

75LCT MULTI-MONITOR

OPERATING MANUAL



SAVE THESE INSTRUCTION FOR FUTURE REFERENCE.

24/7 Toll-Free Technical Support

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(From the U.S., Canada and the Caribbean)

kitchenbrains.com



ABOUT



The Kitchen Brains® Modularm® 75LCT Touch Screen Multi-Monitor offers the best in walk-in monitoring.

With Touch Screen convenience, the 75LCT provides temperature alarms, door ajar alarms, AC failure alarms and panic alarms. Using Autoset™ technology, the Modularm 75LCT automatically adjusts alarm set points, thus eliminating the need for manual programming. The system saves energy, improves efficiency, reduces coil icing, lowers maintenance costs and helps to maintain product integrity.

Featuring:

- Built in battery back-up with recharging circuitry
- Patented energy act compliant light control activates by motion sensors!



75LC

OPTIONAL ACCESSORIES



IP-1 Illuminated Push Button Panic/Entrapment Alarm

Kitchen Brains® Modularm IP-1 Illuminated Push Button Panic/Entrapment Alarm is an optional accessory that provides light control, panic, and auto panic inside the compartment.

- Works with the DAC-55, DL-35, 75LC and Datalarm™.
- Entrapment Alarms.
- Panic Alarm
- Auto Light Control



MD-1

The MD-1™ adds hands free occupancy detection to your walk in. Connected through low voltage wiring to your 75LC multi-monitor™.

- Hands Free Auto-panic™
- Occupancy Detection
- Auto-Panic
- Auto Light Control
- No Reprogramming Needed



75LC COMMUNICATOR

Compact, dedicated system server that works with the 75LC Multi-Monitor to harvest data from connected devices.

- 24 Points of Temperature
- Secured Remote Access Password
- No Monthly Monitoring Fee
- View Historical Data and Customized Reports via Online Access

NOTICES

Before you start, please read these instructions thoroughly in order to obtain maximum benefit from the capabilities that this product offers. Thank you for purchasing the 75LCT multi-monitor. The 75LCT integrates sophisticated functions with easy programming and operation.

OVERVIEW

75LCT FUNCTIONS:

The 75LCT offers the following functions: (Patented Operation).

2. Autodetect accessories
3. AC Failure Alarm with built-in rechargeable battery and built in recharging circuitry
4. Door Ajar Alarm. (Requires magnetic contacts)
5. Panic (Entrapment) Alarm (Requires optional IP-1 Illuminated Button)
6. Manual and patented timed light control
7. HACCP monitoring (additional equipment required)
8. Remote notification (additional equipment required)
9. Built in audible alarm
10. RS232 & RS485 Communication ports
11. Preventive Maintenance Reminder
12. Localized for German, Spanish, Portuguese and French markets



AUTOSET

WHAT IS AUTOSET?

Patented Autaset Technology selects the right alarm temp setpoints for monitoring a cooler or a freezer automatically, virtually eliminating the need for manual programming. Common cooler and freezer setpoints are pre-loaded into the 75LCT.

Autaset Setpoints are:

COOLER	FREEZER
HI 42F (6C)	HI 10F (-12C)
LO 30F (-1C)	LO -20F (-29C)

Cooler setpoints are the default settings, used for cooler monitoring. If the compartment is a freezer, Autaset detects the lower compartment temperature and automatically changes to the freezer setpoints. (Freezer defaults won't revert to cooler defaults if temperature rises. Cooler defaults can be easily manually restored when necessary.) Manually changing setpoints in the program menu automatically disables Autaset.

WHAT IS AUTODETECT?

The Autodetect function in the 75LCT automatically senses and integrates a connected Modularm accessory into device operation. Additional configuration/setup is not required.

The 75LCT ships with Autodetect enabled, by default, for all supported accessories. For example, If the magnetic door contacts are not connected, the 75LCT operates as if there are no magnetic contacts. Once magnetic contacts are reconnected, Autodetect senses this and automatically includes door ajar alarm function and automatic lights on function when the door is open.

SUPPORTED ACCESSORIES:

- 1. IP-1 Illuminated Push Button** – The low voltage IP-1 is available to be installed inside the Cooler/Freezer and provides the ability to control the light within the Cooler/Freezer as well as a mechanism to sound a panic alarm (press the IP-1 to turn on/off the lights; press and hold for 2 seconds to manually activate the Panic Alarm). A buzzer and light built into the IP-1 warns personnel inside the Cooler/Freezer that lights may turn off if the IP-1 isn't pressed.
- 2. MD-1 & MD-1+2 Motion Detector** – The low voltage MD-1/MD-1+2 mounts inside of the Cooler/Freezer and duplicates the light ON control function of the IP-1 button when activated by movement of personnel inside of the Cooler/Freezer.
- 3. MC-1 Magnetic Contacts** – Low voltage magnetic contacts sense door status and provide both a door ajar alarm switch and a lights on switch relative to the status of the door. One set of magnetic contacts come with each 75LCT, various styles are available.

ACCESSORIES:

Three accessories expand 75LCT operation:

1. IP-1 Illuminated Push Button
2. MD-1 & MD-1+2 Motion Detector
3. MC-1 Magnetic Contacts

These accessories are low voltage devices, connected directly to and powered by the 75LCT. Accessories may be used individually or in combination. To help eliminate programming when common settings are desired, the 75LCT comes equipped with Autodetect.

VISUAL ALARM ANNUNCIATION

VISUAL ALARM ANNUNCIATION:

NOTE the following:

1. During normal operation the monitored temp displays constantly on the 75LCT.
2. Any abnormal condition (when temperature is out of range or door is left open) triggers an error condition that is displayed on the LCD screen. Alarm conditions (when abnormal condition exceeds preset time delay) not only display the error, but also sound an alarm.

TOUCH SCREENS:

TABLE 1. Status of the 75LCT for Abnormal & Alarm Conditions

ALARM TYPE	ABNORMAL CONDITION	ALARM CONDITION
PANIC ALARM	(Non Applicable)	
DOOR AJAR	Door Icon On Door Ajar Message Light Icon On Audible Alarm	
DOOR AJAR	Door Icon On Door Ajar Message Light Icon On No Audible Alarm	
TEMP OUT OF RANGE	High Temp Alarm Out of Range No Alarm	

WHILE IN RUN OR ALARM MODE

Lights: Press to manually activate and deactivate compartment

Silence: Press to acknowledge an alarm



ALARM TYPE	ABNORMAL CONDITION	ALARM CONDITION
	Low Temp Alarm Out of Range No Alarm	
TEMP OUT OF RANGE	High Temp Alarm Out of Range Alarm Condition	
	Low Temp Alarm Out of Range Alarm Condition	
AC POWER FAILURE	Low Temp Alarm Out of Range Alarm Condition	

FEATURES

PANIC ALARM OPERATION:

MANUAL PANIC ALARM

Note: Panic Alarm requires the optional IP-1 switch installed in the Freezer/Cooler.

A panic alarm can be triggered manually by holding down the the IP-1 button for more than 2 seconds. The alarm can be cleared by either pressing the Control Icon /Silence Icon displayed on the 75LCT screen or by opening and closing the door for those installations that have the MC-1 magnetic door contacts installed.

AUTO PANIC ALARM

Note: Autopanic function requires MC-1 magnetic contacts, and either one or both of the IP-1 switch & MD -1/MD-1+2 motion detectors installed in the Cooler/Freezer.

Auto Panic, when activated within the 75LCT setup, automatically sounds a panic alarm when a person working inside the Cooler/Freezer is unable to activate a panic alarm manually.

AUTOPANIC FUNCTION WITH THE IP-1 SWITCH:

When Autopanic is enabled, pressing the IP-1 at any time with the door closed starts the 20-minute Auto Panic Timer. When the Auto Panic timer runs out, the IP-1 starts to beep and blink for 40 seconds. Re-pressing the IP-1 during a beep and blink resets the Auto Panic Timer for 20 minutes.

If during the 40 second interval the IP-1 is not pressed, a Panic Alarm (HELP message) automatically annunciates on the 75LCT to let others know that someone may be injured or disabled inside the Cooler/Freezer. Auto Panic can be cleared by either pressing the Control Icon /Silence Icon displayed on the 75LCT screen or by opening and closing the door for those installations that have the MC-1 magnetic door contacts installed.

AUTOPANIC FUNCTION WITH MOTION SENSOR/S (MD-1 OR MD-1+2):

Addition of the Motion Sensor/s (MD-1/MD-1+2) to the Cooler/Freezer automates the Autopanic function. Motion detected by the sensors simulates a keypress on the IP-1 which automatically restarts the 20-minute Auto Panic Timer. If no motion is detected for 20 minutes the IP-1 (if present) starts to beep and blink for 40 seconds. During this time, if motion is not sensed a Panic Alarm (HELP) automatically annunciates on the 75LCT to let others know that someone may be injured or disable inside the Cooler/Freezer. Auto Panic can be cleared by either pressing the Control Icon /Silence Icon displayed on the 75LCT screen or by opening and closing the door for those installations that have the MC-1 magnetic door contacts installed.

AC POWER FAILURE OPERATION:

On an AC power failure, the 75LCT will chirp every 30 seconds and display "Power Failure" on the Screen. After 1 minute, the alarm relay activates for remote notification and the 75LCT will go dark to conserve battery life. Clicking/pressing the darkened screen will wake the unit and display the status on the screen.

For power failures under 1-minute normal operation restores automatically and the incident is ignored.

LIGHTING CONTROL:

The 75LCT offers three ways to control lights:

1. Regular timed lighting
2. Patented timed lighting with Auto Panic (default)
3. Untimed, manual on-off light control (replaces light switches.)

Regular Timed Lighting (Default) – When lights are turned on from the 75LCT interface, the lights-off timer will be activated. The 75LCT will turn off the lights as soon as the lights-off timer expires.

OPERATION:

Without Accessories: Press the Lights Button on the 75LCT to turn lights on and start lights-off timer. Press the Lights Button again to manually turn lights off before the lights-off timer expires.

With IP-1 installed: Press Lights Button on the 75LCT or IP-1 to turn lights on and start lights-off timer. Press Lights Button or IP-1 Switch again to manually turn lights off before the lights-off timer expires. The IP-1 blinks and beeps for 40 seconds before lights-off timer expires to warn personnel that light will turn off soon. Pressing the IP-1 when it is blinking/beeping resets the lights-off timer and keeps lights on. If no action is taken the lights will turn off when lights-off timer expires.

With Magnetic Contacts installed: Open the door to turn lights on. 75LCT light button and installed IP-1 will allow user to turn lights on or off only with door open. When door is closed, can only turn the light on, but not off. Once the door is closed the lights-off timer will begin. However, If a user Opens the door, then turns off the light (either by pressing the 75LCT light button or the IP-1), closes the door without going inside the Cooler/Freezer, then lights-off timer will be cancelled.

With MD-1 or MD-1+2 motion detector installed: Activation of the MD-1 or MD-1+2 by movement of personnel inside the walk-in will turn the lights On. When personnel are no longer detected inside the Cooler/Freezer the lights will turn off.

OPERATION

Timed with Auto Panic– This feature requires the Magnetic contacts, IP-1 and/or MD-1/MD-1+2 installed.

OPERATION:

- When the door is opened, lights will be turned on.
- When the door is closed the lights-off timer will be activated and the IP-1 shall start to beep and blink for 40 seconds to prompt a “check-in” by pressing the IP-1 button. If within the 40 seconds the IP-1 button is not pressed, the light will turn off.



PRESSING THE IP-1 BUTTON WILL DO THE FOLLOWING:

- Stop the lights-off timer and keep the lights on indefinitely - for as long as the door remains closed. Start a 20-minute Auto Panic timer.
- “Lock out” the light Switch on the 75LCT. This feature prevents someone outside the Cooler/Freezer from turning off the light when the Cooler/Freezer is occupied.
- After 20 minutes, IP-1 starts to beep and blink again for 40 seconds to prompt a “check in” button press. Pressing the IP-1 resets and restarts Auto Panic timer. This cycle will repeat for as long as someone remains in the Cooler/Freezer with the door closed. If IP-1 isn’t pressed within 40 seconds of beeping & blinking, the 75LCT will automatically sound a panic alarm.
- Opening and closing the door will reset all functions. If no one is in the Cooler/Freezer to press the IP-1 after door is closed, light will turn off when lights-off timer expires.

NOTE 1: when both the Magnetic contacts and IP-1 are installed, the IP-1 will only be able to turn the Lights On when the door is closed; when door is open, IP-1 shall be able to either turn the Lights On or Off.

NOTE 2: With the door closed, the IP-1 shall blink and beep for 40 seconds before the lights-off timer expires. Pressing the IP-1 at any time shall always activate the 20-minute Auto Panic timer.

NOTE 3: If door is closed and lights are off, the IP-1 shall work as a “lights on” switch inside of the walk-in and activate the 20-minute Auto Panic timer when pressed.

NOTE 4: The MD-1/MD-1+2 motion detector may be used in lieu of or with the IP-1. The MD-1/MD-1+2, when activated by motion shall duplicate an IP-1 press and automate the process.

UNTIMED MANUAL ON-OFF LIGHT CONTROL

OPERATION:

Without accessories – Pressing light button on the 75LCT shall turn lights on. Pressing again shall turn lights off.

With IP-1 installed – IP-1 shall act as a “lights ON/OFF” switch from inside of the walk-in.

With Magnetic Contacts installed – Lights will turn On when the door is open.

With MD-1/MD-1+2 installed: Lights will be activated by movement of personnel in the Cooler/Freezer and keep them On indefinitely for the duration of their stay (as long as motion is sensed).

75LCT CONFIGURATION MODE:

In the Setup/Configuration mode, the Main menu provides the following options:

View Settings – Lists current settings

Program – Allows users to make changes to default settings

Sleep – Disconnects circuit electrically but not physically

Prev. Maintenance – Allows users to set preventive maintenance reminders

Test – Tests operation of the units and accessories (screen, relays, LED)

Device Info – Displays software version & Product ID

Manuals – QR code link to KB web User manuals



NOTE:

Run Mode: Normal operating mode of the 75LCT when AC power is connected to the unit and the 75LCT is not in any of the above Main Menu selections

Normal operating mode will be restored after 10 seconds of inactivity in anyone of the above screens, **except** Sleep & Test. During Test, pressing the Silence logo will return device to normal operating mode.



CONFIGURATION MODE

VIEW SETTINGS:

Displays the settings for the following parameters currently programmed in the 75LCT-for a quick glance. Each parameter will have its own setup screen, as well as input limits (as defined in table 1).

Date – Date in MM/DD/YYYY for US market; DD/MM/YYYY for non-US markets

Scale – C or F

Calibration Offset – Offsets displayed temperature by preset amount

High Limit – High temperature threshold for sounding alarm

Low Limit - Low temperature threshold for sounding alarm

Temp Delay – Time delay in minutes, after which alarm condition is triggered for temperature exceeding the high or low limit thresholds

Door Ajar Delay – Time delay in minutes, after which alarm condition is triggered for door open/Ajar

Lights Off Delay – Lights off timer, in minutes

Lights Operation – Lights operation mode

Ring Back Delay – Delay for timed repeat audible alarms during an ongoing temperature alarm or power failure alarm condition

Alarm Relay Mode – Set mode of operation for relay

Auto Panic – Set auto panic mode

PROGRAM:

Allows user to configure/change default parameters. Table 2 lists the default settings as well as the selection range for each of the parameters.

Table 2. Program Menu Options

MENU ITEM	SELECTION (RANGE)	DEFAULT
Scale	F or C	F
Calibration Offset ²	-5 to +5	0
High Limit	-40F to 125F or -40C to 52C (1° interval)*	42F/6C cooler 10F/-12C Freezer*
Low Limit	-40F to 125F or -40C to 52C (1° interval)*	30F/1C cooler -20F/-29C Freezer*
Tem Delay	0 to 150 mins (1m interval)*	60
Door Adjar Delay	0 to 60 mins (1m interval)*	20 ³
Lights Off Delay	0 to 150 mins (1m interval)*	14 ⁴
Lights Operation	Timed, Untimed	Timed
Ring Back Delay	0 to 150 mins (1m interval)*	30
Alarm Relay Mode	Unlatched - Latched	Unlatched
AutoPanic	On ⁶ - Off	On

Sleep Mode: The 75LCT ships from the factory in Sleep Mode. The rechargeable battery is connected physically but is not connected electrically until AC power is applied.

2 Calibration Offset shall not change Temperature Setpoints

3 Value of 0 = feature deactivated/no delay

4 Value of 0 = feature deactivated/no delay

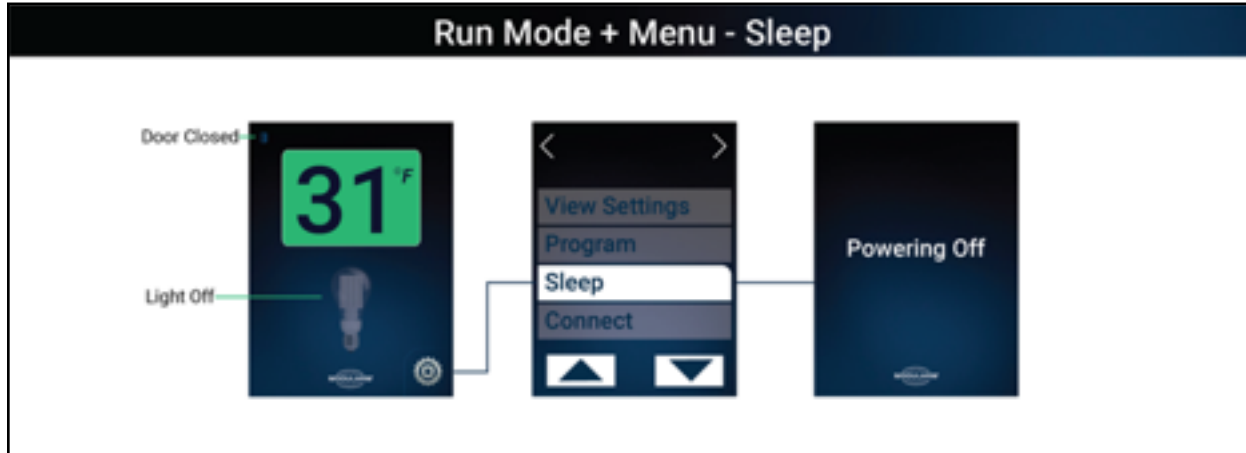
5 In Latched mode, temp alarm condition, alternate display between "High/Low Temp" and Temp value in Red color

6 AutoPanic = On & Lights Operation =Timed allowed only if MC-1 and either one or both IP-1 and MD-1/MD-2 installed

CONFIGURATION MODE

SLEEP MODE:

To restore Sleep Mode if the 75LCT has been powered up:



1. **Disconnect from AC power.** Press gear button. Scroll to sleep menu option and press "SLEEP" and hold until the screen reads "Powering Off".
2. All functions are shut off.
3. The battery automatically reconnects electrically the next time AC Power is applied.

RUN MODE:

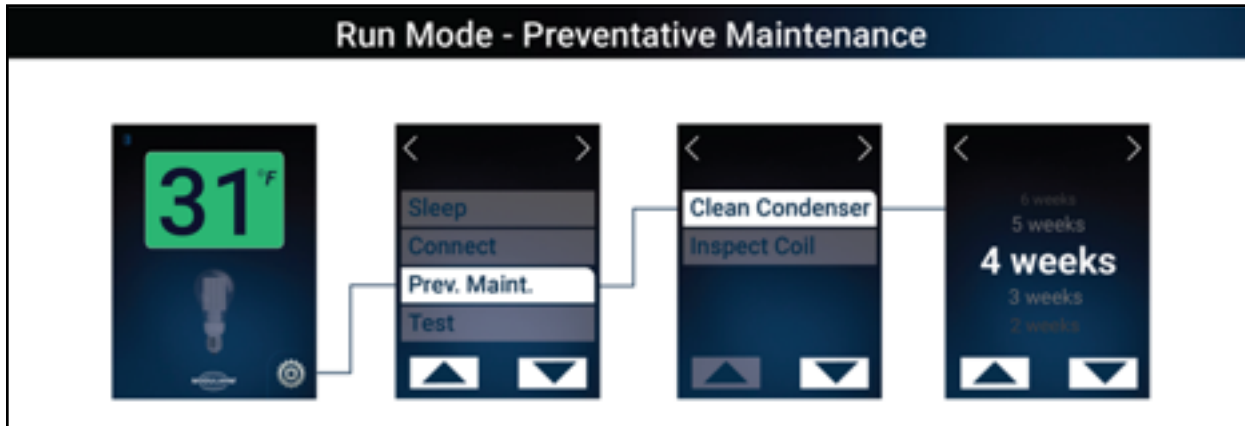
All 75LCT monitoring functions take place in RUN Mode.

NOTE THE FOLLOWING:

1. You must press Silence to clear a Temp Alarm or a Power Failure alarm even if the condition has corrected itself! This informs the operator if these alarm conditions happened, even if no one was present during the alarm.
2. If door is being monitored, close the door to clear a door ajar alarm.
3. Open and close the door or press Silence to clear a Panic Alarm.

CONFIGURATION MODE

PREVENTATIVE MAINTENANCE MODE:



PREVENTIVE MAINTENANCE REMINDER

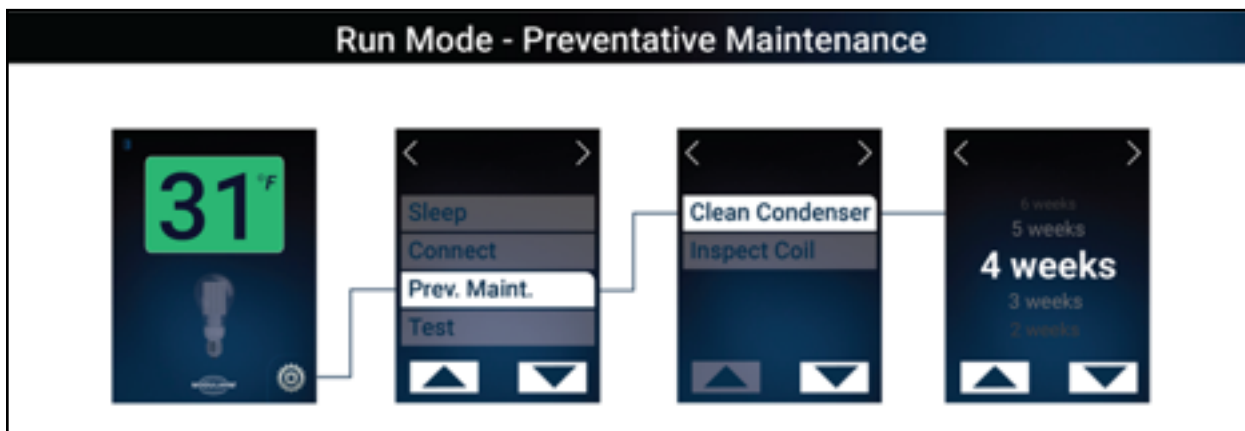
(75LCT) Programming Reminder to inspect coil and clean condenser.

1. Press gear button
2. Scroll down to preventative maintenance reminders
3. Select clean condenser
4. Select time

TO ACTIVATE INSPECT COIL FEATURE

5. Press gear button
6. Scroll down to preventative maintenance reminders
7. Select clean condenser
8. Select time

75LCT RETURNS TO RUN MODE AFTER 10 SECONDS OF INACTIVITY



Probe Calibration – The 75LCT comes pre-calibrated to read proper temperature with Automatic Scale Conversion from F to C. Calibration parameter provides a means for offsetting the displayed temperature by +/-5 if so desired.

1. Press gear button
2. Scroll down to probe calibration
3. Select value

NOTE: CALIBRATING offset doesn't change setpoints

Ringback Delay – Ringback provides a way to generate timed repeat audible alarms during an ongoing temperature alarm or power failure alarm condition.

Select the time interval you wish for this to occur.

1. Press gear button
2. Scroll to ring back delay menu option
3. Select time

Lights Off Delay- The lights will turn OFF after the pre-programmed time. (Factory default time is 14 minutes- Field programmable)

1. Press gear button light off delay menu option
2. Select time off delay
3. Select interval time

Alarm Relay – Normally Open (N/O) and Normally Closed (N/C) dry contacts are provided.

CONFIGURATION MODE

THE TWO RELAY MODES ARE:

Unlatched – Default Setting. Relay activates when alarm occurs and deactivates when Silence is pressed. Typical Application: Controlling a remote buzzer or light.

1. Press gear button to access menu
2. Scroll to unlatched relay mode
3. Select unlatched

Latched – Relay activates when alarm occurs and deactivates when both alarm condition has been cleared and Silence has been pressed. Typical Application: Connection to a building management system where relay remains activated until alarm condition clears and is acknowledged.

1. Press gear button to access menu
2. Scroll to latched relay mode
3. Select latched

INSTALLATION GENERAL SAFETY MEASURES AND PRODUCT LIMITATIONS

- This product ("Product") must be installed by a licensed electrician experienced in working in the types of environments for which this Product is intended to be utilized; specifically, commercial Cooler/Freezer coolers and freezers ("Equipment").
- Personnel installing the Product must carefully and completely read the Operating and Installation Instructions ("Instructions"), and instructions and specifications of the Equipment manufacturers, before attempting to operate and install the Product. Failure to comply with the Instructions, and the instructions and specifications of the Equipment manufacturers, may result in personal injury and/or property damage and may void the warranty of the Product. Retain the Instructions for future reference.
- The Product shall only be used for the purposes described in the Instructions.
- During installation of the Product, all applicable laws, regulations and industry rules, including local electrical and safety codes, the National Electric Code (NEC) and the Occupational Safety and Health Act (OSHA), must be strictly followed. Consistent therewith, follow applicable electrical codes regarding running of low voltage wiring and high voltage wiring in separate conduits and use appropriately rated wire (insulation type, voltage rating and wire gauge) for all connections. Supply connection wiring must be rated at least 90°C. Use copper conductors only.
- The enclosure used for mounting the Product must be properly grounded according to electrical code.
- Confirm that the power source conforms to the requirements of the Product before connecting.
- Do not exceed the rated limits of the Product. Refer to the Product specifications for suitability of the Product to the application.
- The Product is not suitable for use in wet locations. Do not expose the Product to water, moisture or condensation. In no event should the Product be exposed to environments where sudden temperature changes with high humidity may result in the formation of condensation.
- Any openings in the walls, ceiling or floor of the Equipment for wiring or other reason must be sealed (made airtight and watertight) with appropriate materials (e.g., silicone, caulk or foam), both on the outside and inside of the Equipment, to prevent moisture or condensation from entering the compartment of the Equipment and forming and accumulating on the interior walls of the compartment and the contents of the compartment, including the Product. Failure to properly seal such openings may (i) result in damage to the Equipment and contents of the compartment (ii) pose a safety hazard and (iii) void the warranty of the Product.
- To prevent moisture or condensation from entering or forming in the enclosure used for the Product, any openings in this enclosure (for wiring access or other purpose) must be appropriately sealed with materials such as silicone, caulk or foam.
- Installation of the Product should be inspected and the Product tested by qualified personnel to ensure the Product performs safely and in accordance with the Product specifications. Periodic testing of the Product should be performed on an ongoing basis (at least quarterly) to ensure the Product continues to perform properly.
- All personnel operating, maintaining, repairing or interfacing with the Product must be instructed in the use of the Product and provided with the Instructions. The Instructions must be kept in an accessible location for easy reference.
- **WARNING:** Hazard of electric shock! Power sources must be turned off or otherwise disconnected prior to installation or servicing of the Product. Lock and tag power disconnects to prevent an unexpected application of power.

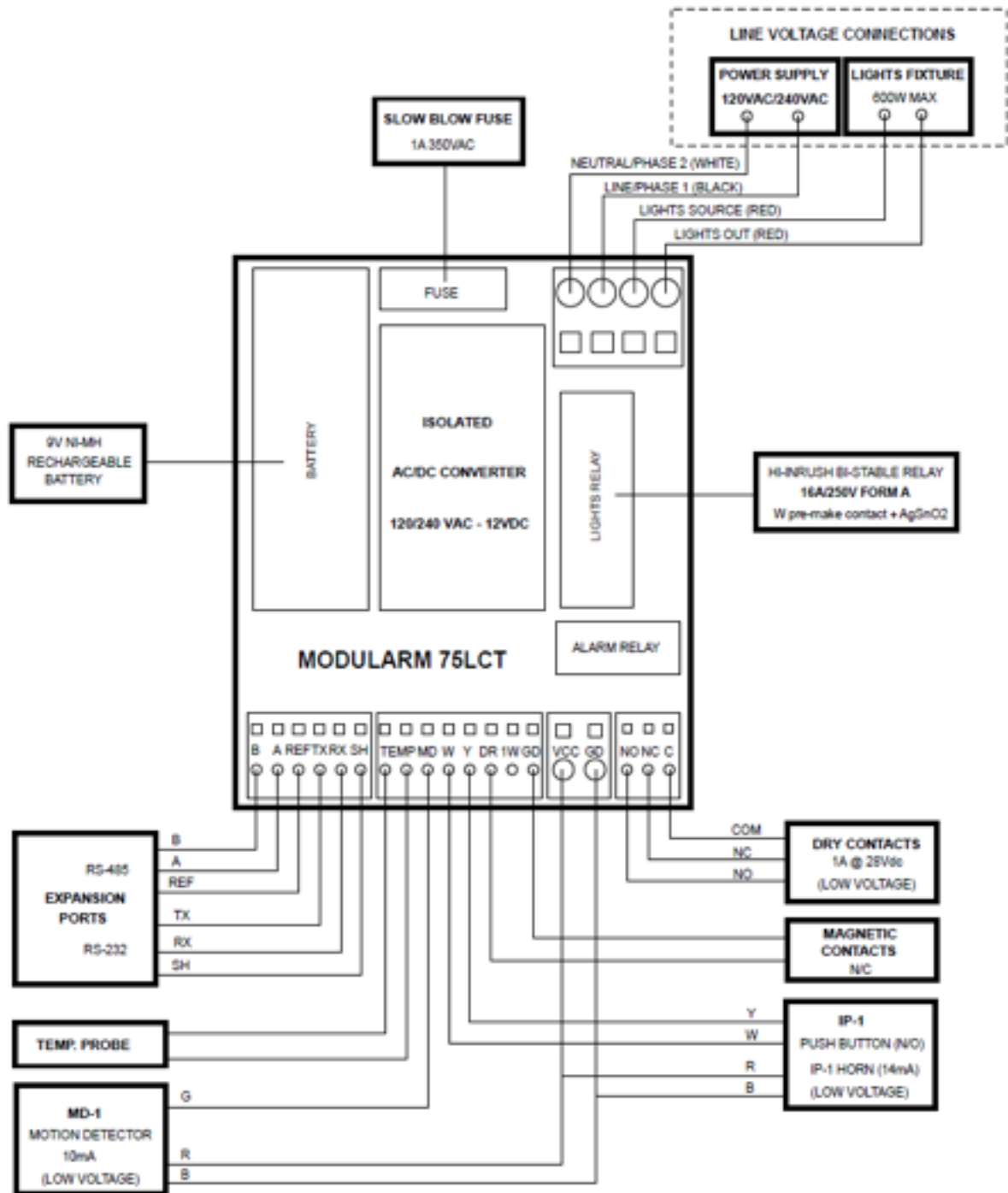
INSTALLATION GENERAL SAFETY MEASURES AND PRODUCT LIMITATIONS

Mounting the Enclosure For The 75LCT	<p>Any enclosure used for 75LCT mounting must provide multiple wire access hubs for running line voltage wiring and low voltage wiring in separate conduits. Determine the wire access hubs to be utilized for the installation and plug and seal any remaining unused openings with hardware and/or sealant. The 75LCT will fit into a typical outdoor, single gang outlet box. Surface Mount – A typical outdoor, single gang outlet box may be used for surface mounting. Mount the enclosure vertically onto the desired surface. If fastening the enclosure with screws directly through the back wall of the enclosure, use two screws, centered vertically above and below the opening in the rear of the enclosure. Once the cutout and mounting holes have been made, screws in the mounting holes may be used to hold the selected enclosure in place during the foaming process.</p>
Mounting the IP-1	<p>The IP-1 may be flush mounted into a standard J-Box. A typical outdoor type single gang outlet box may be used for surface mounting. (NOTE: The IP-1 is a low voltage device. Wiring to the IP-1 must not be installed in the same conduit as line voltage wiring. An 8' length of color-coded wiring for connecting the IP-1 is provided.) Typical mounting location for the IP-1 is inside of the Cooler/Freezer adjacent to the door. Any wire pathways or other openings leading into the enclosure for the IP-1 from outside of the Cooler/Freezer must be sealed both on the outside and on the inside of the walkin to prevent a pathway for condensation.</p>
Mounting the MD-1/MD-1+2	<p>The MD-1/MD-1+2 may be flush mounted into a standard J-Box. A typical outdoor type single gang outlet box may be used for surface mounting.</p> <p>NOTE: The MD-1/MD-1+2 is a low voltage device. Wiring to the MD-1/MD-1+2 must not be installed in the same conduit as line voltage wiring. A 6' length of color coded installation wiring is pre-connected to the MD-1/MD-1+2). Typical mounting location for the MD-1/MD-1+2 is inside of the Cooler/Freezer above the door. There is no need to open or access the motion detector itself.</p> <p>Mount the MD-1/MD-1+2 horizontally with the white oval lens facing down. The red light inside of the MD-1/MD-1+2 will illuminate whenever the MD-1/MD-1+2 is activated.</p> <p>WIRING: See Wiring Diagrams. Keep wiring relatively short inside of the enclosure for the 75LCT. Make sure that wiring openings into all enclosures are sealed properly to prevent a pathway for condensation.</p>
Line Voltage Wiring	<p>The low voltage terminal blocks will accept wire from 24-16AWG. Accessories and sensors are typically provided with 24-22AWG wire. General Accessories and sensor connections are shown on the accompanying 75LCT Connections diagram. Connections are also marked on the 75LC. See the diagrams labeled "IP-1 Connections", "MD-1/MD-1+2 Connections", and "IP-1 & MD-1/MD-1+2 Connections" for wiring specific to your application. The stripped end of the low voltage wire connections should be kept short, approximately ¼" long. To connect wires, press down on the respective plunger on the top of the terminal block, insert the wire into the respective hole and release the plunger. Tug on wires to make sure connections are secure and that they are grabbing bare wire and not insulation.</p>
Low Voltage Wiring	<p>The low voltage terminal blocks will accept wire from 24-16AWG. Accessories and sensors are typically provided with 24-22AWG wire. General Accessories and sensor connections are shown on the accompanying 75LCT Connections diagram. Connections are also marked on the 75LC. See the diagrams labeled "IP-1 Connections", "MD-1/MD-1+2 Connections", and "IP-1 & MD-1/MD-1+2 Connections" for wiring specific to your application. The stripped end of the low voltage wire connections should be kept short, approximately ¼" long. To connect wires, press down on the respective plunger on the top of the terminal block, insert the wire into the respective hole and release the plunger. Tug on wires to make sure connections are secure and that they are grabbing bare wire and not insulation.</p> <p>(NOTE: If the IP-1 and the MD-1/MD-1+2 are both being used, use the enclosure for the IP-1 as a junction box for connecting the MD-1 in accordance with the "IP-1 & MD-1/MD-1+2 Connections" diagram. Connect the green wires together in the IP-1 enclosure with a wire nut or other connector. Strip the 2 black wires approximately 3/8", twist together and insert both into the IP-1 block in accordance with the diagram. Do the same with the two red wires. Again, tug gently on all wires to make sure connections are secure.)</p>

INSTALLATION GENERAL SAFETY MEASURES AND PRODUCT LIMITATIONS

Temperature Probe Mounting	<p>Run the probe into the monitored compartment and locate the sensor in a spot which will typify the average ambient temperature. Recommended location is in the center of the ceiling. Fasten the sensor with the provided clamp. Make sure sensor and sensor wire are positioned and/or protected so as not to be damaged by products or items in the monitored area. (Seal any openings made for passage of the probe wire into the Cooler/Freezer on the inside and the outside of the Cooler/Freezer to prevent a pathway for condensation.)</p>
Magnetic Contacts Mounting	<p>Mounting method will vary depending on the type of contacts utilized. Make sure that the operating gap between the magnet part and the switch part of the contacts accurately detects a door open or a door closed condition. (The DOOR light is on constantly when the door is open. This light may be utilized to assist in proper switch and magnet placement.) NOTE: For compartments with more than one door, multiple sets of contacts, wired in series, may be utilized to monitor multiple door's status.</p>
Mounting the 75LCT onto the enclosure	<p>Mount the 75LCT onto the enclosure with the provided mounting screws. If the 75LCT is mounted onto an outdoor type single gang outlet box, route all wiring away from the battery when the 75LCT is inserted. Inspect the installation for compliance with electrical code, safety, sealing against moisture and condensation, and test to confirm that the Product and installation are operating properly in accordance with these instructions. Periodic testing is recommended to ensure continued proper operation.</p>
Resetting the 75LCT to factory defaults	<p>Press and hold reset button for 2 seconds to restore Factory Set Values.</p>

75LCT STANDARD ACCESSORIES AND BUILDING CONNECTION





USE THE 75LCT TO:



Monitor your Reach-In's



Monitor your Walk-In's



Monitor your Temperature



Monitor your Door Openings



Monitor your Condenser



Monitor your Evap

Save the instructions for future reference.

24/7 Toll-Free Technical Support
1-800-243-9271

(from the U.S., Canada and the Caribbean)

KitchenBrains™
Well Connected.

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