

## AVAILABLE MODULES

### DSP FRAME

#### DSP Frame 3U/19", 10 slots for

- DSP & Communication Controller.
- Eight audio/GPIO modules.
- One GPIO module on slot 9.
- Redundant power supply as option.

#### DSP & Communication Controller

- Main DSP and controller module, always required.
- Connectors for CAN bus, RS232 serial port and 100baseT Ethernet with RJ45 socket.

- MADI interface with 64 inputs and 64 outputs available as option.

#### Digital In/Out/GPIO Module, 8 channels (4 stereo)

- 4 digital inputs (AES3/EBU/SPDIF) with sample rate converters.

- 4 digital outputs (AES3/EBU/SPDIF).
- 4 GPIOs (TTL) and 4 GPOs (open collector).

#### Mic/Headphone/GPIO Module, 4 channels

- 4 Mic/Line inputs, electrically balanced, with preamplifier, max. input level 18 dBu.
- 48 V phantom power, separately switchable for each input.
- 2 stereo headphone outputs.
- 2 GPIOs, 4 GPOs, 2 analog control inputs.

#### Analog In/Out/GPIO Module, 4 channels

- 4 line inputs, electrically balanced, max. input level 18 dBu, 24 dBu option also available.
- 4 line outputs, electrically balanced, max. output level 18 dBu, 24 dBu option also available.
- 4 GPIOs (TTL) and 4 GPOs (open collector).

#### Analog In Selector Module

- 2 stereo input selectors, each with A,B,C,D stereo inputs.
- 16 line inputs, el. bal., max. input level 18 dBu.
- 1 monitor selector and 1 fader selector.

#### GPIO Module

- 4 GPIOs, insulated with optocouplers.
- 12 GPOs, insulated, electromechanical relays, max. current 1 A, max. voltage 30 V.

### MIXING DESK

#### Main Module

- Contains all control elements, always required.
- 32 pushbuttons, 2 volume controls, 1 rotary encoder (optical).
- LCD display and Stereo LED PPM.
- Connector for CAN bus.

#### Fader Module

- Contains 4 fader channels, at least one panel always necessary.
- Each channel has a 100 mm ALPS fader, an LED input display and 5 pushbuttons.
- Connector for CAN bus.

### ADAPTOR PANELS

These adaptors provide XLR connectors for audio signals and Sub-D connectors for GPIO signals. They are used depending on the actual module combination of the RM2200D.

#### RJ45/XLR Adaptor Panel analog

- 4 stereo analog XLR inputs.
- 4 stereo analog XLR outputs.
- 4 Sub-D connectors for GPIOs.

#### RJ45/XLR Adaptor Panel analog/digital

- 2 stereo analog XLR inputs.
- 2 stereo analog XLR outputs.
- 4 AES/EBU XLR inputs.
- 4 AES/EBU XLR outputs.
- 4 Sub-D connectors for GPIOs.

#### RJ45/XLR Adaptor Panel digital

- 8 AES/EBU XLR inputs.
- 8 AES/EBU XLR outputs.
- 4 Sub-D connectors for GPIOs.

### MORE DETAILS

[www.dhd-audio.com](http://www.dhd-audio.com)  
[www.rm2200d.com](http://www.rm2200d.com)



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# How would you like your Broadcast Mixer?



DHD



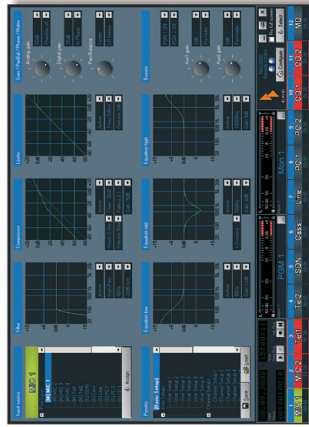
# EASY.



When you are On Air, you don't want to worry about your equipment. You want it to work reliably, steadily, without hassle.

That's why the RM2200D has been designed especially for On-Air use. Press a few buttons on its mixing desk, move a few faders. After a while, this mixer just "works by itself".

# FLEXIBLE.



Shows change. People change. Studios change.

With the RM2200D, this is no problem. Just start its PC software, select the function you want to modify, upload the new configuration and you are ready to go. And if the volume is too low for your new DJ, it is even simpler: Press the "Select" key on the console, change the Gain value and she or he will be happy.

# POWERFUL.



Analog and digital, AES/EBU or S/PDIF, internal or external sync, GPI and GPO...

Today's studio setups can get quite complex. Good to know that the RM2200D is prepared to handle it all. No matter what kind of equipment you want to connect, there are modules available for all common applications.

# FEATURES

The RM2200D is a compact digital broadcast mixing system for small and midrange applications.

It has been designed from the ground up to be a reliable tool for daily use in On-Air studios, OB vans and production suites.

A fully configured RM2200D consists of these parts:

- One Main Module in the mixing desk.
- Up to four Fader Modules each containing 4 faders. This gives you up to 16 faders.
- One DSP Frame containing up to 128 inputs and 128 outputs, analog, digital and MADI.

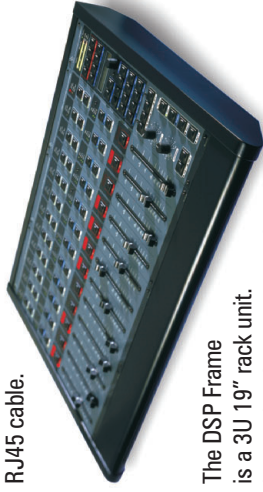


It provides these features:

- Two stereo main busses,
- two stereo aux busses and four stereo clean feeds.
- Input processing for all fader channels (3-band EQ, compressor, limiter, high/lowpass filter).
- GPIO and talkback functions depending on the modules selected.

# HARDWARE

The RM2200D consists of two main parts: *DSP Frame* and *mixing desk*. Both are connected with an industry-standard CAN bus. You can also connect the RM2200D to Ethernet using a standard RJ45 cable.



The DSP Frame is a 3U 19" rack unit. It contains the power supply and the DSP & Communication Controller which connects it to the mixing desk. The rack unit also holds the modules for connecting the audio equipment and external signalling (via GPIO) to the mixer. The mixing desk itself contains no audio processing at all, it is a "remote control" for the DSP Frame.

The internal audio processing of the RM2200D is completely digital and runs on DSP systems. It is controlled by a special embedded real-time operation system. It boots up within three seconds and keeps its state for about a week in case the external power is cut.

This software controls the DSPs, communicates to the mixing desk and optionally to a PC running the RM2200D software. However, there is *no PC technology used inside the RM2200D!*

# SOFTWARE

Each RM2200D includes a special software. You use this software both to *configure* the RM2200D and to *display its state* during everyday operation.

The application runs on any standard PC using Windows XP™. This PC needs to be connected to the same network as the DSP Frame.

Once configured, the RM2200D does not require the PC software for use. However, if you do run it on a PC next to the mixing desk, you get several advantages:

- Detailed metering with two graphical level meters. These meters can display any signal on the RM2200D bus.
- Clear display of fader channel status.
- Stopwatch and timer for each fader channel.
- Direct access to the parameters of each selected fader channel.

If you press the "Select" key of a fader channel, the software shows your parameter changes in detail. You can also use the software to change parameters directly on the screen.

