

DDNG-KNX

Network Gateway Installation Manual



features

- **Powered From The DyNet Network** - Mains supply not required
- **Optically Isolated between the two communication Ports** – 2.5KV surge isolation.
- **Allows KNX integration to Philips Dynalite lighting control system**
- **Powerful Internal PLC** - Custom scripts can be written to provide process control based on conditional logic. Feature allows the gateway to before logical calculation from messages received and then perform the required reaction.
- **DIN Rail Mounting** - 6 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.

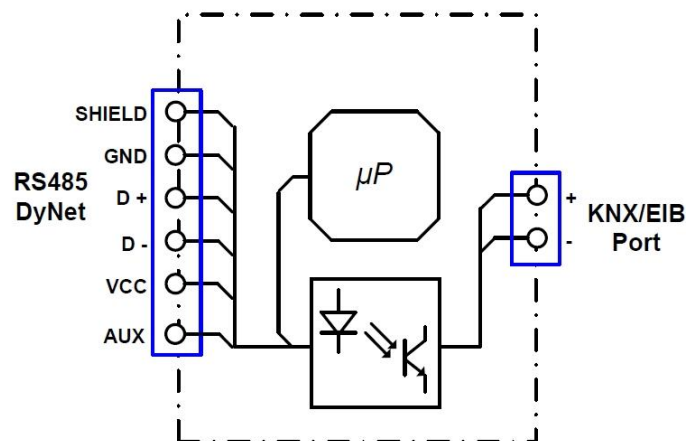
Special Programming – This device will only operate in basic modes unless programmed via a computer. If programming is required, contact your local agent for details. Once the data cable is connected to the devices, the factory default settings will allow any control panel to operate all channels in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

Correct cabling – Ensure that correct polarity of the KNX and DyNet ports are maintained and that only approved cables are used for each port.

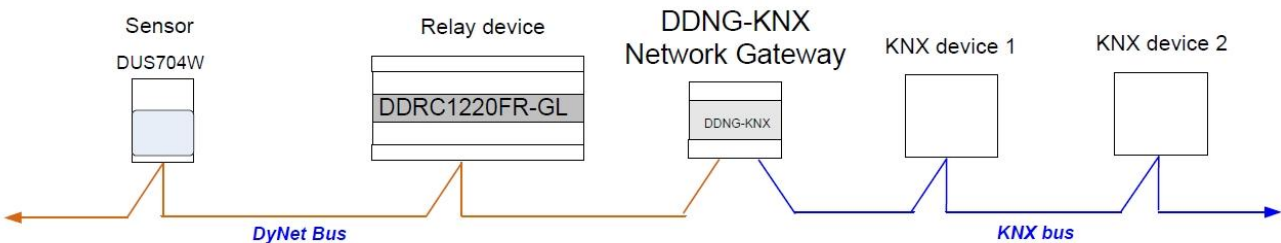
electrical diagram



installation steps

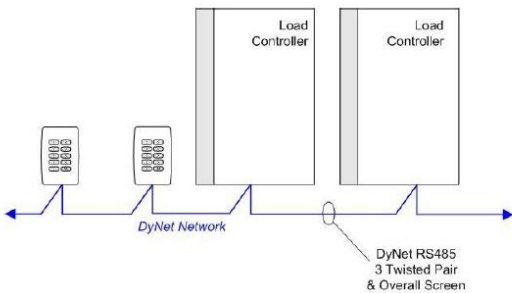
1. Mount the device on a DIN rail inside an appropriate enclosure.
2. Ensure the both Dynet and KNX networks are powered down before beginning termination
3. Connect data cables to the device as per diagrams. Note that the device is powered from the DyNet network segment that is connected to Port 1.
4. Connect KNX network to second port of gateway. Ensure that correct polarity is maintained.
5. Power up both Dynet and KNX networks.
6. The gateway is now ready to be commissioned.

example net work topology

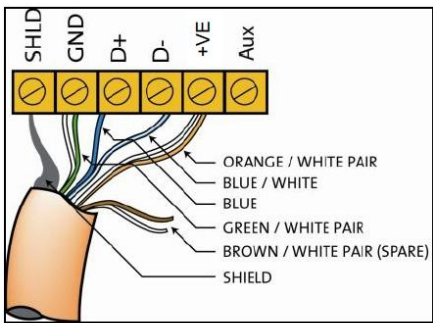


Connecting Data Cable

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

RS485 Serial Port 1:	1 x RS485 un-terminated, consisting of 1 x 6 way terminal block
KNX Serial Port 2:	1 x AUX programmable dry contact input
Serial Port Isolation:	1 x KNX consisting of 1 x 2 pole polarized connector
User Controls:	Opto Isolated to 2.5KV Surge
Internal Controls:	Service Switch, Diagnostic LED for Dynet and KNX network
Operating Environment:	Programmable Logic Controller, 64 Tasks
Power Consumption:	0° to 40°C ambient temperature, 0% to 90% RH non condensing
	Max15mA from the DyNet network at 12-15VDC
	Max 5mA from KNX/EIB
Compliance:	CE, C-Tick, CISPR22 Class B emissions, immunity as per IEC 60335 / 730
Construction:	Polycarbonate DIN Rail enclosure (6 unit)
Dimensions:	H 86mm x W 105mm x D 66mm
Weight:	0.8kg