Belt Rip Detector (CS-BRT20) Quick Start Guide

INSTALLATION

The BRT module requires input power of **24Vdc or 110VAC (220VAC as an option)**. The typical wiring can be found in the wiring diagram below. The BRT can operate as a standalone unit and can also communicate/control via both Ethernet and Modbus TCP.
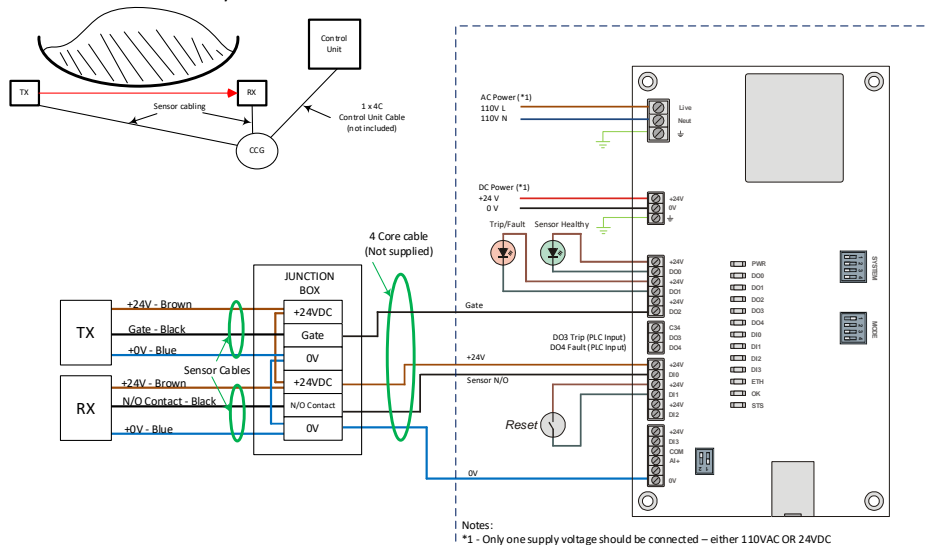

FIGURE 1 – TYPICAL WIRING DIAGRAM

DIP SWITCH SETTINGS

DIP Switch	Description
System - 4	0 = EtherNet/IP, 1 = Modbus TCP
Mode - 1	Default set to 1
Mode - 3	Trip Output (DO-3), 0 = Healthy is normally closed, 1 = Healthy normally open
Mode - 4	Fault Output (DO-4), 0 = Healthy is normally closed, 1 = Healthy normally open

Table 1 – Key DIP Switch Settings

KEY OPERATIONAL INFORMATION

Item	Description
Sensor LED (Green)	Indicates sensor beam is active and aligned.
Trip/Fault LED (Red)	Indicates belt rip has been triggered/detected or system fault
Trip Output – PLC (DO3)	Operates when beam has been broken – belt rip detected. Resets via pushbutton or via communication. **Used to trip conveyor belt**.
Fault Output – PLC (DO4)	Operates for device fault (unit fault) or when reset pushbutton is retained (forced in reset position).
Sensor Alignment	The Emitter and Receiver sensors are aligned when both the GREEN and YELLOW LED's on the receiver sensor (main enclosure) are ON (not flashing)

Table 2 – Key Operating Notes

ADDITIONAL INFORMATION

The following resources contain additional information that can assist the user with the module installation and operation.

Resource	Link
Circular Configurator Installation	http://www.circlarsolutions.co.za/software/circularconfigurator
User Manual, Datasheet Example Code	http://www.circularsolutions.co.za/Beltripdetector
Ethernet wiring standard	www.cisco.com/c/en/us/td/docs/video/cds/cde/cde205_220_420/installation/guide/cde205_220_420_hig/Connectors.html

SUPPORT

Technical support will be provided via the Web (in the form of user manuals, datasheets etc.) to assist with installation, operation, and diagnostics. For additional support the user can use either of the following:

Contact Us web link	www.circularsolutions.co.za/contact-us
Support email	support@circularsolutions.co.za