

Resource
Data Management

TouchXL Orbit

Commissioning Guide

Revision 1.0.2



PR0617-XXX

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Please ensure all power is switched off before installing or maintaining this product.

In Store Use

Using the TouchXL Orbit



The TouchXL Orbit display has no physical buttons or switches, all user interactions are carried out by pressing areas on the touchscreen similar to a mobile phone or tablet PC. The touchscreen should be operated using your finger and care should be taken not to apply excessive force as it could lead to damage. The TouchXL Orbit utilises a capacitive display technology and therefore objects such as pen nibs or screwdriver tips will not operate the display. Either a finger or a dedicated tool, such as a capacitive stylus pen, should be used when interacting with the TouchXL Orbit to provide the correct operation.

Each press of the display is accompanied by a click from the sounder. On some pages where lines of text are shown, such as the parameter list, the user can scroll down the page by running their finger from the bottom to the top of the list in the same manner as with a touchscreen enabled mobile telephone. During this motion your finger should remain in contact with the touch screen. Pinching the screen will also allow the user to zoom in or out.

For the TouchXL Orbit to be utilised, it needs to be used with a DMTouch or Data Manager and the panels must be running software version must be v2.3.2 or above.

Note: The TouchXL Orbit also can be supplied with fibre optic communications, please contact RDM Sales for more information.



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Ordering Information

When ordering a TouchXL Orbit the following ordering scheme can be used to purchase the desired configuration.

PR0617 – X Y Z

X	Product Type
OB	TouchXL Orbit

Y	Comms Type
E	Ethernet
F	Fibre

Z	Colour
WH	White
BK	Black

Example

To order a white TouchXL Orbit with Ethernet communication would be

PR0617 – OB E WH

Ancillary Power Supply Products

The TouchXL Orbit can be powered by either 24Vdc power supply or by means of Power over Ethernet. These products and corresponding part numbers are listed below;

Part Number	Description
PR0618	0.63A 15W Din Rail Mountable 24V PSU
PR0619	Touch XL Power Over Ethernet (POE) Injector kit



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Operations from the “Home” screen



From the Home screen the following can be accessed:

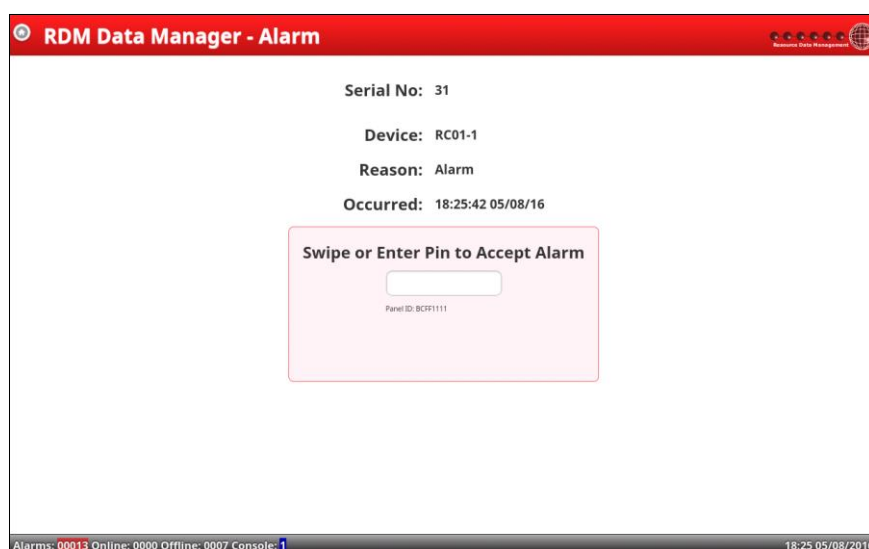
- Device List
- Energy
- Reports
- Alarms
- Service
- GPTimer Run On
- Device List Key
- Help
- Swipe Card

Note: The TouchXL Orbit will appear in Modern look unless the Dark look has been selected on the DMTouch.

Accepting Alarms

When an alarm occurs, the TouchXL Orbit will display the alarm on the screen. The alarm buzzer will sound and the light above the screen will go red.

To accept the alarm, enter an appropriate Pass-code (PIN) and press enter or press “Mute” if the system has been configured for no PIN. The alarm buzzer will stop, the indicator will return to blue and the screen will revert to the screen prior to the alarm.



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Viewing Alarms

From the Home screen, press the alarm bell Icon at the bottom of the screen ().

At the top of the screen any current alarms will be displayed with the old alarms underneath. There is a filter at the top that allows the user to view All Alarms, Current Alarms or Old Alarms.

Alarm Detail

By pressing on the serial number on the left hand side the user can see more information regarding the alarm.

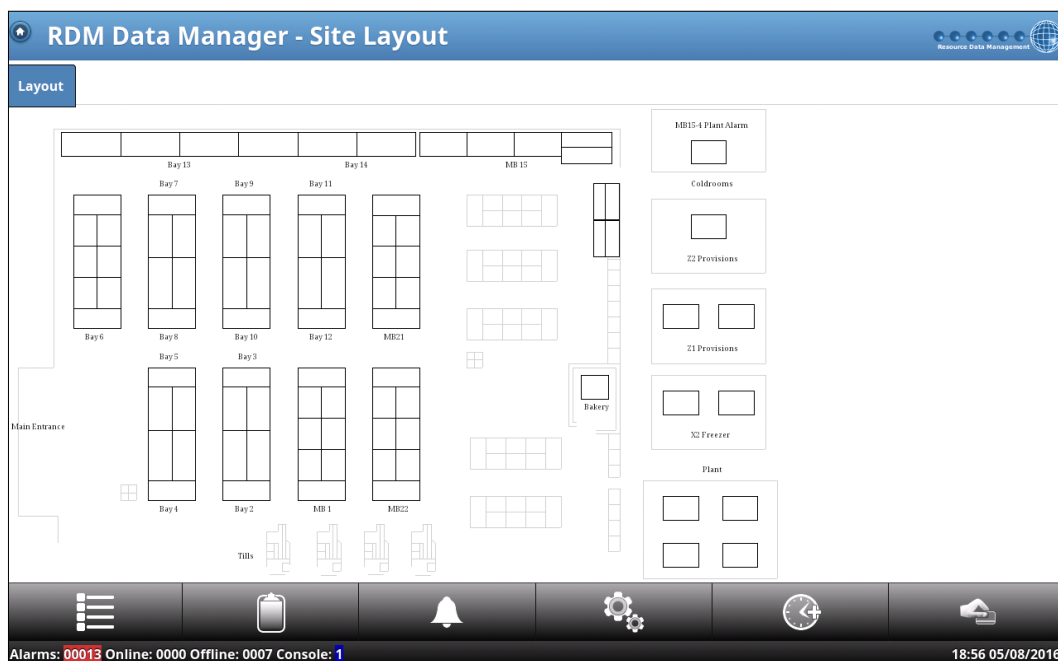
RDM Data Manager - Alarm Entry	
<div> <div>Serial Number</div> <div>31</div> </div> <div> <div>Device</div> <div>RC01-1</div> </div> <div> <div>Alarm</div> <div>Alarm</div> </div> <div> <div>Occurred</div> <div>05/08/16 18:25:42</div> </div> <div> <div>Accepted</div> <div>05/08/16 18:25:56</div> </div> <div> <div>Accepted By</div> <div>install</div> </div> <div> <div>Actions Taken</div> <div>Relay 123, Modem 1, Console 123, Front Panel</div> </div>	

Alarms: 00013 Online: 0000 Offline: 0007 Console: 1 18:46 05/08/2016



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Viewing Data

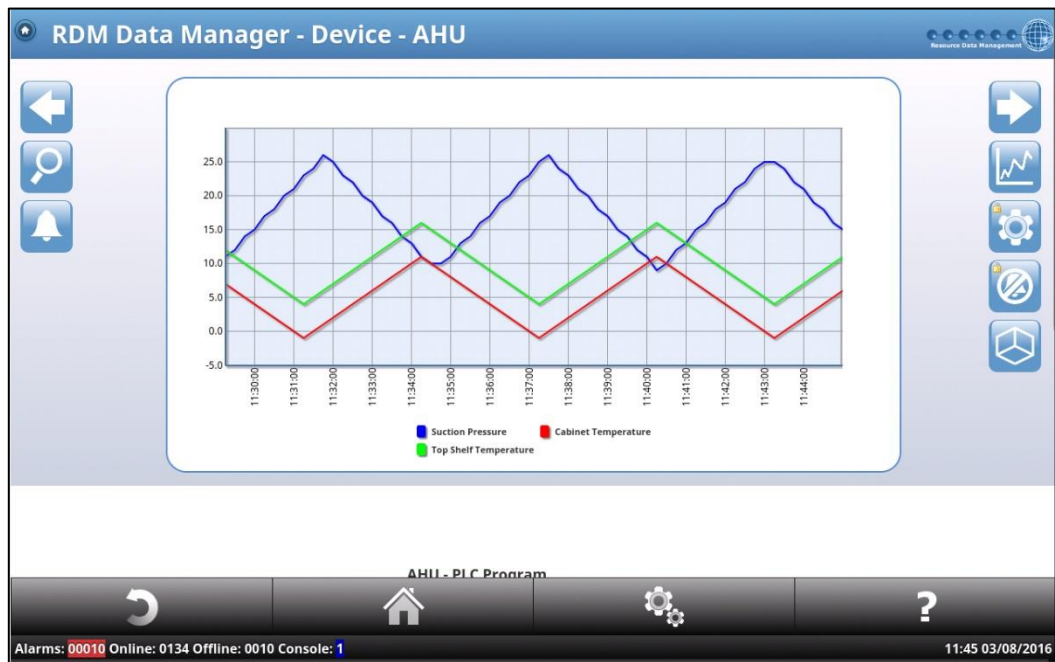


The home page should display the device list but if it is not visible, the user can press the device list page (bottom left icon) which will then take them to the list of controllers logged on to the DMTouch (screen below). From there the user can scroll down to select the device with the data they wish to view.



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Device Information



Pressing on the controller name will show the screen above. A dynamic graph displaying the last 15 mins will be at the top of the page and by scrolling down the user will see the inputs and outputs of the device (picture below).

037 - EEV Case Controller (HT)
Online since 19:05 05/08/16

Name	Value	Units
Control temp.	2.4	°C
Display temp.	2.4	°C
Air on Probe	3.8	°C
Air off Probe	1.1	°C
Evaporator Probe	-2.7	°C
Suc. Line Probe	1.8	°C
Superheat	4.5	°C
Defrost Probe	3.0	°C
Logging Probe	3.7	°C
Plant Fault	OK	
Case Clean	Off	
Monitor Probe	????????	°C
Rem Evap Temp	????????	°C
Ext Defrost	Off	
MOP	Off	
Hub Trim Level	????????	%
Div Input	????????	%
Remote Press	????????	bar
Local Press	????????	bar
Local Calc Temp	????????	°C
Load Shed	Off	

Navigation icons: Back, Search, Alarm, Forward, Graph, Settings, Inhibit, Device.

Alarms: 00011 Online: 0002 Offline: 0005 Console: 1

19:14 05/08/2016

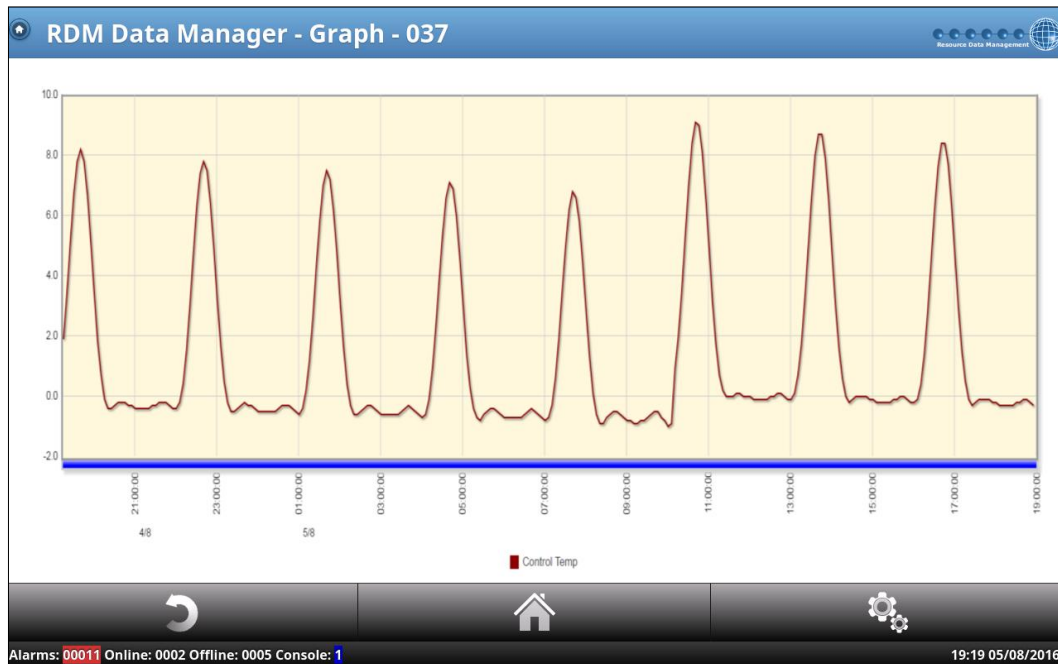
From this screen, the user can choose to view alarms, graphical data, set parameters or inhibit the device.



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View Logged Data

To view a graph of the device, press on the graph icon on the right hand side (🔍). The TouchXL Orbit will then display the 24 hours of information.



Beneath the graph the user has the options of selecting different data traces, logging interval, adding another device to the graph and choosing between Absolute and Differential.

Once the traces have been selected by the user a colour key legend will appear under the graph. The user can select/deselect a trace(s) by pressing on the appropriate trace they want to view/hide. A strike through line will appear when the trace is deselected (see below).

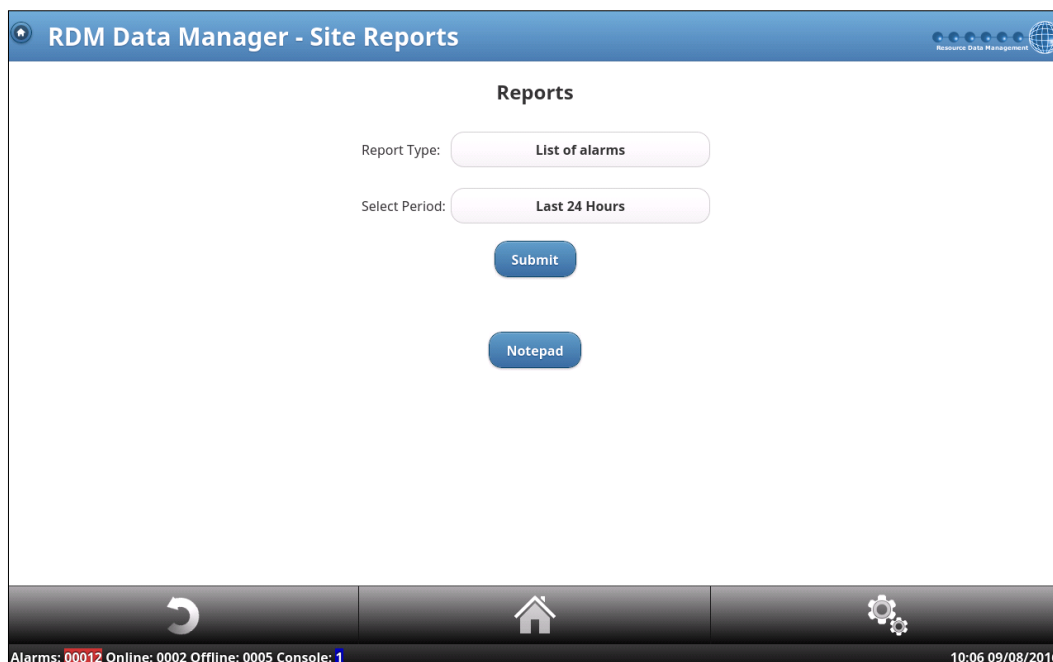
Using the left and right arrows allows the user to move back and ahead 24 hours at a time. Pressing select period will bring up a calendar which will allow a start date and end date to be picked so that a larger period of information can be viewed.



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Reports

From the Layout / Device list screen page press the reports icon ()



This screen allows the user to view reports relating to devices on the DMTouch. The following options are available:

Report Type – Select which type of report to view.

Select period – Define a time period from the past 24 hours, week, 2 weeks or month. It is also possible to generate reports from a specific period.

Note: Some reports will give an option to have the report only gather data for out of hours only.

Normal Hours, enter the operating hours of the DM. For example site opening hours which means out of hours reporting consists of data obtained from the out-of-hours time period e.g. when the site is closed.

When pressing on the 'Report Type' it is possible to structure reports with information regarding:

- List of alarms
- Graph of alarms by device
- Count of alarms by device
- Graph of alarms by alarm
- Count of alarms by alarm
- Graph of OT alarms by device
- Count of OT alarms by device
- Graph of offline alarms by device
- Count of offline alarms by device
- Night blinds report
- Energy Report



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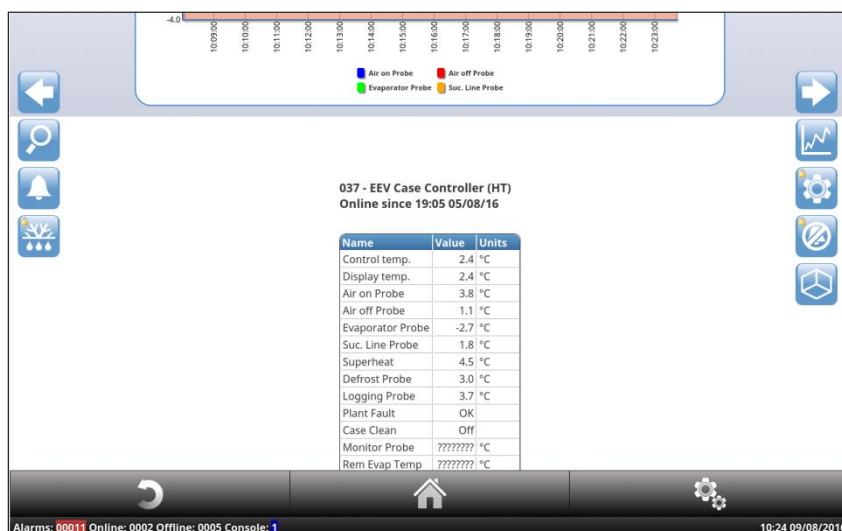
Inhibits

Inhibits are used to prevent alarms from controllers that are intentionally switched off for a duration. Inhibits can be set to:


- Short
- Long
- Online

The defined periods for short and long inhibits are setup during commissioning.

Online keeps the device in inhibit until the next time it is switched on and comes online.



Select the desired Device from the list of devices, now press

the Inhibit button ()

(Swipe card or enter "PIN" to access this feature)



Select either Short, Long or Online.

If Short or Long is selected, the status will change to "Inhibit".


If Online is selected, the mode will come on as "Pending" until that device goes offline. Then the mode indicates "Inhibit" until the device comes back online.

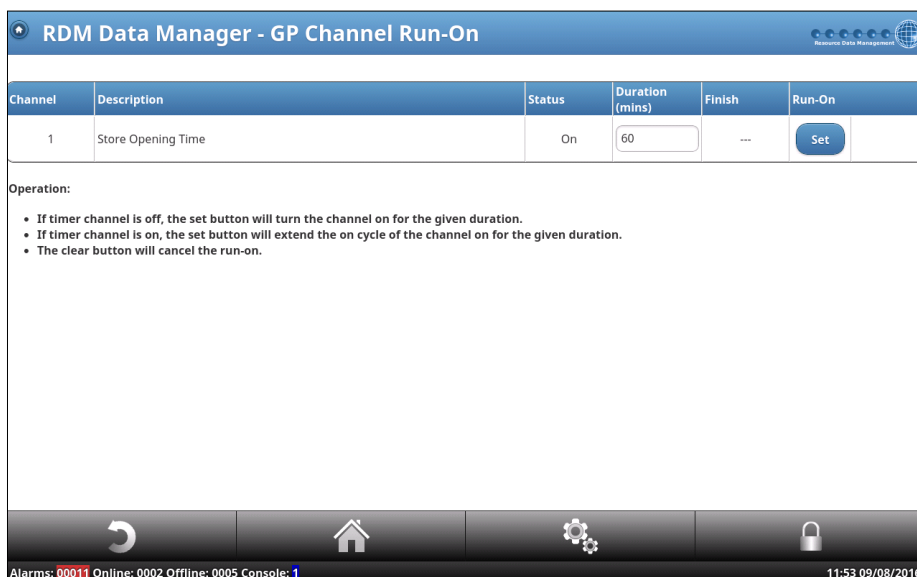
Note. If the case is not switched off before the Offline delay has elapsed, this online inhibit action will be cancelled.



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GP Timer Run-On

This feature allows General Purpose timer channels to have run-on hours added. From the home screen, press the Run-On icon ()



Channel	Description	Status	Duration (mins)	Finish	Run-On
1	Store Opening Time	On	60	---	<input type="button" value="Set"/>

Operation:

- If timer channel is off, the set button will turn the channel on for the given duration.
- If timer channel is on, the set button will extend the on cycle of the channel on for the given duration.
- The clear button will cancel the run-on.

Alarms: 00011 Online: 0002 Offline: 0005 Console: 1 11:53 09/08/2016

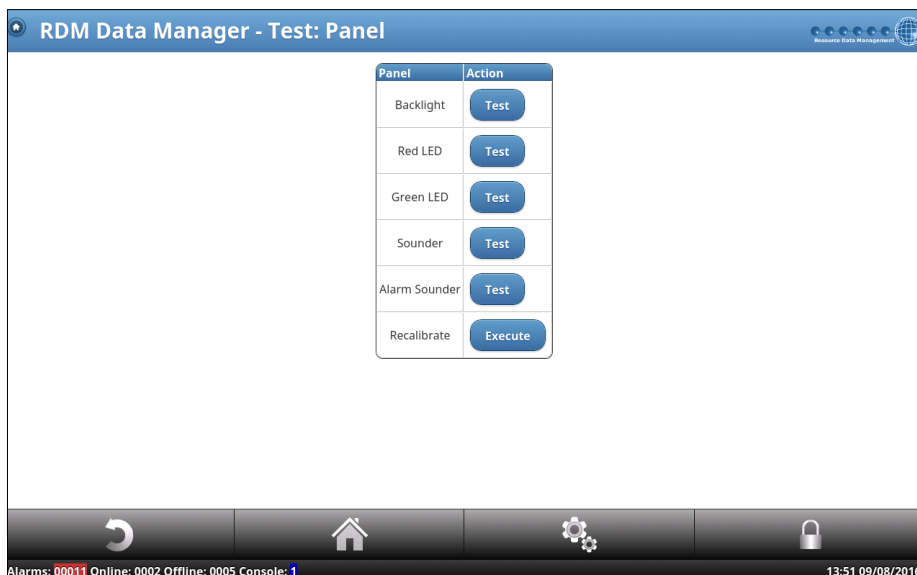
Enter in the desired Run-On period and press Set; the new finish time will be displayed in the Finish box.

Note: Access to the GPT Channel Run-On is limited by access level and the time period is set to a defined period limit (e.g. 60 minutes) which is set under site setup during commissioning.

Test Mode

The user can test some features of the TouchXL Orbit by logging into Service – System – Local IO – Panel Test

That will show the screen below, this allows the user to recalibrate the screen and test the sounder. The other options relate to the DMTouch only.




Panel	Action
Backlight	<input type="button" value="Test"/>
Red LED	<input type="button" value="Test"/>
Green LED	<input type="button" value="Test"/>
Sounder	<input type="button" value="Test"/>
Alarm Sounder	<input type="button" value="Test"/>
Recalibrate	<input type="button" value="Execute"/>

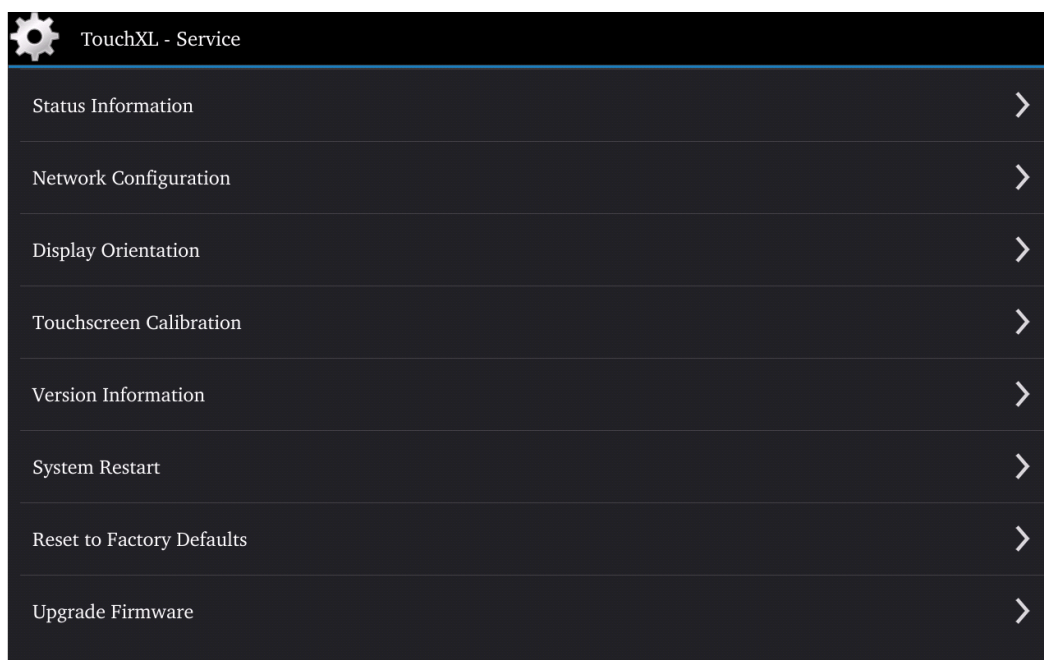
Alarms: 00011 Online: 0002 Offline: 0005 Console: 1 13:51 09/08/2016



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Service

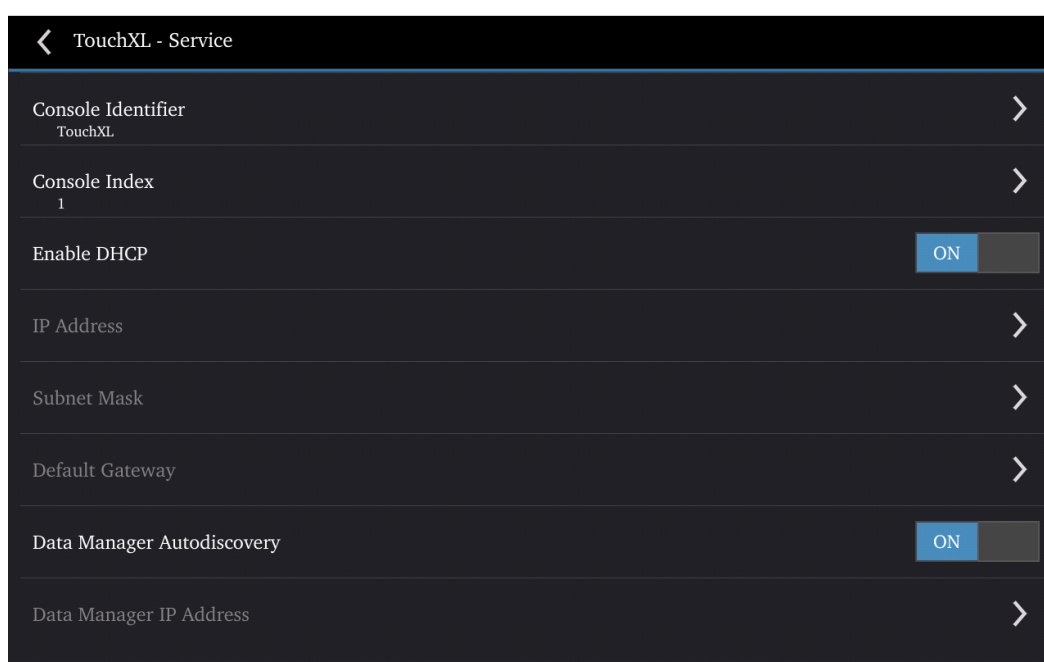
To enter the TouchXL Orbit service screens, press on the Home button on the top left of the panel, and then press the Service icon ()



This screen gives the user access to upgrade software, restart the TouchXL Orbit, calibrate the screen, set screen orientation, reset to factory defaults, view status and version information and also configure the network settings of the TouchXL Orbit.

Network

Pressing on Network configuration on the Service screen will display the screen below.



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Console Identifier	This name will appear on the DMTouch under the TouchXL information. It enables the user to easily distinguish between connected devices.
Console Index	This can be set to 1, 2 or 3 and is used for the alarm actions menu in the DMTouch
Enable DHCP	If enabled, it will accept an address handed out from a DHCP server on the network that it is connected to.
IP Address Subnet Mask Default Gateway	If not using DHCP, these options will be available and must be filled in for the TouchXL Orbit to communicate with the DMTouch. These details may need to be supplied by the local IT consultant.
Data Manager Autodiscovery	Allows the TouchXL Orbit to search for a DMTouch panel.
Data Manager IP Address	If Autodiscovery is set to off, this should be populated with the DMTouch panel address.

Note: Using the above network settings will enable the TouchXL Orbit to communicate over Ethernet 0 or Ethernet 1 with the DMTouch.

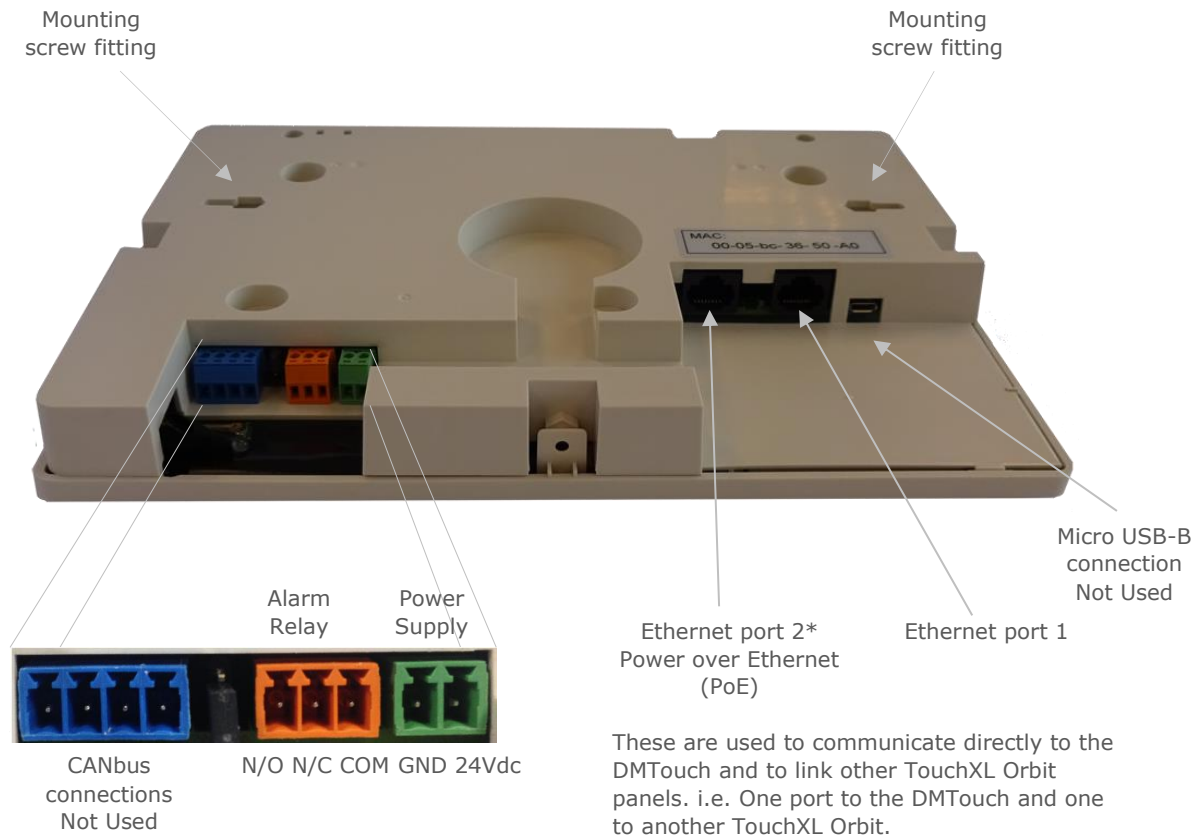
Loss of Communications

If the TouchXL Orbit loses connection or cannot detect the DMTouch for longer than two minutes, the device will generate an alarm on screen and make an audible alarm to alert the user that there is a fault and that communications have been lost.



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Installation



*When ordered with the fibre connections, Ethernet port 2 will be replaced with the fibre optic terminals.

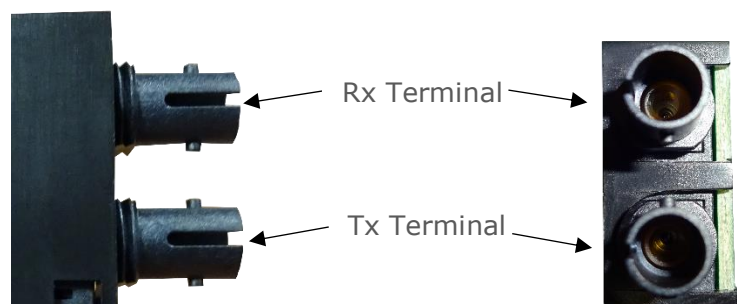
Alarm Relay

The alarm relay will be 'energised' for a healthy/no alarm condition and 'de-energised' for an alarm condition.

Fibre Connection

The Fibre connection uses the ST Connector and uses a 1310nm Class 1 Laser*.

* Class 1 Laser safety IEC60825 compliant. Class 1 - This class is eye-safe under all operating conditions.



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- 125Mbps IEEE 802.3u 100Base-FX compliant.
- 125Mbps FDDI ISO/IEC 9314-1 compatible.
- Max length up to 2km on a multimode optical fibre.
- Can use 50/125-micron or 62.5/125-micron multimode fibre.
- Bend radius is dependent upon manufacturer, but a rule of thumb is 15x cable diameter.

Note: Fibre optic connectors and cables can be damaged from airborne particles, humidity and moisture, oils from the human body, and debris from the connectors they plug into. Always handle connectors and cables with care. Failure to do so may result in damage to the fibre optic connectors or cables. Before performing any maintenance, disconnect the fibre optic cables from the unit and turn off power. When disconnecting fibre optic cables, cover with the included dust caps to the ends to maintain their integrity. Before connecting fibre optic cables, clean the connector tips and in-line connectors.



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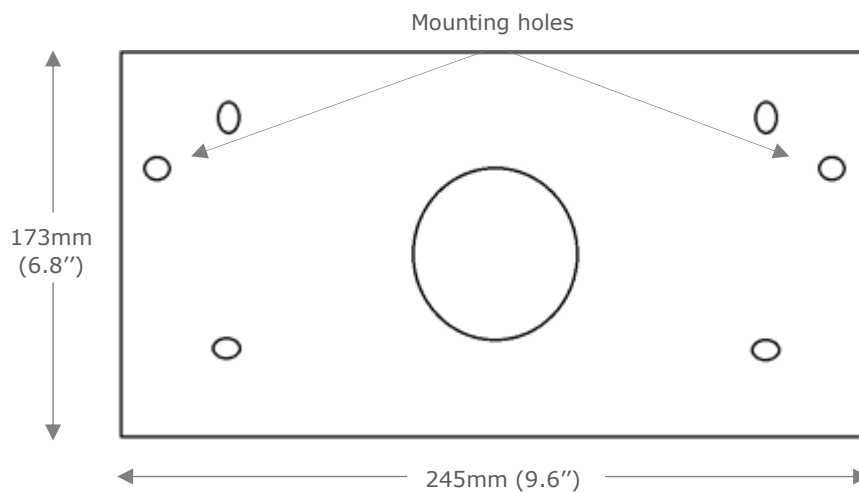
Mounting Instructions

The unit comes supplied with the appropriate connector blocks, two mounting screws with bolts and four screws to screw the back mounting bracket (see below)

To fit and attach the mounting bracket, do the following:

1. Insert the mounting screws into the fittings on the back of the display and slide them to the outside so that they are locked in.
2. Put the back cover on , making sure the screws are lined up with mounting holes (see below)
3. Once the cover is on, secure it in place by using the four screws around the outside edge of the display.
4. Mount in the desired position and use the two bolts supplied to secure into position.

Back Mounting Bracket



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Technical Specification

General

Operating temperature range	0°C to +50°C 32°F to +122°F
Operating Humidity	80% maximum
Storage temperature range	-10°C to +60°C 14°F to +140°F
Environmental	Indoor use at altitudes up to 2000m, Pollution Degree 1, Installation Category II.
Size (H x W x D)	173 x 245 x 31 mm 6.8 x 9.6 x 1.2 inches
Weight	0.73 Kg 1.6 lbs
EMC	EN61326-1: 2013, FCC CFR 47 Part 15b:2015
Ventilation	There is no requirement for forced cooling ventilation.
Disposal	Please observe local legislation with regards to electrical products.
Origins	Product designed in the UK manufactured in Taiwan.

Power Requirements

Supply Voltage Range	24Vdc, +/-10% 13W or PoE Class 0, 12.95W
Supply Frequency	50 - 60 Hz

Display

Type	256mm (10.1") a-Si TN TFT Colour
Resolution	1280 x 800 (pixels)
Brightness	370 (cd/m ²)
Contrast Ratio	700:1
Viewing Angle	70°
Backlight	LED
Backlight Lifespan	15,000 hours

Touch Interface

Type	Type Balance Capacitive
Resolution	2200 x 3900 (dot)
Light Transmission	85% +/-5%

Relay Specification

Fixed on-board relay NO/NC	Volt Free. Max 2A resistive load 24Vac. 2A, 30Vdc
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