

Kinetic Systems Corporation

Standardized Data Acquisition and Control Systems

3112

8-channel, 12-bit D/A Converter

© 1977, 1987
(Rev. Feb. 87)

FEATURES

- Eight independent analog outputs
- 10 volt output
- 12-bit resolution for each output
- 5 milliamperere drive capability
- 4 microsecond settling time

APPLICATIONS

- Drive panel meters
- Drive strip chart recorders
- Drive x-y recorders
- Provide set point input to servos
- Provide input to programmable power supplies

GENERAL DESCRIPTION

The Model 3112 is a single-width CAMAC module for generating eight output voltages. The standard output is 0 to 10 volts at 5 milliamperere maximum. A 12-bit register is provided for each channel. Strap options are provided so that the output range of each channel can be changed in the field to 0 to +5 volts, ± 10 volts, ± 5 volts, or ± 2.5 volts, independent of the setting of the other channels. The data is two's complementary and right justified (the LSB is written from Dataway line W1). Settling time of the output to within $\frac{1}{2}$ LSB is less than 4 microseconds. The nonlinearity is less than $\pm \frac{1}{2}$ LSB. The output impedance is less than 100 megohms. Adjustments are provided for the zero and gain of each channel.

The outputs are referenced to a common ground (the module ground). In critical applications, these signals should be received by differential input circuits.

On power-up, the data registers are cleared.

FUNCTION CODES

Command	Q	Action
F(16)·A(i) WT1	1	Writes the Data register i.
Z CZ	0	Clears the Data registers.

Notes: i can range from 0 to 7.
X = 1 for all valid addressed commands.

