

Isco 2105 Universal Interface Cable

Instruction Sheet #60-2002-572
Revision A, May 26, 2010

Preparation and Use

Overview

This multipurpose cable connects to the 12-pin female connector on the side of the 2105 module. The unterminated end can be wired to compatible circuits for interfacing. These instructions explain how to prepare the cable for use, and the function of each wire.

CAUTION

Risk of equipment damage. Only experienced electronic technicians should make the connections to an external device using cable 69-2004-580.

Preparation

1. Referring to Table 1, select the appropriate wires and tin the ends with solder or attach crimped connector ends.
2. Electrically insulate any unused wires.
3. Ensure that the connection has protection from the environment, such as cable conduit. Teledyne Isco offers a sealed, in-line cable joiner for watertight protection of the connections (Kit #60-2007-580).

WARNING

Ensure that no wire ends come into contact with each other. Personal injury, power shutdown, or component failure can result. Wires not in use should be individually sealed at all times.

2105 Connection

To connect the cable to a 2105 module, simply press the cable connector into the module's connector port until it clicks (Figure 1). To disconnect the cable, press down on the spring-loaded connector tab and pull the cable connector out.

Note

Always insert connector caps into unused connectors to terminate the network and prevent moisture damage.

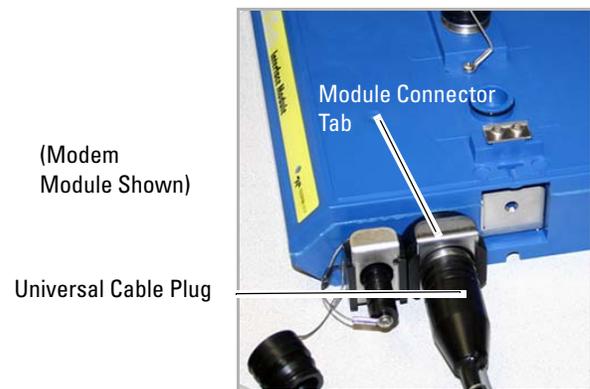
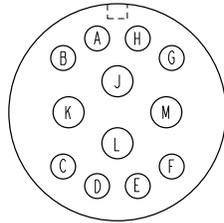


Figure 1: 2105 Interface Connector

Table 1: 2105 Port Connector Functions^a

Pin	Wire Color	Functionality	Default Configuration	Additional Information
A - SDI-12A	Brown	SDI-12 Data	SDI-12 Data Master	Transmits/Receives 0 to 5 VDC, 1200bps
B - XMT-101B	Red	I/O + Serial Out	TTL Serial Transmit	Transmits 0 to 5 VDC, default 9600bps
C - RCV-102C	Orange	I/O + Serial In	TTL Serial Receive	Receives ± 4 to 26 VDC, default 9600bps
D - V5D-103D	Yellow	I/O + Pulser	Flow Pulse Output ^b	Transmits 65-75 ms, 5 VDC pulses
E - A2D-104E	Green	I/O, Analog Voltage ^c	Sampler Inhibit Output	Transmits sustained, 0 VDC for Inhibit
F - A2D-105F	Blue	I/O, Analog Voltage	Sampler Event Mark Input	Receives 3 second, 4 to 26 VDC pulses
G - CTR-106G	Violet	I/O, Analog Voltage	Rain Gauge Tip Input	Receives 48 ms, 0 VDC Rain pulses
H - CTR-107H	Gray	I/O + Counter	Sampler Bottle Number Input	Receives 48 ms, 4 to 26 VDC pulses
J - DGND-J	Black	Digital Ground	Digital Ground	0 VDC, 100 mA typical
K - VBAT-K	Tan	Battery Voltage	Battery Voltage	7-26 VDC, 1A maximum
L - PGND-L	White	Power Ground	Power Ground	0 VDC, 3A maximum
M - PSRC-M	Pink	Power Source	Power Source (switched)	9-12 VDC, 0.5A maximum



- All voltage levels are positive default and referenced to common ground on pins J and L.
- All pulse signals are considered 50% duty cycle.
- See user manual for additional information on alternate configurations.

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