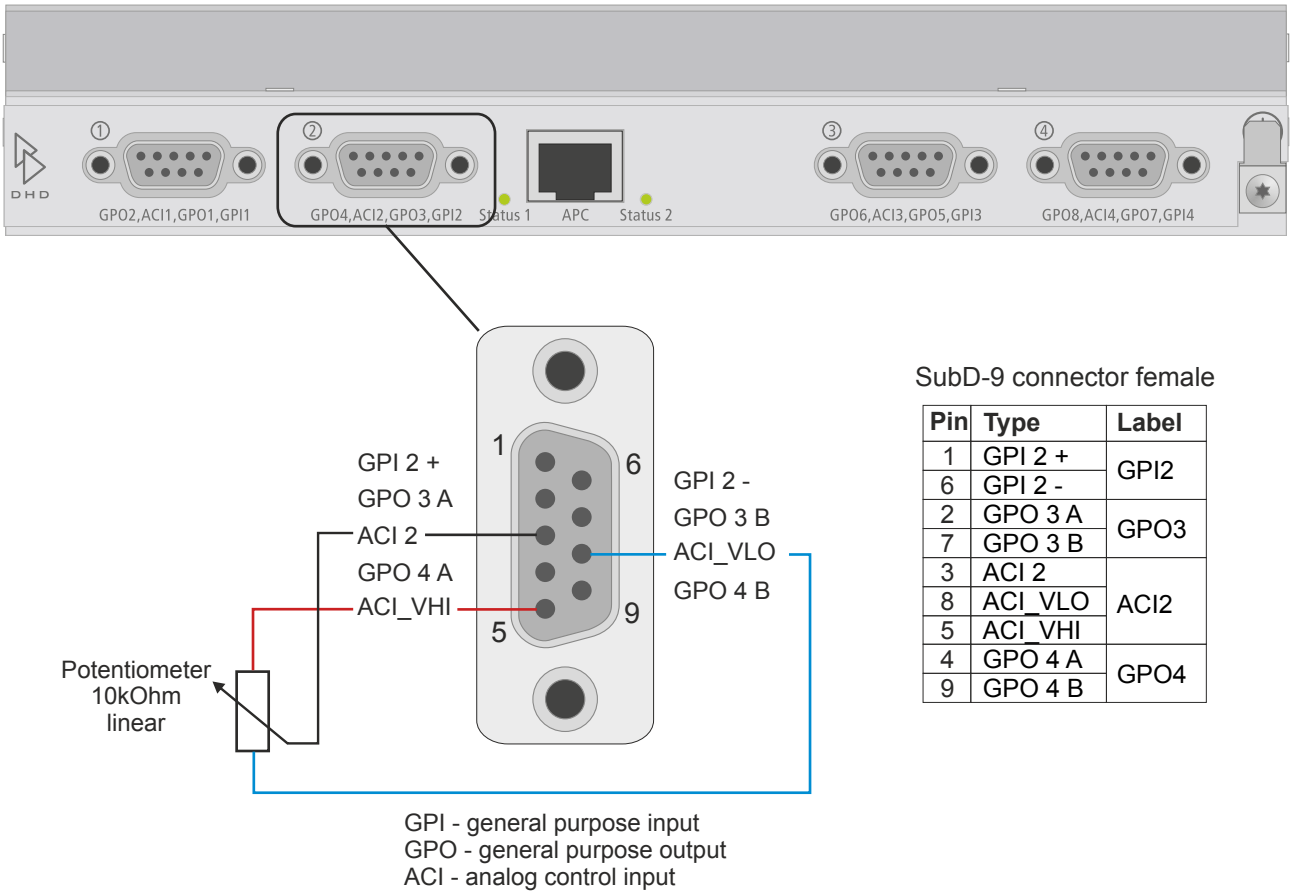
ACI_VLO must not be connected to chassis, housing, earth, shield or other common signals!

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

ACI_VHI, ACI_VLO of connectors 1 to 4 are internally connected.

52-7235 Pin Assignment

D-Sub 9 - connector 2



SubD-9 connector female

Pin	Type	Label
1	GPI 2 +	GPI2
6	GPI 2 -	
2	GPO 3 A	GPO3
7	GPO 3 B	
3	ACI 2	ACI2
8	ACI_VLO	
5	ACI_VHI	
4	GPO 4 A	GPO4
9	GPO 4 B	

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

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

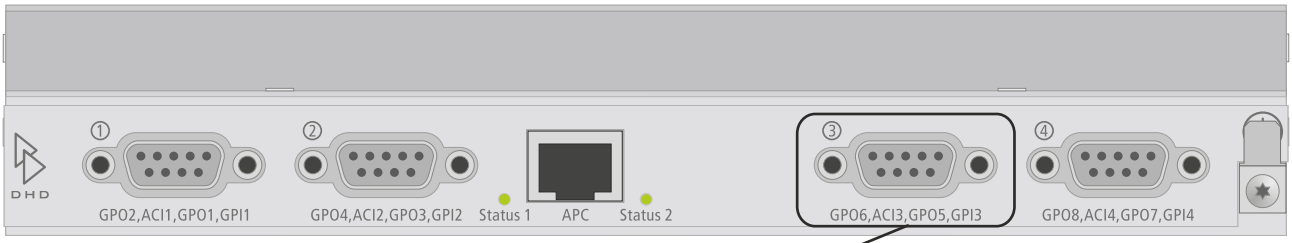
ACI_VLO must not be connected to chassis, housing, earth, shield or other common signals!

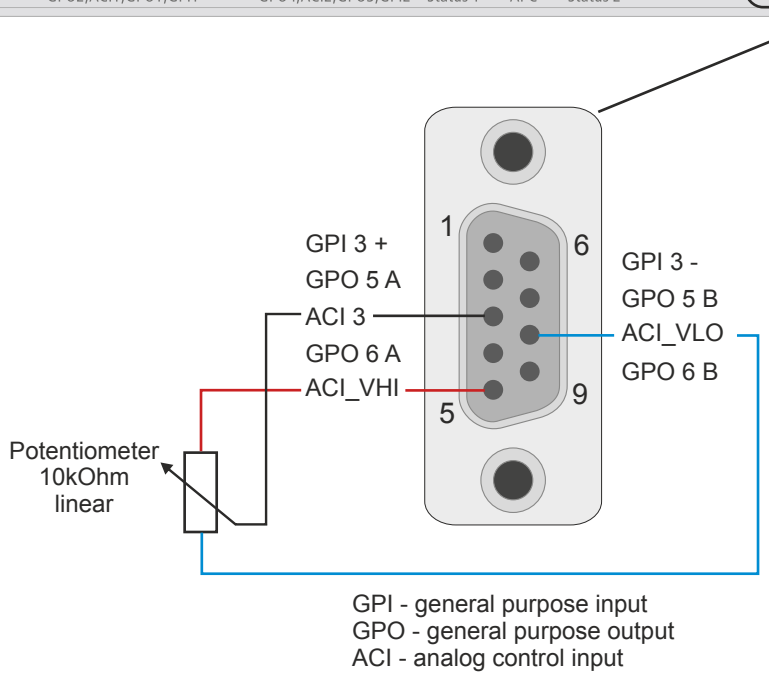
The potentiometer must have a resistance value of 10kOhms (linear)!

ACI_VHI, ACI_VLO of connectors 1 to 4 are internally connected.

52-7235 Pin Assignment

D-Sub 9 - connector 3





SubD-9 connector female

Pin	Type	Label
1	GPI 3 +	GPI3
6	GPI 3 -	
2	GPO 5 A	GPO5
7	GPO 5 B	
3	ACI 3	ACI3
8	ACI_VLO	
5	ACI_VHI	
4	GPO 6 A	GPO6
9	GPO 6 B	

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

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

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

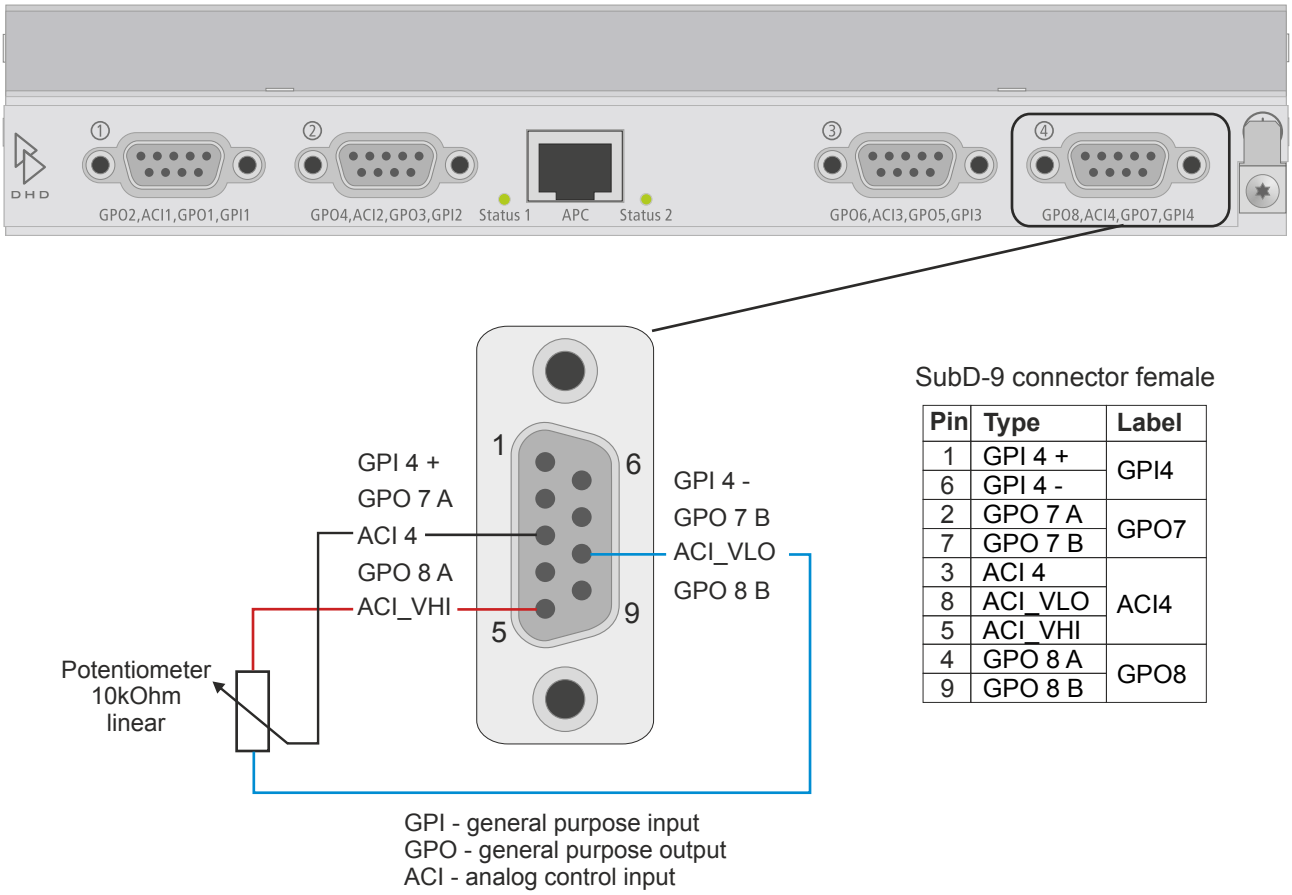
ACI_VLO must not be connected to chassis, housing, earth, shield or other common signals!

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

ACI_VHI, ACI_VLO of connectors 1 to 4 are internally connected.

52-7235 Pin Assignment

D-Sub 9 - connector 4



SubD-9 connector female

Pin	Type	Label
1	GPI 4 +	GPI4
6	GPI 4 -	
2	GPO 7 A	GPO7
7	GPO 7 B	
3	ACI 4	ACI4
8	ACI_VLO	
5	ACI_VHI	
4	GPO 8 A	GPO8
9	GPO 8 B	

Notes:
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: maximum rated current: 0,2A (resettable fuse), maximum peak switched voltage: 30V 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 to 4 are internally connected.

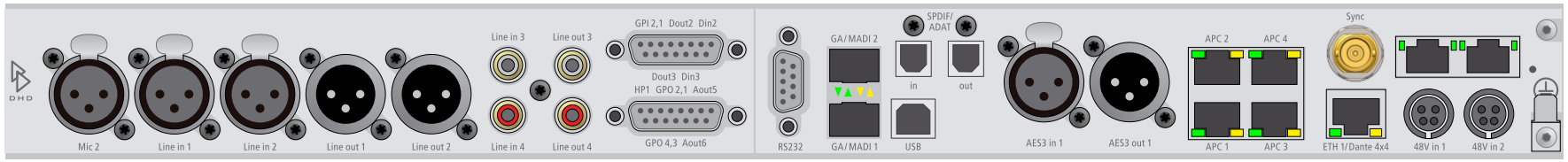
52-1830 Connectors

Front View

USB In/Out
2/2 Ch. Interface, int. powered (works with common smart phones without additional USB hub and PCs)

Headphones 1 L/R | Mic/Line In 1

Rear View

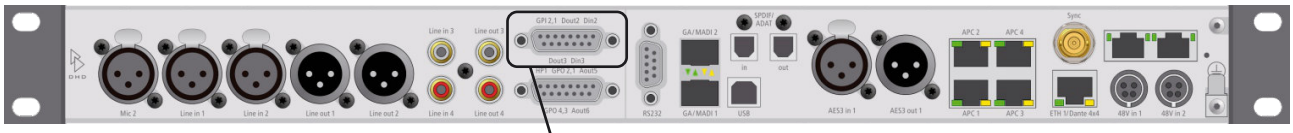


Line In 3 | Line Out 3 | DSUB-2 Digital AES3 In 2 Digital AES3 In 3 Digital AES3 Out 2 Digital AES3 Out 3 GPI 1, GPI 2 | RS232 | MADI/ GA 2 | ADAT/SPDIF In Out | APC 2 | APC 4 | Sync In/Out | Modul Option: Dante 64/64

Mic/Line In 2 | Line In 1 | Line In 2 | Line Out 1 | Line Out 2 | Line In 4 | Line Out 4 | DSUB-1 Headphones 1 L/R GPO 1, GPO 2 GPO 3, GPO 4 Line Out 5 Line Out 6 | MADI/ GA 1 | USB Port For future use | AES3 In 1 | AES3 Out 1 | APC 1 | APC 3 | DHD Network + Dante 4/4 Ch. | Power 48V In 1 In 2

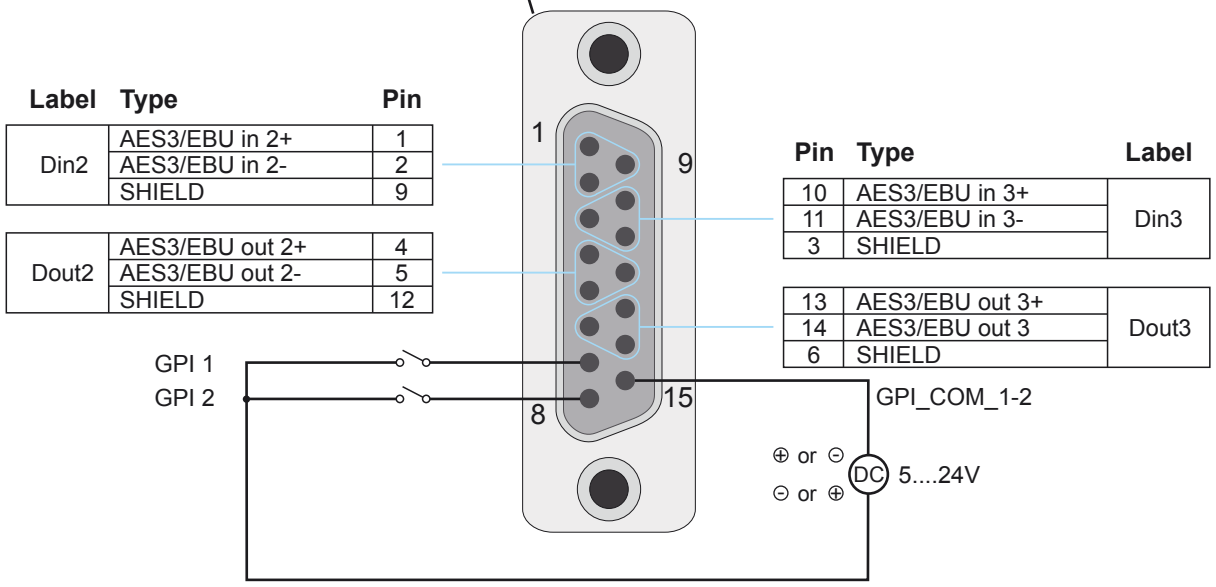
52-1830 Pin Assignment

D-Sub 15 - upper connector



Label	Type	Pin
Din2	AES3/EBU in 2+	1
	AES3/EBU in 2-	2
	SHIELD	9
Dout2	AES3/EBU out 2+	4
	AES3/EBU out 2-	5
	SHIELD	12

Pin	Type	Label
10	AES3/EBU in 3+	Din3
11	AES3/EBU in 3-	
3	SHIELD	
13	AES3/EBU out 3+	Dout3
14	AES3/EBU out 3	
6	SHIELD	



GPI - general purpose input
GPO - general purpose output

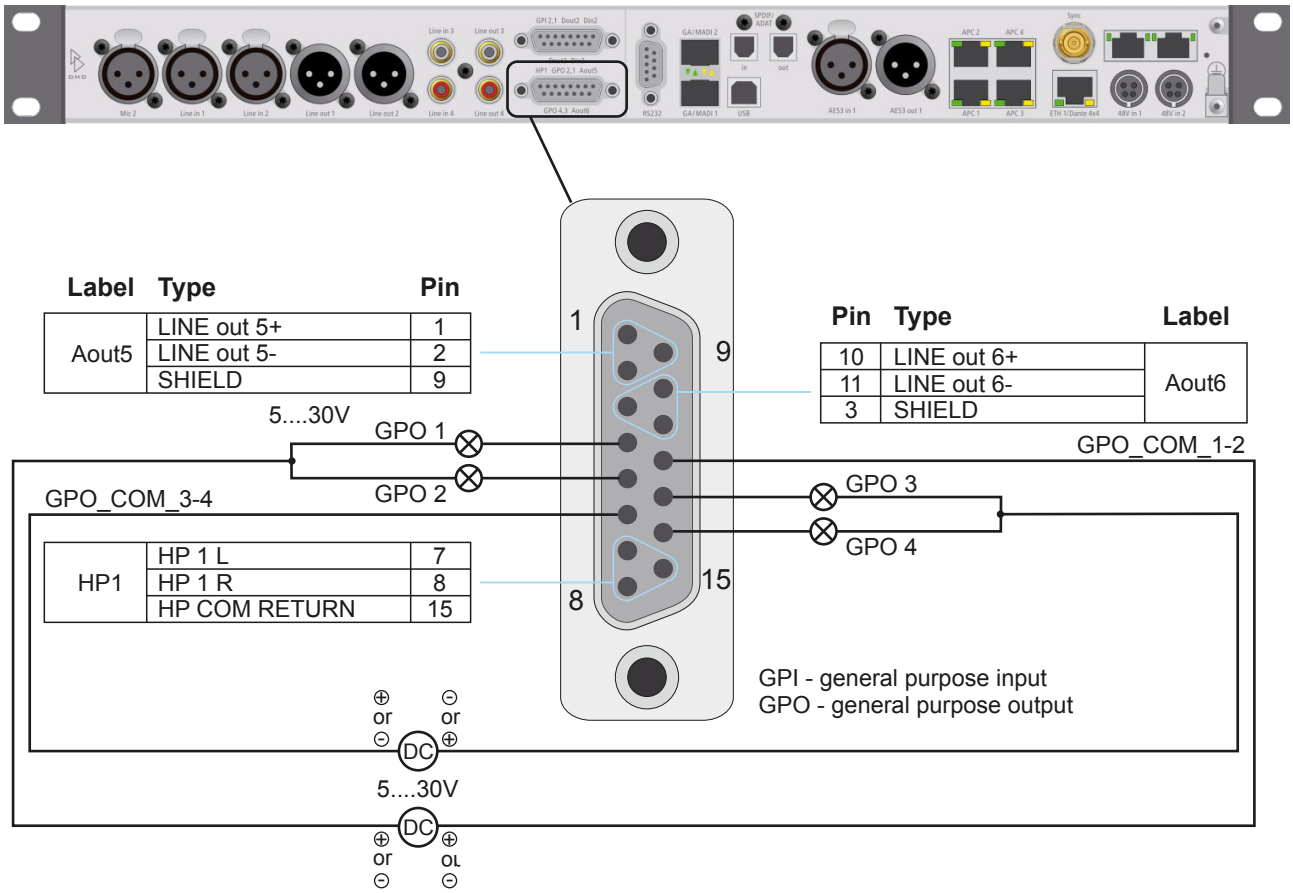
Notes:
GPI and GPO sections are isolated from each other and from the modules internal circuits.

GPI section uses common wire GPI_COM for GPI 1 and GPI 2.
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

52-1830 Pin Assignment

D-Sub 15 - lower connector



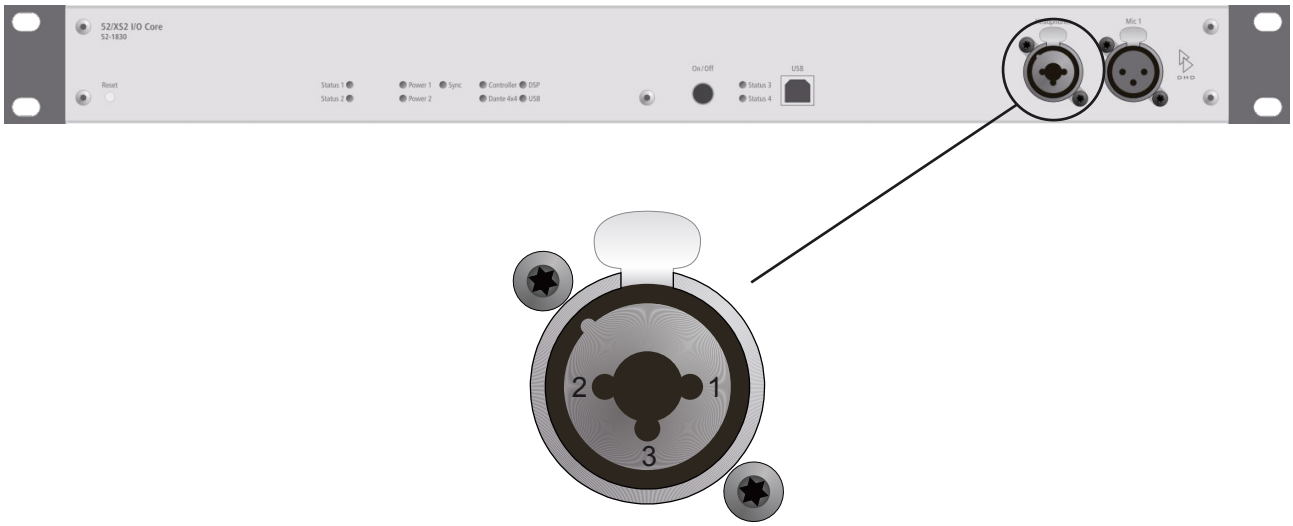
Notes:
GPI and GPO sections are isolated from each other and from the modules internal circuits.

GPO section uses common wire GPO_COM_1-2 for GPO 1 and GPO 2 and
GPO_COM_3-4 for GPO 3 and GPO 4.
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

52-1830 Pin Assignment

Headphone connector



1/4" stereo jack	Type	XLR Pin
Sleeve	HP_COM_RETURN	1
Tip	HP 1 L	2
Ring	HP 1 R	3

52-1830 Pin Assignment

USB Audio

The USB audio port at the front panel is a fully functional digital stereo input and output. 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

This USB audio port can not be used for maintenance or control purposes.

The following applies to the front USB audio port:

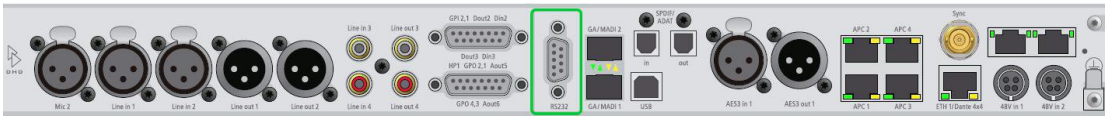
- 1 stereo input, sample rate converter
- 1 stereo output, sample rate converter (linked to associated input if activated in Toolbox)
- full-speed transceivers
- compliant with USB 2.0 specification
- self-powered USB circuit
- default Windows or Mac USB audio device driver is used, no additional driver required
- iOS devices with version 7.0 or higher can be connected via a camera connection kit for playback and recording

Serial Connectors

52/XS2 Core Serial Connectors

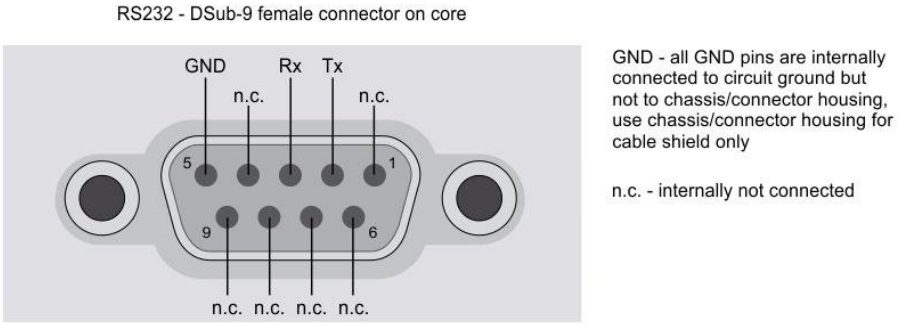
52-1830 Core

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

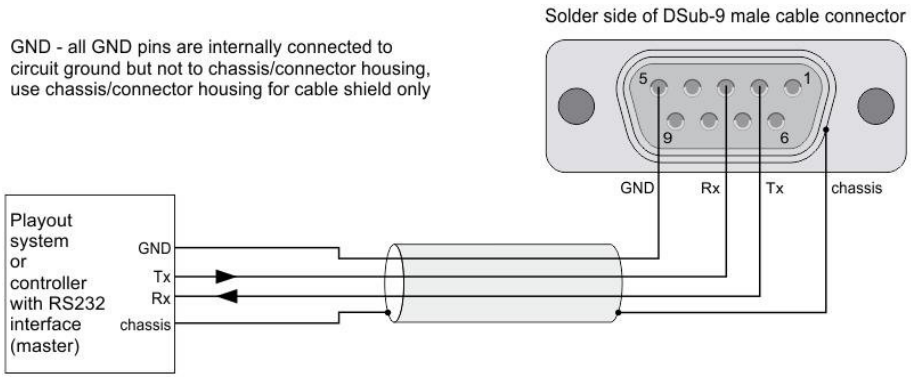
You can find the pin assignment for the female RS232 port on the core in the following drawing:



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:



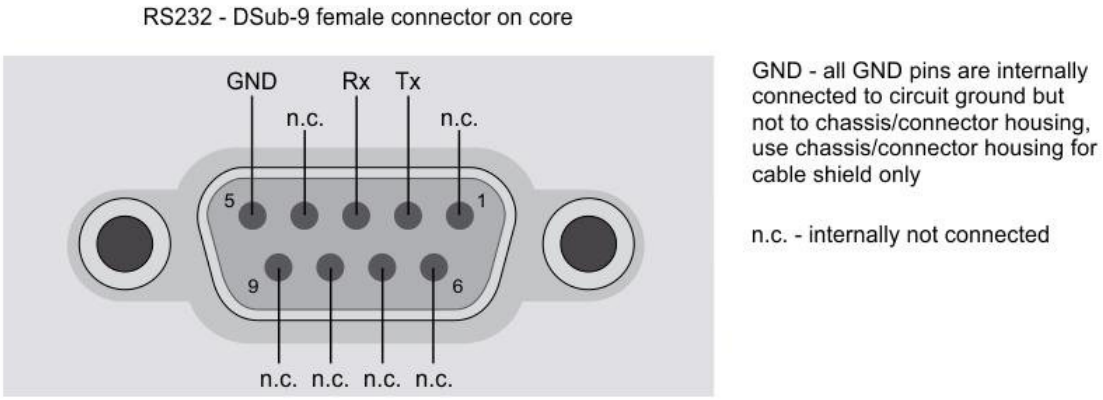
Pin assignment for the RS232 cable connector

52/XC2 Core Serial Connectors

52-7424 Core

52-7424 XC2 Core - side view with one male DSub-9 serial RS232 port

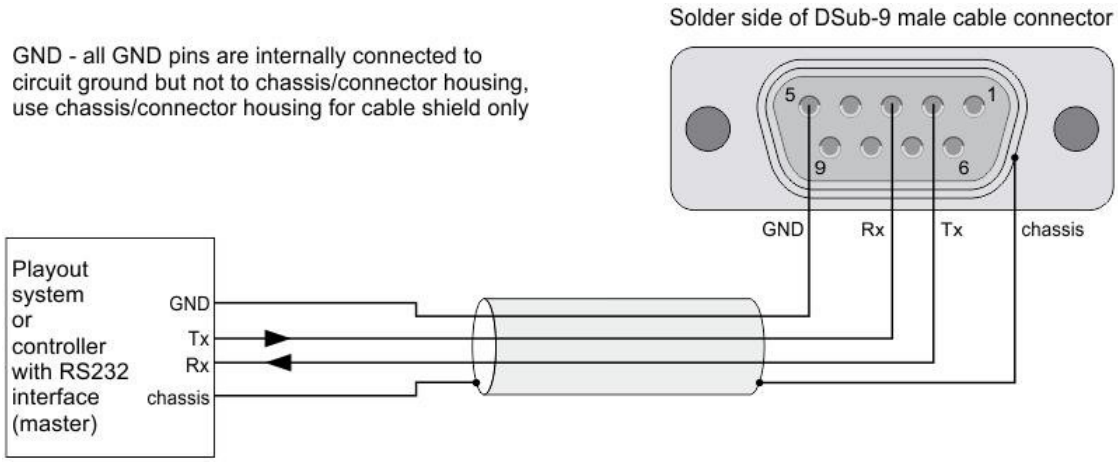
You can find the pin assignment for the female RS232 port on the core in the following drawing:



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

For more information visit

support.dhd.audio