CORDOVA
FLOW CONTROLS
INNOVATION MEETS APPLICATION

RAD-I/O 1500
INSTALLATION AND OPERATION

APPLICATION:

The Cordova RAD-I/O 1500 Wire Replacement Modules provide a wireless link for a single digital input and remote battery status to a PLC. Simply connect a preconfigured "SCOUT" unit to your remote digital output, and a preconfigured "BASE" unit to your PLC (or output from "BASE" unit can directly control an end device). You can then monitor the remote status three ways: a visual LED indicator, an optically isolated output, and an optional relay. The remote battery voltage and RSSI are available via analog outputs.

SPECIFICATIONS:

Electrical	
Power Input voltage	9 – 30VDC
Typical current consumption at 12V, no relay	35mA typical
Typical current consumption at 12V, relay active	55mA typical
Typical current consumption at 24V, no relay	20mA typical
Typical current consumption at 24V, relay active	40mA typical
Radio Frequency	2.4 GHz

Environmental	
Temperature	-40°F to +140°F (-40°C to +60°C)
Corrosion Protection	Circuit board conformal coating

LED Indication:

Red	Power on indicator
Green	Digital input indicator (High/On, Low/Off)
Yellow	Associated indicator, normally flashing, not used for normal two radio configuration.

DIP Switches:

DIP Switch	Off Position	On Position
1, relay voltage	24V power	12V power
2, relay option	Relay disconnected; use this to save power if the relay will not be used	Relay connected.

WIRING:

Color	Name	Unit	Electrical	Description
Red	PWR	Both	9 – 30VDC	Power supply positive
Black	GND	Both	Ground	Power supply ground
White	Voltage Output	SCOUT	Power output for isolated collector	
Green	Digital Input	SCOUT	Signal input from isolated emitter	
Blue	PLC+	BASE	Isolated collector	
Brown	PLC-	BASE	Isolated emitter	
Orange	Relay Common	Optional for Both	Isolated relay, not protected	For SCOUT or BASE unit, optional relay that is activated when Digital Input (green wire) is high
Yellow	Relay NC	Optional for Both	Isolated relay, not protected	Normally closed contact
Violet	Relay NO	Optional for Both	Isolated relay, not protected	Normally open contact
Grey	A1	BASE	Analog output	For BASE unit, analog value that represents the battery voltage of the associated SCOUT unit. Multiply this voltage by 11 to get battery voltage, example: analog value of 1.14V equals battery voltage of 12.54V.
Pink	A0	Both	Analog output	RSSI – indicates the receive signal strength of the most recent successful radio transmission. Highest strength is 3.3V.

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Rev. 11/23/13