

# DDTC001

## Network Time Clock Installation Manual



### features

- **365 Day Clock** – with auto Daylight Saving and Sunrise/Sunset functions. Clock has a backup battery to keep time during loss of power
- **Powerful Internal PLC** - Custom scripts can be written to provide process control based on conditional logic. Supports up to 250 timed Events and 8 Tasks.
- **Tamper Proof** - All functions are programmed via a PC, there are no external controls available, preventing disruption to device operation
- **1 x RS485 DyNet Port** - Available on a 5 way terminal strip.
- **Powered from the DyNet Network** – No need for an external power supply
- **Simple Installation** – DIN Rail enclosure allows the device to be conveniently placed in the switchboard with other networked automation products

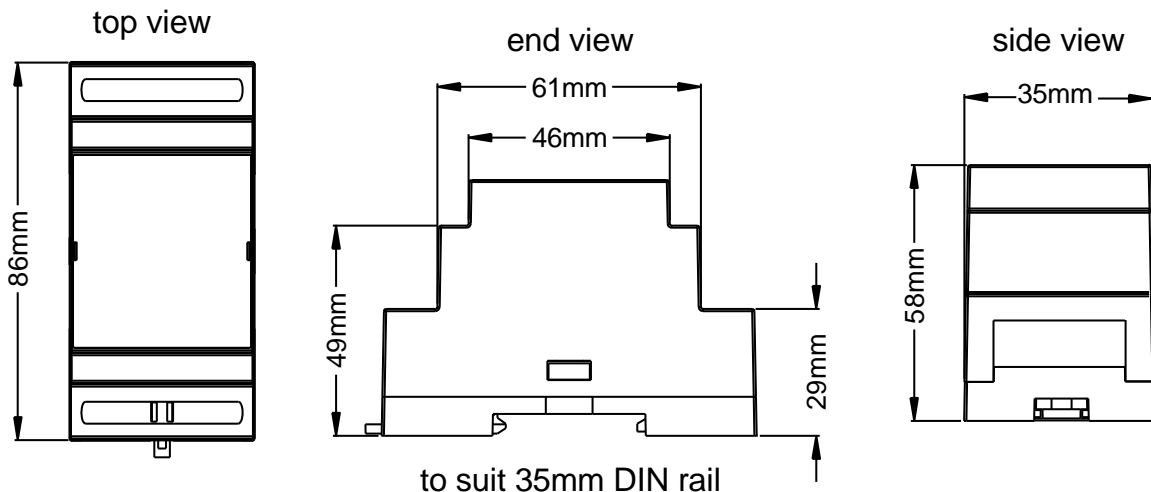
**Read Instructions** – We recommend that you read this Instruction Manual prior to commencement of installation.

**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.

**Installation Location** – Install in a dry location, close to the equipment to be interfaced with.

**RS485 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.

### dimensions

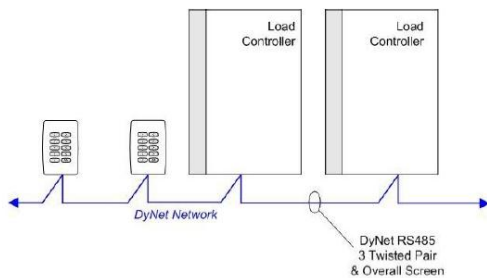


# installation steps

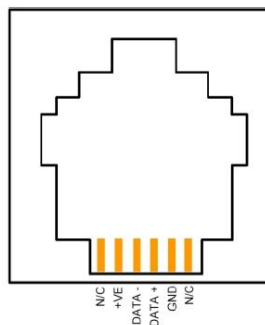
1. Mount the device on a DIN rail inside an appropriate enclosure. Alternatively there are 2 holes provided to fix the device to a surface without the use of DIN rail. Remove the front cover to access these holes.
2. Connect the RS485 cable to the DyNet 5 way terminal strip, as per the "Serial Cable Permanent Connections" diagram. Note that this device consumes 40mA of power from the DyNet network.

## Connecting Data Cable

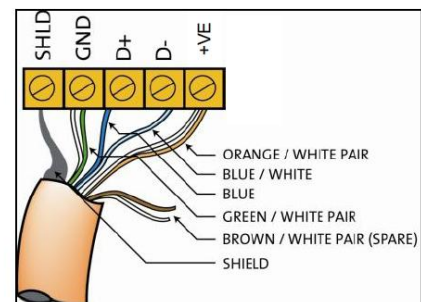
Connect Data Cable in a 'Daisy Chain'



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>RS485 Serial Port:</b>	1 x RS485 unterminated DyNet, consisting of 1 x 5 way terminal strip.
<b>Clock:</b>	365 day clock Battery backup Sunrise/Sunset tracking Automatic daylight saving adjustment 250 timed events
<b>Memory:</b>	All data stored in 100 year life EEPROM
<b>User Controls:</b>	Service Switch, Diagnostic LED
<b>Internal Controls:</b>	Programmable Logic Controller, 8 Tasks
<b>Operating Environment:</b>	0° to 50°C ambient temperature, 0% to 95% RH non condensing
<b>Power Consumption:</b>	40mA from the DyNet network
<b>Compliance:</b>	CE, C-Tick
<b>Ambient Temperature:</b>	50°C max.
<b>Construction:</b>	ABS DIN Rail enclosure (2 unit wide)
<b>Dimensions:</b>	H 86mm x W 35mm x D 58mm
<b>Weight:</b>	0.1Kg