SYSTEMS ELECTRONICS GROUP

SYSTEMS M4500 INDUSTRIAL CONTROLLER

I4560-DCH: DIGITAL DC INPUT MODULE
16-POINT 10-30VDC SOURCING

- **16 digital 10-30VDC input points**
- **True High (for use with PNP sourcing type device)**
- **Used in conjunction with S4560 Input Board**
- **Removable I4560 interface cable connection**
- **16 individual status LEDs (one per input point)**
- **Inputs individually optically isolated (1500Vrms)**
- **DIN rail mountable external of M4500**

General Description

The I4560-DCH 10-30VDC Input Module, for use with the M4500 series of modules, contains 16 identical solid state input circuits which accept the on/off status of user devices such as push-buttons, limit switches, and proximity sensors. The inputs sense the voltage levels of digital DC input signals, with the devices driving the inputs being defined as sourcing (positive current into the input). When the voltage at the input is high (above the input "on" threshold), the input is read as a "1". When the input is low (approximately zero), the input is read as a "0".

The on/off status of each input is indicated with individual LEDs located on the front of the module. The LEDs provide the status of the actual input points (field side) rather than the internal logic status. Input and user power wiring is implemented with a removable 18-pin field wiring connector which allows easy module replacement.

Two I4560-DCH modules interface with one S4560 board. The I4560-DCHs are mounted within close proximity of the M4500 module which contains the S4560. Connection between the I4560-DCHs and the S4560 is achieved using a split, round, shielded, ribbon cable.

Installation

The I4560-DCH is mounted on DIN compatible mounting channel. To mount the I4560-DCH, align the mounting feet with the channel and snap into position. To remove the I4560-DCH, pry the mounting feet back from the channel one at a time using a screw driver. Field wiring is implemented using a removable 18-pin connector mounted on the I4560-DCH. Refer to figure 1 and 2 for the typical user wiring.

The I4560-DCH is connected to the S4560 it interfaces to using a split, round, shielded, ribbon cable. To make this connection, perform the following:

With power "off" to the M4500 that the I4560-DCH will be connected to, install one of the 26-pin ribbon cables from the S4560 to the I4560-DCH ribbon cable connector. The ribbon cable connectors are polarized and therefore can only be installed one way. Also when installing the connectors, the ejector latches will lock the ribbon cable connectors into the connector on the I4560-DCH.

To disconnect the ribbon cable from the I4560-DCH, pull the ejector levers away from the ribbon connector and the cable will eject out of the connector.

Specifications

Module Size:	
Length:	4.50"
Height:	2.25"
Width:	3.00
Number of Inputs:	16
Input Voltage:	
Vin (on-min):	10.0 volts
Vin (on-max):	30.0 volts
Vin (off-min):	5.0 volts
Input Current (max):	15 milliamps at Vin=30volts
Optical Isolation:	1500 Vrms
Power Requirements:	
Icc (typ – M4500 bus)	16 milliamps
Temperature Ranges:	
Storage:	0 to 85 degrees C
Operating:	0 to 60 degrees C
Relative Humidity:	5 to 95% non-condensing

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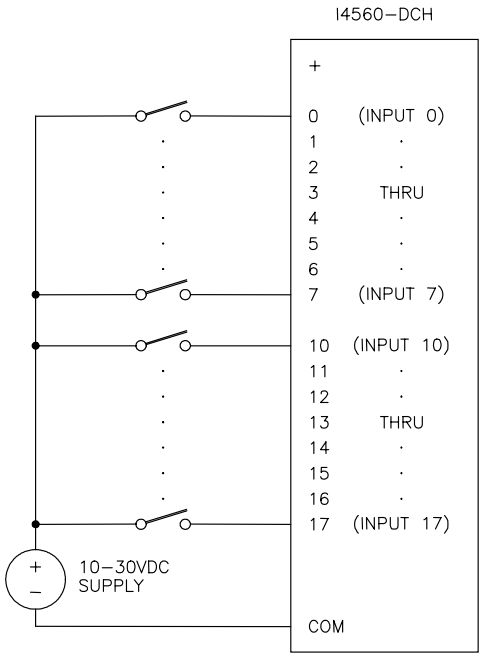

Figure 1
Typical User Wiring

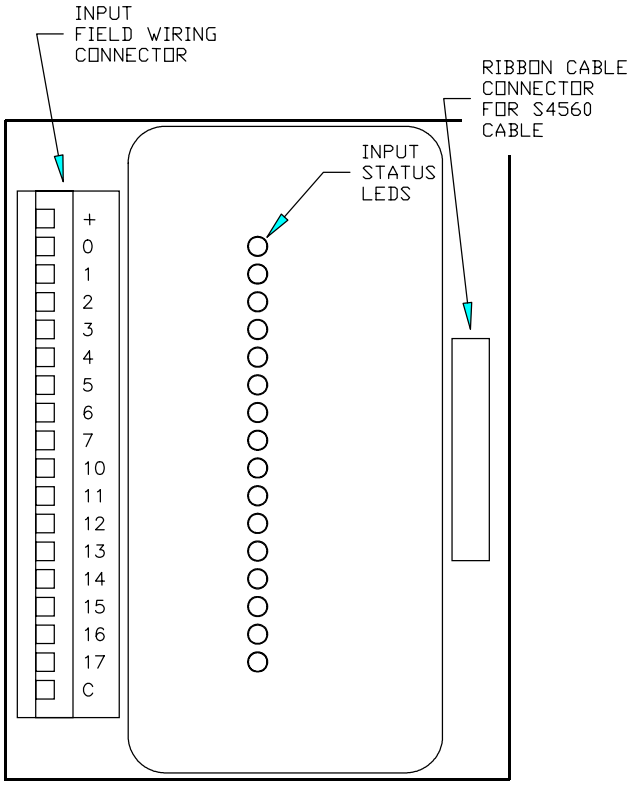

Figure 2
Module Outline

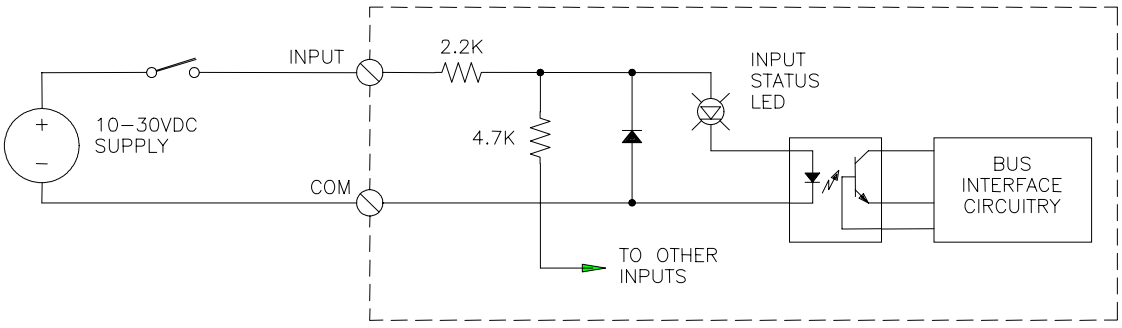

Figure 3
Typical Input Circuit