

SERIES SN/SNR



Model SN 488-121

SN are single- or dual-channel digital to analog converters for use with Kepco's analog-programmable power supplies. They provide an optically isolated listen-only control channel that provides a precise 0-10V analog output to drive Kepco's JQE, ATE and similar operationally controlled power supplies. They are available in decimal format (3-digit BCD), or in hexadecimal format (12-bit binary). A single-channel instrument can be converted in the field to a dual-channel model by plugging in auxiliary boards SN 603 or SN 612.

FEATURES

- The SN 488 implements the AH1 acceptor handshake and L1 listener, plus listener-only functions of the IEEE 488 protocol.
- The SN Series incorporate optical isolation (up to 1000 Volts d-c), so they may be used to control floating power supplies.
- The SN 488 offers a choice of single- or dual-channel operation. Each channel is completely isolated from the other so that they can be used to drive independent instruments or two functions of the same instrument, (e.g., voltage setting and current limiting in an ATE power supply). Both channels obtain their data through a single input connector. Addressing is used to select which channel responds.



SN 488 MODEL TABLE

MODEL	NO. CHANNELS	DATA FORMAT	RESOLUTION
SN 488-121	one	hexadecimal	12 bit binary
SN 488-122	two (isolated)	hexadecimal	12 bit binary
SN 488-031	one	decimal	3 digit BCD
SN 488-032	two (isolated)	decimal	3 digit BCD
Field installable add-on channel:			
MODEL	NO. CHANNELS	DATA FORMAT	RESOLUTION
SN 612	1 added channel	hexadecimal	12 bit binary
SN 603	1 added channel	decimal	3 bit BCD
Interconnect cables for use with the IEEE 488 bus:			
MODEL	TYPE	LENGTH	
SNQ 488-1	Cable, printed circuit edge to IEEE 488	1 meter	
SNQ 488-2	Cable, printed circuit edge to IEEE 488	2 meter	
PC 488	Plug, printed circuit edge to IEEE 488	—	

Note: The SNQ cables have an IEEE 488 connector at one end and a printed circuit edge connector at the other end. Model SNQ 488-2 is supplied with each type SN 488 single/dual channel programmer (one cable services both channels). If the PC 488 adapter plug is used, a separate IEEE 488 cable should be ordered.

FEATURES

- Both single- and dual-channel models are stocked; however, a single channel model can be converted to a dual-channel model by the installation of either a Model SN 612 (binary) or a Model SN 603 (BCD) field installable card.
- The SN 488 provides a means of controlling positive or negative polarity. This feature is useful when the SN 488 controls a bipolar power supply such as the Kepco Series BOP.
- The SN 488 provides a means of controlling range over a 10:1 ratio. This is accomplished by a programmable attenuator. The "high" range provides a 0 to $\pm 10V$ analog output; the "low" range provides a 0 to $\pm 1V$ analog output.

SN 488/SNR 488 GENERAL SPECIFICATIONS

SPECIFICATION	MODEL SN 488			
	121	122	031	032
Numbers of channels	1	2	1	2
Input data format	Hexadecimal		Decimal	
Resolution	12 bit binary		3 digit BCD	
Output Voltage	High range	±10V		
	Low range	±1V		
Output Current	±2mA max.			
Output Impedance	<0.05 ohms			
Linearity Error	0 to +70°C ±½ LSB			
Temperature Coefficient	Full scale	±35 PPM/°C max.		
	Zero high range	±20µV/°C max.		
	Zero low range	±10µV/°C max.		
Logic Input	TTL compatible			
Data Transfer Format, (ASCII Coded)	SN 488	Byte serial, Bit parallel		
Interface Functions Implemented, SN 488	AH1, L1			
A-C Input	Voltage	105-125V/210-250V		
	Frequency	50-440Hz		
	Power	≈12VA		
Dimensions (behind panel)	(inches) 5½H x 4½W x 17¼D (mm) 132.6H x 105.6W x 436.6D			
Weight (packed for shipment)	10lbs., 4.6Kg.			
Color	Two tone black and light gray, Fed Std. 26440			
Mounting	¼ rack size:	Use rack adapter RA 24 or RA 37 for mixing with Kepco's power supplies.		

SN PLUG-IN DIGITAL CONTROL CARDS

PLUG-IN CARDS	SN 488-B	SN 488-D
Data Format	Hex	Decimal
Resolution	12 bit	3-digit
Output High	±10V	±10V
Output Low	±1V	±1V

Housings and Accessories

SNR 488-4 Plug-in housing for 4 SN cards

SNR 488-8 Plug-in housing for 8 SN cards

IEEE-488 Cable Assemblies

SNC 488-1 1 meter long

SNC 488-2 2 meter long

SNC 488-4 4 meter long

These are standard GPIB cables with an IEEE-488 connector at both ends.

DIMENSIONS

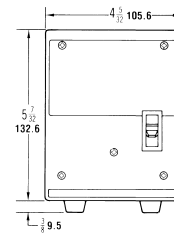
English 5½H x 19W x 17¼D

Metric 132.6mm x 482.4mm x 452.4mm

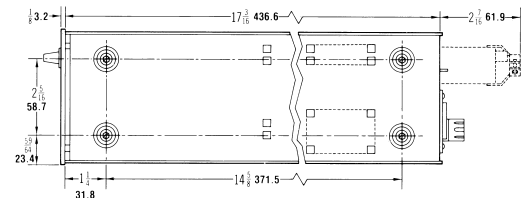
SERIES SN OUTLINE DIMENSIONAL DRAWINGS

Fractional dimensions in light face type are in inches, dimensions in bold face type are in millimeters.

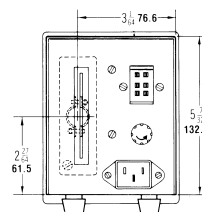
Tolerance: ± 1/64" (0.4) between mounting holes
± 1/32" (0.8) other dimensions



FRONT VIEW



BOTTOM VIEW



REAR VIEW

CE SN and SNR are CE marked per the Low Voltage Directive (LVD), EN61010-1.

