Resource Data Management

DMTouch
On Site User Guide

PR05XX

General Note: Icons or images may not be exactly as depicted in this document or in the same location depending on user configuration and the DMTouch software version.

Hardware images shown represent the current version of DMTouch.

The space provided below is available for site specific notes.

Contents

On Site Guide

Operations from the 'Home' Screen

From the 'Home' screen of the DMTouch, the following options can be accessed:

🏠	Home
	Layout
☰	Device List
⚡	Energy Report
	Reports
🔔	Alarm Log
⚙	Service
	GP Run-On
	SME Logout
🔧	Maintenance

By pressing on the '?' icon at the top of the screen the user will see a Key legend which tells the user the type of network the devices are logged on to (i.e. IP, Genus, split devices) and will also show if it's a TDB program , or system device. Also shown will be a 'Help' button, which will show the user the DMTouch user guide.

If there is a layout present on the DMTouch then the Layout/Device List buttons will be available to allow a user to toggle between the Device List and the Layout screen.

Interacting with the Touchscreen

The DMTouch 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 DMTouch 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 DMTouch to provide the correct operation. Care should be taken not to apply excessive force as it could lead to damage.

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.

Using the Onscreen Keyboard
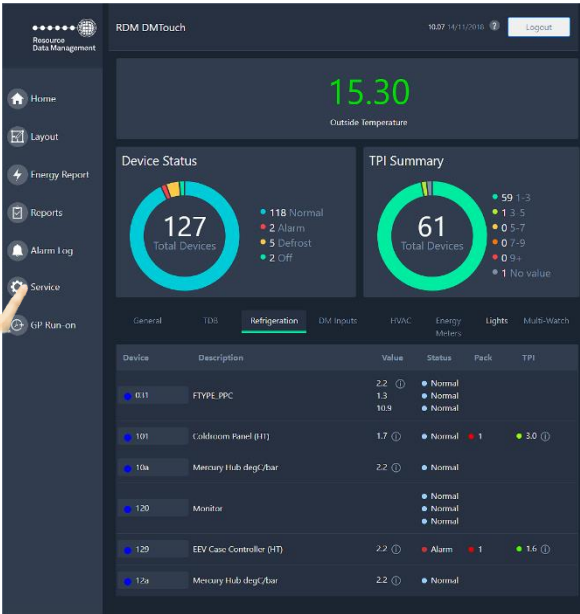
When entering information into the DMTouch an alphabetical or numerical keyboard will be displayed. For example, click on the 'Service' option as shown on the left. A login screen will appear prompting the user to enter valid user credentials as seen below.

The user can configure the log in screen to accept a username/password or a pin number. This option is configurable through the 'Site Setup' page.

If setup for user name and password, then, when the user touches the screen to enter their details the alphabetical keyboard will be shown, and if set up for a pin then the numerical keyboard will be displayed. The keyboard will appear beneath allowing them to type in their log in details. The user can toggle between the two keyboards using the 'ABC' and '123' button at the bottom left of the keyboard.


Alphabetical Keyboard
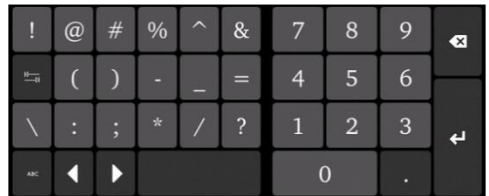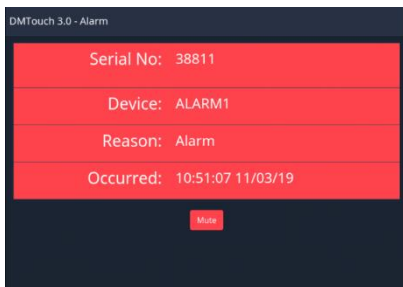

Numerical Keyboard

Accepting Alarms

When alarm(s) occur(s), the DMTouch will display the alarm on the screen. The alarm buzzer will sound and the light at the bottom of the touchscreen with the Bell icon will flash red.

To accept the alarm(s), enter an appropriate PIN or username/password and press Enter (press "Mute" if the system has been configured for no PIN). If the appropriate hardware is fitted a swipe card can be used to accept the alarm instead. Further alarms can be accepted by pressing "Mute". If the "Mute" key has not been pressed for 10 seconds, a PIN or username/password will be required to accept further alarms.

Once all of the current alarms have been accepted, the alarm sounder will stop, the indicator will display static red and the screen will revert to the screen prior to the alarm. Once all alarms are clear, the indicator will display static green.
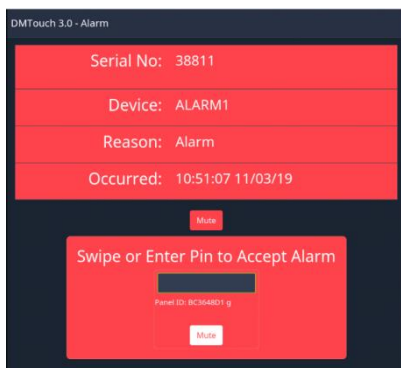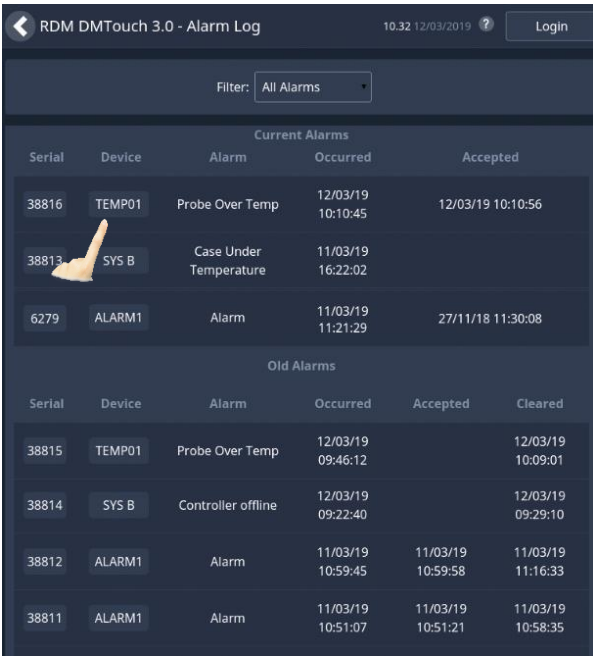

Typical alarm screen when using a PIN or swipe card to acknowledge and accept.

Typical alarm screen when not using a PIN or swipe card.

Alarm Log

Alarms are shown in tabular form, with their serial number, device, alarm and occurred time.

When viewing the alarm log the user can press on the screen and drag up or down to view the different alarms. Both current alarms and historic alarm information is viewable on this page.

Each alarm generated is assigned a unique 'Serial' number.

There is a filter drop down box at the top of the page that will allow the user to filter between All, Current and Old alarms.

Alarm Detail

Touching a given serial number will result in additional information being displayed for the alarm selected.

Viewing Data

From the "Home" screen.

From the 'Home Screen' the user can press on any of the devices on the 'Device List'

Pressing on the desired 'Device' name will show more detailed information from the device.

Device Information

By pressing the device name the user will be shown a mimic (if setup) or a summary graph which will display certain temperature probe reading for the last 15 minutes.

 The user can view the current values of Inputs, Outputs, Parameters, Control states and watched items by using the tabs above the graph.

Using the navigation buttons at the top of the page allows the user to review data or interact with the device. Some examples are as follows. The user can view Alarms relating to the device, set Parameters for the device, view the device Data Logs and inhibit the device.

Please see next page for more information on the function of the buttons.

Navigation Buttons

➡	Next	This takes the user to the next device
📈	Graph	This will show the 'Graph' screen and allow viewing of historical data
⚙	Set	The user is prompted for a log in and taken to a screen that allows set points to be altered
🔍	Optimisation Graph	If set up in the 'Energy' section, this shows how the case has been performing
🔔	Inhibit	Will show the options for putting the device into inhibit
⬅	Previous	This takes the user to the 'Previous' device
🔔	Alarms	Current and previous alarms
❄	Manual Defrost	Forces the device into a defrost
⚠	Manual Override	Allows the user to override key functions on HVAC and BMS equipment on a BACnet interface
📊	COP	Generates a graph of the Coefficient of Performance for that case
⬡	Profile	Shows graphical performance profile
❄	Defrost Terminate	Terminates the device's defrost cycle

Mimic Drawing

These are mimic diagrams that can be set up on the DMTouch by an engineer that will show the user a simulation of how the case is performing.

There are four that can be configured and shown. They are Case, Coldroom, Probe and Energy Meter.

If they are setup, they will appear at the top of the page when checking the device values.

These are used to show a quick overview of how the device is performing. The user will be able to see the over/under temperature alarm set point and what the current value is.

Viewing Graph Data

Press " " to view the log data.

In this example probe temperatures for a case controller in the last 24 hours is shown.

The user can change the trace that is required and the interval time. They can also add devices to superimpose different traces over the top.

Using the arrows will allow the user to move forward or back 24 hours.

Reports

From the 'Home Page' page select Reports.
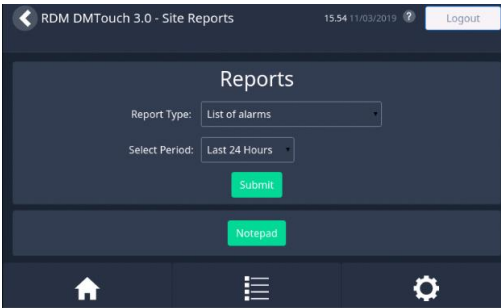
Press "Report" to view the data.

As shown in this example the number of alarms generated in the past 24 hours by each device is highlighted.

Press down on "Report Type" and select the type of report to be created.

Select "Period" and define the required period from the possible options listed (24 hours, 1 week, 2 weeks or 1 month). It is also possible to select a specific period out with these options from which the data is gathered.

GP Timer Run-On

This feature allows General Purpose timer channels to have run-on hours added. From the home screen, press more, then Run-On
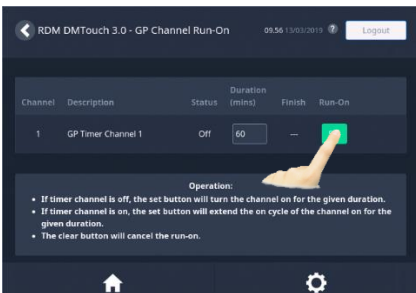
Press "Set" and key in the desired Run-On period; the new finish time will be displayed.

Inhibits

Inhibits are used to prevent alarms from devices 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.
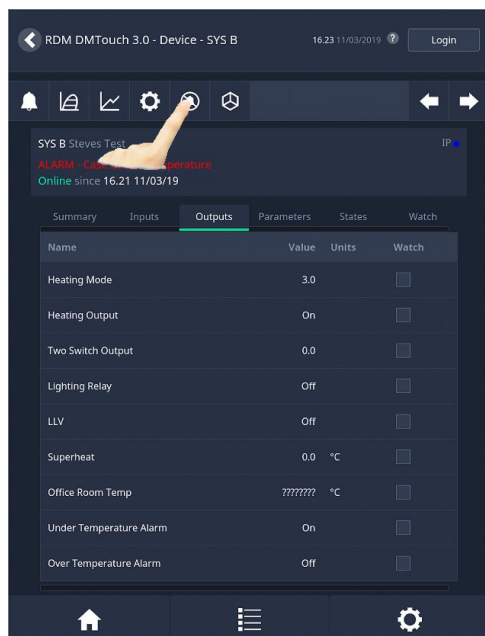
Select the desired Device from the list of devices, now press the Inhibit button.

(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 device is not switched off before the Offline delay has elapsed, this online inhibit action will be cancelled.
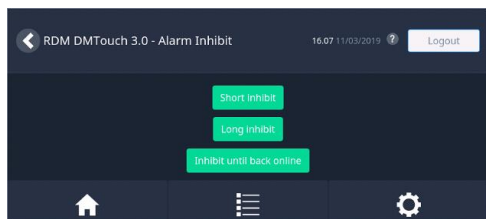
Accessing the DMTouch via a PC

Using a Web Browser to View the DMTouch

The DMTouch can be accessed using a PC connected to the IP network connection. Doing so provides a visually similar layout to physically being at/using the DMTouch.

If the PC is directly connected to the DMTouch a standard straight through patch cable or cross-over Cat 5 cable can be used.

Navigation

With the PC attached to the DMTouch start a web browser session, the Home screen will be found at http://10.1.2.75 (certain configurations may differ). Example web browsers are Internet Explorer, Edge or Google Chrome.

For consistent results, use the application navigation buttons rather than the standard browser buttons.

Home Screen

There are two types of screen that will appear at the home page, a device list or a site layout. In both cases a menu tab will appear at the bottom of the page, as shown below.

Depending on the features enabled and the screen you are currently in, then the list of icons below will be displayed.

🏠	Home
📝	Layout
☰	Device List
⚡	Energy Report
📋	Reports
🔔	Alarm Log
⚙	Service
⏱	GP Run-On
⏏	SME Logout
🔧	Maintenance

Clicking on the appropriate menu will select the required page.

Device List

Shown below is the Device List from the DMTouch home screen, this is shown if no layout diagram has been uploaded to the DMTouch:
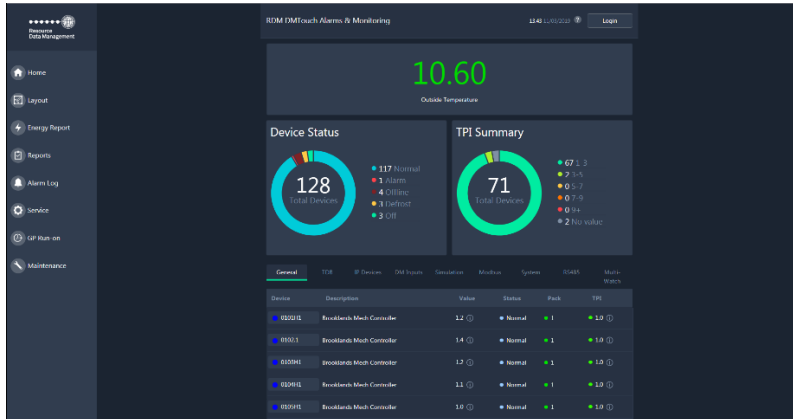
The columns shown are as follows:

Device	Device Name
Description	Device Alias
Value	Current Value (if used)
Status	Current State
Pack	Pack Optimisation Performance Indicator*
TPI	Case Temperature Performance Indicator*

*Only available when the requisite energy features have been enabled. Refer to DMTouch commissioning guide for full details.

The status field is colour coded to indicate the different states:

	Red	Alarm
	Blue	Normal
	Yellow	Defrost
	Green	Case Off
	Orange	Alarm Inhibit

Further information on each device can be viewed by clicking on the desired device from the list. A Device Status summary appears at the top of the device list showing how many controllers are online and how many are currently in alarm.

Layout

If a layout diagram has been loaded during commissioning, then a screens similar to the ones below will appear as the home page.


The layout screen above gives a graphical view of how the AHU unit is operating. Below is an over-view of a site layout. The individual devices are colour coded to show their respective states (see example below).

Colours used to define status:

	Red	Alarm			Yellow	Defrost
	Blue	Normal			Green	Case Off
	Orange	Alarm Inhibit			White	No Device

Clicking on a device or bay will auto-zoom in to that specific area. As with the device list, further clicking on the device will display the device values and/or alarm status, as shown below.
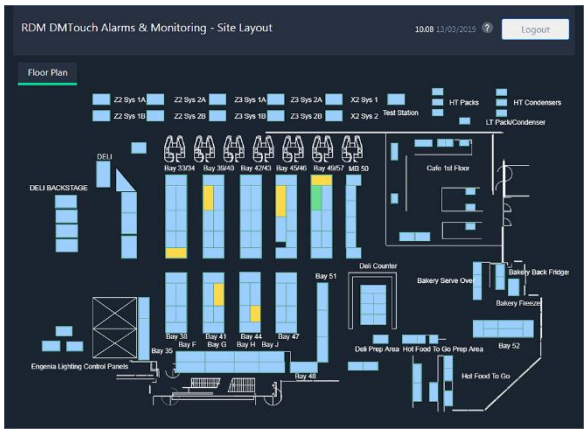
The data on this screen will vary according to which device is being viewed. You can click on the tabs to view a mimic, Summary (below), Inputs, Outputs, Parameters, States and Watched Items
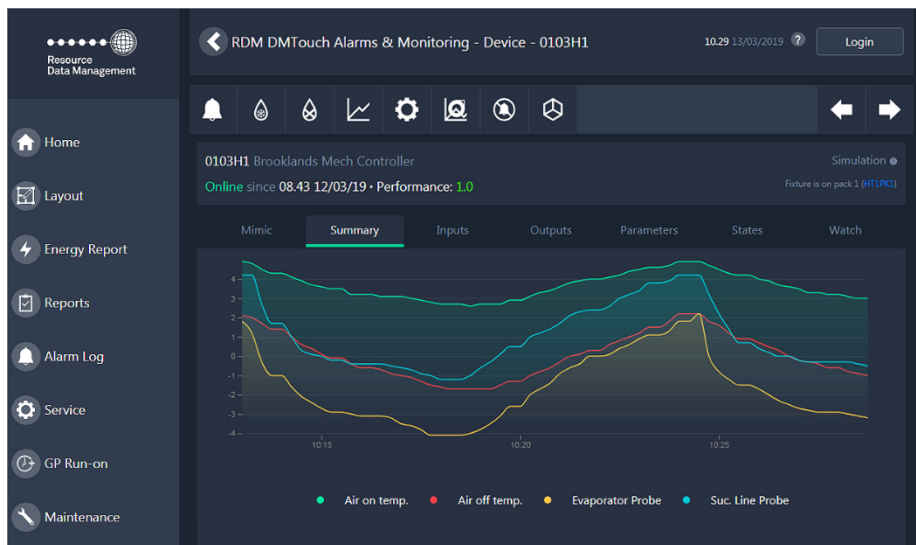
There are a further 10 device-associated screens, which can be accessed by clicking the icons on this screen (top to bottom, left to right):

🔔	Alarms	Shows the device alarm log
💧	Defrost	Performs an immediate defrost
💧	End Defrost	Terminates the defrost
📈	Graph	Shows the device history in graphical format
⚙	Set	Allows the user to change device parameters
▣	Optimisation	Shows graphical reviews of case valve performance
◉	Inhibit	Inhibits all alarms from the device
⬡	Profile	Shows graphical performance profile
⬅	Previous	Moves back to the previous device
➡	Next	Moves to the next device on the list

Settings

Parameters

Click the Parameters tab to view the device settings:

The data on this screen is read only and will vary according to which device is being accessed.

Press the "Values" icon or the back button to revert to the device values.

Alarms

Click the alarms icon to access the device alarm page:

Data and values on this view only screen will vary according to the device being viewed.

Clicking on the alarm serial number can expand individual alarms, giving this view:

Graph

Click the graph icon to view the device history graphically:
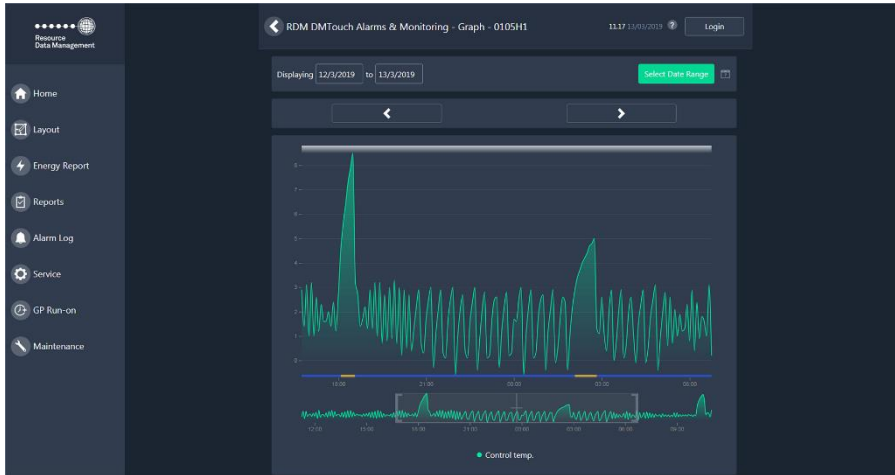
Traces seen on the graph can be added or deleted by selecting/de-selecting using the Select Trace button.

Previous day values can be seen by clicking the 'Previous Day' icon and to go forward a day click the 'Next Day' button.

Selected days can be seen by using the 'From' and 'To' buttons and entering the required dates.

More devices can be added to the graph by selecting them using the 'Select 'Device' button.

Zoom

The trace(s) can be zoomed by clicking and holding the left mouse button and dragging across the time and date at the bottom of the graph, then releasing the left mouse button.

Set

(Access to this screen requires a service or install level user)

Click the set icon to view and/or change the device parameters:

Type in the required values in the appropriate fields and click "Set Parameters". The parameters will be saved in the device's memory.

Parameters can be "locked" preventing further changes to be made (unless by an authorised user).

Check the "Locked" tick box against each parameter you require to lock and then press "Set Parameters".

The DMTouch will highlight values entered into a parameter field which are out with a parameters valid range. When this occurs the parameter is highlighted in Red, enter a valid value from the range shown and press "Set Parameters" to continue.
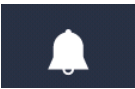
Optimisation

Click the optimisation icon to view the device valve performance.

The optimisation screen displays the percentage valve opening against time.

Alarm Log

Click Alarm Log Icon the menu to view alarm data:

Accepting Alarms Using the PC

To accept alarms through the PC, then navigate to the Alarm Log page. Any alarm that needs to be accepted will show an "Accept" button in right hand side column, beside each configured alarm.

Clicking on the button will prompt the user to login, at this point the alarm will be acknowledged. Repeat to accept further alarms.

Reports

From the menu tab click on reports.

Reports

Report Type: Graph of alarms by alarm

☐ Out of hours only

Normal Hours:

06:00

to

20:00

Select Period: Last 2 Weeks

Submit

Select the type of report to be created.

Select whether the report generated is used with data gathered out with "Normal Hours".

From the drop down menu select appropriate times to define "Normal Hours"

Define the period from which data is gathered.

Graph of alarms by alarm

Alarm	Count
Warning: Night blinds fail	6
Controller offline	5
Warning: Defrosts term on time	3
Remote Pressure	1
S03 Transducer Fault	1
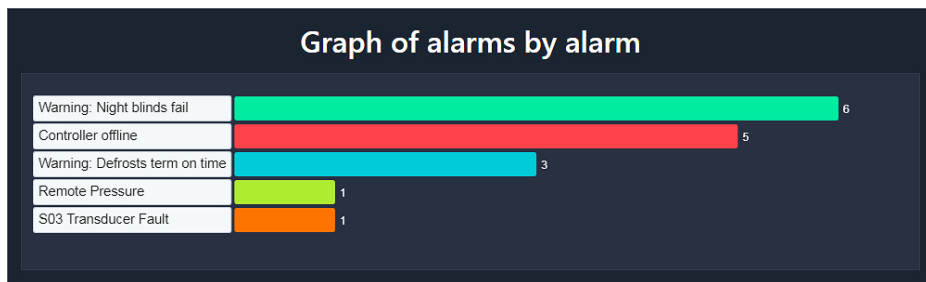
Shown above is an example graph of "alarms by alarm". By selecting "Count of alarms by alarm" It is possible to view this data in tabular format.

GP Timer Run-On

From the menu tab click on GP Run-On.

Channel	Description	Status	Duration (mins)	Finish	Run-On
1	GP Timer Channel 1	Off	60	---	Set

Type in the desired run-on duration and click the "Set" button. The page will update showing the new finish time.

The clear button will also be displayed; click this button to cancel a run-on.

Front Panel

USB, Ethernet, RS485 connections

Power LED   Alarm Indicator LED

Warning: Refer to Installation Manual for details of connections. The removal of wings/covers and connections made inside the covers should only be carried by a competent installation/service engineer who has had training in the installation and maintenance of the DMTouch.

Notes

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