APPLICATION NOTE

MicroScan Digital Interface - Connection Diagrams

Revision Record:

Date	Description	Written by	Rev.
04/01/2009	1st release	Itay Weichselbaum	1.00

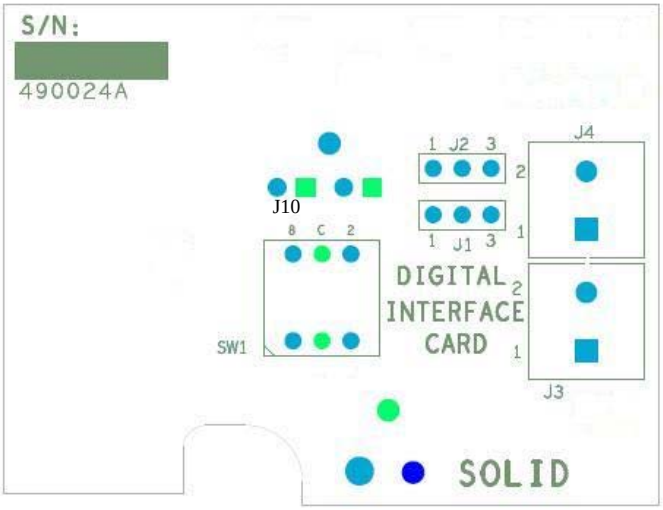
1. SCOPE

The purpose of this document is to describe the Mircoscan Digital Communication Interface functional connectivity options:

a. Internal Connection

b. External box connection.

2. INTERNAL CONNECTION



- Connect a 12-28VDC power supply to J3 terminal:
  1. Connect power supply positive wire to pin 1..
  2. Connect power supply negative wire to pin 2.
- Connect a communication line to J4 terminal:

RS232 –

1. Connect RX wire to pin 1.
2. Connect TX wire to pin 2.
3. Connect Ground pin to J3 terminal negative connection (pin 2).

Note:

1. *RS232 Cross cable connection.*

RS485 –

1. Connect A wire to pin 1.
2. Connect B wire to pin 2.

- Communication baud rate configuration jumper (J10):
  1. Place jumper on J10 for 9600 bps baud rate.
  2. Remove jumper from J10 for 19200 bps baud rate.

- Communication address – Device ID:

  Device ID is user selection using SW1 rotary switch.

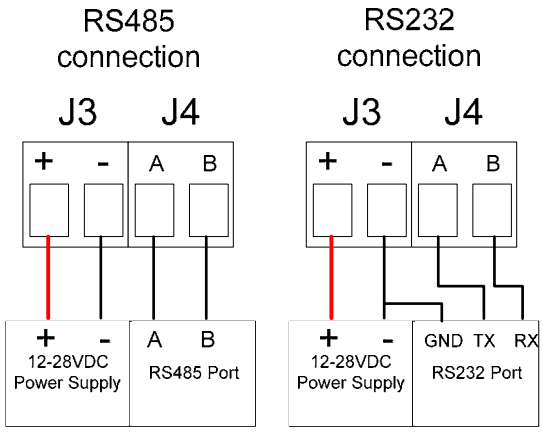
Note:

1. *Rotary is done by using a simple flat screw driver.*

- Relay triggers (J2):
  1. Trigger 1 – J2 pin 1.
  2. Trigger 2 – J2 pin 2.
  3. Common trigger ground – J2 pin 3.

Notes:

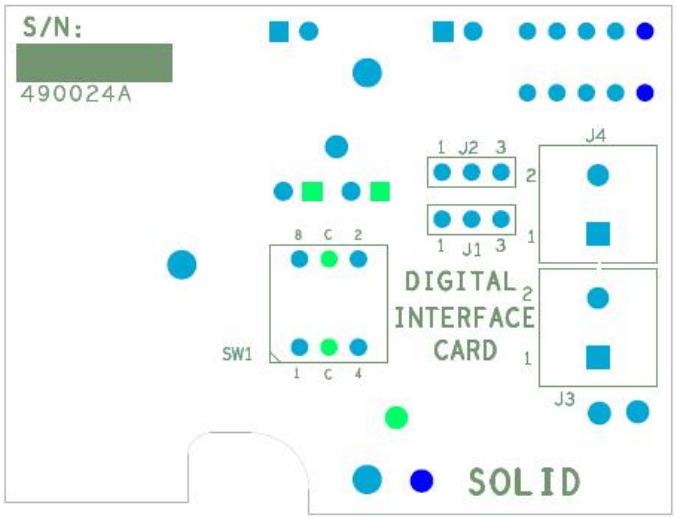
1. *Relay trigger: 3.3VDC @ 16mA (max) CMOS relay trigger (High/Low alarm).*
2. *Recommended Relay module: RBSN-TTL by Altronix*



Note:

1. *Using internally Microscan's digital communication interface change the Microscan to a 4-wire device.*
2. *4-20mA current is no longer available using an internally Microscan digital communication interface.*

3. EXTERNAL BOX CONNECTION



Notes:

1. *Microscan digital communication interface in an external box is for field upgrading.*
2. *The digital communication interface is connected to the Microscan with a 60cm MSU cable.*

- External box specification:
  1. IP65.
  2. 2 PG9 glands.
  3. 2 additional knockouts for more glands.
  4. Weight: 300 gram.
  5. Dimensions: 11 X 13.5 X 6.5 cm^3 (+ 60 cm cable and external gland connector)
- Connect a 12-28VDC power supply to J3 terminal:
  1. Connect power supply positive wire to pin 1..
  2. Connect power supply negative wire to pin 2.
- Connect a communication line to J4 terminal:

  <u>RS232</u> –

  1. Connect RX wire to pin 1.
  2. Connect TX wire to pin 2.
  3. Connect Ground pin to J3 terminal negative connection (pin 2).

Note:

2. *RS232 Cross cable connection.*

RS485 –

1. Connect A wire to pin 1.
2. Connect B wire to pin 2.

- Communication baud rate configuration jumper (J10):
  1. Place jumper on J10 for 9600 bps baud rate.
  2. Remove jumper from J10 for 19200 bps baud rate.

- Communication address – Device ID:

  Device ID is user selection using SW1 rotary switch.

Note:

2. *Rotary is done by using a simple flat screw driver.*

- Relay triggers (J2):
  1. Trigger 1 – J2 pin 1.
  2. Trigger 2 – J2 pin 2.
  3. Common trigger ground – J2 pin 3.

Notes:

3. *Relay trigger: 3.3VDC @ 16mA (max) CMOS relay trigger (High/Low alarm).*
4. *Recommended Relay module: RBSN-TTL by Altronix*