

# MCS 160

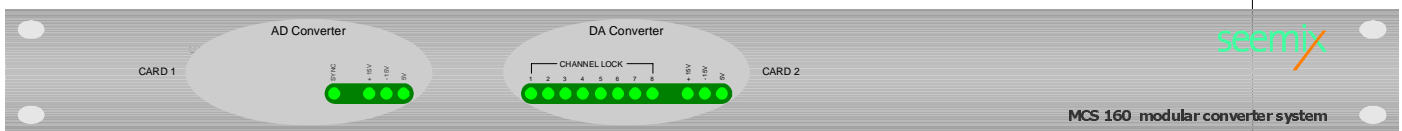
## 24-bit modular converter system

Seemix Sound

The MCS 160 is a 1U modular converter system providing multiple 24-bit A/D, D/A and sample rate converters. The unit can be configured with one or two card types in any combination. Each card contains 8 converters, thus giving a highly compact and price competitive system.

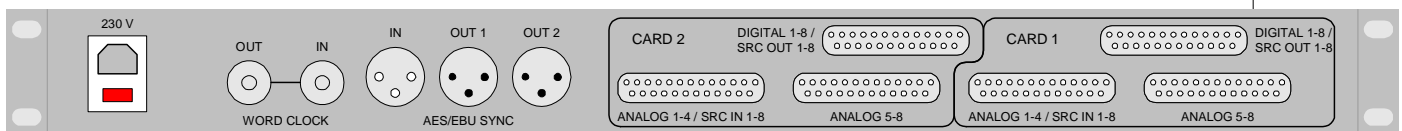


Front panel



The front panel displays LED's which give power and sync indications for each card type.

Rear panel



All connections are made on the rear panel. Audio inputs and outputs are terminated on 25-pin D-sub connectors. The unit has one AES/EBU sync. input and two sync. outputs. Word clock sync. is available as an option.

The A/D and SRC cards can synchronize to and deliver any digital signal with a sample frequency between 27kHz and 54kHz. The D/A card requires no external sync. signal. The eight converters on each card operate independently, enabling up to 16 asynchronous audio signals to be handled simultaneously by one unit.

# MCS 160 Technical Specifications



## DS03 Digital to Analogue Converter Card

### Inputs

Number	8 stereo AES/EBU
Impedance	110 Ohm
Frequency range	27 to 54 kHz AES/EBU

### Outputs

Number	8 stereo or 16 mono
Level for Full Scale	+18dBu standard, adjustable within range +24dBu to +12dBu
Impedance	50 Ohm
Balancing type	Electronic

### Performance (measured with 48kHz AES/EBU input signal)

Frequency response	+/-0.25dB, 20 Hz to 20 kHz
THD + Noise	< 0.002% at -1dBFS, 1 kHz
SMPTE IM	-90dB at -12dBFS, +6dBu
Effective Noise level	-103dBFS, RMS 20 Hz to 20 kHz
Linearity	< +/-1dB at -110dBFS
D/A Chip word length	24 bit

### General

Power consumption	5VDC: 230mA +/-15VDC: 130mA Total: 5.1W
Temperature range	0 to +50° Celsius, operating

## DS04 Analogue to Digital Converter Card

### Inputs

Number	8 stereo or 16 mono
Level for Full Scale	+18dBu standard, adjustable within range +24dBu to +12dBu
Impedance	7.5 kOhm
Common mode rejection	>70dB, 20 Hz to 20kHz
Balancing type	Electronic

### Outputs

Number	8 stereo AES/EBU
Impedance	110 Ohm
Ext Sync	27 to 54 kHz AES/EBU or word clock (optional)

### Performance (measured with 48kHz AES/EBU sync. signal)

Frequency response	+/-0.20dB, 20 Hz to 20 kHz
THD + Noise	< 0.003% at -1dBFS, 20 Hz to 20 kHz
SMPTE IM	-100dB at -12dBFS, +6dBu
Effective Noise level	-107dBFS, RMS 20 Hz to 20 kHz
Linearity	< +/-1dB at -110dBFS
A/D Chip word length	24 bit

### General

Power consumption	5VDC: 950mA +/-15VDC: 115mA Total: 8.2W
Temperature range	0 to +50° Celsius, operating

## DS05 Sample Rate Converter Card

### Inputs

Number	8 stereo AES/EBU
Impedance	110 Ohm
Ext Sync	32 to 54 kHz AES/EBU
Frequency range	1/2 to twice sync. frequency

### Outputs

Number	8 stereo AES/EBU
Impedance	110 Ohm

### Performance (measured with 48kHz AES/EBU input signal)

Frequency response	+/-0.1dB, 20 Hz to 20 kHz
THD + Noise	< 0.0015% at -1dBFS, 1 kHz
Effective Noise level	-120dBFS, RMS 20 Hz to 20 kHz
Linearity	< +/-0.1dB at -110dBFS
Digital Word length	20 bit

### General

Power consumption	5VDC: 500mA Total: 2.5W
Temperature range	0 to +50° Celsius, operating

## Block diagram

