

DMBC110

1 x 10A HF Ballast Controller Installation Manual



Features:

- **Single Phase Supply** - 1 phase at 10A
- **1 x Switched Output** Rated at 10A Inductive
- **1 x Ballast Control Output** DALI Broadcast, 1-10V, DSI
- **Tungsten Carbide pilot contact Relay, 16A inductive, 200A surge**
- **Powerful Internal PLC** - Custom scripts can be written to provide process control based on conditional logic
- **Many Control Options** - Control of this device can be via a combination of methods, eg. serial control port, relay contacts, push button wall stations, infrared receivers and time clocks
- **Simple Installation** – Designed to be installed adjacent to, or inside fixture housing

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

Manual Override Switches - These switches do not provide permanent isolation. Isolate at the supply before performing work on load circuits.

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.

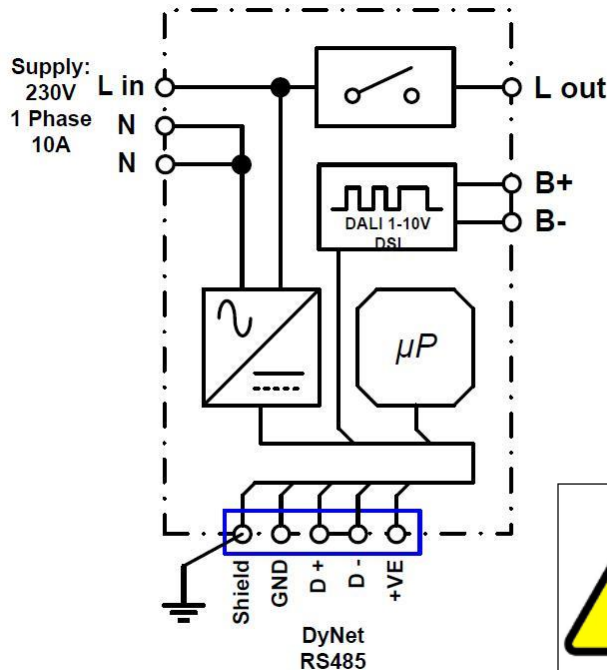
Power Sources – This device should only be operated from the type of supply specified on the front cover.

Switched Output Circuits – The load on a circuit should not exceed the specified capacity of 10A.

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. 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. Network shield terminal must be earthed on at least 1 point & preferably 2.

electrical diagram



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. Network shield terminal must be connected to Earth at minimum two points on the network, either directly or via other mains supplied product DyNet ports with Earth termination provided on mains supply. Installation, programming and maintenance must be carried out by qualified personnel.



WARNING

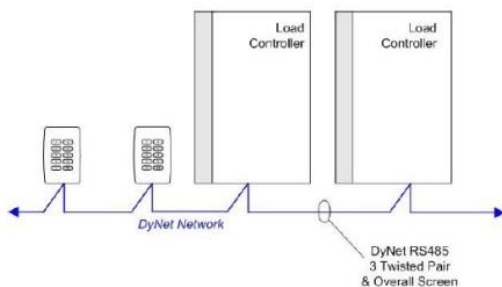
ISOLATE FROM MAINS SUPPLY BEFORE TERMINATING OR ADJUSTING ANY TERMINALS. NO SERVICEABLE PARTS INSIDE. SERVICE BY QUALIFIED PERSONNEL ONLY.

installation steps

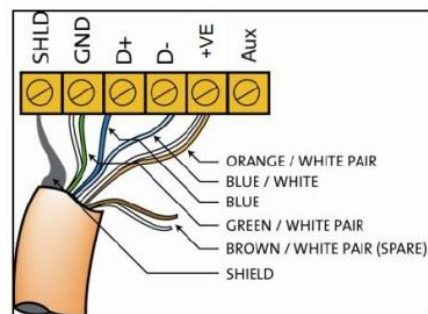
1. Mount the device adjacent to, or inside fixture housing.
2. Calculate loads to ensure the switched output is not overloaded, the maximum loading of this device is:
Maximum Switched Channel Load: 10A 230V AC
Connect load cables to each channel. Note that this device must have an individual supply circuit for each channel. The supply circuits can be on any phase. Note that loads must have a Neutral, Delta wiring is not supported.
3. Calculate the control circuit to ensure it is not overloaded, the maximum control capacity of this device is:
DALI Ballasts and transformers: 5
0-10V: 10mA source or 20mA sink
DSI Ballasts and transformers: 15
Connect the ballast control cable from the B+ and B- terminals.
4. Connect a single phase 10A feed to the supply terminals.
5. Connect data cables to the device as per diagrams below.
6. Earth the Shield network terminal where no other earth connection is provided to DyNet cable shield via other products with mains Earth termination.

Connecting Data Cable

Connect Data Cable in a 'Daisy Chain'



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

Control Supply:	230V ±14% 50/60Hz single phase at 10A
Load Outputs:	1 x Switched Output rated at 10A (inductive) Wiring topology: 1 Phase & Neutral, Delta not supported
Switching Device:	Relay – 16A 230V AC (inductive) 200A Surge.
Supply Terminals:	1 x L in, 1 x Neutral up to 1 x 4mm ² cable per terminal
Load Terminals:	1 x L out, up to 1 x 4mm ² cable per terminal
IO:	1 x RS485 DyNet serial port
DyNet DC Supply +VE:	120mA (supply for approx 6 panels)
Presets:	170
Programmable Logic:	8 Tasks,
Compliance:	CE, C-Tick
Ambient Temperature:	0°C - 50°C Ambient temperature, 0% - 90% RH non-condensing
Construction:	ABS Plastic
Dimensions:	L 185mm x W 44mm x D 38mm
Weight:	0.19Kg