

# DDMIDC8

## Input Interface Unit Installation Manual



### features

- **8 x Opto Isolated inputs** - each configurable to dry contact or 0-24V input
- **4 x Analogue Inputs** – Configurable to 0-5V or 0-10V
- **LED Status Indicators** – for each opto isolated input
- **Power Supplied from Network** - No mains connection
- **Powerful Internal PLC** - Custom scripts can be written to provide process control based on conditional logic
- **Simple Installation** - DIN Rail mount facilitates installation. Fixing points are provided for installation without the use of DIN rail

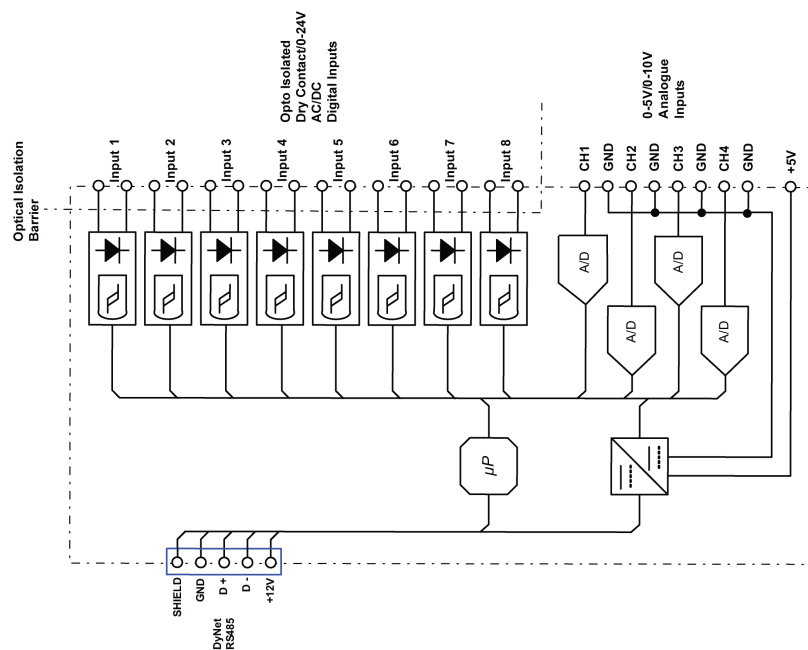
**Read Instructions** – We recommend that you read this Instruction Manual prior to commencement of installation.

**Special Programming** – This device will only operate in basic modes unless programmed via a computer. If programming is required, contact your local agent for details. Once the data cable is connected to the devices, the factory default settings will allow any control panel or input to operate all channels in all controllers.

**Mounting Location** – Install in a dry, well-ventilated location. Controllers may emit some mechanical noise. Take this into account when deciding the mounting location.

**Data Cable** – Use screened, stranded RS485 data cable with three twisted pairs. Segregate from mains cables by 300mm minimum, also in accordance to the local wiring rules. Connect devices in a 'daisy chain'. A data cable that is connected to an energised device is live. Do not cut or terminate live data cables.

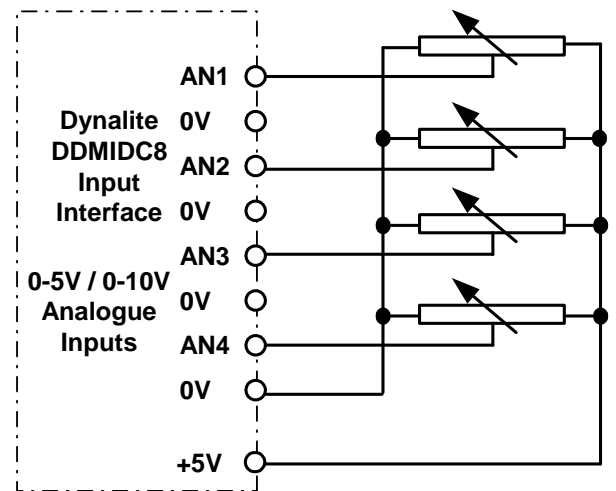
### electrical diagram



## installation steps

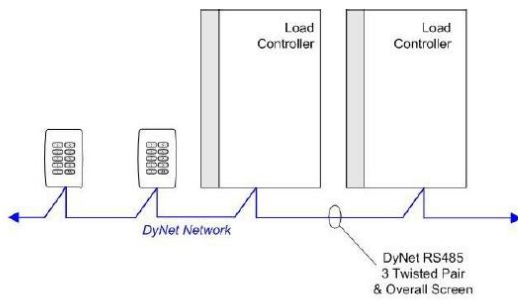
1. Mount the device on a DIN rail inside an approved enclosure. The device can also be installed without the use of DIN rail by removing the cover to access two mounting screw holes.
2. Connect RS485 data cable to the serial port as per the connection diagram overleaf.
3. If used, connect volt free contacts or 0-24V AC/DC inputs to any of the 8 opto-isolated inputs. Remove the lid and ensure that the jumpers for each input are set to the appropriate 0-24V or volt free setting, depending on the input type.
4. If any opto-isolated inputs are of the Dry Contact type, ensure that the power supply jumper is fitted in the "volt free" position. Note that this will increase the current consumption of the device from 37mA to 68mA, which may require consideration of voltage drop on long runs of DyNet data cable.
5. If used, connect 0-5V or 0-10V inputs to the analogue ports. Ensure the input voltage is DC and a maximum of 10 Volts. Note that bare faders can also be connected to the analogue inputs by using the adjacent +5V terminal as a supply. Suggested fader value is 10K ohm. Do not attempt to draw more than 25mA from the +5V terminal.

## analogue fader

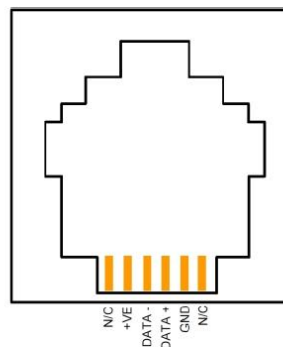


## Connecting Data Cable

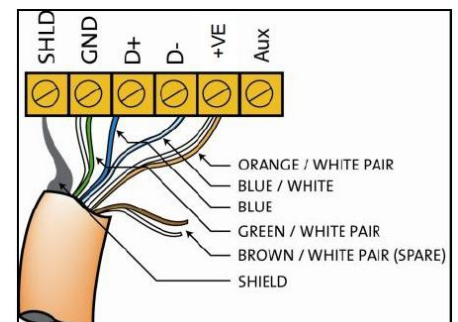
### Connect Data Cable in a 'Daisy Chain'



### RJ12 Socket Connections



### Serial Cable Permanent Connections



## Recommended Cable Colour Coding

<b>Green/White Pair</b>	paralleled for GND
<b>Orange/White Pair</b>	paralleled for +12V
<b>Blue/White Pair</b>	Blue for DATA+
	White for DATA-
<b>Brown/White Pair</b>	Spare, use for Shield on unshielded cable

## Recommended Cable Types

Belden:	9503	M&M cable:	B9503CS
Garland:	MCP3S	Multicables:	AWME120236209220
Hartland:	HCK603	RS Components:	368-687
M&M Cable:	B2003CS	Dynalite:	DYNET-STP-CABLE

## product specifications

<b>Supply:</b>	12-15V DC supplied by the DyNet network, 37mA when not in Dry Contact mode, 68mA when in Dry Contact mode
<b>Digital Inputs:</b>	8 x opto isolated inputs, each, configurable to Dry Contact and 0-24V AC/DC (switching point 1.5V)
<b>Digital Input Isolation:</b>	optical isolation, 2.5kV surge rated
<b>Analogue Inputs:</b>	4 x inputs, configurable to 0-5V or 0-10V
<b>Analogue Input Impedance:</b>	20K Ohm
<b>Serial Port:</b>	1 x RS485 DyNet serial port
<b>User Controls:</b>	LED status indicators for digital inputs, Service Switch, Diagnostic LED
<b>Internal Controls:</b>	Programmable Logic Controller
<b>Digital Input Terminals:</b>	A, B for each input, 1 x 2.5mm <sup>2</sup> max conductor size
<b>Analogue Input Terminals:</b>	CH, GND for each input, 1 x 2.5mm <sup>2</sup> max conductor size
<b>Compliance:</b>	CE, C-Tick
<b>Enclosure :</b>	Polycarbonate DIN Rail enclosure (6 unit)
<b>Operating environment</b>	0° - 50° Ambient temperature 0% - 90% RH non condensing
<b>Dimensions:</b>	93mm H x 105mm W x 75mm D
<b>Weight:</b>	Packed weight 0.281Kg