

# DDNG232

## RS232 Serial Port Interface

### Installation Manual



### features

- **Single Phase supply** – 230V +/- 14% 50/60Hz 0.1A
- **1 x RS485 Port** – Dynet lighting control.
- **2 x RS232 Ports** – 3<sup>rd</sup> party integration device
- **Powerful Internal PLC** - Custom scripts can be written to provide process control based on conditional logic.
- **DIN Rail Mounting** - 12 Units wide.

**Warning** – This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

**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 to operate all channels in all controllers.

**Mounting Location** – Install in a dry, well-ventilated location.

**Data Cable** – Use screened, stranded RS485 data cable with three twisted pairs. Segregate from mains cables by 300mm. Connect devices in a 'daisy chain'. Do not cut or terminate live data cables.

**Power Sources** – This device should only be operated from the type of supply specified on the front panel. This device must be earthed.

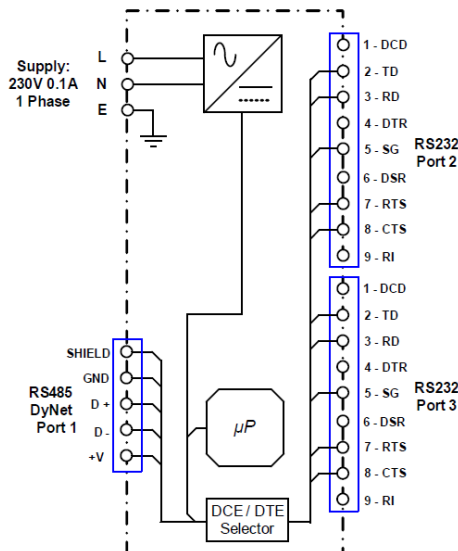
**Megger Testing** – Do not megger test any circuitry connected to the control system, as damage to the electronics may result.



### Warning

- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS DEVICE TO RAIN OR MOISTURE.
- DO NOT ENERGISE UNLESS THE FRONT COVER IS IN PLACE.
- THIS DEVICE MUST BE EARTHED.
- INSTALLATION, PROGRAMMING AND MAINTENANCE MUST BE CARRIED OUT BY QUALIFIED PERSONNEL.

### Electrical diagram

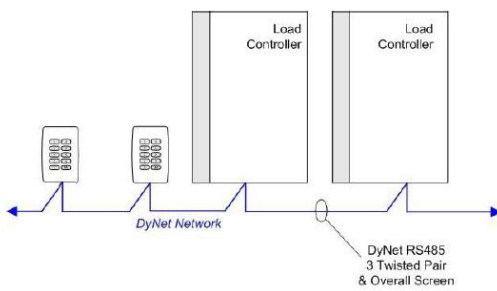


# Installation steps

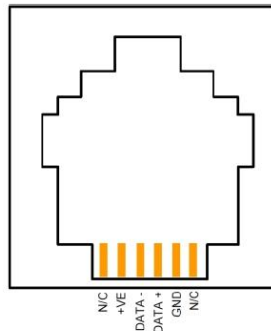
1. Mount the device on a DIN rail inside an appropriate enclosure
2. Connect supply cables feed from appropriately rated protection
3. Connect RS232 and Dynet data cables to the device as per label on device.
4. Power up device once all termination have been re checked.

## Connecting Data Cable

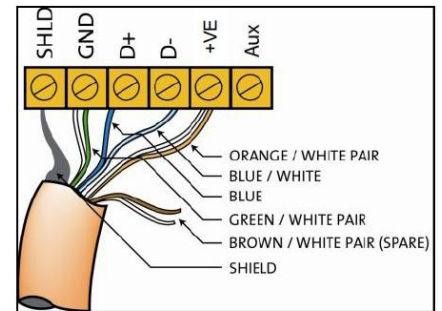
Connect Data Cable in a 'Daisy Chain'



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>	230V +/- 14% 50/60Hz Single Phase, max 0.1A
<b>Serial Port 1:</b>	1 x RS485 unterminated, consisting of 1 x RJ12 socket & 1 x 5 way terminal block
<b>Serial Port 2:</b>	1 x RS232 port, consisting of 1 x D9 female connector
<b>Serial Port 3:</b>	1 x RS232 port, consisting of 1 x D9 female connector
<b>RS485 Data Formats:</b>	DyNet, DyNet II
<b>User Controls:</b>	Service Switch, Diagnostic LED
<b>Internal Controls:</b>	Programmable Logic Controller, 64 Tasks
<b>Operating Environment:</b>	0° to 50°C ambient temperature, 0% to 95% RH non condensing
<b>Compliance:</b>	CE, C-Tick
<b>Construction:</b>	Polycarbonate DIN Rail enclosure (12 unit)
<b>Dimensions:</b>	H 93mm x W 211mm x D 75mm
<b>Weight:</b>	0.86kg