MasterAcoustics
pro studio hardware

16 Channel Direct Coupled Analog Sum

Drive your mix with new pro speed of **200kHz** and leave no details behind. Retain your software automation and plug-ins, while adding the sound of the best large format console technology. Summing in the analogue domain ensures no reduction in resolution - making your mixes fuller, clearer and more consistent.

S16 hardware

S16 is 16-2 Symmetrical Direct Coupled Analog Summing box, with passive input and huge "after DC summing" amplification of maximum 24dB!!!

The reason behind that approach is connected with new computer oriented recording practice. In order to get best performances from AD converters, DAW recordists are executing very hot signals /per channel, so there is no need for further channel level amplification. In addition to that, final mix is, day by day, aproaching theoretical ceiling, so now you can go to the roof if you like!

The **S16** is aimed at the high-end user with "bulletproof" construction, intuitive interface and excellent fit and finish. The unit works as a summing box for DAW use and as a mastering tool. It is ideal companion for Apogee converters (DA16, Rosetta), Pro Tools system and other excellent professional products.

Summing strategy

Tracks destined for analog summing are routed from the DAW to the **S16** via D/A converters. Identical converters are ideal to exclude level and sound differences. Although you may often wish to sum more than 16 tracks, a general recommendation to reduce track numbers is to route those tracks to a common output bus of the sequencing program which are not played back simultaneously in your arrangement. This way you avoid digital summing and your production benefits from the full potential of 100% analog summing. With mono signals one should switch these to mono mode to restrict them to single D/A converter, thereby avoiding the waste of having to use a D/A pair for one mono track. In the DAW such signals must be panned hard left or right.

Connection of Sampler or Keyboards

Along with DAW audio tracks, samplers, keyboards and expanders may also be connected directly to the **S16**. Then the Midi tracks need only be added in the DAW project, the outputs (for example, from a keyboard) are then routed directly to the **S16**.

Linking Several S16

An expansion connector provides for a second **S16** input should 16 channels not suffice. The Main Outputs of the second **S16** must be connected to the Direct in of the first unit. Do not connect both Direct In inputs.

Inputs:
- SUB-D channels 1-8 & 9-16 / analog balanced
- Direct In 2xXLR / analog balanced

Outputs:
- Monitor Out 2xXLR / analog balanced
- Master Out 2xXLR / analog balanced

Whole picture
- On/Off swich and Pan pot on each channel (16)
- Master & Monitor level control pot
- Output level retro analog VU metars
- Mogami internal wiring
- Engraved characters on front and back panels
- Heavy duty chassis
- Hard case package
- Low power consumption

S-16 Specifications *

Frequency Response	10Hz - 50kHz within 0,2dB
	DC - 200kHz, within 2dB
Total Harmonic Distortion	<0.005% in audio band
Intermodulation Distortion	<0.005% SMPTE 4:1
Crosstalk @ 1kHz	<-98dB
Crosstalk @ 10kHz	<-80dB
Noise floor	<-90dBu RMS, unweighted in audio band
Max Input Level	+26dBu
Max Master & Monitor Output Level	+28dBu in 100kohm
	+26dBu in 600ohm
	+25dBu in 200ohm
Master Output Gain	$-\infty$ to +16dB
Monitor Output Gain	$-\infty$ to +20dB
Nominal operating level	+4dBu (1.228 volts)
Input impedance	>7kohm balanced
Output impedance	<25 ohms (600 ohm drive capable)
Total Dynamic Range	116dB
0dBVU	+20dBu
Power consumption	10 watts
Warranty	2 year labor, 2 years parts. Subject to inspection.
	Does not include shipping damage or abusive operation.

* Mesured with Neutrik A2 audio analyzer

1. Pan pot
2. On/Off Channel
3. Analog VU
4. Main On/Off
5. Master output
6. Monitor output

Analog Input
8Ch Sub-D

Direct In
Chain

200kHz

New Limits

No coloration
inside