

DTK600

TOUCH PANEL INSTRUCTION MANUAL



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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.
- INSTALLATION, PROGRAMMING AND MAINTENANCE MUST BE CARRIED OUT BY QUALIFIED PERSONNEL

Features

- Fully configurable control panel
- Internal real time clock 365 day astronomical, daylight saving, leap-year adjustment
- High resolution touch sensitive LCD mono-chrome with backlight
- Controls 255 areas, 255 channels per area, 96 scenes per area, 250 events, 8 tasks
- Programmable internal sequencer can be triggered by external DyNet[®] messages

Important Safeguards

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

Special Programming – This device will only operate in basic modes until programmed. If

programming is required, contact your local agent for details. Once the data cable is connected to the device, the factory default settings will allow any the panel to control all channels in all dimmers.

Mounting Location – This device must be mounted indoors away from direct sunlight. The optimum viewing angle is 90°. Ensure that the LCD display will be at, or slightly below, eye level for all users. Take this into account when deciding the mounting location.

Data Cable – The recommended cable for connections to the serial port is screened, stranded RS485 data cable with three twisted pairs. Part numbers for various manufacturers are listed on page 4. This cable should be segregated from mains cables by a minimum distance of 300mm. If anticipated cable runs are over 600 metres for serial cables or 12 metres for analogue cables, consult your Dynalite dealer for advice. Do not cut or terminate live data cables.

The Display – The DTK600 LCD display and touch membrane are very sensitive to damage from sharp or hard objects. Never operate the panel using anything other than your fingertip. The miniature fluorescent tube backlight is very fragile and runs at a high voltage. Ensure there are no protrusions when fitting the panel to the wall. If cleaning is required only use a soft cloth with ethyl alcohol.

Power Supply – The DTK600 Touch Panel requires a DC supply. Due to the extra load of the backlighting, supply from the DyNet network may not be of an adequate capacity. We recommend the installation of an additional 12V - 15V DC power supply rated at 500mA minimum, connected directly to the +12V and GND terminals on the panel (in parallel to the network +12V and GND cables). This may require additional wiring. When selecting the power supply location, keep in mind that a power supply hidden locally in the wall or ceiling is difficult to service.

Specification

| Supply: Serial Ports: | 12V DC @ 500mA 1 x RS485 1 x RS485/232 |
|---|--|
| Control: | RS485 DyNetä Network Control |
| Presets: | 96 internal, selectable presets |
| Compliance: | CE Compliant |
| Ambient Temperature: | 40°C max. |
| Screen Size: | Height 84.5mm x Width 113.5mm |
| Construction: | ABS facia, metal wallbox |
| Dimensions: | |
| Exposed Face: Hidden Wallbox: Unpacked Weight: | Height 166mm x Width 206mm x Depth 17mm Height 145mm x Width 187mm x Depth 50mm 1.132Kg (with wallbox) |

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Selecting a Location

Remember the display height should be equal to, or slightly below, the eye level of all users. Avoid a location in which bright light is present, either directly in front of, or behind, users.

Fixing the Device The DTK600 Touch Panel must be flush-mounted. Separate the wallbox from the panel and make sure no dust or debris enters the device during installation. Knock out a cable entry point and prepare a hole 145mm x 187mm x 50mm. The box can then be screwed to an appropriate member.

Connecting Serial Control Cables

RJ12 Socket Connections



Serial Cable Permanent Connections



Connect Data Cable in a "Daisy Chain"



Determine Your Requirements

Serial Ports are used to interconnect dimmers, other control panels, sensors and AV controllers. Serial port devices can be identified by 4 terminals, labelled: GND, DATA+, DATA-, +12V. On the DTK600 connect to Port 1 closest to the RJ12 Connector.

Serial Cable Connections

There is one RS485 port for DyNet® signals, in the form of a RJ12 socket, on the rear, which is used for the temporary connection of a PC or a Portable Programmer (DTK601). There are data terminals on the main PCB, for permanent connections. The recommended cable for connections to the serial port is screened, stranded RS485 data cable with three twisted pairs. Recommended cable types include:

| Poldoni | 0502 |
|----------------|---------------------|
| Deluen. | 9503 |
| Garland: | MCP3S |
| Hartland: | HCK603 |
| M&M Cable: | B2003CS |
| M&M cable: | B9503CS |
| Multicables: | AWM E120236 2092 20 |
| RS Components: | 368-687 |
| | |

One pair is paralleled for GND, one pair paralleled for +12V, and one pair used for DATA+ and DATA -.

Recommended Cable Colour Coding

| Green/White pair: | ра |
|--------------------|----|
| Orange/White pair: | pa |
| Blue/White pair: | B |
| | |

aralleled for GND aralleled for +12V lue for DATA+ White for DATA-

The colour-coding scheme used is not critical, as long as the same scheme is used throughout the installation. The shield should be terminated in the "SHIELD" terminal if present, otherwise it should be terminated to the metal chassis of electrically earthed devices, and looped through on devices that are not electrically earthed.

Serial Cable Connecting Method

The recommended connecting method is to 'daisy chain' devices (starting at the first device, then looping in then out of devices, with a single cable terminating at the last device. There should not be any spurs or stubs, and only the first and last device should terminate one cable. All other devices should terminate two cables). Devices may be wired in any order. The Data Cable should be segregated from any Mains Cables. A data cable that is connected to an energised dimmer is live. Do not cut or terminate live data cables. If the Data Cable has to cross over any Mains Cables, it should do so at a 90° angle.

Comment:

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