SuperSystems incorporated

# Matrix Modules

# HARDWARE MANUAL

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# Contents

Overview: ..... 4
Conformity Information ..... 5
Backplane Connection ..... 6
DIP Switch Configuration ..... 6
Terminal Connectors ..... 6
Basic Maintenance ..... 7
13701 – 4-Analog Input Module ..... 8
Attributes ..... 8
Diagrams ..... 9
13702 – 4-Analog Output Module ..... 10
Attributes ..... 10
Diagrams ..... 11
13703 – 12-Digital Input Module ..... 12
Attributes ..... 12
Diagrams ..... 13
13704 – 12-Digital Output Module ..... 14
Attributes ..... 14
Diagrams ..... 15
13705 – Main Controller ..... 16
Attributes ..... 16
Diagrams ..... 17
13707 – Remote Module ..... 18
Attributes ..... 18
Diagrams ..... 18
13708 – Analog 3-Input 2-Output Module ..... 19
Attributes ..... 19
Diagrams ..... 20
13709 – Digital 4-Input 8-Output Module ..... 21
Attributes ..... 21
Diagrams ..... 22
13750 – 12-Output Relay Module ..... 23
Attributes ..... 23

Diagrams ..... 24
13751 12 ISO input ..... 25
Attributes ..... 25
Diagrams ..... 26
Warranty ..... 27
Revision History ..... 28

## Overview:

The Matrix Series Controller provides a flexible platform for meeting a large variety of control applications. The expandable I/O for analog and digital cards allows for right-sizing an application. The instrument has all the built-in features for sophisticated thermal processing applications, includes a customizable HMI allowing the right interface to be created for the application, and it includes built-in data logging.

The modules are designed for:

- Indoor use
- Altitude up to 2000m
- Temperatures 5˚C - 40˚C
- Maximum relative humidity 80% for temperatures up to 31˚C, decreasing linearly to 50% relative humidity at 40˚C
- Overvoltage category I
- Pollution degree 2

The modules are to be assembled on DIN rail inside a NEMA-12 or better enclosure.

The modules are classified as OPEN EQUIPMENT as per IEC/UL/CSA 61010-2-201. Enclosure must be provided by the user.

If this equipment is used in a manner not specified by SSi, the protection provided by the equipment may be impaired.

Conformity Information

The modules have been tested to the following standards…

- Standard for Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use; Part 1: General Requirements:
  - IEC 61010-1:2010
  - EN 61010-1:2010 + Corrigendum 1: 2011
  - UL 61010-1, 3rd Edition with revisions through May 11, 2012
  - CAN/CSA-C22.2 No. 61010-1-12 Third Edition
- Standard for Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use; Part 2-201: Particular Requirements for Control Equipment:
  - IEC 61010-1:2017
  - EN61010-2-201:2017
  - UL61010-2-201, Second Edition 05/14/2018
  - CAN/CSA-C22.2 NO. 61010-2-201:18

…under the following Conditions of Acceptability:

- The modules are evaluated in conjunction with the main controller.
- The total configurations of the backplane system shall not exceed One Main Controller (13705), 24 analog inputs, 16 analog outputs, 32 digital inputs, and 64 digital outputs.
- Equipment is only to be installed by trained personal in accordance with the relevant national and regional electrical codes.
- The controllers are "open type" according to IEC 61010-2-201:2017. Therefore, the controller shall be installed within a NEMA 12 enclosure which provides the safety aspects protecting the operator from mechanical and electrical hazards and shall be accessible only by authorized personnel. This metal enclosure is required to serve as fire enclosure. Requirements for mechanical strength, flammability and stability of the modules must be considered in the end use application in conjunction with the overall enclosure.
- Equipment has only been tested for electrical safety. No evaluation of functional safety and performance characteristics have been performed.
- System is required to be supplied only by certified Safety Extra Low Voltage (SELV) power supply providing reinforced or double insulation for protection against electric shock with output voltages below 30 V r.m.s. and 42.4 V peak or 60 Vdc, per clause 6.3.1 of IEC/EN/UL/CSA 61010-1.
- All output circuits are considered as not hazardous live.
- Wiring for SELV circuits shall be either segregated from the wiring for circuits other than SELV, or the insulation of all conductors shall be rated for the higher voltage.
- Disconnection means to be provided by end user.

Backplane Connection

The five contacts on the back of the card supply communications and power to the module. Figure 1 shows the contacts layout of the modules.

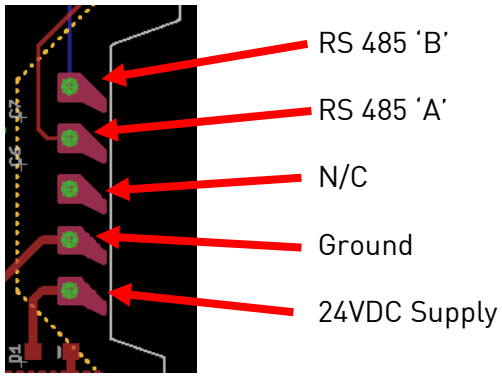



Figure 1- Contacts Layout

The modules will function with a supply voltage between 10.8 VDC and 26.4 VDC, with a nominal voltage of 24.0 VDC. The communications bus conforms to the RS 485 electrical standard, and should not exceed -7 VDC or 12VDC.

DIP Switch Configuration

Figure 2 – DIP Switches

On the front of the module, there is an eight-position DIP switch used to set the individual address of the module within a greater system setup. Addresses are set in a binary fashion, with the position 1 switch being the least significant bit, and the position 8 switch being the most significant bit.

It can take approximately one minute from insertion until a module is recognized by the base controller module, communications are established, and inclusion in the system occurs.

Terminal Connectors

Each signal input has two pairs of contacts utilizing a four contact Phoenix Contact screw terminal connector featuring a 5mm pitch. These connectors are rated to accept at maximum 14 AWG and a minimum 18 AWG wire.

Figure 3 - Terminal Connections

Basic Maintenance

Be sure all equipment is in a safe state and disconnected before servicing.

All personnel working with this device require:

- Training in arc flash prevention
- Knowledge of the system in which the device is installed
- Knowledge of applicable lock out/tag out procedures

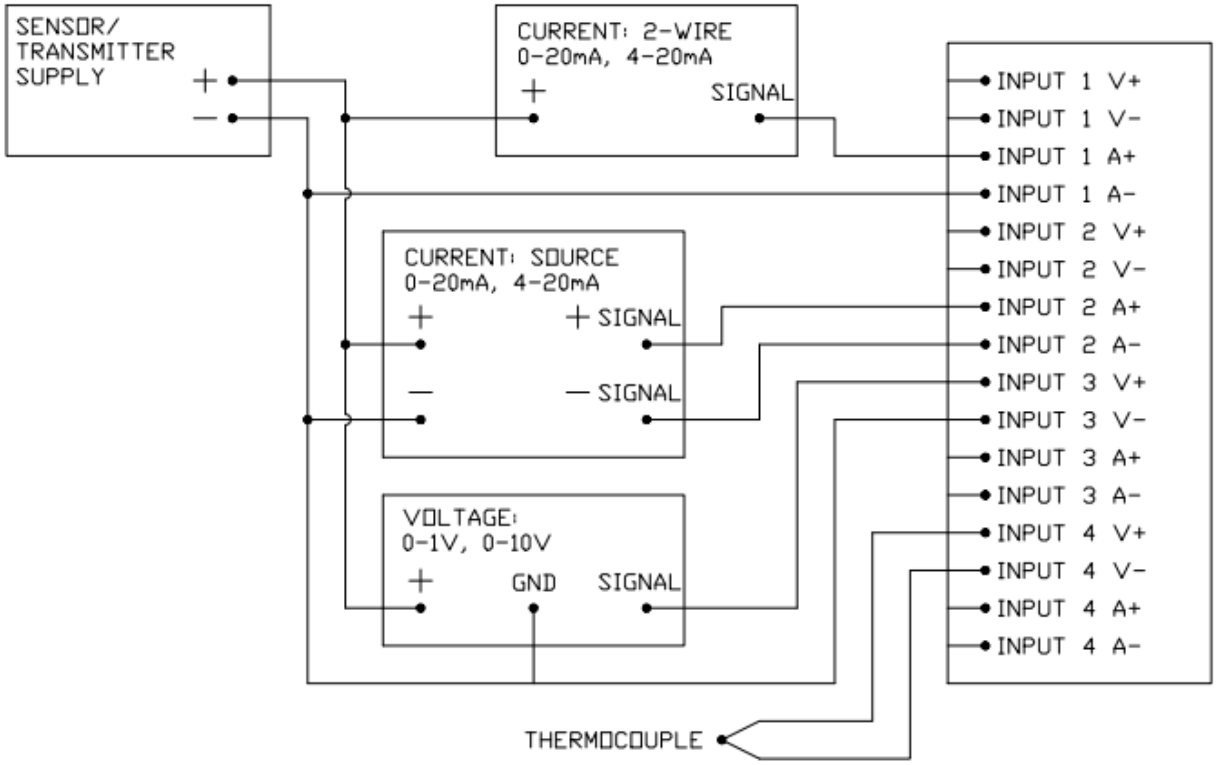
Please contact SSi with any maintenance questions.

## 13701 – 4-Analog Input Module

Attributes

| | |
|---|---|
| Inputs | 4 |
| Input ranges | 20 mV<br>40 mV<br>80 mV<br>160 mV<br>312.5 mV<br>625 mV<br>1.250 V<br>2.500 V<br>12.50 V<br>25.00 V<br>0-20 mA<br>4-20 mA |
| Thermocouple types | B<br>C<br>E<br>J<br>K<br>N<br>M<br>R<br>S<br>T<br>D<br>G<br>P |
| Resolution | 24 bits |
| Working voltage | 24 VDC |
| Current draw @ 24 VDC | 55mA |
| Input impedance | Current terminals: 62Ω<br>Voltage terminals (12.5V and 25V ranges): 20 kΩ<br>Voltage terminals (all other): > 40 mΩ |
| TC accuracy | +/- 2.0°F (1.1°C) or 0.2% of temp reading,<br>(whichever is greater) |
| Isolation voltage | 1000V |
| Dimension | 4.25" x 0.9" x 4.5"<br>(99mm x 22.5mm x 114.5mm) |
| Slot width | 1 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 - 0.6 N |

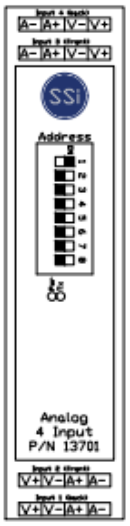
Diagrams

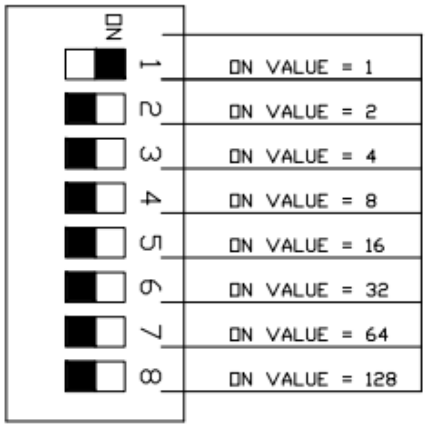



*NOTE: FOR 0-10V SIGNALS, INPUT MUST BE CONFIGURED FIRST*

INDICATES DIP SWITCH POSITION →

Analog Input Addresses Start at 1



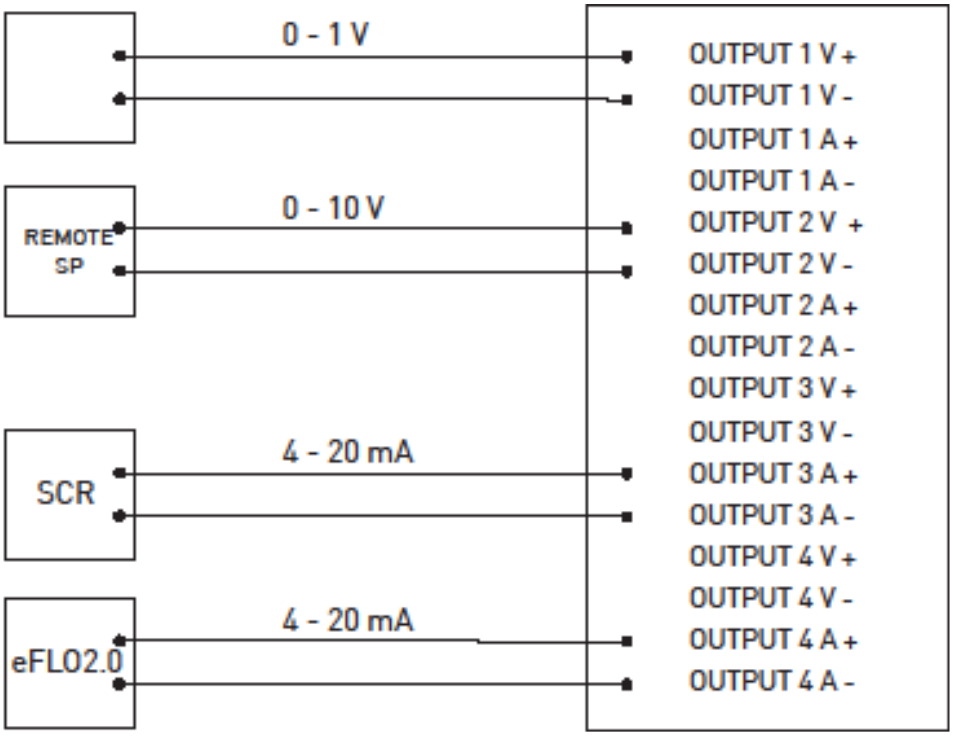

| | ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|---|
| Pwr | POWER | GREEN | INDICATES PROPER POWER VIA THE BACKPLANE |
| Tx | COMMS | AMBER | INDICATES COMMUNICATION VIA THE BACKPLANE |

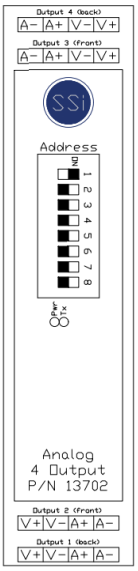
## 13702 – 4-Analog Output Module

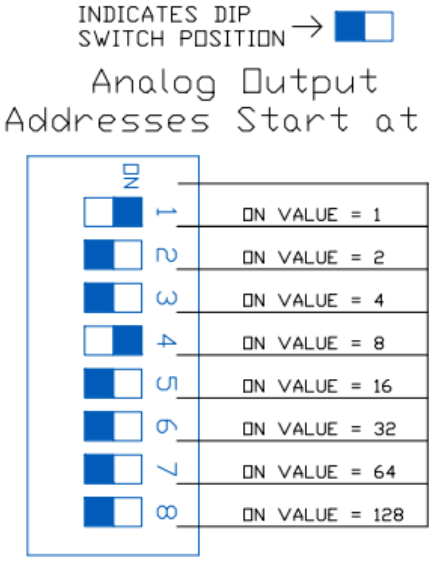
Attributes

| | |
|---|---|
| Outputs | 4 |
| Output Ranges | 4 – 20 mA<br>0 – 1 V<br>0 – 10 V |
| Resolution | 16 bit |
| Working voltage | 24 VDC |
| Current Draw @ 24 VDC | 155 mA |
| Dimension | 4.25" x 0.9" x 4.5"<br>(99mm x 22.5mm x 114.5mm) |
| Slot width | 1 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 – 0.6 N |

Diagrams



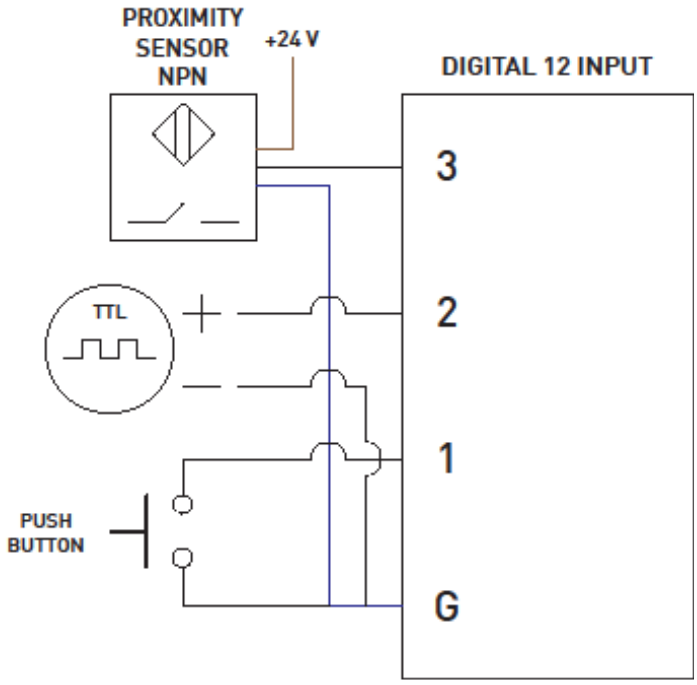

| | ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|---|
| Pwr | POWER | GREEN | INDICATES PROPER POWER VIA THE BACKPLANE |
| Tx | COMMS | AMBER | INDICATES COMMUNICATION VIA THE BACKPLANE |

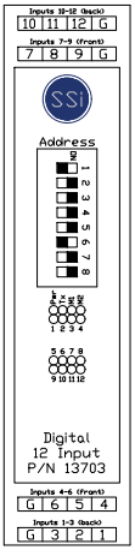
## 13703 – 12-Digital Input Module

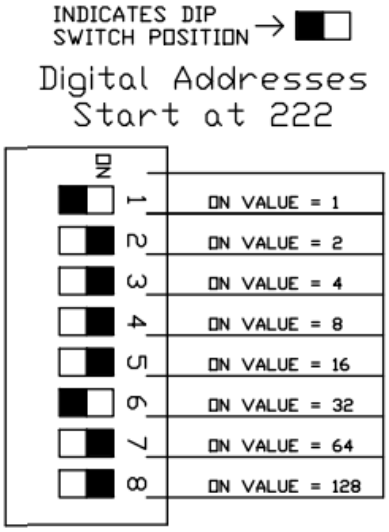
Attributes

| | |
|---|---|
| Inputs | 12 |
| Transistor type | NPN |
| Working voltage | 24 VDC |
| Current Draw @ 24 VDC | 35 mA |
| Dimension | 4.25" x 0.9" x 4.5"<br>(99mm x 22.5mm x 114.5mm) |
| Slot width | 1 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 – 0.6 N |

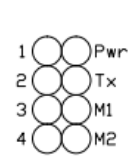
Diagrams



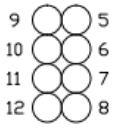




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL INPUT 1 | GREEN | INDICATES INPUT 1 IS ACTIVE |
| DIGITAL INPUT 2 | GREEN | INDICATES INPUT 2 IS ACTIVE |
| DIGITAL INPUT 3 | GREEN | INDICATES INPUT 3 IS ACTIVE |
| DIGITAL INPUT 4 | GREEN | INDICATES INPUT 4 IS ACTIVE |




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| POWER | GREEN | INDICATES PROPER POWER VIA THE BACKPLANE |
| COMMS | AMBER | INDICATES COMMUNICATION VIA THE BACKPLANE |
| MODE 1 | GREEN | NO CURRENT USE |
| MODE 2 | GREEN | NO CURRENT USE |

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL INPUT 9 | GREEN | INDICATES INPUT 9 IS ACTIVE |
| DIGITAL INPUT 10 | GREEN | INDICATES INPUT 10 IS ACTIVE |
| DIGITAL INPUT 11 | GREEN | INDICATES INPUT 11 IS ACTIVE |
| DIGITAL INPUT 12 | GREEN | INDICATES INPUT 12 IS ACTIVE |



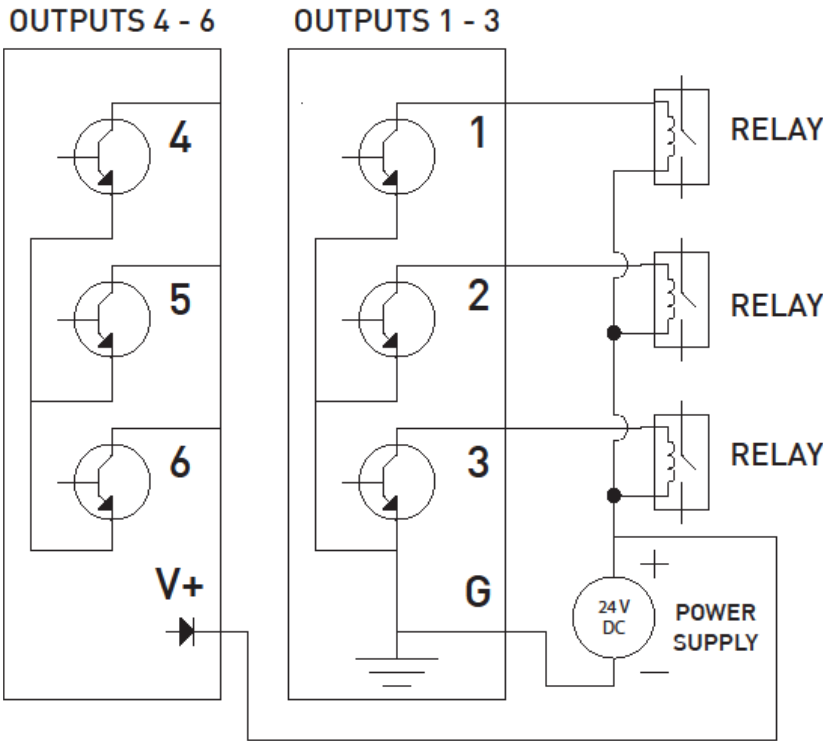

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL INPUT 5 | GREEN | INDICATES INPUT 5 IS ACTIVE |
| DIGITAL INPUT 6 | GREEN | INDICATES INPUT 6 IS ACTIVE |
| DIGITAL INPUT 7 | GREEN | INDICATES INPUT 7 IS ACTIVE |
| DIGITAL INPUT 8 | GREEN | INDICATES INPUT 8 IS ACTIVE |

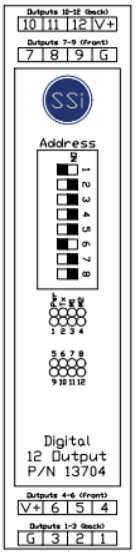
## 13704 – 12-Digital Output Module

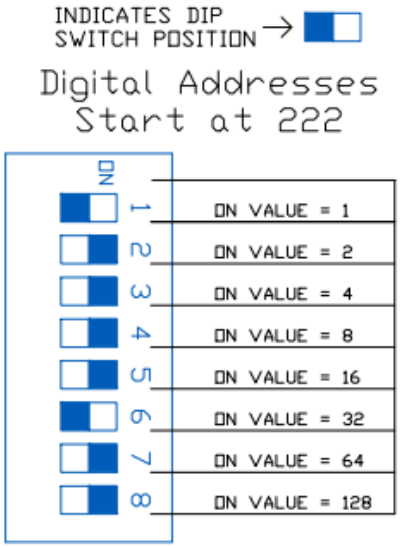
Attributes

| | |
|---|---|
| Outputs | 12 |
| Transistor type | NPN |
| Working voltage | 24 VDC |
| Current Draw @ 24 VDC | 40 mA |
| Dimension | 4.25" x 0.9" x 4.5"<br>(99mm x 22.5mm x 114.5mm) |
| Slot width | 1 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 – 0.6 N |

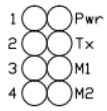
Diagrams



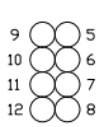




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL OUTPUT 1 | GREEN | INDICATES OUTPUT 1 IS ACTIVE |
| DIGITAL OUTPUT 2 | GREEN | INDICATES OUTPUT 2 IS ACTIVE |
| DIGITAL OUTPUT 3 | GREEN | INDICATES OUTPUT 3 IS ACTIVE |
| DIGITAL OUTPUT 4 | GREEN | INDICATES OUTPUT 4 IS ACTIVE |




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| POWER | GREEN | INDICATES PROPER POWER VIA THE BACKPLANE |
| COMMS | AMBER | INDICATES COMMUNICATION VIA THE BACKPLANE |
| MODE 1 | GREEN | NO CURRENT USE |
| MODE 2 | GREEN | NO CURRENT USE |

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL OUTPUT 9 | GREEN | INDICATES OUTPUT 9 IS ACTIVE |
| DIGITAL OUTPUT 10 | GREEN | INDICATES OUTPUT 10 IS ACTIVE |
| DIGITAL OUTPUT 11 | GREEN | INDICATES OUTPUT 11 IS ACTIVE |
| DIGITAL OUTPUT 12 | GREEN | INDICATES OUTPUT 12 IS ACTIVE |



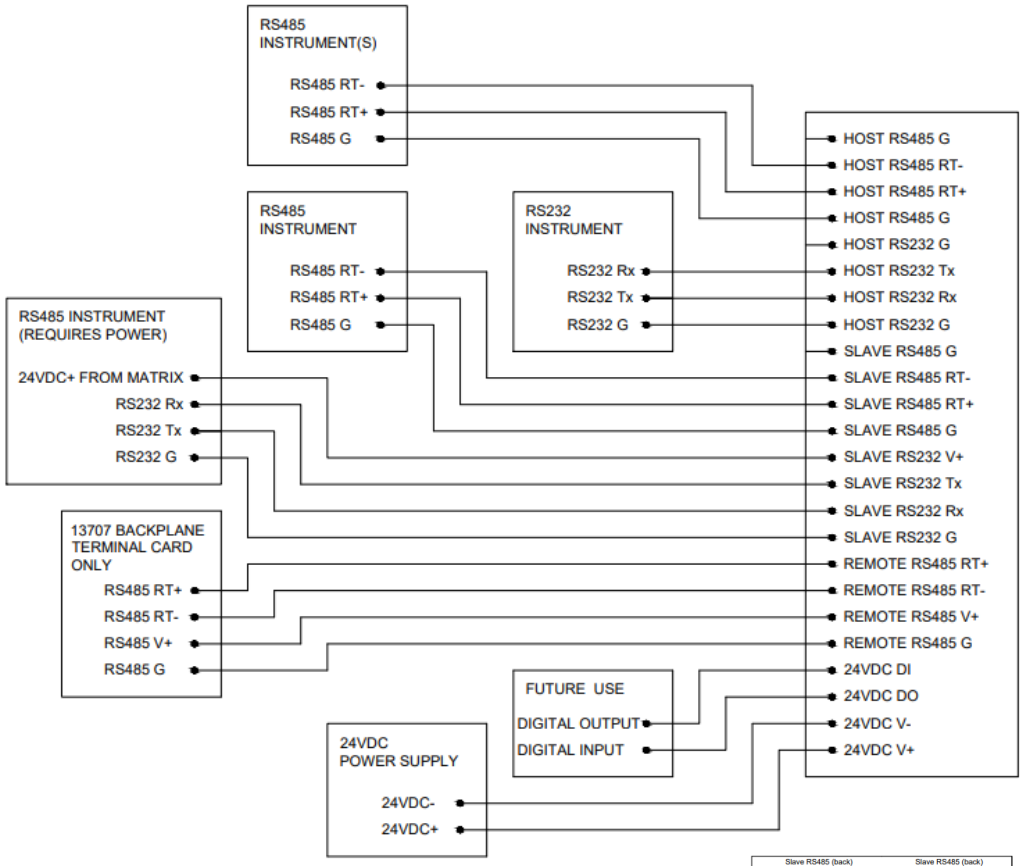

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL OUTPUT 5 | GREEN | INDICATES OUTPUT 5 IS ACTIVE |
| DIGITAL OUTPUT 6 | GREEN | INDICATES OUTPUT 6 IS ACTIVE |
| DIGITAL OUTPUT 7 | GREEN | INDICATES OUTPUT 7 IS ACTIVE |
| DIGITAL OUTPUT 8 | GREEN | INDICATES OUTPUT 8 IS ACTIVE |

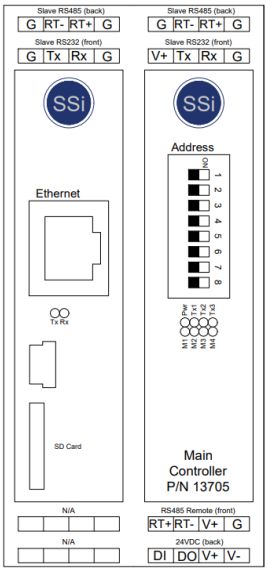
## 13705 – Main Controller

Attributes

| | |
|---|---|
| Communication | RS-232<br>RS-485<br>Modbus TCP<br>Mini USB |
| Output | 24 VDC+ |
| Capacity | 16 Matrix Cards + Main Communications Module + Backplane Modules |
| Storage | SD Card |
| Working voltage | 24 VDC |
| Current Draw @ 24 VDC | 93 mA |
| Dimension | 4.25" x 1.8" x 4.5"<br>(99mm x 45mm x 114.5mm) |
| Slot width | 2 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 – 0.6 N |

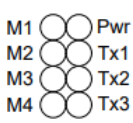
## Diagrams




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| COMMS | AMBER | INDICATES COMMUNICATION TALKING TO USB |
| COMMS | AMBER | INDICATES COMMUNICATION READING FROM USB |

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| MODE 1 | GREEN | NO CURRENT USE |
| MODE 2 | GREEN | NO CURRENT USE |
| MODE 3 | GREEN | NO CURRENT USE |
| MODE 4 | GREEN | NO CURRENT USE |



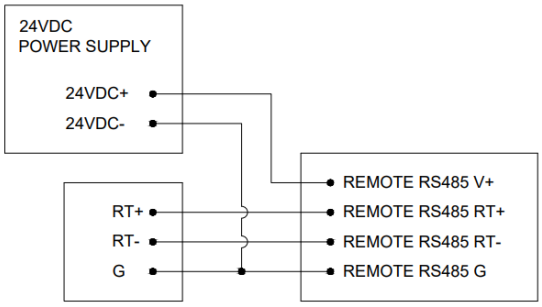

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| POWER | GREEN | INDICATES PROPER POWER TO MAIN MODULE |
| COMMS | AMBER | INDICATES COMMUNICATION VIA BACKPLANE |
| COMMS | AMBER | INDICATES COMMUNICATION TO AUXILIARY DEVICE |
| COMMS | AMBER | INDICATES COMMUNICATION TO AUXILIARY DEVICE |

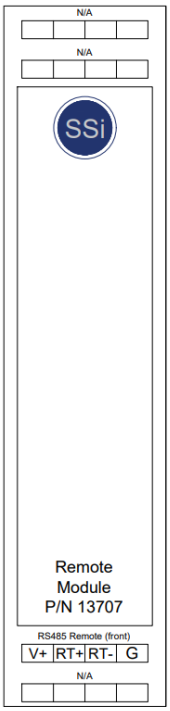
## 13707 – Remote Module

Attributes

| | |
|---|---|
| Communication | RS-485 to Main Communications Module<br>RS-485 via backplane |
| Working voltage | 24 VDC |
| Current Draw @ 24 VDC | 0 mA |
| Dimension | 4.25" x .9" x 4.5"<br>(99mm x 22.5mm x 114.5mm) |
| Slot width | 1 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 – 0.6 N |

Diagrams



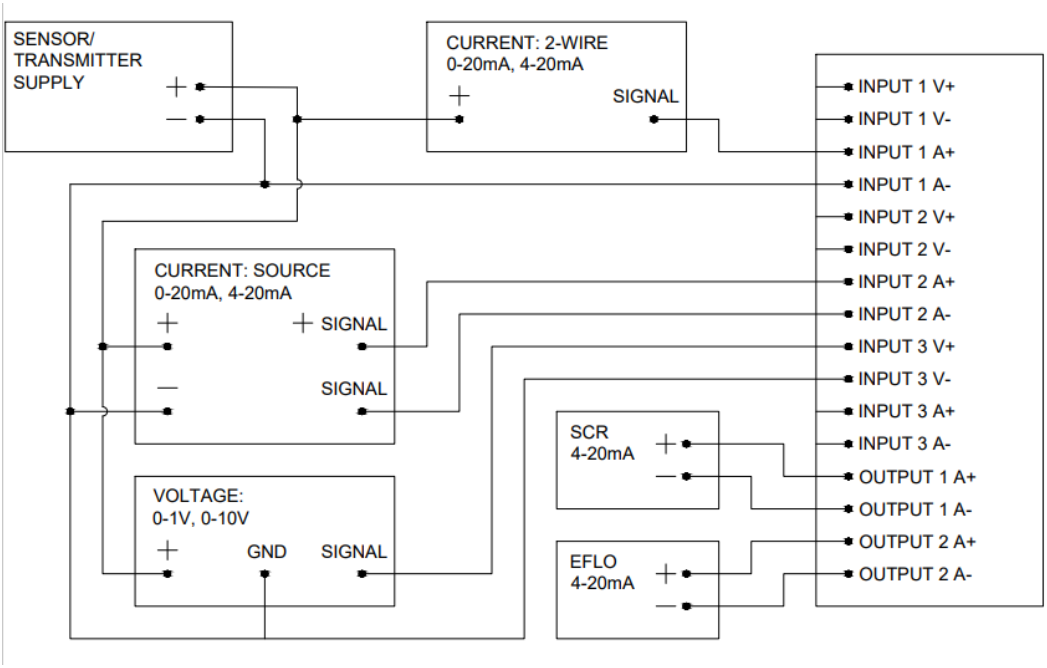



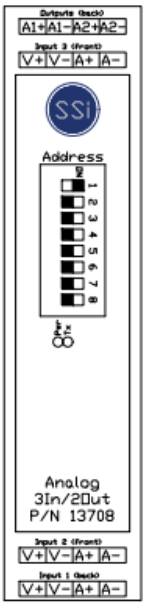
## 13708 – Analog 3-Input 2-Output Module

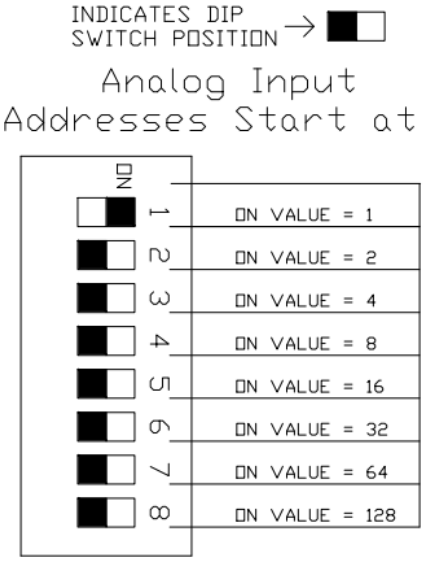
Attributes

| | |
|---|---|
| **Analog Inputs** | 3 |
| Input ranges | 20 mV<br>40 mV<br>80 mV<br>160 mV<br>312.5 mV<br>625 mV<br>1.250 V<br>2.500 V<br>12.50 V<br>25.00 V<br>0-20 mA<br>4-20 mA |
| Thermocouple types | B<br>C<br>E<br>J<br>K<br>N<br>M<br>R<br>S<br>T<br>D<br>G<br>P |
| Input Resolution | 24 bits |
| Input impedance | Current terminals: 62Ω<br>Voltage terminals (12.5V and 25V ranges): 20 kΩ<br>Voltage terminals (all other): > 40 mΩ |
| TC accuracy | +/- 2.0°F (1.1°C) or 0.2% of temp reading, (whichever is greater) |
| Isolation voltage | 1000V |
| Analog Outputs | 2 |
| Output Ranges | 4 – 20 mA |
| Resolution | 16 bit |
| Working voltage | 24 VDC |
| Max Current Draw @ 24 VDC | 80 mA |
| Dimension | 4.25" x 0.9" x 4.5"<br>(99mm x 22.5mm x 114.5mm) |
| Slot width | 1 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 – 0.6 N |

## Diagrams



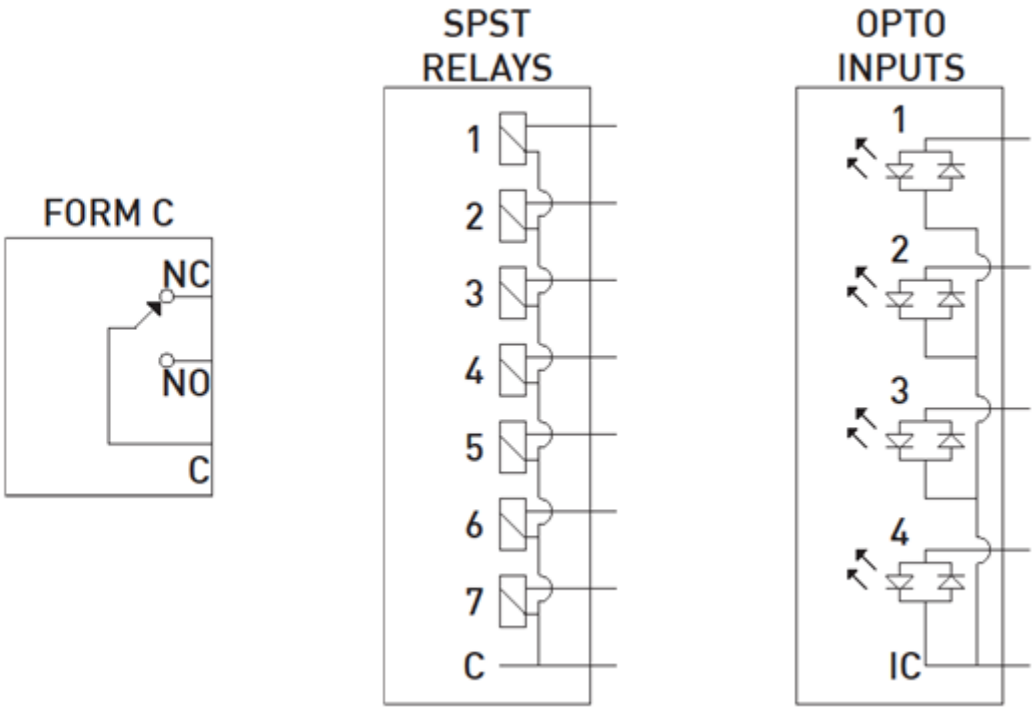

| | ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|---|
| Pwr | POWER | GREEN | INDICATES PROPER POWER VIA THE BACKPLANE |
| Tx | COMMS | AMBER | INDICATES COMMUNICATION VIA THE BACKPLANE |

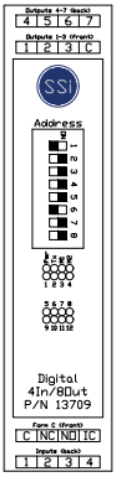
## 13709 – Digital 4-Input 8-Output Module

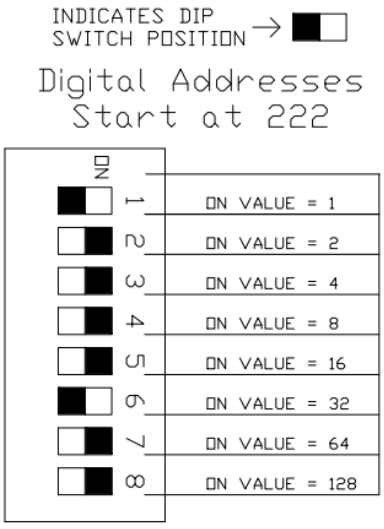
Attributes

| | |
|---|---|
| Digital Inputs (OPTO ISO) | 4 |
| Input Isolation | 2.5k VRMS |
| Relay Outputs | 8 |
| Max Output Switching voltage | 125 VDC |
| Relay Contact rating | 5 A |
| Working voltage | 24 VDC |
| Current Draw @ 24 VDC | 120mA |
| Dimension | 4.25" x 0.9" x 4.5"<br>(99mm x 22.5mm x 114.5mm) |
| Slot width | 1 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 – 0.6 N |

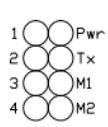
Diagrams



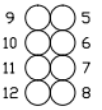




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL INPUT 1 | GREEN | INDICATES INPUT 1 IS ACTIVE |
| DIGITAL INPUT 2 | GREEN | INDICATES INPUT 2 IS ACTIVE |
| DIGITAL INPUT 3 | GREEN | INDICATES INPUT 3 IS ACTIVE |
| DIGITAL INPUT 4 | GREEN | INDICATES INPUT 4 IS ACTIVE |




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| POWER | GREEN | INDICATES PROPER POWER VIA THE BACKPLANE |
| COMMS | AMBER | INDICATES COMMUNICATION VIA THE BACKPLANE |
| MODE 1 | GREEN | NO CURRENT USE |
| MODE 2 | GREEN | NO CURRENT USE |

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL OUTPUT 5 | GREEN | INDICATES OUTPUT 5 IS ACTIVE |
| DIGITAL OUTPUT 6 | GREEN | INDICATES OUTPUT 6 IS ACTIVE |
| DIGITAL OUTPUT 7 | GREEN | INDICATES OUTPUT 7 IS ACTIVE |
| DIGITAL OUTPUT 8 | GREEN | INDICATES OUTPUT 8 IS ACTIVE |



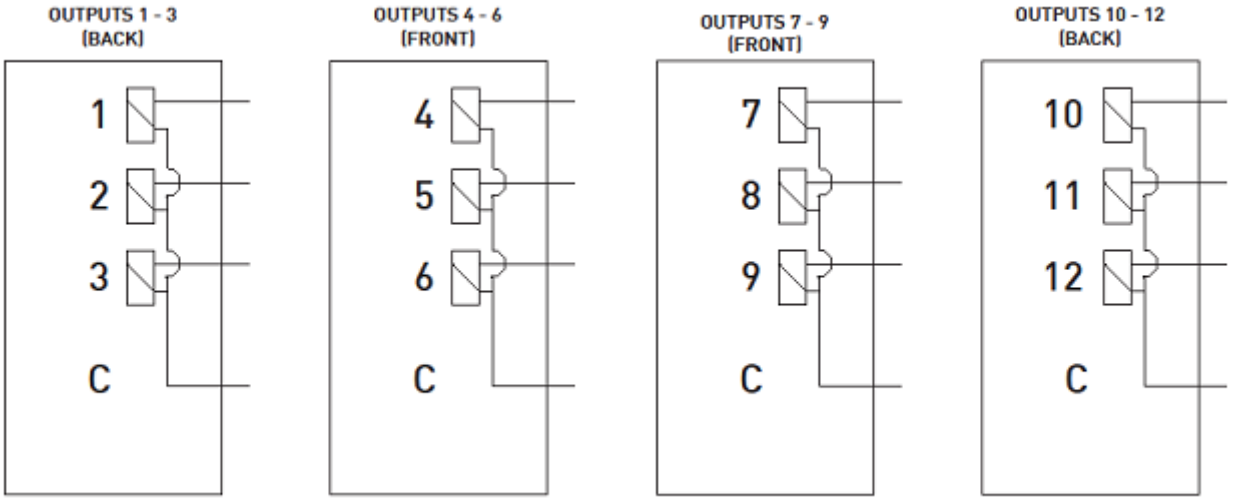

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL OUTPUT 1 | GREEN | INDICATES OUTPUT 1 IS ACTIVE |
| DIGITAL OUTPUT 2 | GREEN | INDICATES OUTPUT 2 IS ACTIVE |
| DIGITAL OUTPUT 3 | GREEN | INDICATES OUTPUT 3 IS ACTIVE |
| DIGITAL OUTPUT 4 | GREEN | INDICATES OUTPUT 4 IS ACTIVE |

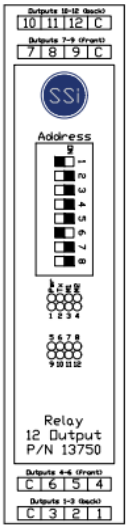
## 13750 – 12-Output Relay Module

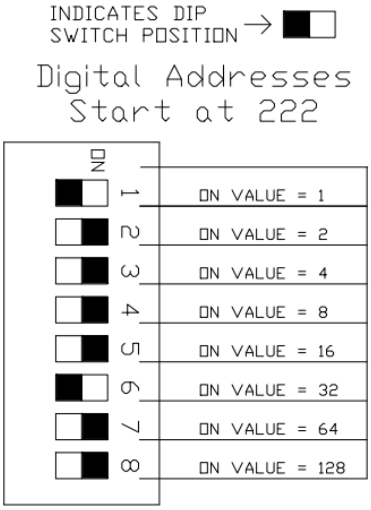
Attributes

| | |
|---|---|
| Relay Outputs | 12 |
| Max Output Switching voltage | 125 VDC |
| Relay Contact rating | 5 A |
| Working voltage | 24 VDC |
| Current Draw @ 24 VDC | 130 mA |
| Dimension | 4.25" x 0.9" x 4.5"<br>(99mm x 22.5mm x 114.5mm) |
| Slot width | 1 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 – 0.6 N |

## Diagrams



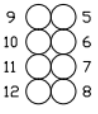




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL OUTPUT 1 | GREEN | INDICATES OUTPUT 1 IS ACTIVE |
| DIGITAL OUTPUT 2 | GREEN | INDICATES OUTPUT 2 IS ACTIVE |
| DIGITAL OUTPUT 3 | GREEN | INDICATES OUTPUT 3 IS ACTIVE |
| DIGITAL OUTPUT 4 | GREEN | INDICATES OUTPUT 4 IS ACTIVE |




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| POWER | GREEN | INDICATES PROPER POWER VIA THE BACKPLANE |
| COMMS | AMBER | INDICATES COMMUNICATION VIA THE BACKPLANE |
| MODE 1 | GREEN | NO CURRENT USE |
| MODE 2 | GREEN | NO CURRENT USE |

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL OUTPUT 9 | GREEN | INDICATES OUTPUT 9 IS ACTIVE |
| DIGITAL OUTPUT 10 | GREEN | INDICATES OUTPUT 10 IS ACTIVE |
| DIGITAL OUTPUT 11 | GREEN | INDICATES OUTPUT 11 IS ACTIVE |
| DIGITAL OUTPUT 12 | GREEN | INDICATES OUTPUT 12 IS ACTIVE |



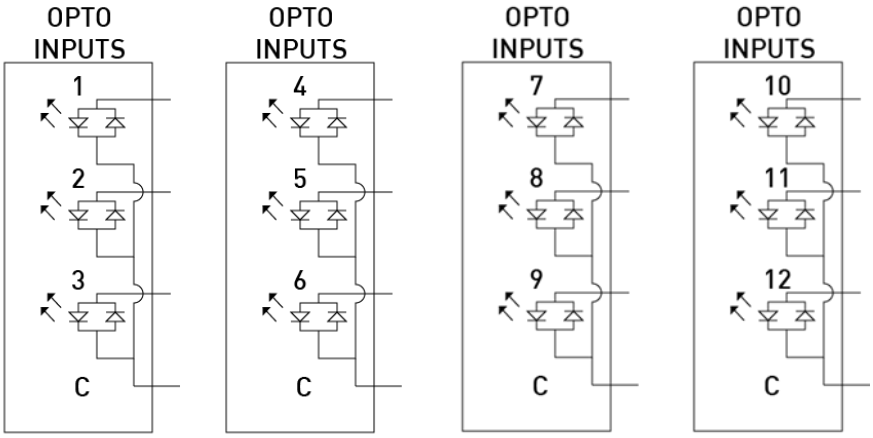

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL OUTPUT 5 | GREEN | INDICATES OUTPUT 5 IS ACTIVE |
| DIGITAL OUTPUT 6 | GREEN | INDICATES OUTPUT 6 IS ACTIVE |
| DIGITAL OUTPUT 7 | GREEN | INDICATES OUTPUT 7 IS ACTIVE |
| DIGITAL OUTPUT 8 | GREEN | INDICATES OUTPUT 8 IS ACTIVE |

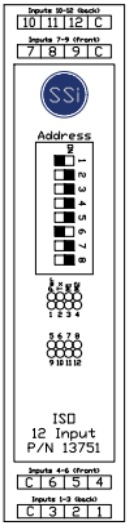
## 13751 12 ISO input

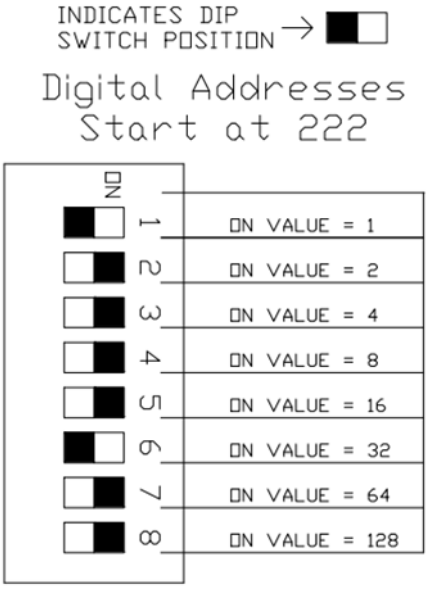
Attributes

| | |
|---|---|
| Inputs | 12 |
| Input type | Opto isolator |
| Input isolation | 2.5k VRMS |
| Working voltage | 24VDC – 120VAC |
| Current Draw @ 24 VDC | 54mA |
| Dimension | 4.25" x 0.9" x 4.5"<br>(99mm x 22.5mm x 114.5mm) |
| Slot width | 1 |
| Module location | DIN rail |
| Terminal Type | 5mm pitch |
| Terminal Screw Torque | 0.5 – 0.6 N |

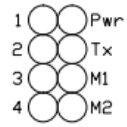
Diagrams



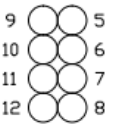




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL INPUT 1 | GREEN | INDICATES INPUT 1 IS ACTIVE |
| DIGITAL INPUT 2 | GREEN | INDICATES INPUT 2 IS ACTIVE |
| DIGITAL INPUT 3 | GREEN | INDICATES INPUT 3 IS ACTIVE |
| DIGITAL INPUT 4 | GREEN | INDICATES INPUT 4 IS ACTIVE |




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| POWER | GREEN | INDICATES PROPER POWER VIA THE BACKPLANE |
| COMMS | AMBER | INDICATES COMMUNICATION VIA THE BACKPLANE |
| MODE 1 | GREEN | NO CURRENT USE |
| MODE 2 | GREEN | NO CURRENT USE |

| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL INPUT 9 | GREEN | INDICATES INPUT 9 IS ACTIVE |
| DIGITAL INPUT 10 | GREEN | INDICATES INPUT 10 IS ACTIVE |
| DIGITAL INPUT 11 | GREEN | INDICATES INPUT 11 IS ACTIVE |
| DIGITAL INPUT 12 | GREEN | INDICATES INPUT 12 IS ACTIVE |




| ATTRIBUTE | COLOR | PURPOSE |
|---|---|---|
| DIGITAL INPUT 5 | GREEN | INDICATES INPUT 5 IS ACTIVE |
| DIGITAL INPUT 6 | GREEN | INDICATES INPUT 6 IS ACTIVE |
| DIGITAL INPUT 7 | GREEN | INDICATES INPUT 7 IS ACTIVE |
| DIGITAL INPUT 8 | GREEN | INDICATES INPUT 8 IS ACTIVE |

## Warranty

*Limited Warranty for Super Systems Products:*

The Limited Warranty applies to new Super Systems Inc. (SSI) products purchased direct from SSI or from an authorized SSI dealer by the original purchaser for normal use. SSI warrants that a covered product is free from defects in materials and workmanship, with the exceptions stated below.

The limited warranty does not cover damage resulting from commercial use, misuse, accident, modification or alteration to hardware or software, tampering, unsuitable physical or operating environment beyond product specifications, improper maintenance, or failure caused by a product for which SSI is not responsible. There is no warranty of uninterrupted or error-free operation. There is no warranty for loss of data—you must regularly back up the data stored on your product to a separate storage product. There is no warranty for product with removed or altered identification labels. SSI DOES NOT PROVIDE ANY OTHER WARRANTIES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SOME JURISDICTIONS DO NOT ALLOW THE LIMITATION OF IMPLIED WARRANTIES, SO THIS LIMITATION MAY NOT APPLY TO YOU. SSI is not responsible for returning to you product which is not covered by this limited warranty.

If you are having trouble with a product, before seeking limited warranty service, first follow the troubleshooting procedures that SSI or your authorized SSI dealer provides.

SSI will replace the PRODUCT with a functionally equivalent replacement product, transportation prepaid after PRODUCT has been returned to SSI for testing and evaluation. SSI may replace your product with a product that was previously used, repaired and tested to meet SSI specifications. You receive title to the replaced product at delivery to carrier at SSI shipping point. You are responsible for importation of the replaced product, if applicable. SSI will not return the original product to you; therefore, you are responsible for moving data to another media before returning to SSI, if applicable. Data Recovery is not covered under this warranty and is not part of the warranty returns process. SSI warrants that the replaced products are covered for the remainder of the original product warranty or 90 days, whichever is greater.

## Revision History

| Rev. | Description | Date | MCO # |
|---|---|---|---|
| New | Initial release | 8/20/2024 | 2358 |
| A | Added Main Controller and Remote Module | 3/11/2025 | 2367 |
| | | | |
| | | | |