



# Operating Instructions

GRAM PROCESS · KPS Blast Chillers and Freezers



Type

Part No.

S/N

# Thank you for choosing a Gram product

This manual is divided into two major sections, a compulsory and a complementary section.

The compulsory section deals with details that you must know of in order to use the product. The complementary section gives advice about utilising our many extended functions. It should be stressed that no cabinet is completely maintenance-free, however the most typical issues can be prevented with correct use and maintenance.

## Easy to operate, total control

The Gram KPS cabinets are blast chillers and freezers that fulfill all HACCP requirements for a cook-chill kitchen. The entire range of KPS cabinets utilise the same controller with short cut keys to make it easy to run your desired cycle. You can also customise your own blast chill or blast freeze programmes to enhance operational flexibility.

If you do experience operational difficulties a diagnostic error code will be shown on the display. The cause and remedy will be described within this manual.

All KPS cabinets utilise HFC-free insulation.

## Support

If you do not find the information you need in this manual, our service department is ready to help you. Often issues can be readily solved over the telephone.

**Contact information for the service department:** – see backpage.

### Attention

**Please fill Type / Part No. / S/N (Serial no.) from the name plate of your cabinet into the three white boxes on the frontpage.**

See the paragraph "Service" for information about where the name plate is placed on your cabinet.



#### Gram products observe the RoHS Directive

1 July 2006 the EU-wide enforcement 2002/95/EF took effect. It concerns the RoHS directive (Restriction of Hazardous Substances Directive). The RoHS directive took effect on 1 July 2006, and is required to be enforced and become law in each member state of the EU. This directive restricts the use of six hazardous materials in the manufacture of various types of electronic and electrical equipment. The law commands manufacturers that earlier used these substances in their components to find alternatives.

The six banned substances are: lead, mercury, cadmium, hexavalent chromium, poly-brominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE). As a proof that Gram Commercial and our sub-suppliers live up to the law our company has a RoHS declaration.



#### The CE mark

- certifies that a product has met EU consumer safety, health or environmental requirements.

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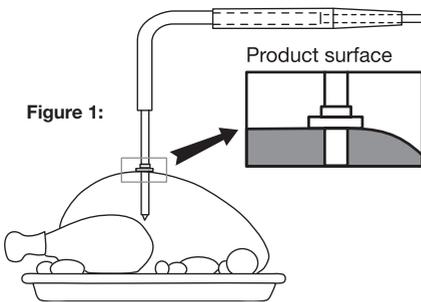
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# Getting started

The following models are comprised in this manual:

General use of the cabinet.

- > **KPS 20, 40, 60, 90, 120 and 180.**
- > The models in this manual are all termed as “cabinets” although KPS 120 and 180 are rooms that you can walk into.
- > Some functions or properties can deviate from cabinet to cabinet. Differences will be mentioned.



- > The KPS cabinet is not a storage cabinet. Therefore the cabinet does not defrost automatically. Use the appropriate short cut key to run a defrosting cycle, see paragraph “Short cut keys” or the **Quick Guide**.
- > After end of the blast chill or freezing cycle the system will automatically switch to the storage mode (+2°C at the end of the positive blast chill phase and -22°C at the end of the freezing phase). When the cabinet runs a storage cycle the display shows “cons”.
- > To achieve an effective cooling cycle it is advisable to run a pre-cooling cycle prior to selecting any blast chill or freeze cycle.
- > It is important to insert the probe correctly. When running an IFR cycle the probe is inserted until the “disc” of the probe reaches the surface of the foodstuff. Concerning other cycles using the probe the needle is inserted until the point reaches the center of the foodstuff. See figure 1.

## Composition of this manual.

- > This manual is divided into the following two parts:

**Compulsory part** (page 4 - 13)

**Complementary part** (page 14 - 27)

- > The **compulsory part** deals with basic functions. Knowledge of these is required for correct use of the cabinet.
- > The **complementary part** deals with extra functions, including use of recommended programmes and storage and use of user's programmes.
- > In addition the manual has a **Quick Guide** which offers an overview of the most common functions and how to use them.

## Use of display images.

- > This manual will refer to display text using images as in the example below:

Example

Date: ---- 10/02/09
Time: ---- 14:22:46

- > The control panel is equipped with a display and keys which are positioned under the display:



- > Check the **Quick Guide** for an explanation of the 5 short cut keys and for further information regarding correct use of these keys.

# Installation and preparation

## Installation

Correct installation of the cabinet before usage.

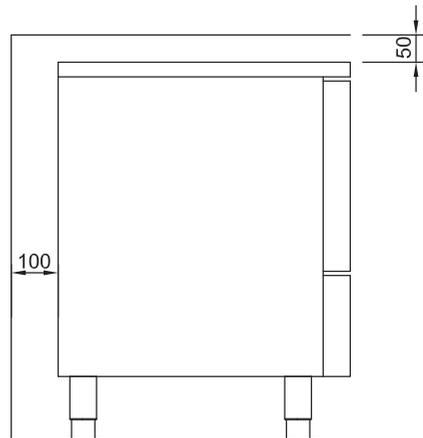
Installation continued.

- > To ensure reliable operation make sure the following is observed:
- > The cabinet must be located in a dry and ventilated room.
- > The cabinet is designed to operate in ambient temperatures of up to +30°C. Avoid location in direct sunlight or near any heat sources, i.e. an oven.
- > The cabinet can be placed directly against a wall. However, the KPS 20 and 40 must be located with a distance of minimum 100 mm to the wall behind the cabinet and at least 50 mm space above the cabinet is required.
- > For versions with legs, use the screws on the legs to make sure that the cabinet stands level and upright.
- > Before usage, clean the cabinet with a mild soapy solution and dry thoroughly.
- > If the cabinet has been transported in horizontal position it must stand upright at least 2 hours before it is started to allow the oil from the compressor to run back.

**This only concerns the KPS 20 and 40 as well as KPS 60 cabinets with built-in compressors.**

⚡ The cabinet must not be located in a chloride/acid-containing environment (swimming-bath etc.) due to risk of corrosion.

! **The KPS 20, 40 and 90** are delivered with height adjustable legs and with doors with removable sealing strips. The KPS 40 is also delivered with reversible door.



**KPS 20/40**

## Connecting the cabinet

Read the text below thoroughly before electrical connection.

Connecting the cabinet - continued.

- > The **KPS 40, 60, 90, 120** and **180** must be connected by an authorized electrician.
- > The **KPS 20** can be connected by the user himself.
- > When the cabinet has been connected, press  to turn on the cabinet.
- > If there is a power failure the controller will remember the settings. When the power returns the cabinet will continue in the programme settings prior to the power failure.

 Do not use the cabinet before all shieldings have been mounted to prevent access to live or rotating machine parts.

Do not use the cabinet, if the wire has been damaged. In this case the cabinet must be examined by a service electrician from Gram Commercial or an authorised refrigeration company with knowledge of Gram's products.

 The cabinet must not be used outdoor. All earthing requirements stipulated by the local electricity authorities must be observed. The cabinet plug and wall socket should then give correct earthing. If necessary, contact an electrician.

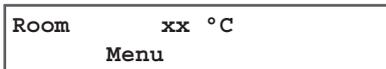
 As regards the **KPS 60, 90, 120** and **180** defrost water must be led to an external drain. See page 11.

The **KPS 20** and **40** are equipped with a water tray which at point of delivery is placed inside the cabinet. The user must place the tray under the cabinet when the cabinet is installed. The tray must be emptied when needed. Alternatively, these cabinets can be connected to an external drain.

## Starting-up

It is easy to start using the cabinet.  
For easy reference the **Quick Guide** displays an illustration of the control panel.

- > Connect the cabinet to the main power and if necessary also to a drain. See the paragraph **“Connection”**.
- > If the display does not turn on when power is connected, press  to turn on the cabinet.
- > Then press  twice to display:



Room      xx °C  
Menu

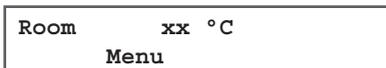
- > Use the keys   to select the desired menu.

**!** **Language, date and time**  
It is recommended to set language, date and time initially. See next paragraph.

### Main menu

The main menu can be reached at any time

pressing  twice. The display shows



Room      xx °C  
Menu

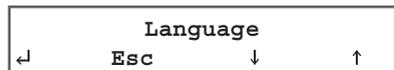
For easy reference it is helpful to unfold the **Quick Guide** when reading the manual this will help you to see the illustration of the control panel and main functions. Guide when reading the manual for easy reference to the illustration of the control panel and main functions.

Note: xx °C = Current temperature

## Language, date and time

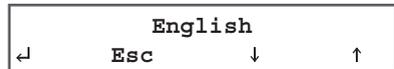
The default language is English.  
Therefore, the display language is English unless this is changed. Date and time are set afterwards.

- > Press  and then  until the display shows:



Language  
Esc      ↓      ↑

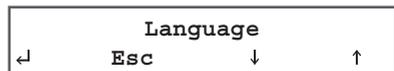
- > Press  to access the menu. The display shows:



English  
Esc      ↓      ↑

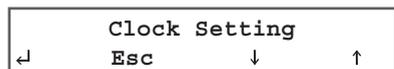
- > Press   to select language and then press  to confirm choice of language.

- > The display now shows:



Language  
Esc      ↓      ↑

- > Press  once and the display shows:



Clock Setting  
Esc      ↓      ↑

## Pre-cooling

Language, date and time - continued.

- > Press  to enter the menu. The display shows:

Example

Date: ---- 10/02/09
Time: ---- 14:22:46

- Press   to change the flashing digits.

- > Press  to save the settings and to move on to the next digits.

- > Press  twice to return to the **main menu**.

The main menu display now shows:

Room        xx °C
Menu

- > To enable an effective chill/freeze cycle it is advisable to run a pre-cooling cycle of the cabinet prior to selecting any cycle. For advice on how to run a pre-cool cycle, see **Quick Guide**.

After end of the pre-cooling cycle the display shows:

Room        -25 °C
Insert product

When the food stuff is placed inside the cabinet and the door is closed, the display shows:

Room        xx °C
Menu

Now the desired programme must be run. See **Quick Guide**.

**!** Unfold the **Quick Guide** for further information.

The short cut keys can only be activated from the main menu, see main menu display opposite.

## Short cut keys

5 keys also serve as short cuts. To activate a short cut, press the key for 5 seconds.

- >  Activates a defrosting cycle. If defrosting is not necessary the cycle will not be activated.
- >  Activates an IFR cycle. IFR automatically adapts the cycle to the characteristics of the food item. Using the IFR facility, surface frosting cycle will be minimised. See page 17 under “IFR” for further information.
- >  Activates a blast freezing cycle (Quick negative chill key).
- >  Activates a blast chill cycle (Quick soft positive chill key).
- >  Activates a pre-cooling cycle. Also when pressed once it will repeat the last ran cycle.

! Unfold the **Quick Guide** for further information.

The short cut keys can only be activated from the main menu:

Room	xx °C
Menu	

# Maintenance

## Cleaning

If cleaning is insufficient, the cabinet may not work efficiently or it may cause malfunctions.

- > Before cleaning isolate the cabinet from the electrical supply.
- > The cabinet should be cleaned internally with a mild soap solution at suitable intervals.
- > For the external maintenance use stainless steel polish.
- > The compressor compartment and in particular the condenser (cabinet with built-in compressor) must be kept free from dust and dirt. This is best done with a vacuum cleaner and a stiff brush.
- > For information of cleaning of the defrost water tray see the opposite paragraph "**Defrosting water**".
- > **Defrosting:**  
A KPS cabinet does not defrost automatically. Typically it is not necessary to defrost. However, if it turns out to be necessary please see the **Quick Guide** for guidance.

 Cleansing agents containing chlorine or compounds of chlorine as well as other corrosive means, **must not be used**, as they might cause corrosion to the stainless panels of the cabinet and the evaporator system.

**!** Do not flush water directly on the cabinet or inside the cabinet as this may cause short-circuits in the electrical system. It is recommended to keep record of the cleaning of the condenser in the cleaning plan. This is relevant to KPS 20 as well as KPS 40 and 60 with built-in compressor.

## Defrosting water

As a KPS cabinet does not re-evaporate defrosting water the following should be noticed:

- > The **KPS 60, 90, 120** and **180** must be led to an external drain.
- > The **KPS 20** and **40**: A defrost water tray is placed under the cabinet to collect defrost water. The tray must be emptied daily or when needed. Alternatively, these cabinets can also be connected to an external drain.

## Service

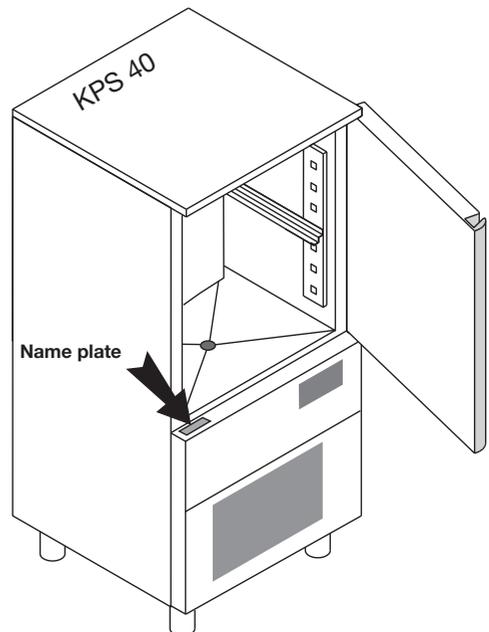
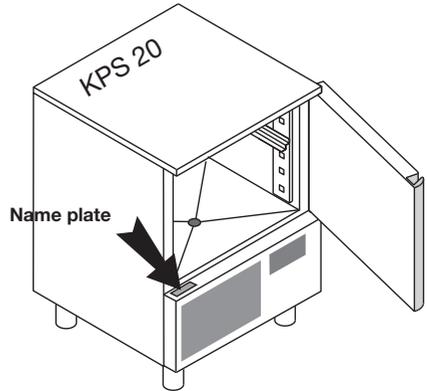
The refrigeration system and the hermetically sealed compressor need no inspection, only cleaning.

Service - continued.

- > If refrigeration fails, first investigate whether the unit has been unintentionally disconnected or switched off at the socket, or whether a fuse has blown.
- > If it is not possible to find the cause of the refrigeration failure, please contact Gram's technical department.
- > **KPS 20 and 40:** When contacting us please tell us the name and serial number (S/N) of the cabinet. This information is stated on the name plate, see illustrations opposite.

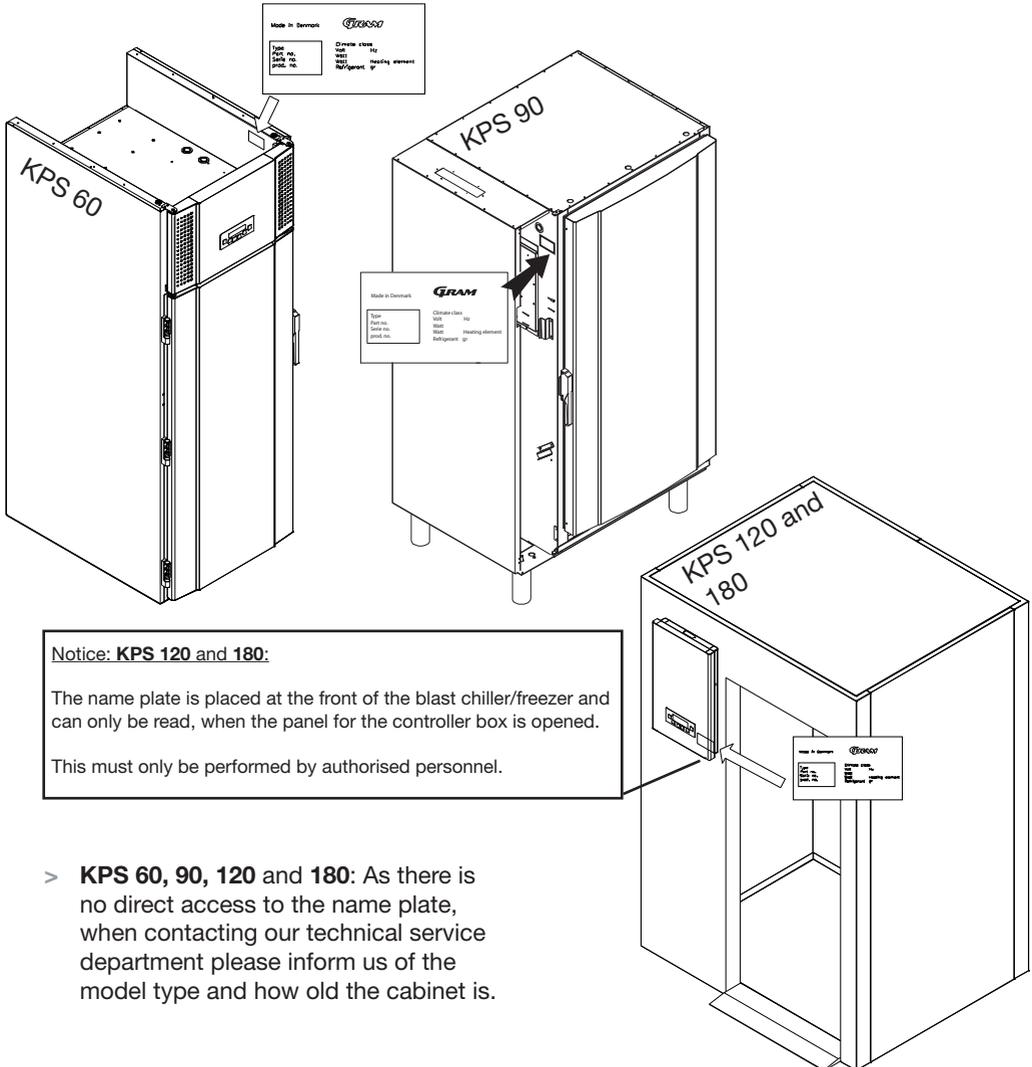
 When removing covers to gain access to electrical parts either remove the lead from the wall socket, or switch it off at the wall socket.

It is **not** sufficient only to switch off with  at the cabinet only.



Service - continued.

Service - continued.



# Working cycles

## Programming of user's cycles

How to do your own user programmes.

- > If you want to do your own user cycle, select one of the following three types of cycles:

**Soft positive cycle:** Minimum room temperature of  $-5^{\circ}\text{C}$  and a minimum core temperature of  $+3^{\circ}\text{C}$ .

**Negative cycle:** Minimum room temperature of  $-25^{\circ}\text{C}$  and a minimum core temperature of  $-18^{\circ}\text{C}$ .

**Hard positive cycle:** 60% of the time at a minimum room temperature of  $-25^{\circ}\text{C}$ . The remaining time at a minimum room temperature of  $-5^{\circ}\text{C}$ . The core temperature is set to be  $+3^{\circ}\text{C}$ . Suitable for thick cuts of meat.

- > The settings are displayed in the diagram on this and the next page:

To repeat the latest cycle, press



**Return to previous menu:**

It is possible to return to the previous menu.



Use the key until you reach the start menu, see diagram.

**Regarding "core" at level 2:**

This cycle is with the core probe and continues until the core temperature has reached  $+3^{\circ}\text{C}$  when running a soft or hard positive cycle, and  $-18^{\circ}\text{C}$  when running a negative cycle.

**Regarding time at level 2 and 3:**

This cycle is time controlled and continues until the set time expires.

How to do your own user programmes - continued.

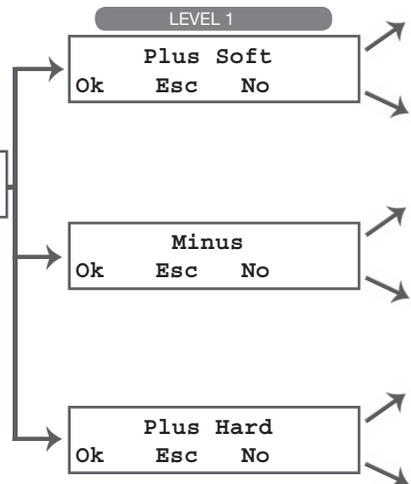
- 1 Press and the display shows:



- 2 Press until the display shows:



- 3 Press to access settings on LEVEL 1 and adapt the cycle to your needs.



How to do your own user programmes - continued.

How to do your own user programmes - continued.

4 Press  to scroll the cycle types at LEVEL 1.

5 Press  to confirm your choice.

6 Press  to scroll between core and time controlled cycle.

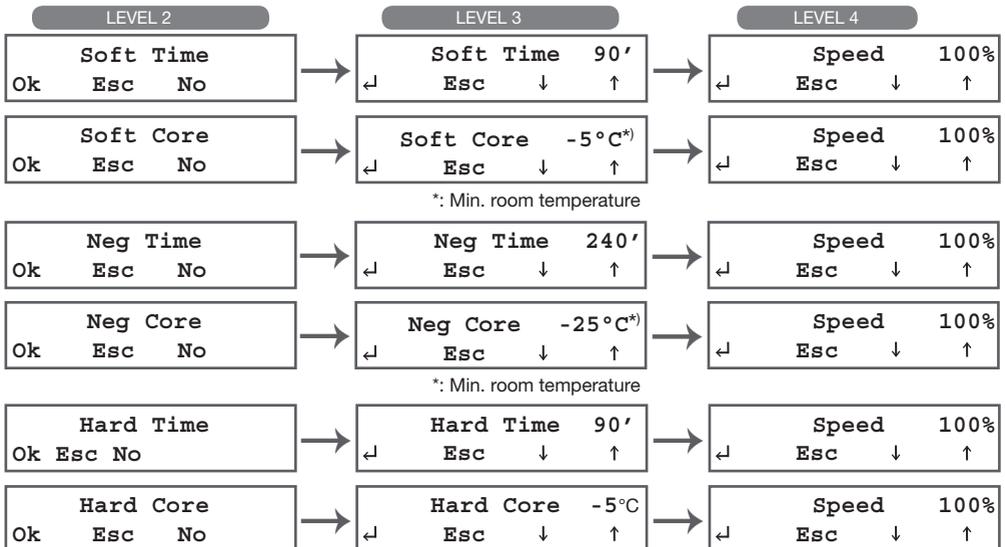
7 Press  to confirm your choice.

8 Use  or  to set time or minimum room temperature.

Confirm your choice with .

9 Press  or  to set the desired fan speed. Press  to confirm your choice. **If you want to save the programme, do this before running the programme, see next page.**

10 Press  to start the cycle.



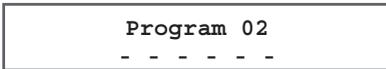
# Memorise user's programmes

User's programmes can be memorised.

- > After programming a user's cycle (see page 14-15) it can be memorised. Do as follows:

- > Keep  pressed for 5 seconds and the display will show the first available position.

- > Available positions are showed with ----- in the display. Example:

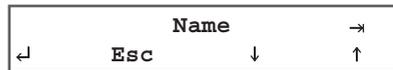


- > Press  and  to select a desired position.
- > If the position is not available programme data is shown in the bottom line of the display.
- > Press  to confirm the chosen position. Leave the menu and the display shows:



- > Type in the name of the programme, which is to be memorised using   to scroll through the letters and numbers.
- > Press  to confirm and move on to the next character.

- > Press  to save the name. The display shows (example):



- Press  to immediately activate the selected cycle.

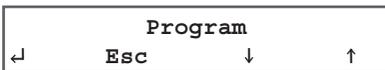
! Please, note that memorised programmes can be overwritten.

## IFR cycle

IFR automatically adapts the cycle to the food item's characteristics. IFR minimises frost on the food surface.

- > Insert the probe correctly into the foodstuff (see illustration page 4) and activate an IFR cycle. The temperatures are then monitored in 3 places; the core, the product surface and the air temperature around the surface of the food.
- > In this way surface frost that can be damaging to the foodstuff can be minimised.
- > The function is usable only when blast chilling (not blast freezing) and where the probe can be used correctly.

- > Press  and the display will now show:



- > Press  and the display now shows:



- > Press  to start the IFR cycle.

- ! From the main menu it is also possible immediately to start an IFR cycle.

Simply press  for 5 secs. and the cycle will start immediately. See **Quick Guide**.

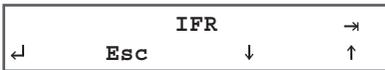
# Programmes

## Use of recommended programmes

It is possible to choose between recommended programmes, which are pre-set programmes, which cannot be changed.

Use of recommended programmes - continued.

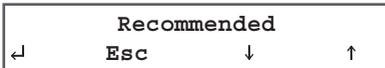
- > Press  to select the desired pre-set programme. The display shows:



- > Press   to select the desired programme, 21 - 29.

- > Press  to start the selected cycle.

- > Press   until the display shows:



- > Press  and the display shows:

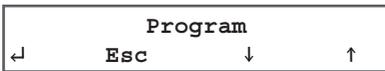


Prog	Name	Time/core	Hard	Storage temperature	Time
21	MEAT	Core (probe)	Yes	+2°C	120 min.
22	DAIRY	Time	No	+2°C	90 min.
23	PIE	Time	No	+2°C	90 min.
24	STEW	Time	No	+2°C	90 min.
25	FISH	Time	Yes	+2°C	90 min.
26	POULTRY	Time	Yes	+2°C	90 min.
27	VEGETABLES	Time	No	+2°C	90 min.
28	FREEZING TEMP	Core (probe)	Yes	-22°C	240 min.
29	FREEZING TIME	Time	Yes	-22°C	240 min.

## Use of own programmes

It is possible to memorize your own programmes and use them afterwards.

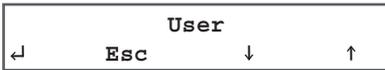
- > Press  to use your own programmes. The display shows:



- Press  and the display shows:



- Press   until the display shows:



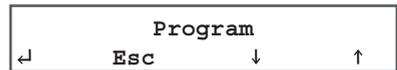
- > Press  to confirm the choice.
- > Use   to scroll between the user programmes.
- > Press  to activate the selected programme.

## Pre-cooling

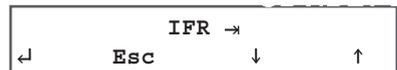
It is recommended to pre-cool the cabinet, prior to any cooling or freezing process.

- > Press  to select the desired menu.

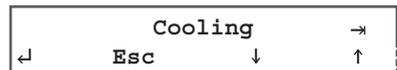
- > Use   until the display shows:



- > Press  to confirm your choice. The display shows:



- > Use   until the display shows:



- Press  to activate pre-cooling.

! Pre-cooling can also be activated by means of short cut key from the main menu, see Quick Guide.

## Storing cycles

The cabinet can run a storing cycle for a short period.

Storing cycles - continued.

- > To set the storing temperature follow the instructions below:

Press  to select the desired menu.

- > Use  and  until the display shows:

Store			
←	Esc	↓	↑

- > Press  to confirm your choice.
- > To set a **positive** storing temperature press , until the display shows:

Plus			
Ok			No

- > To set a **negative** storing temperature, press , until display shows:

Minus			
Ok			No

- > Press  to confirm your choice. The display now shows:

Set Point			
←	Esc	↓	↑

- > Press  and  to change setpoint for the room temperature.
- > Press  to confirm your choice.

## Storing cycles - continued.

- > The display shows:



- > Use  and  to change fan speed.

- > Press  to confirm your choice.  
The display shows:



- > Press  to start the storing cycle.

**!** We recommend that you do not use the product range for storing cycles, as the cabinets are not equipped with an automatic defrosting function.

# Error codes

## Overview

If the cabinet has a defect or operating troubles occur, the display will typically show an error code.

- > In the table below you can get information about the error and how to correct it.

Error code	Cause	How to correct the fault
<b>ALL High Press</b>	High pressure switch activated.	<ul style="list-style-type: none"> <li>• The blast chiller is located too close to the wall behind (see installation).</li> <li>• Ask Grams Service department for skilled assistance.</li> </ul>
<b>ALL Room Sensor</b>	Room probe defect.	<ul style="list-style-type: none"> <li>• Qualified technician required. Replacement of room sensor.</li> </ul>
<b>ALL Evap Sensor</b>	Evaporator probe defect.	<ul style="list-style-type: none"> <li>• The problem may be a frosted evaporator.</li> <li>• Ask Gram Service department for skilled assistance.</li> </ul>
<b>ALL Cond Sensor</b>	Condensator probe defect. (this only concerns cabinets with built-in compressors)	<ul style="list-style-type: none"> <li>• Qualified technician required</li> <li>• Replacement of the condensator probe.</li> </ul>
<b>ALL Probe</b>	Needle probe defect.	<ul style="list-style-type: none"> <li>• Qualified technician required.</li> <li>• Replacement of the needle probe.</li> </ul>
<b>ALL Insert Probe</b>	Needle probe not correctly inserted in the food stuff although a needle probe cycle is running. The cycle will automatically change to a time-controlled cycle.	<ul style="list-style-type: none"> <li>• Insert needle or ignore the error code.</li> <li>• <b>IMPORTANT:</b> If the needle is not used at Quick-guide programmes, it must be heated before re-start of the programme to avoid that the process starts in storing cycle (cons.)</li> </ul>
<b>High T Room</b>	The room temperature is / has been higher than the set point, plus 10°C (in storing programme) Example: The set point is set to +2°C. The upper alarm threshold will in this case be +12°C.	<ul style="list-style-type: none"> <li>• Qualified technician required.</li> </ul>

Overview error codes - continued.

Error code	Cause	How to correct the fault
<b>Low T Room</b>	The room temperature is / has been below the set point, less 10°C (storing cycle). Example: The set point has been set to +2°C. The lower alarm threshold will then be -8°C.	<ul style="list-style-type: none"> <li>• Qualified technician required.</li> </ul>
<b>ALL BlackOut</b>	The power supply has been disconnected.	<ul style="list-style-type: none"> <li>• When power is restored, you can see under <b>ALARM</b> how long this blackout has lasted, and what the maximum temperature has been</li> </ul>
<b>ALL Door Open</b>	Room door is open.  Door micro faulty.	<ul style="list-style-type: none"> <li>• Close the door.</li> <li>• If the error code is still shown in the display after the door has been closed, a qualified technician is required.</li> </ul>

**!** See contact information to Gram's Service department on the back of this user manual.



# Alarms

The control memorises all alarms.

Alarms - continued.

- > To gain access to the mode for displaying alarms press  and use  and  to display:

Alarm			
←	Esc	↓	↑

- > Then press  to see the latest alarms. If **no** alarms are memorized the display shows:

No Data			
Esc			

- > If alarms are memorised, the display shows (example):

A05	Room Sensor		
S	14:21	10/02/09	

- > Press  to get further information about the alarm. Alarm stop “E” is shown with this example:

A05	Room Sensor		
E	16:30	10/02/09	

- > If the alarm is still in progress the display shows: “Present”. Example:

A05	Room Sensor		
I	Gang	16:30	10/02/09

- > Press  again for further information of how to solve an error. Example:

A05	Room Sensor		
	Call Service		

- > Use the keys  and  to display all the memorised alarms.

Press  several times to return to the main menu.

## ! Alarm information:

**A\_ \_** = Alarm number, i.e. A05 is the 5th and the latest alarm and in the example it concerns a room sensor error.

**Room Sensor** = Error type, in this example a room sensor error.

**S** = Alarm start.

**E** = Alarm stop.

**Present** = Alarm is still in progress.

See page 22 for an overview of error codes, cause and how to remedy.

## Key lock

The keys can be locked and in this way secured against unauthorized use of the blast chiller/freezer.

- > Go to the main menu (please, see the **Quick Guide** for guidance).

- > Press  and  at the same time, and a signal is given.

- > Then press  and  at the same time for 5 seconds, until an “S” is shown in the upper right corner. The keys are now locked.

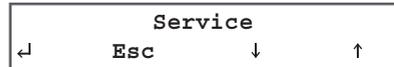
To unlock the keys press  and  for 5 seconds. The “S” will disappear from the display.

## Service parameters

Service parameters show the basic settings in concert with Gram.

The service parameter area of the controller is reserved for the service technician. Therefore the area is protected with a password. Changes in the parameters will directly influence the operation and functions of the cabinet.

The service parameters display looks as follows:



## Inputs/Outputs

In this menu the input and output values can be read, i.e. the present sensor temperature and the relay state.

- > Press  and use  and  to display:

```

Inputs/Outputs
┌───────────┴───────────┐
Esc           ↓           ↑
    
```

- > Press  to check the values shown in the table below.

Inputs/Outputs - continued.

- > Use the keys  and  to scroll the data.

- > Press  several times to exit.

Display	Description
<pre> Room      -6°C Probe     15°C     </pre>	Room and needle temperature values
<pre> Food       6°C External  -3°C     </pre>	<b>"Internal"</b> temperature on the surface of the foodstuff. <b>"External"</b> temperature around the foodstuff.
<pre> Evap.     -10°C Cond.     21°C     </pre>	Evaporator and condenser temperature values. If the cabinet has a remote compressor, <b>"Cond."</b> setting will be <b>"Disab"</b> .
<pre> C  D  FE  FC  L  R  A 1  0  0  1  1  0  0     </pre>	1 = Relay activated 0 = Relay de-activated C = Compressor D = Defrost FE = Evaporator fan FC = Condenser fan L = Sterilisation equipment R = Frame/Floor heating A = Alarm
<pre> DI1      DI2      FAN 0         1         80     </pre>	Digital inputs state and fan speed of the evaporator DI1 = Inputs door switch DI2 = Inputs high pressure safety Fan = Evaporator fan speed

! This menu is suitable for fault analysis.

# Disposal

The below only concerns the United Kingdom.

- > Disposal of an old cabinet is only available when we are delivering a new one at the same time. Cabinets must be fully defrosted and emptied prior to collection.
- > Gram recognises that our products for the catering market are considered as WEEE when they become obsolete (excl. Coldrooms). To ensure that Gram's responsibilities are handled correctly and environmentally friendly, we are signed up the largest Business to Business compliance scheme in the UK – B2B Compliance <http://www.b2bcompliance.org.uk/>
- > B2B Compliance will on our behalf deal with all areas of our responsibilities when collecting and disposing of equipment which fall under the UK WEEE regulations. B2B Compliance can be contacted on telephone number 01691 676124”.





# Technical and spares department

Technical spare parts support and advice are available Monday to Friday 9am - 5pm.

Please find contact numbers below:

Main Office: 01322 616900

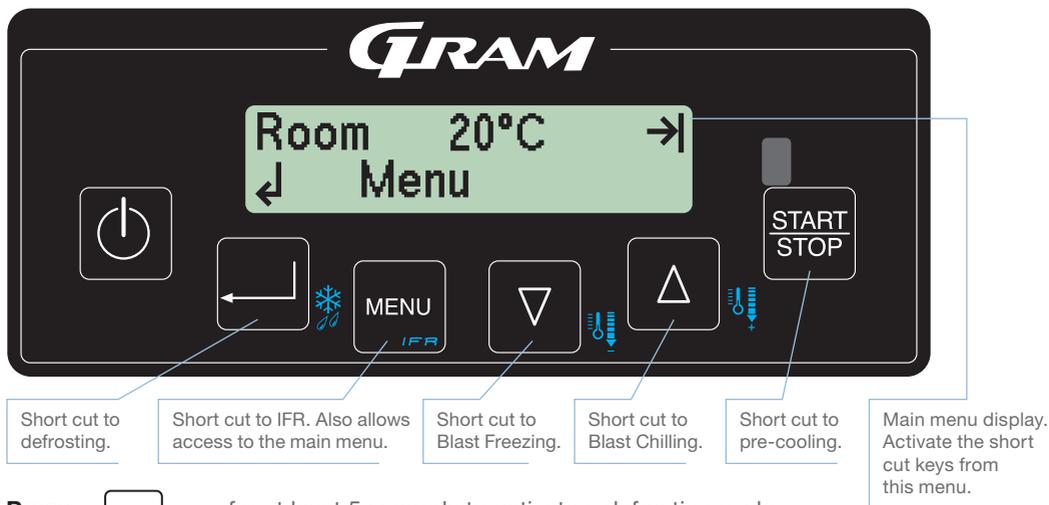
Technical Support: 01322 616915

Spares: 01322 616910

Main Fax: 01322 616901

Spares Fax: 01322 616911

## Control panel with buttons and display



- Press**  ... for at least 5 seconds to activate a defrosting cycle. This function is only effective if the evaporator is colder than +8°C.
- Press**  ... for at least 5 seconds to activate an IFR chill cycle.
- Press**  ... for at least 5 seconds to activate a blast freeze cycle.\* This does not apply for KPS 20 CH and KPS 40 CH and CF.
- Press**  ... for at least 5 seconds to activate a blast chill cycle.\*
- Press**  ... for at least 5 seconds to activate a pre-cooling cycle. At the end of the pre-cooling cycle (-25°C internal temperature) insert product and close door. The desired programme **must now** be selected.

**Access to main menu:** Press  several times until the main menu is displayed.

At the end of every cycle the cabinet will give an acoustic signal and automatically switch to storage mode. The default storage temperature is +2°C for blast chilling and -22°C for blast freezing.

\* **Using the Probe:** When using the temperature probe and short cut buttons for chill or freeze the cycle will be controlled by the core temperature. **If the probe is not used:** A) The chill/freeze cycle will automatically be controlled by time or B) If the probe is colder than the desired temperature the cabinet will start a storing cycle (display shows -Store).

To remedy this press START/STOP to interrupt the cycle. Then heat the probe using warm water. The chill/freezer cycle is now ready for use. The desired cycle is then activated.

**Parameters for blast chilling without use of probe:** -5°C room temperature, 100% fan speed and 90 minutes duration.

**Parameters for blast freezing without use of probe:** -25°C room temperature, 100% fan speed and 240 minutes duration.

► See page 10 for more information about use of the short cut keys...



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[www.gram-commercial.com](http://www.gram-commercial.com)

**Facts about us**

Gram Commercial A/S develops and produces refrigerators and freezers for commercial kitchens. With our head office in Vojens, Denmark, we are part of the Japanese owned Hoshizaki Group, a global supplier of equipment for professional kitchens. With an extensive sales and service network around the world, we provide expert local service to our customers wherever you are.



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