

PRODUCT SPECIFICATION SHEET

SERIES **D•CLASS** DESCRIPTION **D•CLASS ACCESSORIES** CATEGORY **DIGITAL SIGNAL PROCESSING**

# ACCESSORIES



AI01



AI02



DI01



DN1

### AI01 FEATURES

- > Analog Input/Output Module utilizing high quality AD/DA converters
- > 100 db of dynamic range
- > Operates at 96k sample rates
- > Balanced XLR Inputs and Outputs

### AI02 FEATURES

- > Analog Input/Output Module utilizing premium AD/DA converters
- > 112 db of dynamic range
- > Operates at 96k sample rates
- > Balanced XLR Inputs and Outputs

### DI01 FEATURES

- > Digital Interface Module featuring AES/EBU and S/PDIF inputs and outputs
- > Gold plated XLR and RCA connectors
- > Standard BNC word clock connector

### DN01 FEATURES

- > Module for controlling multiple D•Class units
- > High speed, Bi-Directional network protocol using standard XLR cable and connectors
- > Allows the D•1500 RTA to monitor up to 15 D•2500 equalizers on the LED display

# MM01

### GENERAL DESCRIPTION

The MM01 is a fixed charged condenser microphone designed especially for critical test and measurement applications. Manufactured with extreme care, superior electronics and the highest quality craftsmanship, the microphone delivers an exceptionally clear, accurate sound, with precision pattern control. The MM01 is a perfect compliment to any Real Time Analyzer, such as the D•1500 Digital RTA from Samson Audio. The microphone exhibits an extremely flat frequency response providing accurate results when measuring individual drivers or complete sound systems. Thanks to its low noise and linier frequency response, MM01 can also be used for miking acoustic instruments, or as ambient room mics for studio recording applications. In addition, the high SPL capability and omni-directional pick-up pattern makes the MM01 an excellent choice for a variety of specialty miking applications in live sound situations.

### FEATURES

- > Precision, fixed charged condenser measurement microphone.
- > Extremely flat frequency response.
- > Linear, omni-directional pick-up pattern.

- > +9 to 48 Volt phantom power operation.
- > Gold plated XLR connector.
- > The industrial designed is attractive while maintaining a compact and rugged construction.
- > A perfect compliment to any Real Time Analyzer, such as the D•1500 Digital RTA from Samson Audio.
- > Includes ABS carry case.

### MM01 SPECIFICATIONS

Type .....	Fixed charged Condenser microphone
Polar Pattern .....	Omni-directional
Frequency Response .....	20 Hz to 20000 Hz
Sensitivity .....	-37 dbV/pa (14mv/pa)
Rated Impedance .....	200Ω
Max. SPL .....	132 dB (THD less than or equal to 0.5% 1000 Hz)
S/N Ratio .....	71 dB, 1K, 1PA
Power Supply .....	9 52V Phantom power (IEC 268-15/DIN 45596)
Weight .....	130 g



PRO  
PROCESSORS  
PRODUCT SPECIFICATION SHEET  
TYPE:  
DIGITAL SIGNAL PROCESSORS

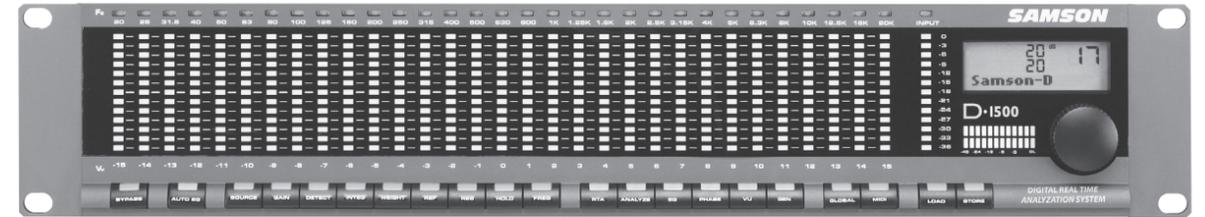
# SAMSON

PRODUCT **D•1500**

DESCRIPTION **REAL TIME ANALYZER**

SERIES **D•CLASS**

CATEGORY **DIGITAL SIGNAL PROCESSING**



### GENERAL DESCRIPTION

The D•1500 is a powerful and accurate audio measurement device with 31-bands of real time frequency analysis. What would once take you hours to do, can now be performed in minutes. And the result, your audio system is set to a true, sonically flat frequency response, or to your own custom pre-set response curve that you've stored in the D•1500's internal memory. This process is simplified with the D•1500 thanks to its large LED display, (which is extremely easy to read in any live sound setting) simple user interface and powerful equalization correction algorithms when connected to a D•2500. In addition to the RTA, the D•1500 includes a Phase correlation meter, VU level meter, and a Signal Generator capable of producing White or Pink Noise as well as a tunable Sine Wave. The D•1500 includes a balanced microphone input, with phantom power, that will work with just about any test measurement microphones, although we recommend a microphone with an extended and linear frequency response such as Samson's MM01 measurement microphone. The D•1500 features standard MIDI implementation or Samson's D•Net, enabling device-to-device linking for creating larger audio systems or interfacing to a personal computer. When linking the units you see the full power of the D•Class system. With a basic MIDI connection, you can have the D•1500 RTA display the fader positions of the D•2500 digital EQ, giving you the power of digital processing with a unique analog feel. For systems using many D•Class units, the D•1500 can be fitted with the DN1 D•Net network card. Samson's D Net is a high-speed communication protocol for connected multiple D•Class units, like the D2500 digital equalizer. In addition to being 10 times faster than MIDI, the error rate is so close to zero, it's difficult to measure. All settings and parameters can be stored in any of the 99 user-preset locations providing instant recall of your favorite setups. Like all D•Class models, the D•1500 features an advanced 32-bit point floating processor

DSP interface to high quality converters with 24-bit audio resolution and sample rates up to 96kHz for pristine audio quality. You can even upgrade your D•Class units to premium Analog-to-Digital and Digital-to-Analog I/O (Input/Output) converter boards, keeping your D•Class system up to date with the best technology, and sound, far onto the future.

### FEATURES

- > 31-band, Digital Real Time Analyzer accurately measures the frequency response of any sound system.
- > Large frequency LED display plus custom, back-lit Liquid Crystal Display for easy readability in any live sound environment.
- > The RTA has adjustable meter Resolution that lets you zoom in and out on your measurement, and adjustable Frequency range for RTA allowing you to make tighter measurements.
- > On-board Phase Correlation meter.
- > The D•1500's display can be converted to a large VU Level meter that simultaneously displays both Peak and VU levels.
- > A comprehensive Signal Generator capable of producing White and Pink Noise, as well as a tunable Sine Wave can be used to flatten a system with a standard analog equalizer, or automatically with the D•2500 digital equalizer.
- > RTA mode lets you see the frequency response of your system in real time.
- > EQ mode configures the LED Meters to display the fader positions of up to 16 connected D•2500 Digital Equalizers.
- > Pristine audio quality thanks to the high quality Analog-to-Digital and Digital-to-Analog I/O audio converter boards with 24-bit resolution and sample rates up to 96kHz.
- > XLR Balanced Microphone Input with phantom power for connecting a measurement microphone.

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PRODUCT SPECIFICATION SHEET

SERIES **D•CLASS** DESCRIPTION **REAL TIME ANALYZER**

CATEGORY **DIGITAL SIGNAL PROCESSING**

**D•1500**

**FEATURES** (continued)

- > Configure larger systems using multiple D•Class units which communicate over standard MIDI, or with Samson's optional high-speed D•Net interface card.
- > A steel and aluminum chassis makes the D•1500 eminently road-worthy.
- > Three year extended warranty.

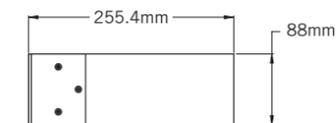
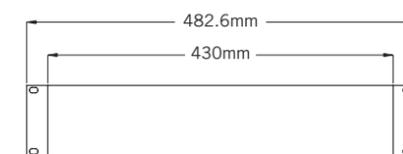
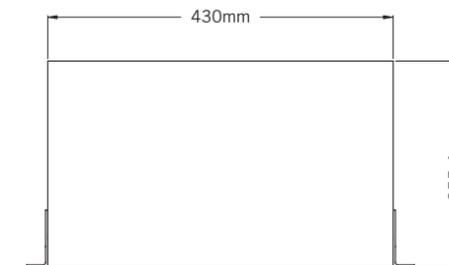
**ARCHITECT'S & ENGINEER'S SPECIFICATIONS**

The D•1500 shall be a 31 band digital real time analyzer for the purpose of analyzing an audio system. It shall have a large LED display to show the levels of the 31 bands of audio frequencies. The D•1500 screen can also become a phase correlation meter or a VU level meter. The D•1500 shall also have a signal generator with the ability to generate white or pink noise or a sine wave. The D•1500 shall have a mic input on the rear panel for the purpose of inputting an analyzing mic to the RTA. It shall also have balanced XLR inputs and outputs so that line level signals can be analyzed. The inputs and outputs shall be on cards so that they can be removed and upgraded. A slot shall also be provided for a D•Net card so that the unit can communicate with other D•Class units at a faster speed than from the included midi connections. There shall be 99 digital memory locations to store and recall user program information. The D•1500 is one of a series of 3 digital processors that can operate separately or together as a single piece of analyzing equipment.

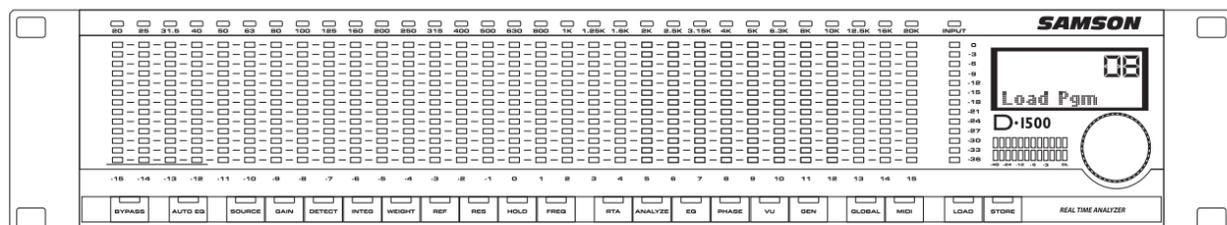
**D1500 SPECIFICATIONS**

- Inputs**  
 Type ..... electronically balanced  
 Connector ..... XLR  
 Impedance ..... 22 kΩ at 1 kHz  
 Max. input level ..... +22  
 AIO1 ..... +14dBu  
 AIO2 ..... +20dBu
- Outputs**  
 Type ..... electronically balanced  
 Connector ..... XLR  
 Impedance ..... 100 Ohms at 1 kHz
- Max. output level**  
 AIO1 ..... +14dBu  
 AIO2 ..... +20dBu
- Frequency Response** ..... 10 Hz to 35 kHz (-1dB)  
 @ 96 kHz sampling rate
- Signal-to-noise-ratio**  
 AIO1  
 Noise floor (unweighted) ..... < -92 dBFS (-78 dBU)  
 Noise floor (A-weighted) ..... < -100 dBFS (-86 dBU)  
 AIO2  
 Noise floor (unweighted) ..... < -106 dBFS (-86 dBU)  
 Noise floor (A-weighted) ..... < -112 dBFS (-92 dBU)
- THD** ..... 0.007 % typ. @ +4 dBu, 1 kHz, unity gain
- Measurement Microphone Input**  
 Type ..... electronically balanced  
 Input impedance ..... 2 kΩ  
 Max. input level (MIC) ..... variable from 0 dB to +60 dB  
 Phantom power ..... +24 V
- Digital Processing**  
 Converter ..... 24-bit Delta-Sigma, 64/128-oversampling
- Sample rate**  
 AIO1 & AIO2 ..... 32, 44.1, 48, 64, 88.2, 96 kHz  
 DIO1 ..... 96 kHz  
 Type ..... digital 31-band FFT analyzer  
 Frequency range ..... 20 Hz to 20 kHz, 31 bands on ISO standard frequencies  
 Detectors ..... Peak and RMS  
 Noise generator ..... White Noise, Pink Noise, Frequency Tunable Sine Wave
- Display**  
 Type ..... 32 Large size 13-segment LED Frequency band, plus LCD for parameter control

- Memory**  
 Presets ..... 100 memory locations, 99 user programable
- Midi interface**  
 Type ..... 5-pin. DIN jacks In/Out/Thru
- Power Supply**  
 Mains voltage ..... 115 V, 60 Hz, 230 V, 50 Hz  
 Power consumption ..... 20 W typ.  
 Fuse ..... T 630mA for 100- 120 Volt / T315mA for 220 - 240 Volt  
 Mains connector ..... Standard IEC receptacle
- Dimensions (W x D x H)** ..... 19" x 10.5" x 3.5"  
 482mm x 267mm x 89mm
- Weight** ..... 5.1 lb.(2.31 kg)



FRONT PANEL



BACK PANEL

