

# Isco 5800 Sampler Multipurpose Cable

Instruction Sheet #60-5802-034  
Revision A, August 23, 2012

## Preparation and Functions

### Overview

The connector of this multipurpose cable connects to the 16-pin connector on the back side of the 5800 or 4700 refrigerated sampler. The unterminated end can be wired to compatible circuits for interfacing with the sampler. These instructions explain how to prepare the cable for use, as well as the function of each wire.

#### CAUTION

Risk of equipment damage. Only experienced electronic technicians should make the connections to an external device using this cable. Ensure that the connection has protection from the environment, such as running the cable through conduit and making the connections inside a watertight electrical box.

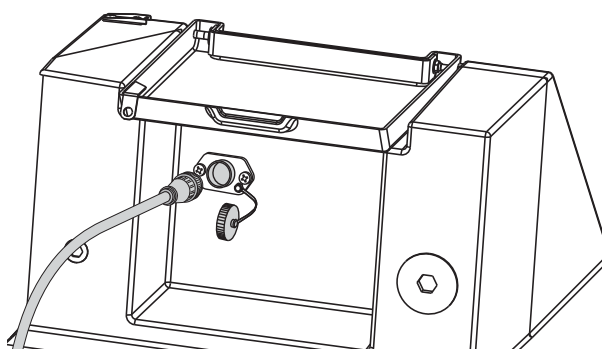
### Preparation

Referring to Table 1, select the appropriate wires and tin the ends with solder or attach crimped connector ends. Electrically insulate any unused wires.

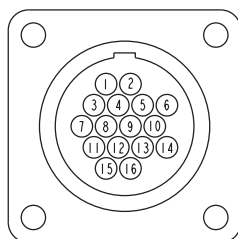
#### WARNING

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.

Standard 10' Length: part #69-4704-041  
Custom Length ( $\leq 100'$ ), part #60-5314-738 (contact factory)



Pin	Wire Color <sup>a</sup>	Signal	Sampler I/O	Additional Information
1	Black	12VDC	0	+14.5 to +12.0 VDC, 0 to 1 ampere maximum
2	White	Ground	n/a	Common ground
3	Green	Flow Pulse	I	25 millisecond (minimum) pulse, +5 to +15 VDC
4	Blue	Serial Data	0	Bottle number output. Also for use with PC connections. <sup>b</sup>
5	Orange	Event Mark	0	3 second, +12 VDC pulse at beginning of sample collection
6	Red	Enable Pin <sup>c</sup>	I	Ground this input (short to pin 2) to disable sampler operation. Leave this input open (floating) to collect samples.
7	White/Black	12VDC	0	+14.5 to +12.0 VDC, 0 to 1 ampere maximum
8	Red/Black	Alarm 1 <sup>d</sup>	0	0 to +5 VDC, 100 mA maximum
9	Red/White	Alarm 2 <sup>d</sup>	0	0 to +5 VDC, 100 mA maximum
10	Orange/Black	Alarm 3 <sup>d</sup>	0	0 to +5 VDC, 100 mA maximum
11	Green/Black	Alarm 4 <sup>d</sup>	0	0 to +5 VDC, 100 mA maximum
12	Green/White	Analog 4-20 mA (+)	I	Linear current loop signal representing minimum flow rate at 4 mA, maximum flow rate at 20 mA. This input is paired with pin 13.
13	Blue/White	Analog 4-20 mA (-)	I	See pin 12.
14	Blue/Black	Ground	n/a	Common ground. Same as pin 2.
15	Black/White	Not Used	n/a	Not used
16	Bare	Not Used	n/a	Not used



- For color pairs, the first color named is the predominant color, and the second is the stripe.
- Cable 69-5804-042 (DB9-pin) or 60-5314-949 (USB) recommended for serial data connection.
- This pin is also used as the Serial Data Input for use with PC connections. Optional cable recommended instead (see preceding note).
- See the 5800 Installation and Operation Guide to configure alarm conditions.

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