

Store Data Manager Installation Procedure

Information required by Engineer (1 copy per engineer):

- Data Manager install guide
- Sainsbury's letter of Authorisation to install the Data Manager
- Relevant Risk Assessments
- Asset Alias Name List
- Store Data Manager Eth1 IP address information

Information required by Engineer - Commissioning Only Stores (1 copy per site):

- Data Manager Installation Completion Certificate

Information required by Engineer - All Other Stores (1 copy per site):

- Verisae's refrigeration asset list (may be blank if none available)
- Store survey sheet (if available)
- Site Specific Method Statement
- SWP Sheet (extension to Method Statement)
- Data Manager Installation Completion Certificate
- Minor Works Sheet

Materials required by Engineer (Per site where replacing an existing front-end):

- Data Manager (Supplied by RDM)
- 2 x 20mm Large Hole stuffing glands & Locknuts
- 2 x 25mm stuffing gland & Locknuts
- 10 to 60 meters CAT5e cabling
- 2m YT1 plastic trunking or 20mm plastic conduit & adapter
- 2 x RJ45 (CAT5e) single outlet plates & surface back boxes
- 2 x patch leads (1 x 1m, 1 x 2m)
- 10 x Tyraps White 160 x 4mm
- 4 x 32mm x 8 screws and rawlplugs
- 2m x 3 core white 1mm flex (if existing requires replacing)
- 3amp fuse for existing Fused Spur
- White Hygiene Hat & Coat (or overalls, paper or cloth, as must be worn in prep areas, rear café area, etc, whilst installing integral cabinet ID tags)
- Label printer – to identify fused spur and CAT5 Cable / Patch Lead
- Combined Earth loop tester & Meggar (IR Tester) – to test mains supply.

Complete the commissioning paperwork for return along with the signed SWP Sheet (Method Statement extension sheet), electrical Permit to Work and the electrical test certificate (Minor Works Sheet), etc.

Note: At the end of the installation, check that Verisae have remote access to the Data Manager and that all controllers are still on-line!
This has to be checked before leaving the store after each visit!


Store Data Manager Installation Procedure

Sign in, introduce yourself to the Duty Manager, show him/her the Sainsbury's letter of authorisation, Explain the installation procedure and complete the method statement (Store Safe Working Practices) forms asking them to sign where appropriate.

The instructions/guidelines below MUST be followed when installing a Data Manager into an existing store. This procedure has been put together to attempt to eliminate issues with the installations. Can you please read and follow these instructions, i.e. install any Integral Cabinet ID Tags first, then contact Verisae, then install the DM, etc, etc, then contact Verisae again before leaving.

<u>Description of Works</u>	
1	Engineer to sign in at Customer Service desk.
2	Engineer to make contact with Store/Duty manager, discuss scope of works, request a 'Permit to Work' and complete 'Store SWP Sheet' together with store duty manager.
3	Set up working area ensuring segregation from store staff.
4	Deliver materials to working area.
5	Store to commence manual temperature checks.
6	Engineer to survey the store to establish cabinet ID Tag requirements.
7	Engineer to run new Data cabling between IT switch and Data Manager (if required).
8	New Data Outlet Point to be installed adjacent to Data Manager (if required).
9	Engineer to contact Arcus FM (0800 980 8887) and advise that the existing system is going Off-line (if refit)!
10	Check and note down ALL controller names prior to removing the existing front-end (if refit).
11	Power down existing Alarm Front End, disconnect power & network cables and remove.
12	Install new Data Manager alarm panel.
13	Connect existing power supply to new Data Manager.
14	Connect existing field data wiring to new Data Manager.
15	Engineer then continues with the store survey, identifying the controllers, compiling the asset sheets, etc.
16	Engineer to configure Data Manager
17	Engineer to contact Verisae 0208 334 7446 and advise works are complete and request confirmation all information is being received.
18	Engineer to contact RDM help desk to confirm all fixtures are visible.
19	Engineer to carry out training of store personnel and ensure that the training certificate/DM completion sheet is signed accordingly.
20	Store to cease manual temperature checks.
21	Engineer to clear site.

Store Data Manager Installation Procedure



JS Information Systems Ltd

33 Holborn
London
EC1N 2HT
Tel: 0207 695 6000

For the attention of: Store Manager

Purpose


Sainsbury's are undertaking a rollout of new technology to monitor and report refrigeration temperatures across our estate. This is part of an IT project and this letter provides you with documentation that the below list of contractors have permission to access the store and store facilities to install the new technology. This will not disrupt store activities in any way.

The contractors who will be visiting your store are employed by one of the following company's and have the permission to complete the site survey:


Verasec UK
Energy MCSB (for Northern Ireland)
BECS - Building Energy Control Solutions
E&H Electrical Services
ADIB - Advanced Data Installations & Service
NCC - Neil Charlton Contracting
Hybrid UK

The contractor must and will display identification at all times once they are on the Sainsbury's premises and must sign in and out following the standard Sainsbury's guidelines. Should you have any issues or queries with this please contact:

Martin Booby: IT Project Manager
James Phillips: IT Procurement

Thank you for your support with this.
Kind regards,

Rob Fraser
(Sainsbury's IT Director)

Registered address: 33 Holborn, London EC1N 2HT, Registered in England & Wales.
Company Registration Number: 04152502. Vat number: 600 4548 36



Store Safe Working Practices
(Extension to Method Statement)

Store Name / Location: Store ID:

Store Representative: Signature:

Date of Commencement on site:

Store Fire Assembly Point:

Engineer Name:

This document is to be used as a guide only and should be read in conjunction with the 'Working with Sainsbury's' handbook and 'Sainsbury Health & Safety Handbook' and is to be used as a minimum requirement of contractors whilst working on Sainsbury's premises.

Item	Must Do:
1	On arrival at the store, Sign In / Out at Customer Services showing proof of identity, i.e. Company ID card and/or CSCS card.
2	Contact the duty manager and discuss with him your anticipated areas of work for that day and acquire the necessary 'Permits to Work', i.e. Electrical, Working at Heights, etc.
3	Evacuate the premises immediately upon hearing the continuous Fire Alarm and assemble in the designated location, which at this store is as detailed above.
4	Use the PPE equipment your employer has provided for the tasks you are about to perform. As a minimum, Testectors are to be worn at ALL TIMES and Hi-Vis Vest MUST be worn in the Loading Bay/Yard areas.
5	Work safely with consideration for others, e.g. erecting barriers to protect Sainsbury colleagues where necessary.
6	Read and follow the 'Risk Assessments and Method Statements' provided for you by your employer.

Item	Must Not Do:
7	Consume Food or Drink anywhere outside of the designated areas, i.e. Staff Canteen.
8	Cause an obstruction by working in, or storing materials in, aisles / walkways, without prior approval of the store management.
9	Store materials on, or utilise Sainsbury's storage / transportation equipment, without the express approval of the store management.
10	Smoke in non-designated areas, including Plant Rooms, Roofs, Car Parks, etc.


I have read and agree to abide by the above items whilst I am working at these premises and will bring to the immediate attention of my supervisor and/or employers, any issues or deviations from the above items.

Engineer 1 Name: Signature: Date:

Engineer 2 Name: Signature: Date:

Engineer 3 Name: Signature: Date:

Building a better future together!



SITE SPECIFIC METHOD STATEMENT

Works Associated with:-

Installation & commissioning of new Data Manager Systems and associated interface equipment, in accordance with design & tender specifications, relevant regulations, standards & manufacturer's instructions.

Customer:- Sainsbury's (via Resource Data Management Ltd)

Customers Contact:- Charlie Costley (RDM)

Works to be carried out at:- Milton Keynes Store
Witan Gate
Milton Keynes
Buckinghamshire
MK9 2FW

Works to be carried out by:- Building Energy Control Solutions Ltd
Commerce Court
Challenge Way
Bradford
West Yorkshire BD4 8NW

Telephone:- 01274 662226
Facsimile:- 01274 662226

Date:- 02 June 2011
Reference:- 170211 Milton Keynes Method Statement

Issue No. 1
Amendments:

Issued By:	Graham Brown 2/6/2011
Approved By:	Colin Brown 2/6/2011

Issued to:- Beverley Boocock - Office (Site) file
Graham Brown - BECS
Charlie Costley - Resource Data Management

Design Consultancy : Control Panel Design : HVAC : PLC Control : Remote Monitoring : Project Management : Installation : Energy Management

Building Energy Control Solutions Ltd, Commerce Court, Cutler Heights Lane, Bradford, BD4 8NW.
Tel: 01274 662226 Email: info@becs.com Web: www.becs.com
Registered in England: 07327214 VAT Registration No: 951 6214 81

RISK ASSESSMENT RIS-02

Section 1: Details of Assessment

Activity Description: **Asbestos**

Risk Assessments should be read in conjunction with the company Health & Safety Policy
All accidents/incidents/concerns should be reported to your Line Manager/Project Engineer


Likelihood	Severity	Risk Rating
0. Almost impossible	0. No injury	0. Control measures in place
1. Very unlikely	1. First aid	Low
2. Unlikely	2. 3 days	Medium
3. Likely	3. 7-30 days	High
4. Very likely	4. Long term	
5. Almost certain	5. Death	

Section 2: Task Hazards and Risk Rating

Hazard/Activity Description	Likelihood	Severity	Risk Rating	Further Site/Job Recommendations/Notes
Working within a building known to contain undisturbed asbestos	1	4	4	<ul style="list-style-type: none"> All staff must have asbestos awareness training before entering area. All staff must familiarise themselves with the premises current asbestos records prior to commencing work. Work must not start until the asbestos register is made available and checked.
Working within a building not known to contain undisturbed asbestos	1	4	4	<ul style="list-style-type: none"> Area is to be declared safe to work in by Main contractor or specialist asbestos contractor. All staff must have asbestos awareness training before entering area. All staff must familiarise themselves with the premises asbestos record prior to commencing work. All staff must wear PPE provided - Minimum of P3 type face mask and Disposable overalls. <p>Every week 20 tradesmen die from asbestos-related disease.</p>
Accidental damage to asbestos board or tile	2	4	8	<ul style="list-style-type: none"> All work to cease immediately within the localised area. Self and 3rd parties to evacuate the area with care taken to avoid further disturbance of asbestos fibres. All relevant personnel (self, the manager, Human Resources, store manager, contractor, subcontractor etc) must be informed immediately.
Accidental inhalation of asbestos particles or dust	2	5	10	<ul style="list-style-type: none"> All work to cease immediately within the localised area. Self & 3rd parties to evacuate the area. All relevant personnel (self, the manager, Human Resources, store manager, contractor, subcontractor etc) must be informed immediately. Seek Medical Advice

Section 3: Implementation

RIS Number:	RIS-02	Original Assessor:	Graham Brown
Date Created:	March 2010	Last Review Date:	July 2011
		Next Review Date:	July 2012



Store Data Manager Installation Procedure

Ask the Duty Manager for an "Electrical Permit to Work" form

Complete the form as much as possible at this time, ask the Duty Manager to authorise it.

SAINSBURY'S
TOP COPY TO FILE
MIDDLE COPY TO CONTRACTOR
BOTTOM COPY TO WORK AREA

ELECTRICAL		PERMIT TO WORK No.	07752
JOB DETAILS		INSTALL EDM ALARM PANEL (FRIDGE)	
SPECIAL TOOLS TO BE USED		NONE	
JOB LOCATION/ PLANT IDENTIFICATION		PLANT ROOM 1 ALL	
<p>This permit is only valid when all sections in orange are complete</p> <p>If you are in doubt or don't understand, then please ask. Please use this permit in the spirit intended to protect yourself and others. Please ensure that you sign this permit-to-work</p> <p>Do not proceed with your work until your permit has been authorised by the relevant member of staff.</p>			
HAZARDS AND PRECAUTIONS TO BE TAKEN			
PRIMARY HAZARDS - fumes, electrics, gases, liquids, sludge, radiation, moving parts			
PLEASE ANSWER THE FOLLOWING QUESTIONS TRUTHFULLY			N/A YES NO <small>PLEASE TICK ✓</small>
Has a Method Statement /Risk Assessment been completed for this task/read and understood?		✓	
Are you competent to undertake this work?		✓	
Have the relevant departments been advised of isolation?		✓	
Has the electrical supply been switched off?		✓	
Have any flammable substances been removed?		✓	
Are fire extinguishers required?		✓	✓
Is a fire blanket required?			✓
Have any combustibles/flammables been removed?		✓	
Is the fire procedure understood?		✓	
Is a voltage detection instrument required?		✓	
Is earthing required?		✓	
Are circuit breakers required?			✓
Are caution/danger signs required?		✓	
Are insulating mats/screens required?			✓
Will the isolator be locked off/tagged off prior to commencing work?		✓	
Are sprinklers in service?		✓	
Are heat resistant screens in place?			✓
Is Personal Protective Equipment required?		✓	
Is your electrical equipment PAT tested and free from damage?		✓	
Have you informed the relevant colleagues of your whereabouts and that you intend to carry out the work?		✓	
Other precautions and safety equipment required	N/A		
AUTHORISATION AND ACCEPTANCE			
<p>I confirm that I have verified the above information and ensured that the necessary precautions have been taken. It is safe to carry out the work as defined above and the permit information has been explained to all workers involved. I accept responsibility for this work.</p>			
PERSON IN CHARGE	Jon Burton		EXPIRY DETAILS
COMPANY	B.E.C.S		DATE
SIGNATURE		DATE	TIME
AUTHORISING PERSON	NAME	SIGNATURE	MUST NOT EXCEED 12 HOURS
	P. Humphrey		10 8 11
		18/8/11	18 : 00
HAND BACK AND CANCELLATION			
<p>I confirm that the work has been completed/partially completed*, checked by myself and the area left in a safe and tidy condition. (* delete as appropriate)</p>			
PERSON IN CHARGE	Jon Burton		
<p>I have inspected the completed/ partially completed* work and hereby cancel this permit. (* delete as appropriate)</p>			
AUTHORISING PERSON	NAME	SIGNATURE	DATE

Store Data Manager Installation Procedure

Fix Cabinet ID Tags to all un-networked integral cabinets adjacent to the Asset Label, noting the following information on the store asset information sheet:

Cabinet ID tag number, cabinet make & model number, food group type (Product Type) and Alias.

1. Frozen Food
2. Meat, Fish, Poultry
3. Provisions, Bakery, Ready Meals
4. Produce
5. Pharmacy
6. Drinks

The Cabinet ID tags **ARE** to be installed on the following:

ALL fridges & freezers that do not have intelligent & networked controllers.
Franchise freezers (Named freezers, i.e. **Ben & Jerries, Walls** Ice Cream cabs.)

The Cabinet ID tags **ARE NOT** to be installed on the following:

Starbucks concessions
Costa Coffee concessions
Colleague Restaurant fridges
Colleague fridges (those fridges with food purchased by the staff for their own use)
Franchise fridges (Named fridges, i.e. **Coca Cola**, etc.)
Well fridges that are emptied of product each day (i.e. Cafe fridge that is emptied prior to the Café closing)

Data Manager install (If this is a Refit type or New installation):

Identify the existing front-end (if a refit), network connections and power supply options.

Before removing any existing panel, note down the existing controller ID numbers.

Disconnect the existing network from the panel, then walk the sales floor checking all cabinet lighting that was on, is still on!

If the lighting goes off, contact the Office before proceeding further.

Isolate the existing supply to the fused spur, or if not possible, remove the fuse from the spur.

Check the mains supply has now been completely isolated at the front-end panel. Disconnect the supply flex, making sure to tape over the end of the neutral cable so as not to trip any RCD farther down supply.

Disconnect the controllers existing RS485 or IP connection/s from the front-end and remove the panel.

Install the Data Manager in place of the removed front-end (should be mounted 1.5m to 1.8m above finished floor level (AFFL) measurement to centre of screen).

Install any necessary RS485 to IP modules (RCS) or RS485 to USB dongles (Carel) and connect to the RS485 cable.

Reconnect the controllers existing RS485 or IP connection/s back into the Data Manager.

Note: Complete an Electrical Test Certificate (Minor Works Sheet) for EVERY Store where YOU are installing the Data Manager, including where the existing power supply is being re-used!
DO NOT complete a Minor Works sheet where YOU have not installed the Data Manager.

Note: Any removed equipment should be left in the store in the plant room or plant area.

Store Data Manager Installation Procedure

Power up the Data Manager and carry out the following setup, **MUST** be done in this order:

Via the Data Manager touch screen, configure the "Network Settings" as below.

Note 1: Eth0 will always be set as below if the Data Manager is replacing anything other than an older Data Manager. If replacing an older Data Manager, the existing Eth0 settings should be used. Also note whether the DHCP server is Yes or No and reinstate accordingly into the new Data Manager.

Eth1 & Default Gateway settings will differ per store and should be selected from the list provided.

Note 2: "Run DHCP server on Eth0" should be set to "**No**" as screen capture below, unless set as On in previous Data Manager (as above - Note 1).

Input the addresses/settings as per the numbered sequence below.

The screenshot shows the 'Network Settings' screen with the following items and annotations:

- 1 Run DHCP server on eth0: **No** (circled in green, callout: "Same for each site.")
- 2 Consoles: Yes
- 3 Default gateway: 10.XXX.XXX.137 (circled in red, callout: "Site specific, i.e. will be different for each and provided by your office.")
- 4 Eth0 - Address: 192.168.0.128 (circled in green, callout: "Same for each site.")
- 5 Eth0 - Netmask: 255.255.255.0 (circled in green, callout: "Same for each site.")
- 6 Eth1 - Address: 10.XXX.XXX.138 (circled in red, callout: "Site specific, i.e. will be different for each and provided by your office.")
- 7 Eth1 - Netmask: 255.255.255.248 (circled in red, callout: "Site specific, i.e. will be different for each and provided by your office.")

The remaining system settings can now be configured using Internet Explorer (or any other web-browser software) on your Laptop PC, but you will first need to configure your PC network settings to enable it to communicate with the Data Manager (once setup, your PC will then communicate with any Sainsbury's Data Manager without being re-configured each time).

Laptop PC running Windows XP:

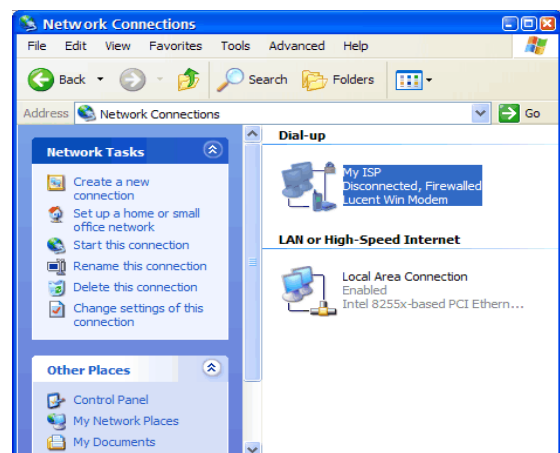
1. Launch the "Network Connections" Control Panel.

From the desktop, click the "Start" button.

Within the "Start" menu, click "Control Panel."

Once the Control Panel window appears, click the option labelled "Switch to classic view."

Now you will see a collection of icons. Double-click the icon labeled "Network Connections."



Store Data Manager Installation Procedure

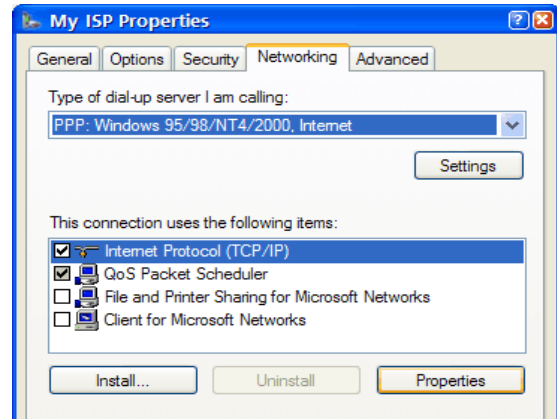
2. In the Network Connections window, you will see an icon for each type of network connection you have.

Right-click the icon for your Local Area Connection, and choose "Properties" from the menu that appears.

3. Click the "Network" tab, then...

Click "Internet Protocol (TCP/IP)", then...

Click the "Properties" button.



4. In this window, your settings will most likely match those shown here.

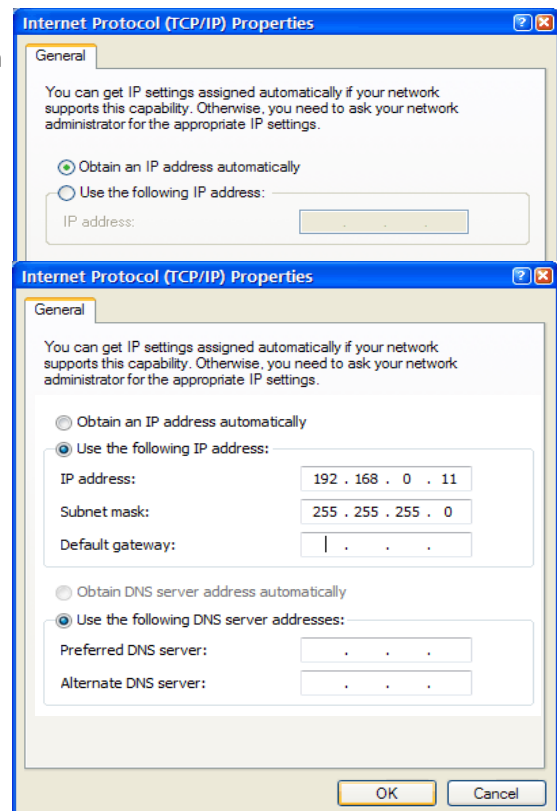
Click the "Use the following IP address:" button to enable you to enter the following settings:

In the "IP address:" box type in a spare address on the network, usually 192.168.0.11 is spare.

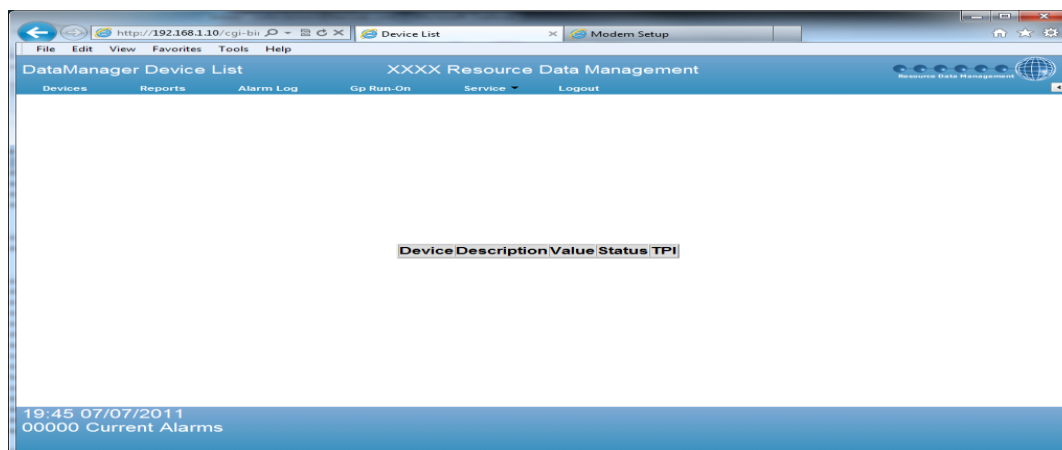
In "Subnet mask:" type in the necessary subnet mask 255.255.255.0

Leave the "Default gateway:" and all of the "DNS server" boxes clear.

Then click the "OK" button to save the modified settings and close any remaining open windows.



5. Plug in a patch lead between your PC and the Data Manager, open your Web-browser (i.e. Internet Explorer) and type into the address bar the Eth0 IP address: 192.168.0.128 and press Enter. You should then after a short period be connected to and able to view the Data Manager web page screens.



Store Data Manager Installation Procedure

Verify the Data Manager Web page look is set to 'New' in site setup (as the above screen capture). If not, change from 'Original' to 'New' web look.

Service/System/Site/Site Setup

Site ID	<input type="text" value="2140 Sainsburys Pocklington"/>		
Site description	<input type="text" value="2140 Sainsburys Pocklington"/> OR 4078 Sainsburys Brindley Place Loc OR P0541 Sainsburys Blackheath PFS		
Offline alarm delay (mins)	<input type="text" value="15"/>	Test dialout frequency (hrs) (0 - disable test dialout)	<input type="text" value="0.6"/>
Web page look	<input type="text" value="New"/>	Sound/Accept alarms on PC	<input type="text" value="None"/>
Allow alarm comments	<input type="checkbox"/>	Card swipe on Orbit 1	<input checked="" type="checkbox"/>
PIN/Swipe alarm accept on panels	<input type="checkbox"/>	Log Probe on Layouts	<input type="checkbox"/>
Service Lockout	<input type="checkbox"/>	Closure codes in Maintenance	<input checked="" type="checkbox"/>
Enable console support	<input checked="" type="checkbox"/>	Sort devices in alphabetic order	<input checked="" type="checkbox"/>
Calls by contractor not discipline	<input type="checkbox"/>	Signal alarm locally if dialout fails	<input checked="" type="checkbox"/>
Authentication on Web Service	<input checked="" type="checkbox"/>	Static namespace on Web Service	<input checked="" type="checkbox"/>
Log thin age (days)	<input type="text" value="180"/>	Log thin freq (mins)	<input type="text" value="5"/>
Alarm delay time (mins) (0 - disabled)	<input type="text" value="0"/>	GP Run-on permission	<input type="text" value="Service"/>
GP Run-on limit (mins)	<input type="text" value="60"/>	CGI compression option	<input type="text" value="Auto"/>
Secondary Web Port (0 - disabled, must be greater than 1024)	<input type="text" value="0"/>		
Console language	<input type="text" value="English"/>		
Time-zone	<input type="text" value="Europe"/> <input type="text" value="London"/>		
Modem port	<input type="text" value="Internal"/> Modem Information		
	<input type="button" value="Set Site Information"/>		

Set all other 'Site Information' as above, Store header to be store ID (preceded by a Letter 'P' for Petrol Filling Station stores only) followed by Store Name exactly as written on the store IP Info List provided, i.e. '4078 Sainsburys Brindley Place Loc', Offline alarm delay to 15mins & test dialout frequency to be 0.6 hours, with all others remaining as default.

Service/System/Site/Site Setup (as above)

Set 'Time'.

Service/System/Miscellaneous/Set Time

<input type="text" value="17"/>	:	<input type="text" value="13"/>	:	<input type="text" value="35"/>		<input type="text" value="01"/>	/	<input type="text" value="08"/>	/	<input type="text" value="2013"/>
<input checked="" type="checkbox"/> Use time from NTP server.										
<input checked="" type="checkbox"/> Use default gateway as NTP server.										
Run calibration <input type="text" value="Off"/>										
<input type="button" value="Set"/> <input type="button" value="Get PC Time"/>										
Please do not change the time on this panel without understanding the effect that it may have. You may need to restart the panel after doing so to reinitialise some services. Do not change the run calibration option unless expressly asked to do so. You will cause problems if you do.										

Store Data Manager Installation Procedure

Connect Eth1 to the external IT switch (as detailed in the C-Store Port Details Doc.).

If a spare external IT connection is not available near the new DM location, install a new IT connection as follows:

a. If the IT cabinet is **LESS** than 25m away from the Data Manager, install a patch lead, or CAT5e cable with a crimped RJ45 plug on both ends of the cable, from the IT cabinet switch port directly into the new Data Manager Eth1 adapter. (This will be classed as a 'Zero Cost' installation and will not be identified on the Data Manager Installation Completion Certificate).

b. If the IT cabinet is **MORE** than 25m away from the Data Manager, install a CAT5e cable with a crimped RJ45 plug on both ends of the cable, from the IT cabinet switch port directly into the new Data Manager Eth1 adapter. (This will be classed as a 'Chargeable Cost' installation and **MUST** be identified on the Data Manager Installation Completion Certificate by crossing out the 'Already Installed' box and noting down the cable length in the comments box at the bottom of the certificate).

Store Data Manager Installation Procedure

IF THE DATA MANAGER REQUIRES CONFIGURATION/UPGRADE: Note down the RDMSO number from the Data Manager box configuration sheet on to the completion certificate and the controller information from the survey sheet i.e. quantities and types of controllers, this is to ensure the right amount of blocks of IP are enabled, then Contact RDM technical (0141 810 2828 option 2) so they can check the external connection and then update the Data Manager

After the RDM download is complete:

Connect the internal network to one of the Data Manager Eth0 network ports and Scan the network to load the devices.

Select and start 'IP Scan' from the Scan Network section.

Service/Devices/Network/Network Scan

Choose network(s) to scan

Scan	Line	Type
	1	Data Manager
	2	Data Manager
<input checked="" type="checkbox"/>	3	IP
	4	IP
	5	IP
	6	IP
	7	RCS
	8	RCS
	9	RCS
	10	RCS
	16	System

Please do not use this option unless you understand the effect it will have or have been asked to use it by RDM technical support. **You may cause severe network problems otherwise.**

Whilst the network scan is loading the controllers, note the last seven digits of the asset numbers onto the Asset sheet along with the Model No. & Manufacturer of each case / coldroom / pack. Also note down each controllers Product Type, as this information will all be required later to enable successful commissioning of the Data Manager.

NOTE: The various types of controllers and networks should be identified and then connected and scanned as follows:

RDM 485: Connect the RS485 cable onto the DM 485 network connection (additional 485 - USB dongles can be installed if necessary) and scan the 485 network via the DM front panel console, scanning each channel in turn.

RDM IP: Connect the RJ45 patch lead directly into the on-board network hub and scan the IP network as detailed further above.

Genus 485: Connect and scan as per RDM 485.

RCS 485: Connect the RS485 cable onto the dedicated RDM-RCS 485 network module (1 module will be required per RCS485 network) and scan the network as per the userguide supplied separately.
RCS485 Controllers on a CFP (Old style RCS Front-end box on Eth01) - Contact RDM Technical Support, as they will need to add these devices.

RCS IP: Connect and scan as per RDM IP.

Carel 485: Connect the RS485 cable onto the dedicated RDM-Carel485 network dongle (Only 1 dongle can be used and the RS485 network cable must be connected to Network Socket 1) and scan the network as per the userguide supplied separately.

Carel IP: Connect and scan as per RDM IP. Or for small quantities, Add Device as SNMP Device using the Carel Gateway IP address e.g. 192.168.0.140, etc and select Carel IR133 (address 1), etc.

Store Data Manager Installation Procedure

Only if the controller's name has not been autopopulated correctly (must be 4 digits), then change the Device Name to the actual case section, coldstore or pack number, e.g. 1 to 001.0 or 001.1.

New Stores all fixtures Device I.D.s should end in ".0", Eg: XXX.0, where XXX is the fixture I.D.

First time refit stores all fixtures Device I.D.s should end in ".1", Eg: XXX.1, where XXX is the fixture I.D.

Second time refit stores all fixtures Device I.D.s should end in ".2", Eg: XXX.2, where XXX is the fixture I.D.

ANY fixture not replaced or relocated can retain its original fixture and asset number.

Alias to set:

Choose device(s) to set

Device	Alias
<input type="checkbox"/> 001.1	0928432 Freezer Full Hgt Cabinet
<input type="checkbox"/> 002.1	0928433 Freezer Full Hgt Cabinet
<input type="checkbox"/> 003.1	0928434 Freezer Full Hgt Cabinet
<input type="checkbox"/> 004.1	0928435 Freezer Full Hgt Cabinet
<input type="checkbox"/> 005.1	0928436 Freezer Full Hgt Cabinet
<input type="checkbox"/> 051.1	0928437 Prov Bakery Ready Meals
<input type="checkbox"/> 052.1	0928438 Prov Bakery Ready Meals
<input type="checkbox"/> 053.1	0928439 Meat Fish & Poultry Cab
<input type="checkbox"/> 054.1	0928440 Meat Fish & Poultry Cab
<input type="checkbox"/> 055.1	0928441 Prov Bakery Ready Meals
<input type="checkbox"/> 056.1	0928442 Prov Bakery Ready Meals

Set Alias including asset number (asset number first using last seven digits of asset number) using description on the Alias Naming Sheet e.g. 0107424 Freezer Glass Door/Well.

Service/Devices/Aliases/Names (as above)

Store Data Manager Installation Procedure

Configure Pack Setup - **Pack Device**, for **EACH** pack select the appropriate pack name, i.e. Pack Number 1 would be set up as device 301.# (# = Install number, 0,1,2,etc), pack number 5 would be 305.1 (1 = Refit 1), etc.

Service/System/Energy/Pack Setup

Select appropriate Script File/s for **EACH** Pack, ICMT, from the drop-down list by ticking the pack name and then adding the corresponding script file/s. The Gas Detectors (sensors) will be automatically associated with the correct script file, but please remove any that have been incorrectly assigned to Rail Temp Sensors or Humidity Sensor! (If in any doubt please contact Charlie Costley of RDM 07775 995010 for further clarification.)

Service/Devices/Script Setup

Device	Scripts
<input type="checkbox"/> 001	241001 Freezer Full Hg
<input type="checkbox"/> 002	241002 Freezer Full Hg
<input type="checkbox"/> 003	241003 Freezer Full Hg
<input type="checkbox"/> 004	241004 Freezer Full Hg
<input type="checkbox"/> 005	241005 Freezer Full Hg
<input type="checkbox"/> 006	241006 Freezer Full Hg
<input type="checkbox"/> 007	241007 Freezer Full Hg
<input type="checkbox"/> 008	241008 Freezer Full Hg
<input type="checkbox"/> 009	241009 Freezer Full Hg
<input type="checkbox"/> 301	Danfoss Pack
<input type="checkbox"/> 301 GD	Danfoss Sensor
<input type="checkbox"/> 301/304 ICMT	Danfoss Evaporator
<input type="checkbox"/> 302	Danfoss Pack
<input type="checkbox"/> 302 GD	Danfoss Sensor
<input type="checkbox"/> 302/305 ICMT	Danfoss Evaporator
<input type="checkbox"/> 304	605053 IT1 Pack
<input type="checkbox"/> 304-1	Danfoss Pack
<input type="checkbox"/> 305	605082 IT2 Pack
<input type="checkbox"/> 305-1	Danfoss Pack
<input type="checkbox"/> 306	605038 IT3 Pack
<input type="checkbox"/> 307	605120 IT4 Pack
<input type="checkbox"/> 308	605181 IT5 Pack
<input type="checkbox"/> 309	
<input type="checkbox"/> 521.1	
<input type="checkbox"/> 521.2	
<input type="checkbox"/> 601	605042 LT1 Pack
<input type="checkbox"/> 600	605046 LT2 Pack

Select script, then click add/remove to modify selected controllers

----- Add Remove

- Danfoss gas sensor alarms (5000psi limit, 15s delay)
- RCS IT alarms (60psi limit, 300s delay)
- RCS LT alarms (30psi limit, 300s delay)
- RCS Discharge alarms (280psi limit, 300s delay)
- Carel IT alarms (4.2bar limit, 300s delay)
- Carel LT alarms (2.1bar limit, 300s delay)
- Carel Discharge alarms (19.3bar limit, 300s delay)
- Parasense gas sensor alarms
- RCS SAMM gas alarms (40, 100, 600, 15s delay)
- Danfoss SCM IT (Suction 20-37bar, Discharge 40-105bar, 300s delay)
- Danfoss SCM LT (Suction 7-20bar, Discharge 20-37bar, 300s delay)
- Danfoss ADV IT (Suction 18-35bar, Discharge 40-95bar, 300s delay)
- Danfoss ADV LT (Suction 6-16bar, Discharge 18-35bar, 300s delay)
- Danfoss GC IT (Suction 20-30bar, Discharge 36-105bar, 300s delay)
- Danfoss GC LT (Suction 7-15bar, Discharge 20-30bar, 300s delay)
- Danfoss ICMT (Pressure 28-95bar, 300s delay)
- Danfoss Pack (1 or more compressors alarm, 300s delay)
- Danfoss Pack (Suction superheat limit 5, 300s delay)

On Danfoss:
Add Danfoss ICMT

On RCS or Carel Packs:
Add IT or LT Suction
Add Discharge

On Danfoss Packs:
Chose Pack Manufacturer
Add Suction / Discharge
Add 1 or more compressor alarm
Add Suction superheat

Store Data Manager Installation Procedure

Set CPT values and pack references, for instance if you have set 301.1 as Pack1 and it supplies a dedicated fixture then you would select 1 in the pack drop down list for that device/fixture.

The CPT selection will be copied from the Alias/Product Type sheet.

Service/Devices/Case Setup

Hold down Ctrl key and click on "Check Blinds" or "Df Warn" heading to toggle all items.
The priority column defines how important the device is 1 - most, 10 - least, --- - never disable.

Device	Description	Pack	Size (kW)	Priority	Length	CPT Value
001.1	0928432 Freezer Full Hgt Cabinet	1	0.00	---	---	Frozen food
002.1	0928433 Freezer Full Hgt Cabinet	1	0.00	---	---	Frozen food
003.1	0928434 Freezer Full Hgt Cabinet	2	0.00	---	---	Frozen food
004.1	0928435 Freezer Full Hgt Cabinet	2	0.00	---	---	Frozen food
005.1	0928436 Freezer Full Hgt Cabinet	2	0.00	---	---	Frozen food
051.1	0928437 Prov Bakery Ready Meals	3	0.00	---	---	Provisions, bakery, ready meals
052.1	0928438 Prov Bakery Ready Meals	3	0.00	---	---	Provisions, bakery, ready meals
053.1	0928439 Meat Fish & Poultry Cab	3	0.00	---	---	Meat, fish, poultry
054.1	0928440 Meat Fish & Poultry Cab	50	0.00	---	---	Meat, fish, poultry
055.1	0928441 Prov Bakery Ready Meals	3	0.00	---	---	Provisions, bakery, ready meals
056.1	0928442 Prov Bakery Ready Meals	3	0.00	---	---	Provisions, bakery, ready meals

Note: If a device has **No Pack** associated, or a pack is not networked, select pack **50** from the list, **DO NOT** leave blank.

Store Data Manager Installation Procedure

Set 'Alarm Actions' - Remove 'All' from Front Panel for Actions 1 & 2 where RDM have Remote Access, otherwise leave as default. Set Action 3 to 'All' for Modem 1 and Console 1 as below.

Service/Alarms/Alarm Actions

Action	Relay			Modem						Front Panel	Console		
	Alarm 1 (1)	Alarm 2 (2)	Alarm 3 (3)	1	2	3	4	5	6		1	2	3
0													
1	All	All	All	All	---	---	---	---	---	---	---	All	---
2	---	All	All	All	---	---	---	---	---	---	---	All	---
3	---	---	---	All	---	---	---	---	---	---	---	All	---
4	---	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---	---

Set 'Default Actions' - Leave as default as below.

Service/Alarms/ Default Actions

Default Actions							
Index	Action	Index	Action	Index	Action	Index	Action
1 (Extern)	2	9 (Low Press / Log UT)	2	17 (Thermistor)	2	25	0
2 (Refrig)	2	10 (Low Shutdown)	2	18 (Oil Pressure)	2	26	0
3 (Pack)	2	11 (Low Discharge)	2	19 (HP Fault)	2	27	0
4 (OT)	1	12 (High Discharge)	2	20 (General Fault)	2	28	0
5 (UT)	2	13 (Low Liquid)	2	21	0	29	0
6 (Fault)	2	14 (Panel Off)	2	22	0	30	0
7 (System)	1	15 (Comp Run Fail)	2	23	0	31 (Warnings)	0
8 (High Press / Log OT)	2	16 (Overload)	2	24	0		

[Set](#)

Set 'Drinks/BWS Cabinet Alarm Indexes' - Change the 'Alarm Indexes' for any **Drinks or BWS Cabinets Only** to 'Action 3', by selecting their Device Name from the list of devices and changing the indexes in the lower boxes as below.

Service/Alarms/ Alarm Index

Current Alarm Indexes																																
Device	Indexes																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
<input checked="" type="checkbox"/> RC10-0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	0	0	0	0	0	0	0	0	0	0

Store Data Manager Installation Procedure

Set Modem 1 - URL to 172.31.136.19

Service/Alarms/Modem Setup

	Number/URL	Type	Retries	Period (mins)	Options
1	172.31.136.19	Modem	20	5	<input checked="" type="checkbox"/> Send Clear <input type="checkbox"/> Send Extra
2		Modem	20	5	<input checked="" type="checkbox"/> Send Clear <input type="checkbox"/> Send Extra
3		Modem	20	5	<input checked="" type="checkbox"/> Send Clear <input type="checkbox"/> Send Extra
4		Modem	20	5	<input checked="" type="checkbox"/> Send Clear <input type="checkbox"/> Send Extra
5		Modem	20	5	<input checked="" type="checkbox"/> Send Clear <input type="checkbox"/> Send Extra

Note: The dialout will stop on the first number that succeeds.

Store Data Manager Installation Procedure

Pump Fault Input:

The Data Manager should be set up to receive a Pump Alarm input, which is/will be utilised to be monitored by the Data Manager. Wires should connect to common & Input 1 of the Data Manager's I/O board. Pump 2 to input 2, Pump 3 to input 3, etc.

Configure Input 1 as 'Pump 1'

Service/System/Local IO/Input Setup

Name:

Description:

Type:

Mode:

Alarm Delay:

Configure Input 1 Pump Item Alias

Service/Devices/Aliases/Items

Set Item Alias for INP001

Item	Item Alias
Alarm Input	<input type="text" value="Pump Alarm"/>
Active State	<input type="text" value="Active State"/>
Alarm delay	<input type="text" value="Alarm Delay"/>

Note: To remove an alias leave the text box blank

Configure Input 1 Pump Alarm Alias

Service/Devices/Aliases/Alarms

Set Alarm Alias for INP001

Alarm	Alarm Alias	Type Alias
Alarm	<input type="text" value="Pump Alarm"/>	3 <input type="text"/>
Alarm Inhibit	<input type="text" value="Alarm Inhibit"/>	6 <input type="text"/>

Note: To remove an alias leave the text box blank
If you set the type alias to 0 the alarm will not be logged

Store Data Manager Installation Procedure

Trend Lighting Override Input:

The Data Manager should be set up to receive a Trend Lighting Override input, which is/will be utilised to control the case lighting. If the cable has already been installed divert it into the Data Manager and connect it onto common & Input 12 of the Data Manager I/O board.

Configure Input 12 as 'Trend Lighting Interlock'

Service/System/Local IO/Input Setup

Name:

Description:

Type:

Mode:

Alarm Delay:

Set Input Information

Configure Input 12 Item Alias

Service/Devices/Aliases/Items

Set Item Alias for INP012

Set Item Aliases

Item	Item Alias
Alarm Input	<input type="text" value="Lighting Override"/>
Active State	<input type="text" value="Input State"/>
Alarm delay	<input type="text" value="Input Delay"/>

Set Item Aliases

Note: To remove an alias leave the text box blank

Configure Input 12 Alarm Alias

Service/Devices/Aliases/Alarms

Set Alarm Alias for INP012

Set Alarm Aliases

Alarm	Alarm Alias	Type Alias
Alarm	<input type="text" value="Alarm"/>	<input type="text" value="0"/>
Alarm Inhibit	<input type="text" value="Alarm Inhibit"/>	<input type="text" value="6"/>

Set Alarm Aliases

Note: To remove an alias leave the text box blank
If you set the type alias to 0 the alarm will not be logged

Store Data Manager Installation Procedure

Configure GP Timer Channel 1 as 'Store Trading Times' and add Weekly schedules for each day.

Service/Timers/GP Timers/Channel 1

Channel Type: Master
 Channel Name: Store Trading Times
 Input Type: Unused
 Output Type: Case
 Output Mask:
 Invert Output:
 Run-On: Not Allowed

Schedule

Remove All Remove Add Schedule

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Mon	Tue	Wed	Thu	Fri	Sat	Sun
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Key

- Daily
- Weekly
- Yearly
- Once

Period 1

08:00 00:00 08:00 20:00 23:59 20:00

Period 2

Configure GP Timer Channel 2 as a Slave to Master Ch 1, named e.g. '0???.? Case Lighting Times'

Service/Timers/GP Timers/Channel 2

Channel Type: Slave Master Channel: 1
 Channel Name: 0???.? Case Lighting Times
 Input Type: Force Off Input Device: INP012 Input Channel: Lighting Override
 Output Type: Case Output Mask: 0???.?
 Invert Output:
 Run-On: Not Allowed

Start Offset

-00:30 -12:00 -00:30 +12:00

End Offset

+00:00 -12:00 +00:00 +12:00

Set Channel

Note: Enter the Output Mask (Enter ? in the output mask to cover all case controller names)

Note: Enter a Start Offset of 30mins for each case lighting channel.

Configure more GP Timer Channels as necessary to cover all case names, e.g. 1???.? Etc.

Service/Timers/GP Timers/Channel 3

Channel Type: Slave Master Channel: 1
 Channel Name: 1???.? Case Lighting Times
 Input Type: Force Off Input Device: INP012 Input Channel: Lighting Override
 Output Type: Case Output Mask: 1???.?
 Invert Output:
 Run-On: Not Allowed

Start Offset

-00:30 -12:00 -00:30 +12:00

End Offset

+00:00 -12:00 +00:00 +12:00

Set Channel

Store Data Manager Installation Procedure

Set Alarm Times and Alarm Inhibit. In ??? Out ??? (as per the store manned hours, NOT opening times).
Set Short Inhibit to 24 & Long Inhibit to 72.

Service/Alarms/Alarm Times

Times :	In 1	Out 1	In 2	Out 2
Sunday	<input type="text" value="08:00"/>	<input type="text" value="20:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Monday	<input type="text" value="08:00"/>	<input type="text" value="20:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Tuesday	<input type="text" value="08:00"/>	<input type="text" value="20:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Wednesday	<input type="text" value="08:00"/>	<input type="text" value="20:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Thursday	<input type="text" value="08:00"/>	<input type="text" value="20:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Friday	<input type="text" value="08:00"/>	<input type="text" value="20:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>
Saturday	<input type="text" value="08:00"/>	<input type="text" value="20:00"/>	<input type="text" value="00:00"/>	<input type="text" value="00:00"/>

Short inhibit duration (hours)

Long inhibit duration (hours)

Store Data Manager Installation Procedure

Prove the case IDs are correct:

At the Data Manager set the offline delay temporarily to 2 mins in the 'Site Setup'.

Prove one case per island is correct by isolating the case until the case alarms offline on the Data Manager.

At the Data Manager again, set the offline delay back to 15 mins in the 'Site Setup', then check with RDM Technical that all information is viewable remotley.

Open a new folder on your laptop with the store ID & name and save the following files into it.

Save System Dump file.

Service/System/Miscellanous/System Dump

Save Site Setup file.

Service/System/Site/Save Site Setup

Fit an asset Label to RDM Data Manager panel

Take a photograph of the Data Manager in its installed position to record where it is installed.

Contact Verisae Monitoring (07580 885909) to inform them the setup is complete and you are leaving the store.

Contact RDM Technical support (0141 810 2828 opt. 2) to inform them the setup is complete and you are leaving the store.



RTMS fixture numbering convention - revision 3

These below scenarios are a guide for your assistance but not restrictive to only these fixture types as a uniformed numbering convention applies to all fixtures;

- This numbering convention is to be adopted for ALL refrigerants.

A new Store would follow these fixture numbers

Frozen Food cabinets; 001.0, 002.0, 003.0, 004.0.....
Meat, Fish & Poultry and Provisions cabinets; 051.0, 052.0, 053.0, 054.0.....
Serve overs; 111.0, 112.0.....
Produce cabinets; 130.0, 131.0, 132.0, 133.0.....
Frozen Food coldrooms; 200.0, 201.0, 202.0, 203.0.....
Meat, Fish & Poultry coldrooms; 220.0, 221.0, 222.0, 223.0.....
Provisions coldrooms; 230.0, 231.0, 232.0, 233.0.....
Produce coldrooms; 240.0, 241.0.....
Packs; 301.0, 302.0, 303.0, 304.0, 305.0, 306.0.....
Integral cabinets; 500.0, 501.0.....
Gas Detectors; examples are 200.GD, 202.GD, 230.GD, 232.GD, 240.GD, 301.GD & 800.0, 801.0.....
ICMT valves; ICMTa ICMTb.

1st refit store would follow these numbers if the fixtures are replaced

Frozen Food cabinets; 001.1, 002.1, 003.1, 004.1.....
Meat, Fish & Poultry and Provisions cabinets; 051.1, 052.1, 053.1, 054.1.....
Serve overs; 111.1, 112.1.....
Produce cabinets; 130.1, 131.1, 132.1, 133.1.....
Frozen Food coldroom; 200.1, 201.1, 202.1, 203.1.....
Meat, Fish & Poultry coldrooms; 220.1, 221.1, 222.1, 223.1.....
Provisions coldrooms; 230.1, 231.1, 232.1, 233.1.....
Produce coldrooms; 240.1, 241.1.....
Packs; 301.1, 302.1, 303.1, 304.1, 305.1, 306.1.....
Integral cabinets; 500.1, 501.1.....
Gas Detectors; if replaced switch fixture no. to other evaporator in room; 201.GD, 203.GD, 231.GD, 233.GD, 241.GD, 304.GD & 800.1, 801.1.....
ICMT valves; ICMTa, ICMTb

2nd refit store would follow these numbers if the fixtures are replaced

Frozen Food cabinets; 001.2, 002.2, 003.2, 004.2
Meat, Fish & Poultry and Provisions cabinets; 051.2, 052.2, 053.2, 054.2
Serve overs; 111.2, 112.2
Produce cabinets; 130.2, 131.2, 132.2, 133.2
Frozen Food coldrooms; 200.2, 201.2, 202.2, 203.2
Meat, Fish & Poultry coldrooms; 220.2, 221.2, 222.2, 223.2
Provisions coldrooms; 230.2, 231.2, 232.2, 233.2
Produce coldrooms; 240.2, 241.2
Packs; 301.2, 302.2, 303.2, 304.2, 305.2, 306.2
Integral cabinets; 500.2, 501.2
Gas Detectors; if replaced contact the Refrigeration Bureau as fixture numbers can be retained but asset numbers altered.
ICMT valves; ICMTa, ICMTb

- Any fixture not replaced or relocated can retain its original fixture and asset number.
- In instances when the fixture is not replaced but the asset number is lost please contact the Bureau.
- Where Gas detectors are situated in non-refrigerated locations such as colleague area's please use fixture numbers 800.0 or 800.1 and upwards and then use the Data Manager description field to note the location.

If you have any queries on this matter please contact CoE or the Arcus FM Refrigeration Bureau.

Proposed Location	Equip Type	Proposed Sub-Category	CPT Value / Product Type	Alias (must be one of these)	Comments	Rev.6 05/03/13
BEERS & WINES & SPIRITS	Cabinet	BWS Cabinet (Alcoholic drinks)	Drinks	1234567 BWS Cabinet	Sales floor BWS area	
DAIRY	Cabinet	Milk cabinet	Provisions, Bakery, Ready Meals	1234567 Milk Cabinet	Roll-in-milk	
DAIRY	Cabinet	Dairy / Provisions / Bakery Multi-deck	Provisions, Bakery, Ready Meals	1234567 Prov Bakery Ready Meals		
FROZEN FOODS	Cabinet	Freezer Half Glass Door Cabinet (Top section only)	Frozen Food	1234567 Freezer Half Glass Door		
FROZEN FOODS	Cabinet	Freezer Well (Bottom section only)	Frozen Food	1234567 Freezer Well		
FROZEN FOODS	Cabinet	Freezer full height glass door cabinet	Frozen Food	1234567 Freezer Full Hgt Cabinet		
FROZEN FOODS	Cabinet	Freezer half height glass door with well cabinet	Frozen Food	1234567 Freezer Glass Door/Well		
MEAT & FISH & POULTRY	Cabinet	Meat, Fish & Poultry Cabinet	Meat, Fish, Poultry	1234567 Meat Fish & Poultry Cab	Raw food only	
MEAT & FISH & POULTRY	Cabinet	Meat, Fish & Poultry Cabinet	Meat, Fish, Poultry Carters	1234567 Meat Fish & Poultry Cab	Carter IC Range Cabinet ONLY	
PRODUCE	Cabinet	Produce - Ready to Eat cabinet	Provisions, Bakery, Ready Meals	1234567 Produce Ready To Eat Cab	Produce with dressings	
PRODUCE	Cabinet	Produce Cabinet	Produce	1234567 Produce Cabinet	Produce Only	
SALES FLOOR	Cabinet	Sandwich Cabinet	Provisions, Bakery, Ready Meals	1234567 Sandwich Cabinet		
SALES FLOOR	Cabinet	Drinks Cabinet (Non-perishable)	Drinks	1234567 Drinks	i.e. Fizzy drinks, water, etc	
SALES FLOOR	Cabinet	Drinks Cabinet (Perishable)	Provisions, Bakery, Ready Meals	1234567 Prov Bakery Ready Meals	i.e. Orange juice, milky drinks, etc	
BAKERY FREEZER	Coldroom	Bakery Frozen Food Coldstore	Frozen Food	1234567 Frozen Bakery CS		
CAFE / COFFEE BAR	Coldroom	Cafe chiller / cold store	Provisions, Bakery, Ready Meals	1234567 Café Chiller CS		
DAIRY CHILLER	Coldroom	Milk chiller / cold store	Provisions, Bakery, Ready Meals	1234567 Milk Chiller CS		
FOOD TO GO CHILLER	Coldroom	Hot food fridge prep room	Meat, Fish, Poultry	1234567 Hot Food Fridge Prep CS		
FOOD TO GO FREEZER	Coldroom	Hot food freezer prep room	Frozen Food	1234567 Hot Food Freezer Prep CS		
FROZEN FOOD CHILLER	Coldroom	Frozen chiller / cold store	Frozen Food	1234567 Frozen Food CS		
MEAT, FISH & POULTRY CHILLER	Coldroom	Meat, Fish & Poultry chiller / cold store	Meat, Fish, Poultry	1234567 Meat, Fish & Poultry CS		
ONLINE CHILLER	Coldroom	Online chiller / cold store	Meat, Fish, Poultry	1234567 Online Chiller CS		
ONLINE FREEZER	Coldroom	Online Freezer / cold store	Frozen Food	1234567 Online Freezer CS		
PRODUCE CHILLER	Coldroom	Produce chiller / cold store	Produce	1234567 Produce CS		
PROVISIONS CHILLER	Coldroom	Provisions chiller / cold store	Provisions, Bakery, Ready Meals	1234567 Provisions CS		
BAKERY COUNTER	Counter	Bakery counter	Provisions, Bakery, Ready Meals	1234567 Bakery Counter		
CHEESE COUNTER	Counter	Cheese counter	Provisions, Bakery, Ready Meals	1234567 Cheese Counter		
DELI COUNTER	Counter	Deli counter	Provisions, Bakery, Ready Meals	1234567 Deli Counter		
FISH COUNTER	Counter	Fish counter	Meat, Fish, Poultry	1234567 Fish Counter		
MEAT COUNTER	Counter	Meat counter	Meat, Fish, Poultry	1234567 Meat Counter		
PIZZA COUNTER	Counter	Pizza counter	Provisions, Bakery, Ready Meals	1234567 Pizza Counter		
SALAD BAR	Counter	Salad Bar counter	Provisions, Bakery, Ready Meals	1234567 Salad Bar Counter		
BAKERY FREEZER	Integral	Bakery freezer	Frozen Food	1234567 Bakery Freezer	behind counter	
BAKERY FRIDGE	Integral	Bakery fridge	Provisions, Bakery, Ready Meals	1234567 Bakery Fridge	behind counter	
BEERS & WINES & SPIRITS	Integral	BWS fridge (Alcoholic drinks)	Drinks	1234567 BWS Fridge	Sales floor BWS area	
CAFE / COFFEE BAR	Integral	Cafe fridge	Provisions, Bakery, Ready Meals	1234567 Café Fridge		
CAFE / COFFEE BAR	Integral	Cafe cabinet	Provisions, Bakery, Ready Meals	1234567 Café Cabinet		
CAFE / COFFEE BAR	Integral	Cafe chilled well	Provisions, Bakery, Ready Meals	1234567 Café Chilled Well		
CAFE / COFFEE BAR	Integral	Cafe freezer	Frozen Food	1234567 Café Freezer	behind counter	
COLLEAGUE RESTAURANT	Integral	Colleague restaurant fridge	NOT TO BE MONITORED	1234567 Colleague Rest Fridge	NOT TO BE MONITORED	
DELI COUNTER	Integral	Deli counter fridge	Provisions, Bakery, Ready Meals	1234567 Deli Counter Fridge	behind counter	
FISH	Integral	Fish Freezer Cabinet	Frozen Food	1234567 Fish Freezer	behind counter	
FISH COUNTER	Integral	Fish counter fridge	Meat, Fish, Poultry	1234567 Fish Counter Fridge	behind counter	
FROZEN FOODS	Integral	Freezer "Branded" ice cream standalone	Frozen Food	1234567 Freezer Branded IC Integ	i.e. Ben & Jerry's, Walls, etc	
MEAT COUNTER	Integral	Meat counter fridge	Meat, Fish, Poultry	1234567 Meat Counter Fridge	behind counter	
ONLINE FREEZER	Integral	Online Chest Freezer cabinet	Frozen Food	1234567 Online Chest Freezer	Ice Blocks (Eutectic Pit)	
PHARMACY	Integral	Pharmacy fridge	Pharmacy	1234567 Pharmacy Fridge		
PIZZA COUNTER	Integral	Pizza counter fridge	Provisions, Bakery, Ready Meals	1234567 Pizza Counter Fridge	behind counter	
SALAD BAR	Integral	Salad Bar fridge	Provisions, Bakery, Ready Meals	1234567 Salad Bar Fridge	behind counter	
SALES FLOOR	Integral	Coca Cola fridge sales floor	NOT TO BE MONITORED	1234567 Coca Cola Cab S/Floor	NOT TO BE MONITORED	
SALES FLOOR	Integral	Drinks Fridge (Non-perishable)	Drinks	1234567 Drinks	i.e. Fizzy drinks, water, etc	
SALES FLOOR	Integral	Drinks Fridge (Perishable)	Provisions, Bakery, Ready Meals	1234567 Prov Bakery Ready Meals	i.e. Orange juice, milky drinks, etc	



PR0020-RCS

RS485 to IP Communications Module RMS® Compatible Installation Process Sainsbury Applications

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Switchboard

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Sales Enquiries

The RS485 to IP Communications Module From Resource Data Management

RMS® Compatible Variant

Sainsbury Applications - Installation Process

Firstly contact RDM Technical Support, as per the standard procedure, to enable the appropriate features. Once this has been completed follow the process outlined below: -

- I. Obtain the controller name('s) from the existing gateway before disconnecting it.
- II. Set the rotary switches on the RDM gateway (PR0020) from the following range 001 to 254: -
 - 001 to 254 - The module is set to operate in the 192.168.0.XXX range with the last part of the IP address being a number between 1 and 254. The last part of the IP address is the rotary switch address entered. For example if the rotary switch address is set to "150" then the module will be assigned the address 192.168.0.150.

Generally the switches are set to '150'.

- III. The unit can be powered on and connected to the Data Managers Eth0 network via a patch cable.
- IV. Now wire from the "old" RCS gateway to the RDM PR0020 gateway via existing RS485 network cable. When the unit is powered and the RS485 network cable connected the RS485 LED on the PR0020 will flash intermittently. If the LED is permanently off/on then there is a wiring fault.
- V. Now give your Laptop a static IP address and connect to the IP address of the PR0020 gateway. Enter the controller names into the "List of controllers:" The controller names can be obtained from the controller display or the existing frontend.

Note for the above the controller names must be in the format x.x, xx.x or xxx.x

e.g 1.0, 12.1 or 123.5

Resource Data Management
RMS Interface

Software version 1.0
Up 0 days 0 hours 18 mins 6 secs

List of controllers:

1.0	2.0	3.0	4.0	100.1	100.2	100.3	101.1
101.2	101.3						

Network setup (only used when rotary switches are set to 000) :

IP Address

Subnet Mask

Gateway

- VI. Once complete start a Network Scan from the Data Manager. If a device appears in the Data Manager Device List but it is offline confirm the controller name entered into the PR0020 matches what's in the controller.

Disclaimer

The specifications of the product detailed in this document may change without notice. RDM Ltd shall not be liable for errors or omissions, for incidental or consequential damages, directly or indirectly, in connection with the furnishing, performance or misuse of this product or document.



Ensure that all power is switched off before installing or maintaining this product

Data Manager USB to RS485 Carel® Interface (PR0470-CAR485)

Network support can be enabled using the RDM USB to RS485 Carel network adaptor, part number PR0470-CAR485. A single adaptor is supported by the Data Manager which allows a single Carel RS485 network with up to 32 devices on the network. Support is provided for a range of Carel® devices however RDM cannot guarantee 100% compatibility for every device. This adaptor is for use on Sainsbury's applications only. This feature requires Data Manager software version V1.55.7 or above. Once fitted to the Data Manager, contact RDM with a purchase order number for the adaptor and you will be issued with an activation code. Once the activation code has been inserted onto the Data Manager it will automatically be restarted allowing the adaptor to be recognised. Connect the controller network to the adaptor and go to menu; service, device, network, add device and you will see the below menus.

Device type:

Address:

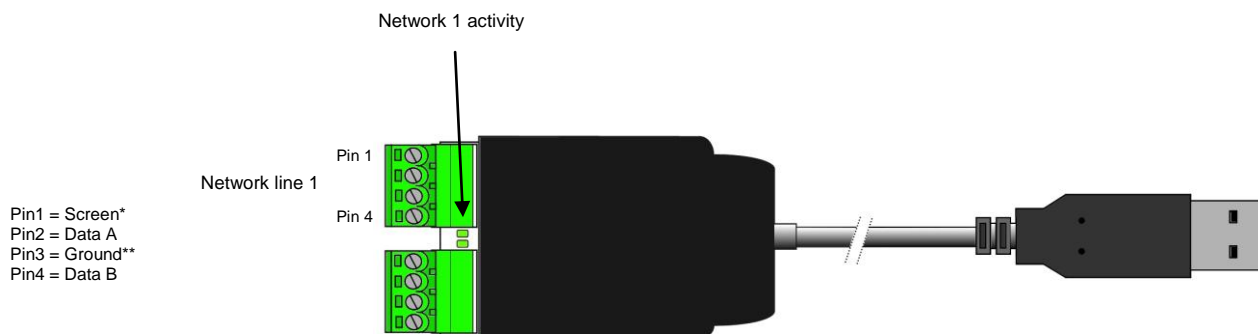
Name:

Alias:

This method of adding a device should not normally be required, but may be used for adding either a third party device or one with a static IP address

1. Choose 'Carel Controller' from the Device Type drop down menu.
2. Add the Carel address which has been put in the controller you wish to add.
3. Put the name you wish the device to appear on the Data Manager as.
4. Put what alias you would like to call controller.
5. Select Add Device and it will appear on Data Manager as the name you have given it.
6. Repeat process for all the controllers you wish to add on to the Carel network.

Wiring for PR0470-CAR485



* Optional

**Note the Ground may or may not be present depending on the wiring configuration onsite.

Specifications

DC Voltage 5V
Rated Current 0.1A (USB Powered)

Mechanical

Dimensions 35 x 22 x 260mm
Weight 50g (1.7 oz)

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Resource Data Management

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PR0623

USB to RS485 Modbus® Comm's Adapter Installation Process Sainsbury Applications For Dixell XR100C Series

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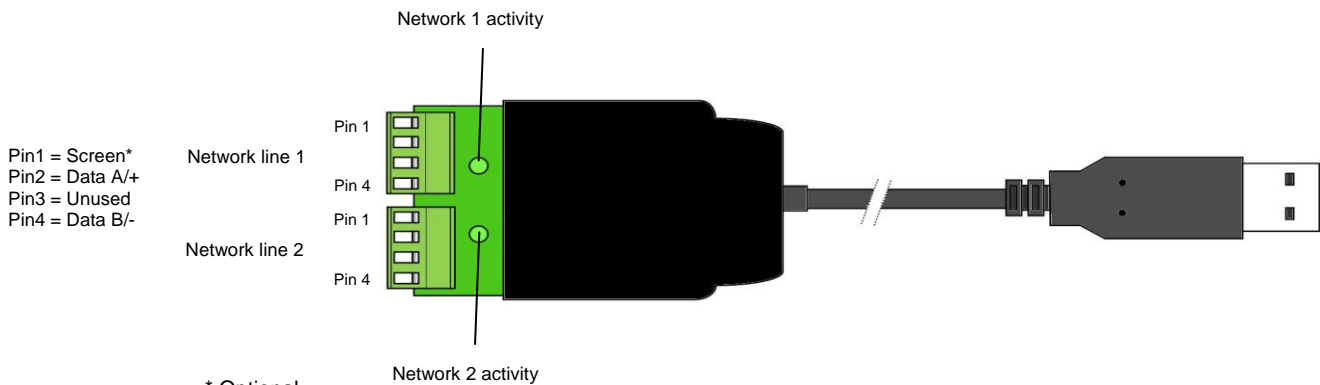
The USB to RS485 Modbus® Adapter From Resource Data Management

For use with the Dixell® XR160C and XR170C Series Case Controller

Sainsbury Applications - Installation Process

Firstly contact RDM Technical Support, as per the standard procedure, to enable the appropriate features. Once this has been completed follow the process outlined below: -

1. Obtain the controller Modbus® address('s) from the Dixell® controller('s) on the shop floor, see Appendix 1.
2. Remove the right hand wing of the Data Manager and insert the PR0623 adapter into one of the 4 USB ports found here.
3. Now power on the Data Manager or perform a system restart if the unit is running already.
4. Now wire from the "old" frontend to the PR0623 adapter via the existing RS485 network cable. Ensure the old frontend network connection has been disconnected. Please follow the wiring diagram below ensuring the network is connected to Network Line 1: -



5. Now connect your laptop to the Data Manager and browse to the home page**.
6. Login through the "Service" heading and navigate to "Devices – Network – Add Device"
7. Enter the appropriate details as shown below

Device type	Modbus/Usb Device
Name	002
Alias	380140 Drinks
Type	Dixell XR160C / XR170C
USB Line	Line 1
Modbus address	01
<input type="button" value="Add Device"/>	
<small>This method of adding a device should not normally be required, but may be used for adding either a third party device or one with a static IP address</small>	

Note 1 The "Name", "Alias" and "Modbus Address" fields will differ for each controller logged on.
Note 2 Ensure the correct "USB Line" is selected based on the RS485 network connection to the PR0623

8. Once complete click "Add Device" the controller should now appear on the Device List.
9. If you have additional controllers to add please repeat from step 7.
10. Once all devices are logged on continue with the installation.

** The controller can also be added via the Data Manager front panel buttons. Go to "Service-Controller-Network-Add Device".

General Information

Modbus network support can be enabled using the RDM USB to RS485 Modbus network adaptor, part number PR0623. A single adapter is supported by the Data Manager and allows for two RS485 Modbus networks, with up to 32 devices on each network. Support is provided for a range of Modbus devices, new devices are being added continuously. Contact RDM Technical support to obtain the most up to date list of supported devices.

RS485 Configuration

Note the RS485 configuration of the Adapter is fixed and uses the following: -

Baud rate	9600
Data bits	8
Parity	No
Stop Bits	1

Appendix 1

To obtain the Modbus address from a Dixell controller follow these instructions: -

1. From the controller display press and hold both the "Down" and "Set" buttons for 3 seconds until "Hy" is displayed.
2. Now press the "Down" button to scroll to "Pr2".
3. Press the "Set" button, the display will flash "PAS" then "0 - -"
4. Use the "Up" button to enter the first digit of the password then press the "Set" button to confirm.
5. Repeat the above for the second and third digit of the password. Note the default password is "321".
6. Now use the "Down" button to scroll to "Adr" and then press the "Set" button.
7. The current Modbus address of the controller will be shown. Take care not to alter the Modbus address.
8. The display will timeout after a short delay and return to displaying the temperature.
9. Repeat the above for the remaining controllers.

Whilst Resource Data Management makes every effort to ensure compatibility of a Data Manager template and the 3rd party device it was designed for we cannot guarantee the template will be correct in every instance. There are variables out with RDM's control which can change over time and they may result in the template for a device reporting the incorrect values or the device appearing as "offline" in the Data Manager Device List. This can occur due to changes by the 3rd party device manufactures Modbus interface, firmware updates to the 3rd party device, application software changes to the 3rd party device, the software version of the 3rd party device used to create the template differs from the devices onsite etc, all of which RDM have no control and all of which can change over time. Therefore at the time a template is developed by RDM it may operate as expected but in the future changes may be required to keep the template up to date.

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