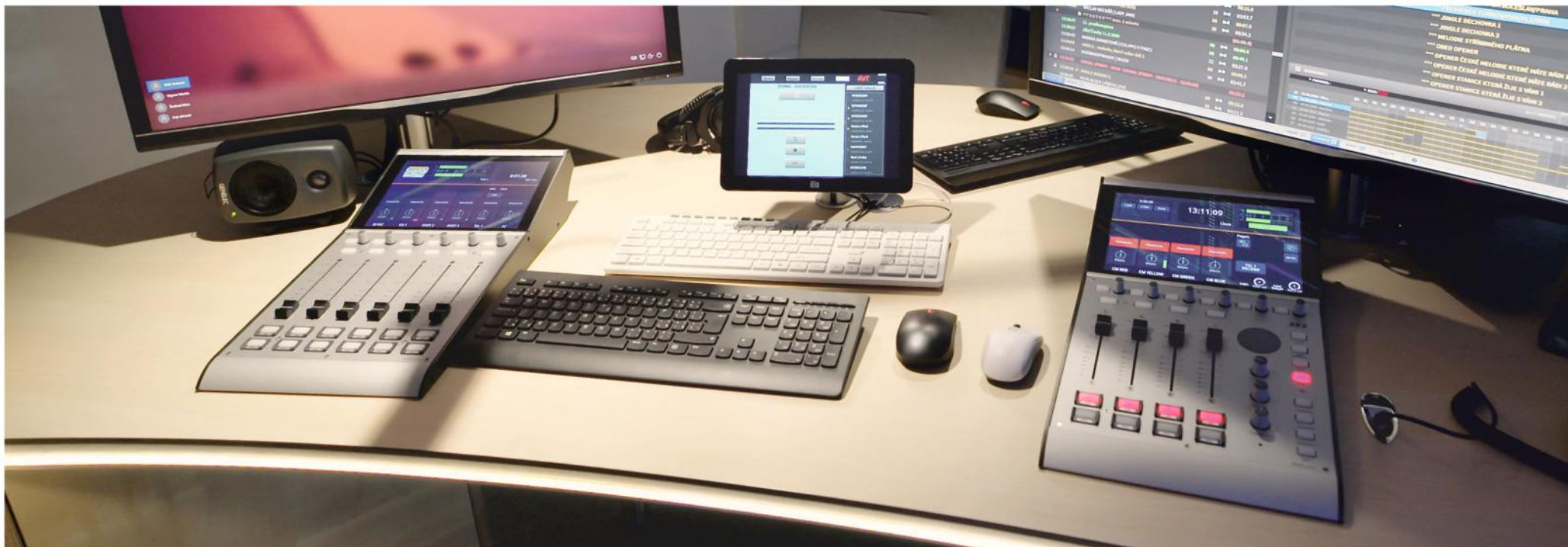


SX2 – THE COMPACT MIXER





SMART MODULES FOR ALL APPLICATIONS

The SX2 is a modular mixing console for radio and other broadcast applications. Price-optimised, it is ideal for on-air studios, audio workstations and smaller OB vans.

SX2 console sizes are adaptive and range from 4 to 16 faders. The central module (52-5614) has four faders and a central section for monitoring, talkback and central controls. The fader modules (52-5620) feature 6 faders. All faders are motorised and allow a second layer for up to 16 channels.

Both module types feature a 10.1-inch multi-touch display for faders and central control. All SX2 units are separate table-top devices and can be chained for a single mixing desk.

The central control module provides the most important audio I/Os. A microphone input and a headphones output are included and you can also connect your loudspeakers directly to this unit, reducing rack space and cabling.

The SX2 is based on the same Series 52 firmware as MX or RX2 consoles. The configuration is done with the Toolbox 10 configuration software.

SX2 features can be extended simply by adding optional license codes to the DSP core. This allows extra faders, busses and clean feeds. It also supports functions like loudness metering, profanity delay as well as talkback to other DHD mixers and our browser-based Views and Assist App.

HIGH-PERFORMANCE 40-BIT FLOATING-POINT DSP FOR:

- 20 channels, mono or stereo, each with 4-band EQ (fully parametric), subsonic filter, dynamics, limiter, delay
- 16 stereo PGM busses, Aux busses, clean feeds and PFL
- 6 clean feeds (mix-minus, mono or stereo)
- 4 monitoring busses for control room and studio
- flexible talkback, logic and GPIO system
- integrated routing matrix
- internal tone generator

All modules are available for table-top or flush-mounted installation.

Each fader module comes with a chaining kit for optional physical connection of modules.

The SX2 modules are designed for easy maintenance and low power consumption (25 W maximum per module).

FADERMODULE

52-5620

TOUCH CONTROLS FOR EACH CHANNEL

- channel name, UTF8-supported
- PGM and off-air selection
- channel input meter
- gain settings

FLEXIBLE FADER ENCODERS

- function according to TFT content
- control of gain settings

PROFESSIONAL HIGH-GRADE 100-MM MOTORFADERS, WITH DUST PROTECTION

FLEXIBLE PUSHBUTTONS IN EACH CHANNEL

- silent, multicolour (RGB)
- individual button functions for channel e.g. on, off, PFL, access, layer or talk
- buttons below fader have a label area for clear function naming



CENTRALMODULE

52-5614

TOUCH CONTROLS FOR CENTRAL FUNCTIONS

- main control
- metering
- EQ and dynamics
- input channel settings
- snapshots

FLEXIBLE CENTRAL ENCODERS

- function according to TFT content
- volume control of guest headphones
- monitor selectors

AMBIENT-LIGHT SENSOR FOR AUTOMATIC CONSOLE BRIGHTNESS CONTROL

PRE-LISTENING & TALKBACK SPEAKER WITH BUILT-IN AMP

SILENT, MULTICOLOUR (RGB) PUSH BUTTONS

- monitoring section, expanded by touch display selector
- GPIO push buttons
- talkback push buttons

PROFESSIONAL HIGH-GRADE VOLUME POTENTIOMETERS

TALKBACK MICROPHONE WITH BUILT-IN PREAMP

CORE AND I/O SPECIFICATIONS

XC3 IP CORE

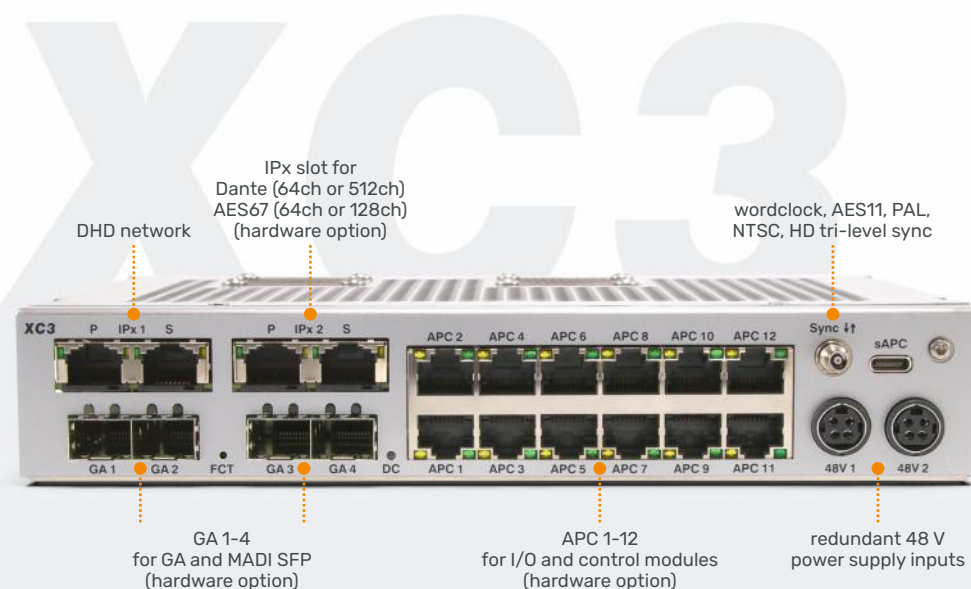
52-7523

The XC3 IP Core provides the DSP processing and logic computing for the SX2 control surface. In its basic version (52-7523) it is perfect for DJ-operated studios with 4 to 20 channels. Also, a second fader layer is possible, allowing a very compact SX2 mixer for small OB-vans with 20 channels on 10 faders.

By adding software licences, you can, for example, increase the number of channels,

logic functions, peak meters or add delay.

The flexibility of the XC3 IP Core is based on the Toolbox configuration software. Your ideas and requirements for certain functions will be defined during a configuration process, typically done by DHD or a local representative. This configuration is what will make your system work. However, if you need to change it later, just use the Toolbox software again.



MIC/LINE INPUT SPECIFICATIONS (52-7235A, 52-1335A, 52-5614A/B)

Input sensitivity	-77 dBu ... 18 dBu
Gain setting	analogue preamp 0 dB, 10 dB ... 63 dB in steps of 1 dB, -20 ... +20 dB digital gain in steps of 1 dB
Frequency response	< 0.03 dB (20 Hz ... 20 kHz)
Dynamic range	> 111 dB (A-weighted)
THD+N	< -82 dB / 0.008% (-1 dBFS, +17 dBu, 0 dB analogue / digital gain)
Equivalent input noise	< -127 dBu (150 ohm source), < -126 dBu (200 ohm source)
Phantom power	48 V switchable per input channel, unloaded input 48 V $\pm$ 10%
Max. input level	18 dBu (balanced)
Converter technology	24 bit, oversampling sigma-delta

ANALOGUE LINE INPUT SPECIFICATIONS (52-7224A, 52-1335A)

Max. input level	24 dBu (balanced)
Frequency response	< 0.05 dB (20 Hz ... 20 kHz)
THD+N	< -85 dB / 0.006% (-1 dBFS, +23 dBu)
Dynamic range	> 98 dB (A-weighted)
Converter technology	24 bit, oversampling sigma-delta

ANALOGUE LINE OUTPUT SPECIFICATIONS (52-7224A, 52-1335A, 52-5614A/B)

Max. output level (phones, single-ended)	24 dBu (52-5614A/B: 18 dBu) (balanced)
Minimum load (outputs short-circuit protected)	600 ohm
Frequency response	< 0.1 dB (20 Hz ... 20 kHz)
THD+N	< -84 dB / 0.006% (-1 dBFS, +23 dBu)
Dynamic range	> 104 dB (A-weighted)
Converter technology	24 bit, oversampling sigma-delta

DIGITAL INPUT/OUTPUT SPECIFICATIONS (52-7112A, 52-1335A)

Input/output impedance	110 ohm (AES3/EBU) or 75 ohm (S/PDIF)
Input sensitivity	> 200 mV
Sample rate converters (SRC)	inputs and outputs (switchable, slaved to related input)
Input SRC sampling frequency range	28 kHz ... 108 kHz
Output SRC sampling frequency range	28 kHz ... 54 kHz
Dynamic range (SRC off)	144 dB (24-bit digital audio)
Output level	3.4 V (into 110 ohm load)
Output dither	off, 16, 20 bit (switchable by configuration software)