

EXPOBAR PROGRAMMING MANUAL



Strong brands of Crem International

1D5 KEYPAD

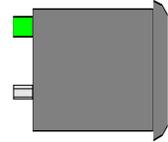
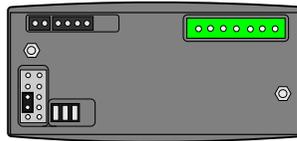
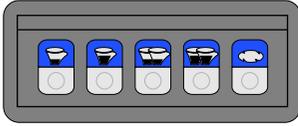
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3D5 LUX

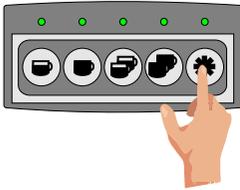
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1D5 Operational Overview

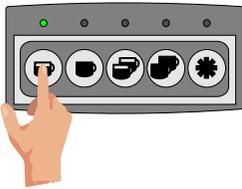
On the Expobar range of traditional espresso machines where a central control PCB is not employed the machine functions are controlled by individual keypads. The keypads can be used in various configurations depending on machine type. When replacing a keypad you will need to program this correct function by following the simple steps on the following pages. This guide is applicable to all formats of the 1D5 style keypad regardless of the design of the front fascia.



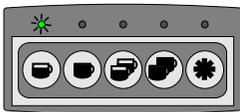
1D5 Programming Doses



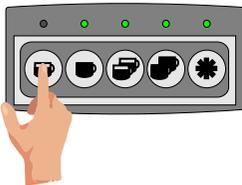
With the machine turned on, press and hold button 5 on the keypad for approx. 8 seconds until all the button LEDs illuminate, you can then release the button and you have approx 20 seconds to select the button you wish to program before the keypad times out and exits from program mode.



With all the button LEDs lit you can now select any of the keys to start a dispense, all the other LEDs will turn off apart from the one currently being programmed. Once pressed, remove your finger from the button.

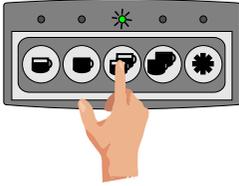


Whilst the selected button is dispensing the corresponding LED will flash to indicate that keypad is registering the dispense.



When the level in the cup reaches the desired setting press and release button one again and this will stop the group and automatically store the programmed level. The LED on button one will extinguish and the keypad will turn the remaining un-programmed LEDs on. You may then proceed to program the other buttons in the same way or wait for the keypad to time out of program mode. Depending what mode of operation the keypad is set to all 5 keys may be programmed.

1D5 Auto Back Wash



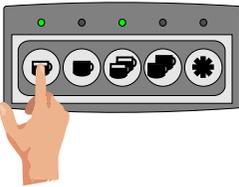
Function to be used when using a group handle with the blanking disc and cleaning powder as per the machine cleaning instructions.

With the machine turned off on the main switch, press and hold button 3 whilst turning the power back on then release button 3. The machine will now operate a full cleaning cycle:

- 1 Pump and group head on 7 seconds
- 2 Pump and group head off 3 seconds

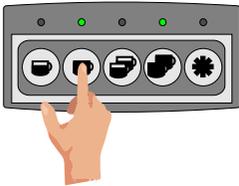
The cycle will be automatically be repeated 7 times and return to normal operating mode once complete.

1D5 Setting Espresso Pre-Infusion



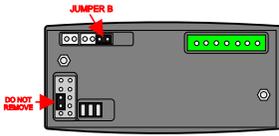
With the machine turned off on the main switch, press and hold button 1 whilst turning the power back on, when you see button LEDs 1 and 3 light up, release button 1. Turn machine off and then on again and the keypad will dispense espresso shots using pre-infusion.

1D5 Disabling Espresso Pre-Infusion

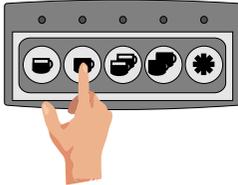


With the machine turned off on the main switch, press and hold button 2 whilst turning the power back on, when you see button LEDs 2 and 4 light up, release button 2. Turn machine off and then on again and the keypad will dispense all shots without using pre-infusion.

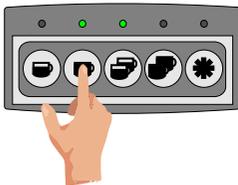
1D5 Disable Button 5 Internal Hot Water Control



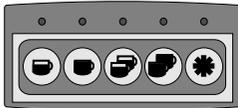
With the machine powered down fit a spare jumper onto the pins as shown 'JUMPER B'
(From the old keypad you are replacing remove the jumper from the 10 way grey connector)



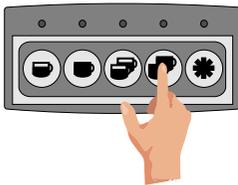
After fitting the jumper press and hold down button 2 on the keypad and whilst holding down power up the machine.



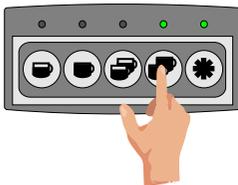
When you have powered up the machine you will see that the LED's on both buttons 2 and 3 now light up. If they do not light up please recheck that you have the jumpers in the correct locations. Once you see both LED's light up you can remove your finger from the keypad.



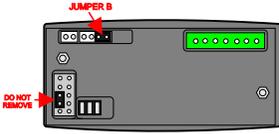
Power the machine off.



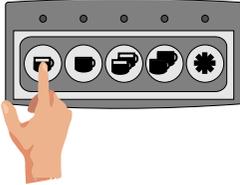
Hold down button 4 on the keypad and whilst holding down power up the machine again.



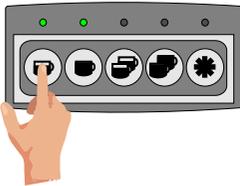
When you have powered up the machine you will see that the LED's on both buttons 4 and 5 now light up. Once you see both LED's light up you can remove your finger from the keypad. Power the machine off, remove jumper B and then turn machine on again. Button 5 on the keypad will now operate the group head. This has now restored the keypad to factory settings where the internal relay on the keypad will provide element protection via RL3.



With the machine powered down fit a spare jumper onto the pins as shown 'JUMPER B'
(From the old keypad you are replacing remove the jumper from the 10 way grey connector)



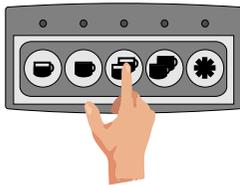
After fitting the jumper press and hold down button 1 on the keypad and whilst holding down power up the machine.



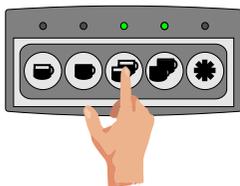
When you have powered up the machine you will see that the LED's on both single shot keys now light up. If they do not light up please recheck that you have the jumpers in the correct locations. Once you see both LED's light up you can remove your finger from the keypad.



Power the machine off.

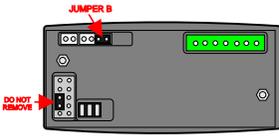


Hold down button 3 on the keypad and whilst holding down power up the machine again.

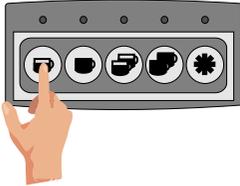


When you have powered up the machine you will see that the LED's on both buttons 3 and 4 now light up. Once you see both LED's light up you can remove your finger from the keypad. Power the machine off, remove jumper B and then turn machine on again. Button 5 on the keypad will now control the external hot water solenoid via RL3. Programming of the keypad is still possible by pressing and holding button 5 as normal which will also allow you to program the hot water dispense time.

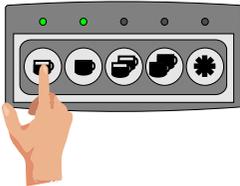
1D5 Enable External Hot Water Control



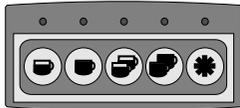
With the machine powered down fit a spare jumper onto the pins as shown 'JUMPER B'
(From the old keypad you are replacing remove the jumper from the 10 way grey connector)



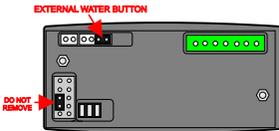
After fitting the jumper press and hold down button 1 on the keypad and whilst holding down power up the machine.



When you have powered up the machine you will see that the LED's on both buttons 1 and 2 now light up. If they do not light up please recheck that you have the jumpers in the correct locations. Once you see both LED's light up you can remove your finger from the keypad.

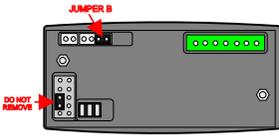


Power the machine off.

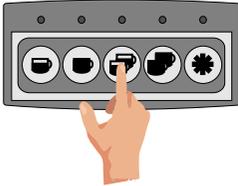


Remove jumper B and then turn machine on again. Button 5 on the keypad will operate the group head as normal and RL3 will control an external solenoid via a switch connected to the terminals shown. RL3 operation time is programmable by taking the keypad into program mode via button 5 and setting the water solenoid time using the external button.

1D5 Disable Button 5 Continuous



With the machine powered down fit a spare jumper onto the pins as shown 'JUMPER B'
(From the old keypad you are replacing remove the jumper from the 10 way grey connector)



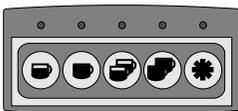
After fitting the jumper press and hold down button 3 on the keypad and whilst holding down power up the machine.



When you have powered up the machine you will see that the LED's on both buttons 3 and 4 now light up. If they do not light up please recheck that you have the jumpers in the correct locations. Once you see both LED's light up you can remove your finger from the keypad.



Power the machine off.



Remove jumper B and then turn machine on again. Button 5 on the keypad is now disabled from dispensing through the group but is still active for putting the keypad into programming mode when setting the doses. The internal relay on the keypad will provide element protection via RL3.

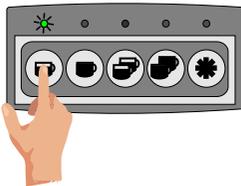
1D5 Auto Fill Time Out Alarm



If the keypad detects no water on the level probe within 2 minutes of a re-fill cycle on the boiler a fault condition will indicated to the operator via all 5 LEDs flashing on/off. Check mains water is turned on, other possible fault could be a failed inlet solenoid.

Depending on the size of the main boiler this fault may also show when first being installed, switching on/off/on will clear this when installing

1D5 Flow-Meter Alarm



After a drink selection is made the keypad operates the pump and the group, if after 5 seconds there has been no pulses from the group flow-meter the LED on the selected drink will flash on/off. The group will still carry on doing the dispense for a maximum of 4 minutes before switching the group off and disabling the key.

Possible fault causes are:

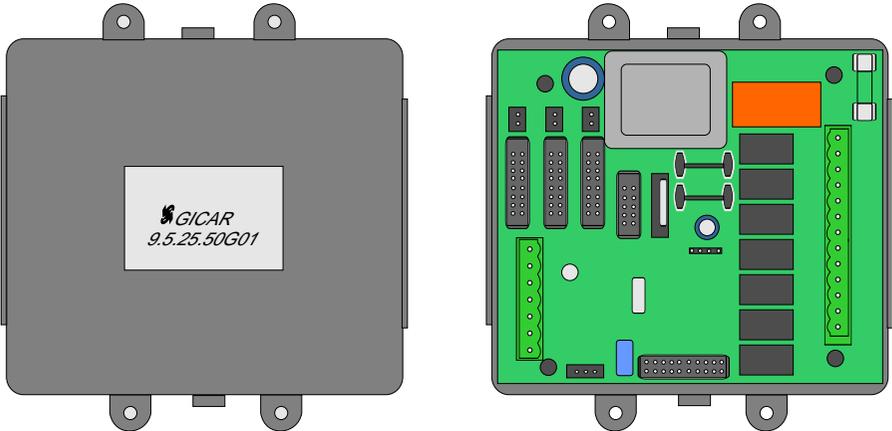
- 1 Blank filter basket or very fine coffee in group handle.
- 2 Mains water supply turned off.
- 3 Group head solenoid stuck closed from cleaning powder.
- 4 Scaled up group hydraulic system.

3D5 LUX OVERVIEW

The 3D5 Lux control board is employed in all our full size G10 models where a LCD display is used on the front of the machine. Where the G10 model in question is a compact and space is an issue we use individual keypads where the electronic functions are integral to each group keypad.

Using the 3D5 Lux enables the machine to integrate advanced functions and control electronics. Along with PID boiler temperature control and clear user feedback to the machine operator, we can also monitor functions like grinder settings, total amount of water that the machine has used for reporting when a filter change might be required. We can also inform the operator that a service of the group heads is due by the amount of coffee doses that the heads have served. Most important of the above functions is the PID or Proportional-Integral-Derivative, basically this means that the electronics will learn how the boiler reacts to a set amount of power applied to the heating element. This learning function will reduce the amount of wasted electrical power over time and offer very efficient boiler temperature control.

All technical program is carried out using the left hand keypad on the front of the machine using the sequences detailed on the following pages of this manual.



3D5 Switching Into Stand-by 'OFF' Mode

With the machine in the ON position press and hold on the left hand keypad button 5 then press button 3, the display will then show 'OFF' on the display. You can then release the keys.

To bring the machine back from 'OFF' mode and into normal 'ON' mode just press and release button 3 on the left hand keypad.

With the machine in the 'OFF' mode (see above), Press and hold button 5 on the left hand keypad for approx 8 seconds.

Once in the program mode the buttons on the left hand keypad function as shown below.

From wherever you are inside the technical program menu you can keep pressing button 5 on the left hand keypad until the display again shows 'OFF' or by turning the main power switch off then back on.

All technical programming must be done from when the machine has been set into 'OFF' mode and all settings are adjusted using the left hand keypad regardless of how many groups the machine has. See previous chapter for basic keypad control.



OFF 12: 25

Set the machine into 'OFF' mode with buttons 5 and 3 on the left hand keypad.



8 SEC

OFF 12: 25

Hold down button 5 for 8-10 seconds to enter technical program mode.



Language
ENGLI SH

First menu is the Language options where you can choose between either: English, Spanish, German, Italian or French



Name 1
CREM

NAME 1 - This is the top line of the display and is programmable with any combination of 16 alpha/numeric characters.



Name 2
EXPOBAR

NAME 2 - This is the bottom line of the display and is programmable with any combination of 16 alpha/numeric characters.



Service Phone

Option available to enter a contact phone number for when the machine has reached it's programmed total doses or filter requires changing.



Doses setting
ENABLED

Option to disable/enable the user from setting the doses via button 5 when not in technical program mode.



Continuous key
ENABLED

Option to set whether button 5 can be used for continuous coffee dispense.



TEA KEY
NO

This function is not used



Steam Boiler Gr.
0

Function used to set which group head keypad will control a temperature controlled steam arm where fitted instead of a steam valve. Should be set to zero.

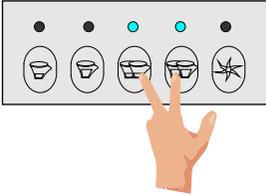
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- ↓
-  ProbeSensitivity
MID
- Main boiler probe sensitivity, normally set to 'MID' which is the normal mode. If the probe is reacting to clean water too easily then set to 'HIGH'
- ↓
-  Grinding Notice
ENABLED
- When 'ENABLED' the machine will warn the operator about the quality of the grind depending how fast or slow the water goes through the group head.
- ↓
-  Rotation LED
ENABLED
- This option allows the LED's above the keypads to cycle from left to right.
- ↓
-  Service Cycles
0000
- Option to program the number of coffee dispenses through the group heads before the machine will tell the operator that a service is required.
- ↓
-  Temperature
°C
- Select which format the display will show the boiler temperature. Either Calceus or Fahrenheit. Default setting is in calceus.
- ↓
-  Boiler Temperat.
118 °C
- Adjustment to the running temperature of the boiler up to a maximum set point of 125°C
- ↓
-  Water Filter
0
- Option to set the total litres of water that goes through the machine before the display shows the operator that a filter change is required. Default is 0.
- ↓
- OFF 12: 25
- After pressing button 5 after 'Water Filter' sub menu the machine will switch back into 'OFF' mode.
- ↓
-  118 °C 12: 25
SELECT DOSES
- From the 'OFF' mode press button 3 to bring the machine back into normal day mode.

3D5 Resetting Water Filter Counter

When the machine has detected

Change filter
7850



3D5 DE LUXE
Filter reset

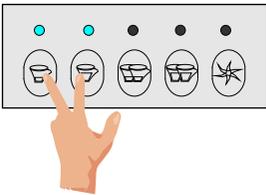
3 second display delay

118 °C 12:25
SELECT DOSES

3D5 Resetting Service Counter

With the machine in the ON position press and hold on the left hand keypad button 5 then press button 3, the display will then show 'OFF' on the display. You can then release the keys.

Servi ce
9500



3D5 DE LUXE
Servi ce Reset

3 second display delay

118 °C 12:25
SELECT DOSES

3D5 Displayed Alarm Messages

3D5 LUX is capable of displaying several alarm warning messages to inform the operator that there is a problem with the control function on the machine.

Gross Grinding

Only displays when 'Grinding Notice' is ENABLED in the technical program section. The alarm is activated when the machine detects that the rate of flow through the flow-meter is either too fast or too slow.

Alarm
Flowmeter Gr. 2

In the event that no pulse is detected from the flow-meter on the group head being used an alarm is raised, this message may also be displayed when the operator is running a back wash.

T. ProbeUnconnect

Main boiler temperature probe has been detected as open circuit. Check connection and replace where necessary.

Time-out alarm
Boiler FillingUp

Main boiler has not re-filled to correct level on the level probe. Check mains water is turned on, other possible fault could be a failed inlet solenoid. Machine may also show this alarm when first being installed, switching on/off/on will clear this when installing

Change filter
7850

Filter has reached setting that was programmed in the technical program, see previous page for resetting guide.

Service
9950

Group head has reached dispensed doses setting that was programmed in the technical program, see previous page for resetting guide.

crem[®]
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