# **XD3, XC3** MIXING, ROUTING AND I/O SYSTEM

IPx 1

S

CT

GA 3

GA4

IPx 2

Sync 11

SAPC

48V 2

DHD.audio

14.70

APC 4

APC 3

APC 2

APC 1

ETH 4

ETH3

DHD-AUDIO.COM

XD3

# **CORE** OPTIONS

### **XC3** IP CORE 52-7520, 52-7523

The XC3 IP Core, in its various configurations, can manage any task in your broadcast studio, ranging from small DJ-operated panels with 12 faders to large control room desks with up to 48 faders. You can increase the number of channels, logic functions and peak meters or add delay at any time by adding software licences to a basic core (52-7523). Up to 72 stereo busses including 48 clean-feeds can be supported by adding a second DSP module.

IPx expansion modules can be added to accommodate up to 128 channels of AES67/ RAVENNA and up to 512 Dante channels.

With the Toolbox configuration software, all your ideas and requirements for certain functions will be defined during a configuration process typically done by DHD or a local representative. If you need to change the mixer configuration later, just use the Toolbox software again.

### **XD3** IP CORE + ROUTER

52-7550/52-7554 + 52-7540

The XD3 is a high-performance IP Core for use with large mixing and routing systems. It allows fully redundant configuration and can accommodate an optional router module. Up to 96 stereo faders, 126 stereo busses and 24 Gigabit Ethernet audio ports are supported.

With two IPx expansion slots, the XD3 IP core can directly integrate different Audio-over-IP technologies in the core such as two 128 x 128 AES67/RAVENNA IPx modules, two 512 x 512 IPx Dante interfaces or a combination of them.

The XD3 IP core and XC3 IP core come with Firmware 10 which offers new capabilities including enhanced network security and unified user management based on web apps.

A more powerful quad-core controller version (52-7554) of the XD3 IP core is available as well, allowing Thimeo Audio Technology's Stereo Tool to run directly on the DHD core.





#### MODULAR POWER



52-7530

Each XC3/XD3 IP Core has one DSP processor already included. The 52-7530 DSP extension module provides 40-bit floating-point processing for additional fader channels, fixed processing, summing operations and additional loudness meters.

One DSP extension module can be added to the XC3 IP Core (52-7520) for more processing power.

By extending the XD3 IP Core (52-7550/52-7554) with the optional XD3 IP Router module (52-7540), up to four additional 52-7530 DSP modules can be added to the device to support a maximum number of faders, busses and delay. Additional routing capacities are provided to allow the use of up to 24 Gigabit Audio ports in XD3 IP cores.



#### **XC3** IPx Dante Audio 512×512 52-7585

- IPx module for XC3/XD3 cores and concentrators
- compatible with Dante-enabled devices or PCs with Dante Virtual Soundcards
- 512 in and 512 out., 128 streams maximum
- 2 Gigabit ethernet for Dante with network redundancy

### **XC3** IPx Dante Audio 64×64 52-7580

 same features as 52-7585 but with 64 in and 64 out, 32 streams, SRC



### **XC3** IPx AES67 RAVENNA 52-7567

- IPx module for XC3/XD3 cores and concentrators
- compatible with devices or virtual soundcards that are enabled for AES67 and RAVENNA
- 64channels in/out (32 streams in/out)
- software options for:
- Seamless Protection Switching (SPS) or channel/ stream extension (128 ch/64 streams) - 52-8541
- multicast GPIOs 52-8542
- SNMP 52-8591

<b>96 FADERS</b>	<b>64 FADERS</b>	48 FADERS	24 FADERS	20 FADERS
stereo	stereo	stereo	stereo	stereo
<b>XD3 IP CORE + ROUTER</b>	<b>XD3 IP CORE + ROUTER</b>	XC3 IP CORE	XC3 IP CORE	XC3 IP CORE
(52-7550/52-7554 + 52-7540)	(52-7550/52-7554 + 52-7540)	(52-7520)	(52-7520)	(52-7523)
<b>5 DSPs</b>	<b>3 DSPs</b>	2 DSPs	1 DSP	1 DSP
126 summing busses	96 summing busses	72 summing busses	48 summing busses	16 summing busses
(PGM, AUX, N-1, PFL)	(PGM, AUX, N-1, PFL)	(PGM, AUX, N-1, PFL)	(PGM, AUX, N-1, PFL)	(PGM, AUX, N-1, PFL)
96 mix-minus busses	64 mix-minus busses	48 mix-minus busses	24 mix-minus busses	6 mix-minus busses
64x64 talkback matrix included	full DSP-Core redundancy as option	48 level meters	4 virtual mixers	automix included
LARGE ROUTER AND CONSOLE WITH NUMEROUS I/OS	LARGE CONTROL ROOM CONSOLE	CONTROL ROOM CONSOLE AND SMALL ROUTER	MEDIUM-SIZED CONSOLE AND SMALL ROUTER	STANDARD CONSOLE

All faders, busses and level meters are stereo, configurable as mono. All values are maximum values in firmware version 10.0 or higher. Availability depends on number and type of used features.

### DHD.audio

# I/O OPTIONS



## **XC** DIGITAL I/O MODULE 52-7112

- 4 AES3/EBU/SPDIF inputs, 24 bit, SRC
- 4 AES3/EBU/SPDIF outputs, 24 bit, SRC
- 4 GPI, 4 GPO, isolated



## **XC** EMBEDDER/DE-EMBEDDER 52-7172

- 2x 3G/HD/SD SDI de-embedders and 2x 3G/HD/SD SDI embedders, each with:
- in, 2x loop through, out (BNC connectors)
- 2 selectable audio groups (1/2 or 3/4)
- 8 channels, SRCs
- 4 GPI, 4 GPO, isolated

### MORE MODULES ON DHD-AUDIO.COM/IOMODULES



## **XC** MIC/HEADPHONE MODULE 52-7235

- 4 mic/line inputs with remote preamp 0...63 dB, 18 dBu
- 48 V phantom power, switchable
- 4 stereo headphone amp outputs
- 4 GPI, 8 GPO, isolated, 4 analogue control inputs



## **XC** ANALOGUE I/O MODULE 52-7224

- 4 analogue line inputs, 18 dBu/24 dBu maximum, electronically balanced, 24 bit
- 4 analogue line outputs, 18 dBu/24 dBu maximum, electronically balanced, 24 bit
- 4 GPI, 4 GPO, isolated



52-7593 multi-mode, 52-7594 single-mode

- $\cdot\,$  AES10 MADI SFP module for XC3 and XD3, LC
- 56 or 64 channels, bidirectional



### 52-7510

- $\cdot\,$  extension unit for I/O and control modules
- 12 DHD APC RJ45 ports
- 2 IPx slots for AES67 or Dante
- 2 power in 48V, HD BNC sync. out
- 2 SFP slots for XC3 GA or MADI SFPs
- incl. 2 SFPs for connection to core, multi-mode LC



#### **XC3** GIGABIT AUDIO SFP 52-7591 multi-mode, 52-7592 single-mode

52-7591 multi-mode, 52-7592 single-mode

- bidirectional audio exchange of 512 channels between two XC3/XD3 Cores
- DHD-licensed SFP module with LC connector

## **XC3** CORE AUDIO NETWORK 52-8582

- bidirectional audio exchange of 48 channels between two XC3/XD3 Cores, multiple links are possible
- direct APC connection via standard CAT cables
- hardware-related license code

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