

DDNG100BT

10/100BaseT Ethernet Installation Manual



features

- **Single Phase supply** – 230 +/- 14% 50/60Hz 0.1A
- **1 x RS485 Port** – Dynet lighting control.
- **1 x 10/100BaseT** - Ethernet port
- **Powerful Internal PLC** - Custom scripts can be written to provide process control based on conditional logic.
- **DIN Rail Mounting** - 12 Units wide.



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.

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.

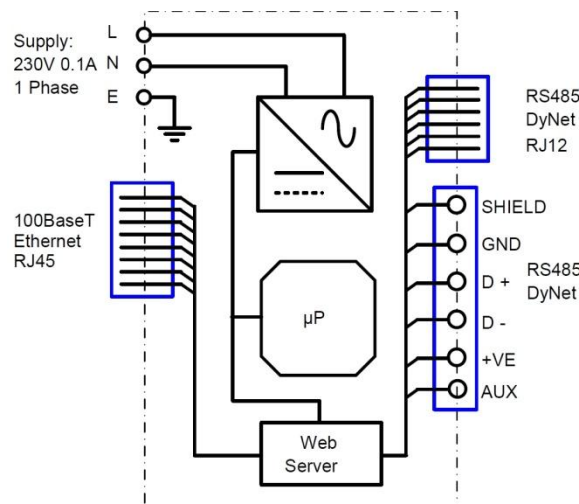
Mounting Location – Install in a dry, well-ventilated location.

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.

Electrical diagram

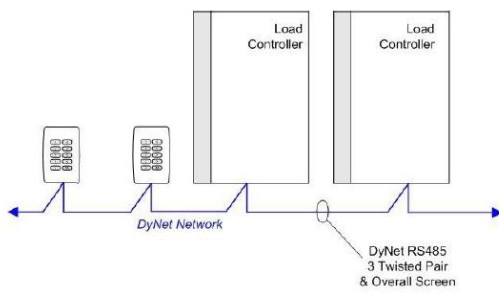


Installation steps

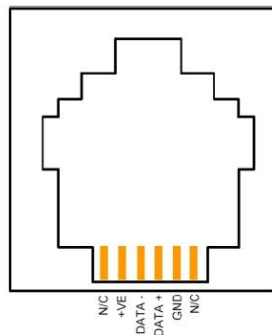
1. Mount the device on a DIN rail inside an appropriate enclosure
2. Connect supply cables feed from the appropriately rated protection.
3. Connect Ethernet and Dynet data cables to the device as per label on device.
4. Power up device once all termination have been re checked.
5. The unit will need to be configured using Envision commissioning tool

Connecting Data Cable

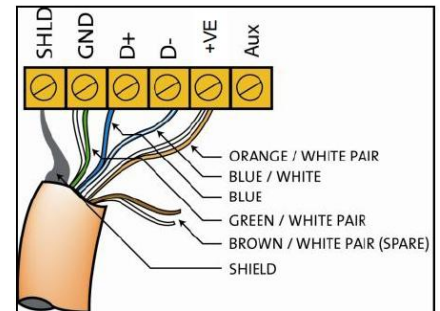
Connect Data Cable in a 'Daisy Chain'



RJ12 Socket Connections



Serial Cable Permanent Connections



Recommended Cable Colour Coding

Green/White Pair	paralleled for GND
Orange/White Pair	paralleled for +12V
Blue/White Pair	Blue for DATA+
	White for DATA-
Brown/White Pair	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

Supply:	230 +/- 14% 50/60Hz Single Phase
Serial Port 1:	1 x 10/100BaseT Ethernet, consisting of 1 x RJ45 socket
Serial Port 2:	1 x RS485 unterminated, consisting of 1 x RJ12 socket & 1 x 5 way terminal block
RS485 Data Formats:	DyNet, DyNet II
User Controls:	Service Switch, Diagnostic LED
Internal Controls:	Programmable Logic Controller, 64 Tasks
Operating Environment:	0° to 50°C ambient temperature, 0% to 95% RH non condensing
Power Consumption:	450mA from the DyNet network at 12VDC
Compliance:	CE, C-Tick
Construction:	Polycarbonate DIN Rail enclosure (12 unit)
Dimensions:	H 93mm x W 211mm x D 75mm
Weight:	0.86kg