

# INSTALLATION

## REMOVAL OF REDUNDANT APPLIANCES

Refrigeration appliances contain refrigerant and gases in their insulation and must be disposed of professionally by a licensed waste management contractor.

Please ensure that old or redundant refrigeration appliances are disposed of safely and legally. It is recommended that doors are removed prior to disposal in order to ensure safety.

## UNPACKING

Remove all external and interior packing and accessories. Ensure all such material is disposed of safely.

Check that no damage has occurred to the appliance, power cable and plug top during transit. If damage has occurred do not use the appliance.

The appliance should be installed in a well ventilated room on a flat and level floor.

We recommend that prior to use, the appliance is cleaned with a mild soap solution and then wiped dry.

## VENTILATION

Refrigerators generate a considerable amount of heat and, if operated in a small unventilated room will quickly cause the room temperature to become excessive. This could cause the motor to overheat and possibly damage the compressor. At the very least, such an installation will cause the unit to use an excessive amount of electricity.

In addition to ventilation in a room, please ensure that cabinets with top-mounted systems have 500mm clearance between the cabinet top and the ceiling for engineer access and ventilation. For all other cabinets, please ensure a minimum clearance of 50mm is provided around the unit to ensure efficient and effective performance.

**Do not block vents by stacking boxes on top or in front of the unit as this could affect performance and give rise to safety risk.**

## LEVELLING (CASTORS/FEET)

The appliance should stand level to ensure the correct operation of self-closing doors and proper drainage of condensate from the evaporator.

Models fitted with castors are non-adjustable. Therefore a level platform / floor should be provided where the appliance is to be located. Where swivel and brake castors are fitted and it has been positioned, please ensure its brakes have been activated by pressing the metal bar down. Remember to release the brakes before trying to move it.

On models fitted with legs, levelling may be achieved by adjusting the bottom section. For marine specification models with flanged feet for deck and bulkhead fixing, installation should be carried out by a specialist marine company.

## WALL BRACKETS FOR A THERMOWELL (OPTIONAL EXTRA)

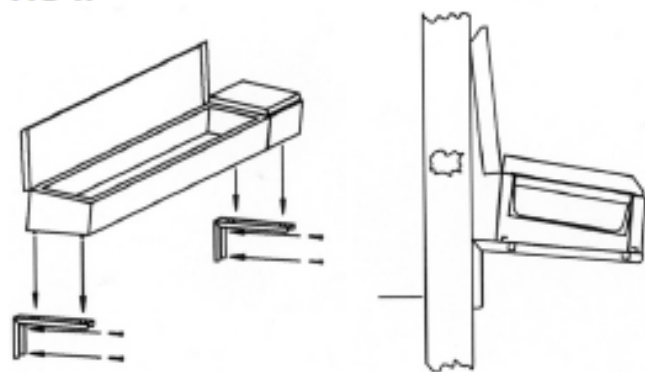
If the Thermowell is supplied with wall brackets, please proceed as follows;

Secure the brackets to the wall using M6 fixings and position the Thermowell upon the brackets. Ensure the feet are securely projecting through the large holes in the brackets. (See diagrams below). The Thermowell and brackets should be positioned as indicated in Figure 1.

Fixing Points:

TW9	918mm apart - 2 points
TW15	724mm apart - 3 points
TW18	900mm apart - 3 points

**FIG 1.**



**NB: Each wall bracket will support 55kg. DO NOT PLACE HEAVY OBJECTS UPON THE THERMOWELL.**

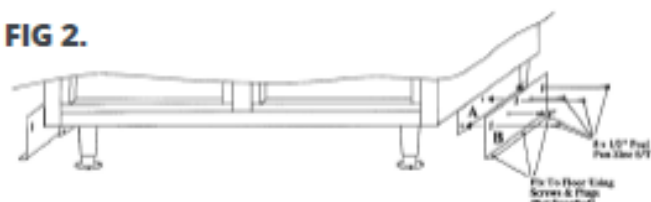
## STABILISING BRACKETS FOR A GLASS DOOR SAPHIRE (OPTIONAL EXTRA)

Instructions to fix stabilising brackets to all Sapphire 1 & 2 door cabinets with glass doors is as follows;

1. Using three 8 x 1/2" pozi fixings to secure Plate B to Plate A via three slots. Plate B is adjustable vertically when it has been secured to the floor.
2. Three holes are provided in Plate B so it may be secured to floor. Drill and secure using sufficient fixings and plugs (not supplied).
3. When Plate B has been secured to floor the fixings can be tightened and the additional holes can be drilled and secured to Plate A.

To fix bracket on cabinet LH side, repeat steps 1,2 & 3.

**FIG 2.**



## MAINS CONNECTION

The appliance is fitted with a moulded plug for safety and must be earthed. Ensure that the mains power cable is extended free from the refrigeration system equipment to avoid entanglement. We recommend supplementary electrical protection with the use of a residual current device (RCD). Periodic testing, repair and fixed wiring connections should only be undertaken by a skilled and competent electrician. If the plug or cable should fail, please contact the Williams Spares Office on +44 (0)1553 817017 for a replacement.

The equipment must be connected to the correct mains power supply as stipulated by the appliance data label and local authority regulations.

**If the appliance has been laid on its back or tipped, DO NOT switch on immediately. Leave in an upright position for at least 3 hours before switching on.**

## CONNECTION TO A MAIN DRAIN

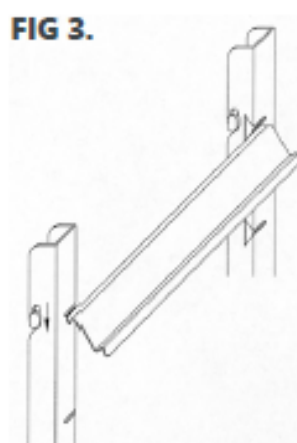
NB: if installing a fish cabinet, please ensure that it is connected to a main drain.

## SHELF/SLIDE FITTING

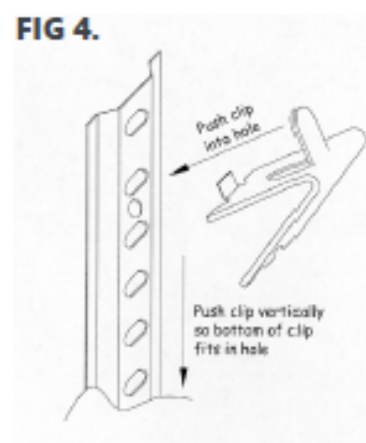
When positioning slides on standard cabinets and counters, present slide to tacking by holding it in the opposite hand to the side of the cabinet to that which they are to be applied. Present slide at 45° angle (See Figure 3). When in place, let slide drop into position to create a horizontal ledge on which the shelves will sit.

Amber / Bottle Coolers are fitted with pilaster and clips (See Figure 4) for fitting. Amber freezer models are fitted with fixed shelves.

**FIG 3.**



**FIG 4.**



## LOADING / SHELF DISTRIBUTION

**Before loading, allow the appliance to reach its normal operating temperature.**

When loading the appliance, please ensure that its load is equally distributed throughout and ensure air can circulate around and through stored products. Ensure all items are covered and that raw and cooked foods are stored separately.

## LOCKING FACILITY

On models with a locking facility, it is recommended that the key be removed from its lock during normal working use. This will prevent bending or breaking of the key which could result in the lock having to be replaced.

Removing the key will also prevent accidental locking when the door is open. This will prevent the door from closing properly and cause the interior temperature to rise. If not checked in time, a loss of food may result.

## OVERNIGHT OPERATION

**Thermowells / Salad Units / Raised Panholder Options / Well Options / Onyx**

We recommend that users remove all food products and place in suitable refrigerated storage overnight.

# CONTROLLER


## CONTROLLER / DISPLAY

The display should be checked daily to ensure that the correct temperature is being maintained.









## CONTROLLER - TYPE A



### Switching on your Appliance

Switch the appliance on or off by pressing and holding  for 3 seconds when it is in standby mode (display shows " - - - ").

### Key to Controls

-  Compressor running indicator
-  Defrost indicator
-  Condenser cleaning light and switch
-  Evaporator fan running indicator
-  LED display (temperature/alarm)
-  Up and down adjustment/defrost instigation
-  Enter button
-  Standby switch

## CONTROLLER - TYPE B



### Switching on your Appliance

Your equipment is delivered ready to run. Plug it into the mains and the appliance is ready to use. ' - - '

### Door Alarm (Meat / Freezer upright Models only)

If the door has been left open for 5 minutes or longer then the cabinet will emit an audible alarm and 'AL' will flash in the display window. Press any button to acknowledge the alarm. The alarm will mute and 'do' will appear in the window. Shut the door and the alarm will cease. However the visual alarm continues if the door switch has a malfunction or if there is another fault. The window will show a different display - call a Service Engineer.

### Hi-Lo Alarm

The controller features a built in audio / visual Hi-Lo alarm. If the temperature within the appliance exceeds the factory set alarm temperatures for 60 minutes or more, the controller will emit an audible alarm signal and 'AL' will flash until the temperature returns to normal operation.


The audible alarm may be cancelled by pressing any button. The alarm will go off again after 60 minutes if the fault has not been addressed. However, 'hi' or 'Lo' will continue to show in the LED Display until the cabinet returns to temperature or a fault is corrected.

### Condenser Cleaning Light (Integral cabinets / counters only)

The LED next to the condenser cleaning button will flash to indicate the condenser requires cleaning.






**NB: there is no audible alarm.** This has been factory pre-set for maximum efficiency.

### Cancel/Reset Condenser Clean:

Press and hold  for 5 seconds to cancel flashing LED.

will appear and the temperature will be displayed. Wait until the cabinet has reached normal operating temperature (indicated on the controller) before loading.

### Key to Controls

-  Temperature set / Information menu
-  Decrease / Scroll Down
-  Increase / Scroll Up
-  Unit running indicator
-  Evaporator fan running indicator


## ADJUSTING THE OPERATING TEMPERATURE



The thermostat is built in to the controller and is adjustable between factory set parameters.


All units are factory pre-set, however conditions on site will vary compared with test conditions and it may be necessary to perform the following adjustments in order to obtain a perfect temperature cycle.

### ADJUSTMENT OF CONTROLLER - TYPE A

To adjust operating temperature;

Press and hold 

Use keys to adjust.  

Then release .

If no further adjustments are made within 10 seconds, the desired operating temperature will be stored, and the display will revert to the actual cabinet operating temperature.

### Defrost Operation




When defrosting is in progress, a defrost indicator on the controller will become illuminated and dF will appear in the LED display.

Defrost is automatic and the appliance will go through a cycle at pre-set intervals. The defrost operation does raise the cabinet temperature slightly for a short period but does not affect product stored inside.

Off-Cycle defrost is carried out on the following products: General produce (H) and chilled food (CF).

Electric defrost is carried out on these products: Fresh Meat (M) and Freezer (L).

Hot Gas defrost is carried out on the Aztra Freezer (L) and PW4 Prep Well only.

To instigate manual defrost on Type A controllers only - press and hold  button or   buttons simultaneously.

### RELEVANT TO BOTH CONTROLLER TYPES

#### Probe Fail Safe Feature

The controller features a fail-safe condition. In the event of a temperature probe failure, the compressor will alternate at 5 minute intervals indefinitely between 'running' and 'not running' and E1 or E2 will be displayed. Normal compressor function will only be restored when the probe fault has been repaired.



Should a probe failure occur please contact Williams Refrigeration Engineering Office on +44 (0) 1553 817000 for a replacement part stating the unit's serial number.

### ADJUSTMENT OF CONTROLLER - TYPE B

To adjust operating temperature, press and hold  key for 3 seconds. Use   keys to adjust.

### Defrost Operation

The LA135 and LA400 do not have automatic defrost. To action a manual defrost the unit should be turned off periodically (usually overnight) to enable the build-up of frost on the evaporator to melt.

To instigate a manual defrost on control panel type B only, press and hold   buttons simultaneously




### THERMOSTAT ON THERMOWELLS



Temperature can be adjusted by turning the thermostat clockwise to reduce temperature and anti-clockwise to increase.



**Thermowells** - have been set to operate between +4°C and +8°C with thermostat located on condensor fan plate.



## CONTROLLER

### INFORMATION VIEW MODE - TYPE A




A single press of  will activate information view mode. It is possible to scroll forward through the references with  and backwards with .



To view a result, scroll to desired reference, press and hold , release  to stop viewing and automatically move to next parameter.



To exit information view mode, press  and  simultaneously or wait 10 seconds and controller will exit automatically.




It is possible to clear recorded values of HI, LO and CR by pressing  or  when viewing the value of relevant reference by holding button marked .

### INFORMATION VIEW MODE - TYPE B

A single press of  will activate information view mode. It is possible to scroll forward through the references with  and backwards with .

To view a result, scroll to desired reference, press and hold , release  to stop viewing and automatically move to next parameter.

To exit information view mode,  and  simultaneously or wait 10 seconds and controller will exit automatically.

It is possible to clear recorded values of HI, LO and CR by pressing  or  when viewing the value of relevant reference by holding button marked .

### INFORMATION VIEW MODE - RELEVANT TO BOTH CONTROLLER TYPES

The following parameters are available for viewing on both controller types:

- T1** Current air probe temperature
- \* T2** Current evaporator probe temperature
- \* T3** Current auxiliary probe temperature
- \*\* Hi** Highest recorded cabinet temperature
- \*\* Lo** Lowest recorded cabinet temperature
- cr** Number of weeks since last condenser clean
- \* =** Optional (will only appear in information view mode if parameter T2 is set to YS and/or T3 is set to NO/AU/FP).
- \*\* =** If parameter T3 is set to FP, HI and LO temperatures will be logged from auxiliary probe. If T3 is not set to FP, HI and LO temperatures will be logged from air probe (T1).

**BREAKDOWN**

In the event of a breakdown, please contact Williams Refrigeration or your Service Provider

When calling, please advise model and serial number. This information can be found on the data plate inside the appliance. It should also be noted on the cover of this Manual. Please ensure that all redundant parts are disposed of safely and legally.

**TROUBLE SHOOTING INFORMATION AND ALARM CODES**

Fault Display	Possible Cause	Action
Cabinet not operating	No power supply	Check fuse or power source
Cabinet not maintaining temperature	1. Dirty condenser	Clean
	2. Air circulation restricted	Remove restriction
	3. Defective fan motor	Call engineer
	4. Defector compressor relay	Call engineer
	5. Loose electrical connection	Call engineer
Faults displayed by control	E1 or E2 - Control probe failure	Call engineer
	hi or Lo - High/low temperature alarm*	Call engineer
	do - door open alarm *	Shut door
Flashing condenser Clean LED	Condenser requires cleaning Air-cooled version *	Remove cover and clean condenser fins with clean brush

\* Type A Controller Only