



SUPER CAR

Remote control

IE

**Instructions and
warning book**



Dear Customer,

*We wish to congratulate you on having chosen one of the **Immergas** high quality products that will guarantee your wellbeing and safety for a very long time to come.*

*As an **Immergas Customer** you know you can always rely on a qualified Authorised Assistance Service, qualified and updated to guarantee that your “Remote Control” will always been 100% efficient.*

*We are taking the liberty of giving you some advice which, if followed, will confirm your satisfaction for the **Immergas** product:*

- *Read the following pages carefully as you can find some useful suggestions on how to use the appliance correctly.*
- *Whenever the need arises for routine maintenance always call an “**Authorised Immergas Centre**”: they have original parts as well as specific know how.*

CONTENTS

	Page
HOW TO USE THE INSTRUCTION BOOKLET	4
FOREWORD.....	4
GENERAL RECOMMENDATIONS	4
CLEANING THE OUTSIDE OF THE REMOTE.....	5
1. INSTALLATION	6
1.1 Installation indications.....	6
1.2 Installing.....	6
2. DESCRIPTION OF THE CONTROLS	9
3. DESCRIPTION OF THE DISPLAY	10
4. STARTING	11
4.1 Programming the current time and day.....	11
4.2 Selecting the mode.....	12
5. SUMMER MODE FUNCTIONS.....	14
5.1 Setting the domestic hot water temperature.....	14
5.2 Domestic hot water timer (for storage tank or Aqua Celeris).....	14
6. WINTER MODE FUNCTIONS	15
6.1 Working manually.....	15
6.2 Working automatically.....	16
6.3 Working in the forced automatic mode.....	17
6.4 Boiler delivery temperature.....	17
6.5 Room antifreeze function.....	17
6.6 Energy saving function.....	18
6.7 Working in the winter mode with the external temperature probe.....	18
7. PROGRAMMING THE SUPER CAR.....	19
7.1 Setting the comfort and reduced room temperature.....	19
7.2 Programming working hours.....	20
8. WEATHER FORECASTS	21
9. DIAGNOSTICS AND ERRORS.....	21
9.1 Diagnostics.....	21
9.2 Resetting errors.....	22
9.3 Resetting the Super CAR.....	22
10. SPECIAL FUNCTIONS.....	23
10.1 Domestic hot water timer (TM SAN).....	23
10.2 Holiday programme (HOLIDAY).....	23
10.3 Backlit display (DISPLY).....	23
10.4 Adjustment parameter management (REGULT).....	24
11. CODE PROTECTED FUNCTIONS (CODE).....	26
11.1 Room probe (AMB ON).....	26
11.2 Modulation (MODUL).....	26
11.3 Antifreeze level (NO FRS).....	27
11.4 Telephone control (REMOTE).....	27
11.5 Antilegionella function (LEGION).....	27
11.6 Language selection (LANGUG).....	27
12. INFO.....	27
13. TECHNICAL SPECIFICATIONS	28
13.1 Product specifications.....	29
14. FACTORY SETTINGS.....	30

HOW TO USE THE INSTRUCTION BOOKLET

The instruction booklet has been divided into 3 main parts:

in the first part, which is for the installer, a description is given of the assembly and connection phases of the remote control with the boiler;

in the second part all the stages for customising the operation programmed are described;

in the third and last part you will find a description of all the operations needed to visually display system operation and keep it under control.

FOREWORD

The “Immergas” programmable “**Super CAR (Remote Control)**” is designed to guarantee ideal temperature conditions at all times of the day and night each day of the week.

It only takes a few minutes to install: it is connected to the boiler with just 2 wires through which it receives and sends the adjustment and control commands and receives power. Once installed it is ready to work thanks to the programme already set inside it. Depending on your particular needs you can alter the basic programme to suit you. And “Super CAR” is so easy to programme. All the values you set can be seen at any time on the large display.

GENERAL RECOMMENDATIONS

This manual is for the **Installer** and **User**.

- Please read carefully all the recommendations you find in this document as they explain the use of the Super CAR as intended by its designs, the technical features as well as the installation, assembly, programming, adjustment and use instructions.
- The system must comply with current CEI standards.
- The instruction manual is to be considered part of the Super CAR and must be “**kept for future reference**”.
- After having removed the packaging make sure the Super Car is in perfect condition. Do not use it if you have any doubts and contact either the **Retailer or Manufacturer**.
- Super CAR is intended only for the use for which it has been specifically conceived. Any other use is considered improper and therefore dangerous.
- Our products are made in compliance with current safety rules which is why you must use all those devices or precautions to ensure its use does not cause injury to people or damage to things.
- Do not remove any parts of the Super CAR when it is working.

- Do not expose the Super CAR to sources of heat or under a hot sun when using it.
- The manufacturer is not held in anyway responsible in the following cases:
 - a) Incorrect installation.
 - b) The boiler to which the Remote Control is connected is malfunctioning.
 - c) Unauthorised alterations or interventions.
 - d) Total or partial disregard for the instructions.
 - e) Exceptional events, etc.

CLEANING THE OUTSIDE OF THE REMOTE

Use a cloth dampened with a mild soap to clean the outside of the Super CAR. Do not use abrasive or powder cleansers.

ATTENTION

Immergas reserves the right to make improvements and changes to parts and accessories while leaving the basic features of the model described here intact.

1. INSTALLATION

1.1 Installation indications.

Super CAR, including its wires and connections to the boiler, must be installed by specialized personnel. When the boiler is initially checked, free of charge, when the Super CAR is installed in the system, the Immergas authorised assistance centre will check its connection to the boiler's terminal block and see that it is working properly. It is not contemplated that the Immergas authorised assistance centre checks only the Super CAR free of charge if requested after the boiler guarantee period has started.

Attention: laying the Super CAR wires is not included in the free boiler check. That has to be done by the installer.

1.2 Installing.

- 1) Separate the fixing template from the body of the Digital Remote Control, using a screwdriver to lever it out (Fig. 1). Install the Super CAR away from sources of heat and where the room temperature can be read correctly (Figs. 2 and 3).

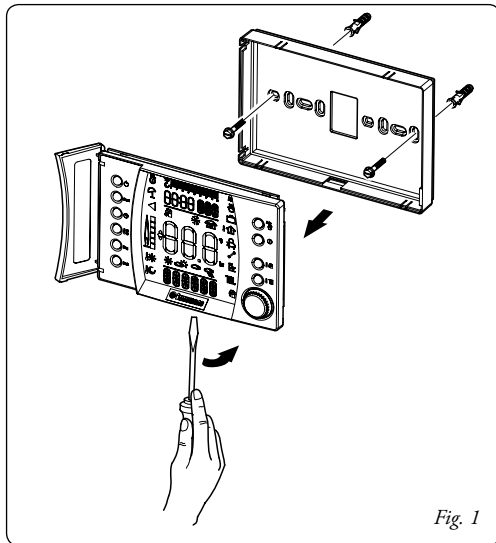


Fig. 1

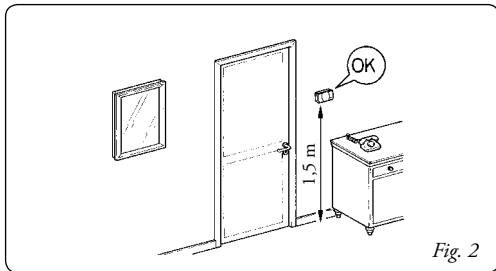


Fig. 2

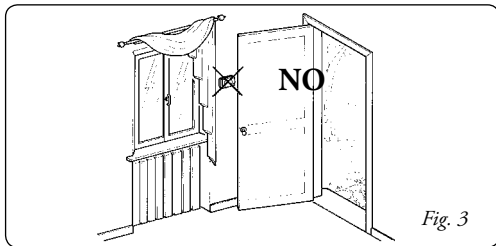


Fig. 3

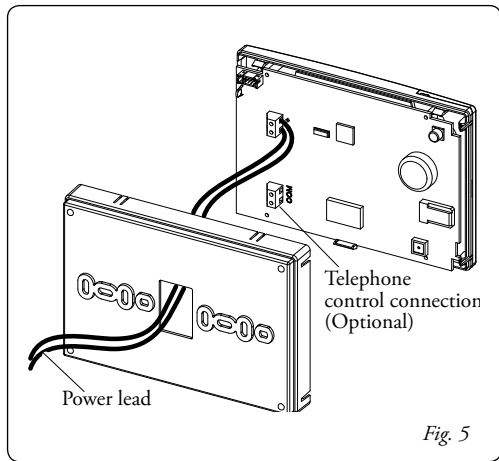
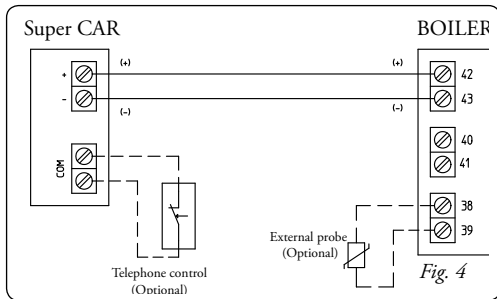
- 2) Install the Super CAR directly on the wall using the holes drilled at the back of it (Fig. 1) or in a recessed box using the screws supplied with it.
- 3) **Do not do the wiring when the boiler powered (Fig. 4). Observe conductor polarity (+ and -) and also remove the jumper on terminals 40 and 41 (if present) on the boiler's electronic board.**

Note: Refer to the electrical connections in the boiler's instruction handbook.

To connect to the boiler use two wires (Fig. 5) with a minimum section of 0.50 mm², maximum 1.5 mm² and no longer than 50 metres.

Note: to ensure correct installation use a line dedicated for connection to the Super CAR in accordance with current laws on electrical installations. If this is not possible, probable interference due to other electrical cables could cause the Super CAR to malfunction.

- 4) Fix the body of the Super CAR to the support template, pressing it into place (Fig. 1).
- 5) After you have powered the boiler wait about 30 seconds before making the adjustments so communication between the Super CAR and the boiler can stabilise.



- 1) Winter, Summer push button, Off
- 2) Boiler malfunctions reset push button
- 3) Push button to set the time and day
- 4) Push button to set Comfort and reduced room temperature
- 5) Push button to access the timer programming menu and the operating mode
- 6) Push button to access the advanced functions menu
- 7) Push button to restore factory settings
- 8) Manual, automatic operation push button
- 9) Info push button
- 10) Push button to set the domestic hot water set point
- 11) Push button to set the central heating set point
- 12) Parameter selector switch, pressing it to confirm and store data

3. DESCRIPTION OF THE DISPLAY



winter - the domestic hot water heating and central heating functions are enabled



summer - only the domestic hot water heating function is enabled



Boiler malfunctions Reset function



flame presence symbol and relative power scale

Note: the symbol appears only on boilers with electronics, type "Superior kW"



comfort temperature on



reduced temperature on



hour bar that shows the time when it is working at comfort and reduced temperatures



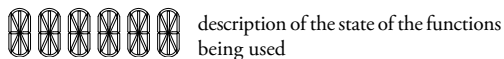
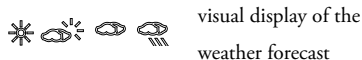
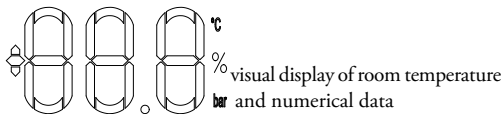
aqua celeris on/comfort d.h.w. ongoing





room antifreeze function on





remote operation on





 working with an automatic programme


 working with a manual programme


 working with a holiday programme


 visual display of the outside temperature


 visual display of the indoor temperature

 working with the energy saving programme

 symbol showing there is a boiler malfunction

 working with the external temperature probe on

 a room heating request is ongoing


 a domestic hot water request is ongoing

Note: the symbol appears only on boilers with electronics, type “Superior kW”.

Note: Some of the icons can have different meanings depending on the context; see the following paragraphs to see which functions are turned on when several icons are present simultaneously.

4. STARTING

4.1 Programming the current time and day.

Press the  push button to access the current time and day mode.

When you are in the programming mode the parameter to change starts flashing. Choose the day of the week by turning the parameter selector and press it to confirm. Do exactly the same to set the hour and minutes.

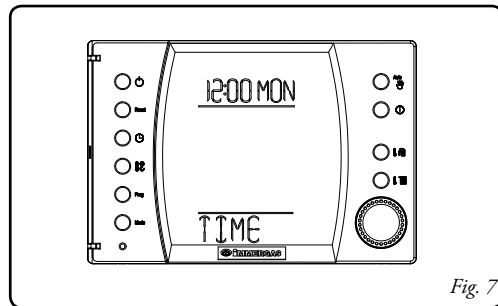



Fig. 7

4.2 Selecting the mode.

Depending on the mode selected, Super CAR carries out the user's request, displaying the results.

By pressing the  push button you go in sequence from stand-by to working in the summer and winter modes.

The room antifreeze function is also foreseen and works whatever function is selected.

- **Working in stand-by.** With Super CAR in the stand-by mode the word "OFF" appears on the display (see fig. 8). The boiler can work only if there is a room antifreeze request. In this state, however, the current day and time, any malfunctions, the weather forecast, the percentage of humidity and room temperature are all visually displayed.

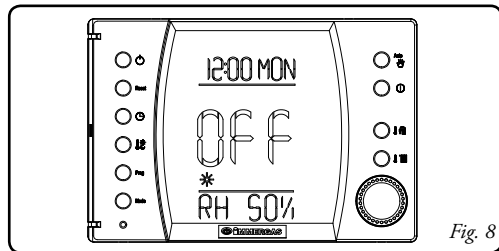




Fig. 8

- **Working in the summer mode.** By pressing the  push button you go to the summer mode () the Super CAR enables the boiler to produce domestic hot water only, turning the room heating mode off (see fig. 9). The current day and time, room temperature, the weather forecast and the percentage of humidity are shown on the display.

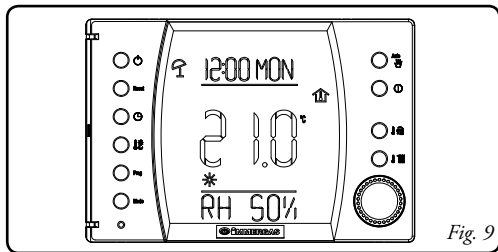




Fig. 9

- **Working in the winter mode.** By pressing the  push button again you go to the winter mode () the CAR enables the production of domestic hot water as well as central heating (see fig. 10). In the winter Super CAR can work automatically or manually - see Chapter 6 for the description. The current day and time, room temperature, the weather forecast and the percentage of humidity are shown on the display.

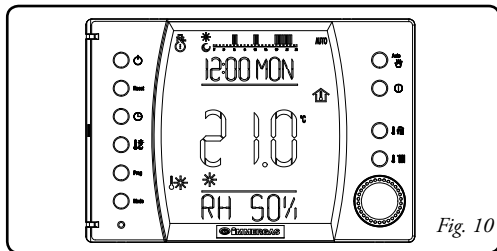


Fig. 10

5. SUMMER MODE FUNCTIONS

Only the production of domestic hot water is enabled when the Super CAR is in the summer mode (🔒).

The boiler produces hot water according to the domestic hot water temperature set on the Super CAR (see fig. 11).

5.1 Setting the domestic hot water temperature.

By pressing the 🔒 push button, the hot water temperature value set appears on the display. If you turn the parameter selector while it is being displayed you change the temperature which is stored by pressing the selector. If the Super CAR is in the “summer” mode, by pressing or turning the parameter selector you gain direct access to the domestic hot water temperature setting window.

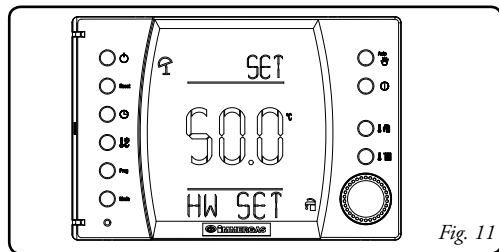


Fig. 11

5.2 Domestic hot water timer (for storage tank or Aqua Celeris).

Use the DOMESTIC HOT WATER TIMER if you wish to set the temperature of the domestic hot water in the storage tank at two different levels (comfort and reduced) or decide when Aqua Celeris is to come on during the day. See the special functions chapter which explains how this is done.

6. WINTER MODE FUNCTIONS

The heating of domestic hot water and central heating are both enabled when the Super CAR is in the winter mode (🔒). You can select two main operating modes: automatic or manual plus a forced automatic timed programme.

- Manual (👉): room temperature is maintained constant at the value set by the user each time according to his needs.
- Automatic (AUTO): room temperature is set at two levels (comfort and reduced) during the day by means of a programme set by the user.
- Forced automatic (AUTO and 👉 flashing): room temperature is modified momentarily with respect to the automatic mode up to the next changeover between the comfort and reduced mode of the automatic programme that was set.

6.1 Working manually.

By pressing the **Auto/👉** push button (fig. 12) the mode alternates between automatic and manual.

Once the manual mode is set the 👉 icon turns on on the display (fig. 12).

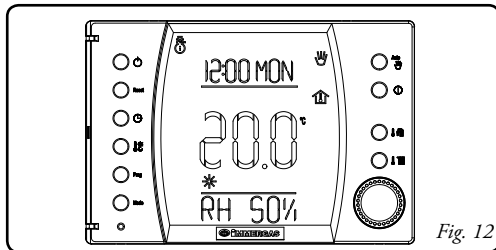


Fig. 12

To set the room temperature wanted simply turn the parameter selector and the room temperature appears on the display (fig. 13). Press the parameter selector to confirm the new value.

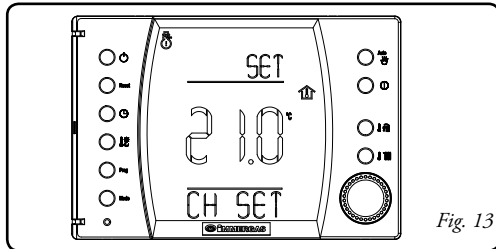



Fig. 13

When you are on manual any room temperature can be selected from +5°C to +30°C and will remain constant until it is changed again or when a different operating mode is chosen.

6.2 Working automatically.

Super CAR enables automatic operation where an hourly programme controls room temperature during the hours of the day.

The room temperature wanted can be set at two separate levels: comfort (☼) and reduced (☾) via the ☼, push button and its distribution throughout the day or week is controlled by the hour programming function.

Press the **Auto**/ push button until the **AUTO** icon turns on on the display.

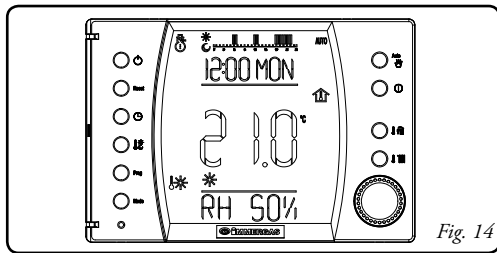


Fig. 14



Super CAR is factory set with a standard programme shown in the following table. If this is different from what you need it can be changed as described in the following chapter.

Days	☼ 16°C	☼* 20°C
Mon - Fri (Day 1 - 5)	from 23.00 to 06.00 from 08.00 to 11.00 from 13.00 to 17.00	from 06.00 to 08.00 from 11.00 to 13.00 from 17.00 to 23.00
Sat - Sun (Day 6 - 7)	from 23.00 to 07.00	from 07.00 to 23.00




Fig. 15

Note: the system is designed to work at comfort and reduced temperature levels depending on the hourly programme set. This means that even when it is working at reduced temperature conditions, if the room temperature measured is below that set the boiler can turn on.

6.3 Working in the forced automatic mode.

If room temperature is changed while in the automatic mode (AUTO) by turning the parameter selector (2 fig. 13), when pressing the parameter selector to confirm, the forced automatic mode starts (shown when the AUTO and  symbols start flashing). In this mode room temperature is adjusted to the value set until the next time the automatic programme set is either turned off or on. The forced automatic mode can be stopped by pressing the **Auto**/ push button.

6.4 Boiler delivery temperature.

The parameter that regulates maximum boiler delivery temperature can be accessed from the winter function (). To gain access to it, simply press the   push button and make the change, turning the parameter selector. The parameter is stored, as always, by pressing the selector. The temperature limits can be set according to the boiler model to which the Super CAR is connected.

Note: if the maximum boiler delivery temperature limit is set too low (less than 60°C) it might prevent room temperature reaching the value wanted.

During normal operation, boiler delivery temperature is automatically controlled by Super CAR based on the room temperature set which means the boiler does not work at the maximum temperature set but does, instead, work at a

lower, but correct, delivery temperature to reach the room temperature wanted.

If the external temperature probe is installed, the delivery temperature will be set as described.

6.5 Room antifreeze function.

The antifreeze function has maximum priority over all other settings. When room temperature drops below 5°C (adjustable, see the special functions chapter) a central heating request is made at the minimum programmed power. This situation remains active until there is a variation in room temperature of 0.6°C equal to 5.6°C measured in the room where the Super CAR is located.

If the antifreeze function starts, the flashing antifreeze symbol appears on the display (see fig. 16).

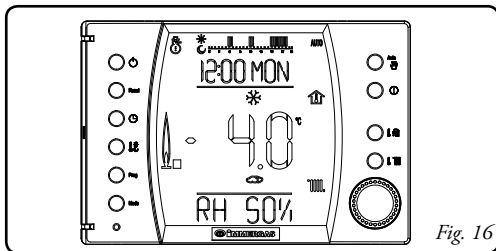




Fig. 16

6.6 Energy saving function.

It is possible to define a number of hours (from 1 to 99) during which the system works in the energy saving mode.


In this energy saving mode the boiler carries on working to maintain the reduced room temperature set on Super CAR.


To gain access to the function press the parameter selector to see the room temperature setting and while it is being displayed press the **Auto**/, push button and choose the number of hours you want to keep the system in the energy saving mode via the selector. It is reduced every hour. At the end of the hours set (the counter reaches 0) the functions that were ongoing before are restored. The  icon flashes when the energy saving function is working.

Note: the antifreeze function is guaranteed also in the energy saving mode.

If you turn the selector during the function you gain access to the function counter and not to the room temperature setting.

6.7 Working in the winter mode with the external temperature probe.

If an external temperature probe is installed you will be able to set a delivery temperature correction curve in relation to the outside temperature. To do this please see the starting procedures explained in the special functions chapter. In this case when you press the  push button the delivery temperature is shown, calculated in relation to the outside temperature which can be modified by turning the parameter selector.


Note: the temperature calculated is visually displayed only if there is a heating request, hence with the symbol  on. In addition, with the room probe on the temperature calculated depends on the room temperature set. If you wish to limit the delivery temperature further still, you have to do so via the “MAX HEAT” parameter in the “Adjustments” menu (Special Functions chapter).




7. PROGRAMMING THE SUPER CAR


By programming the Super CAR you can set/modify the following parameters:

- the comfort and reduced temperature levels;
- hourly, daily and weekly operating programme.

7.1 Setting the comfort and reduced room temperature.

Press the  push button to access room temperature programming (fig. 17).

Once you are in the parameter, set the comfort temperature () by turning the parameter selector and press it to confirm; you then return to the normal display. Press the  push button twice to set the reduced temperature () (fig. 18). Once set, by turning the parameter selector, press it to confirm the value set.

Note: If, after having set the parameter, you press the  push button you exit the programming phase without storing the new temperature.

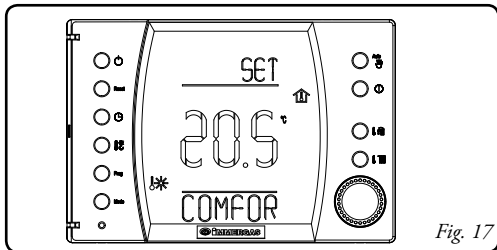


Fig. 17

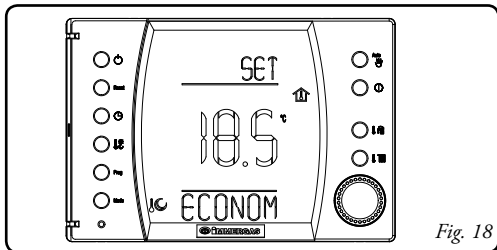


Fig. 18

7.2 Programming working hours.

You enter the programming window by pressing the **Prog** push button.

By following the steps described below you will be able to create or modify the hourly programme.

1) Select the day or group of days by turning the parameter selector:

- Monday, Tuesday, Wednesday... Sunday (single day)
- Mo - Fr (from Monday to Friday)
- Sa - Su (from Saturday to Sunday)
- Mo - Sa (from Monday to Saturday)
- Mo - Su (from Monday to Sunday)

Note. When working automatically (**AUTO**) the 24-hour bar appears on the display and indicates the different hour phases with Comfort or Reduced temperature



the hyphen on the hour bar stands for the Comfort mode.

2) Set the working hours with the comfort and reduced temperature. Up to a maximum of 4 Comfort temperature periods can be set within the 24 hours, each one with its turning on and turning off time.

If you are only going to use 3 of these time periods set the fourth with 24.00 as its turning on and off time.

Once you have selected the day or group of days by pressing the selector, set the first working period with the comfort temperature (ON 1) indicated by the word "ON" at the top right and "Phase 1" at the bottom; by turning the selector you select the first ignition time (corresponding to the time flashing at the top left), pressing the selector to store it. You now go to the next working period with the reduced temperature (OFF 1) indicated by "OFF" at the top right and, as always, "PHASE 1" at the bottom. Once the first Phase (PHASE 1) is set you go automatically to the next comfort and reduced temperature working phases. To programme them, you have to repeat the steps described previously up to phase 4.





The sequence of the ON and OFF states must always be sequential; it is not possible, for instance, to set "OFF 2" at 13.30 and "ON 3" at 11.00.

Once you have programmed the day or group of days, the procedure is exactly the same for the other days.

8. WEATHER FORECASTS

The Super CAR automatically detects variations in atmospheric pressure where it is installed. It also provides information about the relative humidity in the room and an idea of what the weather is like.

Attention: the weather forecast is approximate; Immergas does not hold itself responsible for an erroneous forecast. In addition, forecasts can only be reliable following a front that caused a significant change in atmospheric pressure.

Super CAR visually displays the weather forecast with these graphical symbols     which stand for good weather, variable, cloudy and rainy respectively.

If the “sun” symbol is displayed during the night it means good weather.


9. DIAGNOSTICS AND ERRORS

9.1 Diagnostics.

Super CAR controls boiler operation continuously, signaling any malfunctions detected and displaying the relative error code.

The meanings of the error codes differ according to the boiler the Super CAR is connected to so please read the boiler's instruction manual where you will find a complete list of the error codes and their meanings.

In the event of a failure that cannot be reset, contact a qualified technician (the Immergas Technical Assistance service for instance).

If there is an error the message “ERR>XX” appears on the display where XX stands for the number that identifies the error code besides the flashing  symbol.

Besides the error codes that refer to the boiler operating status, the Super CAR controls its own operating status indicating any malfunctions.

Code	Description
ERR>CM	Communication error between Super CAR and the boiler or switching phase between an evolved (i.e. Superior kW) and normal communication type.

Code	Description
ERR>TP	Error in reading room temperature or value measured off scale (below 0°C or above 50°C)
ERR>RH	Error in reading relative humidity or value measured off scale
ERR>PS	Error in reading atmospheric pressure (relative value) or value measured off scale
ERR>LH	Adjustment algorithm value parameters unsuitable for the heating conditions requested. Insufficient central heating capacity.

9.2 Resetting errors.

In the case of a boiler shutdown that can be reset, the ◁ icon flashes. In this case by pressing the **Reset** push button and holding it down for 5 seconds you can send a release signal to the boiler that starts the boiler working again normally in just a few seconds, if normal operating conditions have been restored, it returns to working in the mode set previously.

You have up to a maximum of 5 consecutive attempts at resetting after which you have to wait an hour to have another 5 attempts.

9.3 Resetting the Super CAR.

By means of the general resetting hole (fig. 7 page 8) it is possible to reset the Super CAR hardware without losing your settings (the hour, date and hourly programme).

If you want to restore the original factory settings, use the reset hole and press the **Reset** push button. When you release it the Super CAR will be reset with all factory data.



10. SPECIAL FUNCTIONS

The **Mode** push button is used to access a menu for customising Super CAR to suit your specific needs.

Turn the selector to scroll the list of functions and press it to select the function wanted.

10.1 Domestic hot water timer (TM SAN).


This is used to set the temperature of the domestic hot water in the storage tank at two distinct levels (comfort and reduced) or to define the daily interval for turning the Aqua Celeris on. You gain access to the “TM SAN” function by pressing the selector and setting it on “YES”. Now you have to set the turning on and off times for the “d.h.w. comfort” temperature. During the turning off period, the domestic water temperature will be set on the minimum value allowed. The

 icon stays on all the time the d.h.w. temperature is in the comfort mode. During the setting phase the ON and OFF comfort temperature time appears on the display as well as the adjustment bar showing the comfort period you are setting ().

Note: for instant boilers, start the function only for models with evolved electronics, type Superior kW.

10.2 Holiday programme (HOLIDY).

A number of days can be defined (from 1 to 99) during which the system deactivates both the central heating and the domestic hot water functions.

The value decreases at midnight with the change of day. At the end of the days set (the counter reaches 0) all functions that were on previously are turned back on. The flashing  icon means the holiday function is working.

If this function is activated remotely by the Telephone control, the boiler is started with the settings given over the phone stopping the Holiday programme.

Note: the room antifreeze function is always guaranteed even in the holiday mode.

10.3 Backlit display (DISPLY).

By pressing the parameter selector you can see the backlit display state (ILLUMN) and choose the information to see in the alphanumeric string (STRING). From these two parameters you have the following options to choose from:

ILLUMN:

- always on (ON);
- on when setting and using the Super CAR, the display stays illuminated for 10 seconds (standard setting) (TMR).

STRING:

- visual display of relative humidity (RH%);
- visual display of the outside temperature (with the optional external probe installed) (TEX);
- cyclic display of relative humidity and outside temperature (CIC).

10.4 Adjustment parameter management (REGULT).

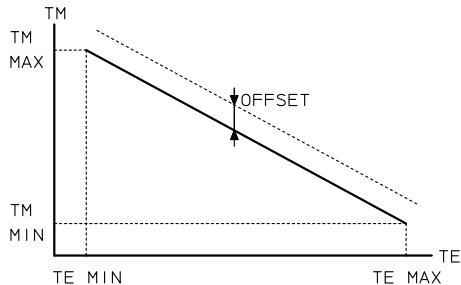
By pressing the parameter selector you can see the parameters for adjusting Super CAR operation:

- Adjustment constant (OFFSET), constant adjustable from -15°C to $+15^{\circ}\text{C}$ which, when the external probe is installed (optional), changes the standard setting of the delivery temperature (0°C) (see fig. 19).

Note: if the self-learning function is enabled the Offset value could be changed automatically.

- The maximum delivery temperature (CH MAX), is the maximum central heating delivery temperature.

EXTERNAL PROBE
Delivery temperature reading correction.
Function of the outside temperature and of the user central heating temperature setting position.



$TM-MAX/MIN =$ Selected delivery temperature range.

$TE =$ Outside temperature.


Note: if the external probe is installed, by pressing the  push button the maximum delivery temperature is not set but the Offset value is changed.

Fig. 19

- Building dimension and inertia (BUILDG), adjustable from 1 to 20, standard setting is 10. It establishes the system's reaction speed depending on the type of system. For example:

Value	System type
5	system with little thermal inertia
10	system of a normal size with radiators
20	system with a lot of thermal inertia (e.g. floor system)

- Minimum outside temperature (TE MIN), it defines at what minimum outside temperature you want to have the maximum delivery temperature which can be set from -20°C to 0°C, set at -5°C (see fig. 19) (on boilers with evolved electronics such as Superior kW visualisation only, settable on the boiler).
- Maximum outside temperature (TE MAX), it defines at what maximum outside temperature you want to have the minimum delivery temperature which can be set from +5°C to +25°C, set at 25°C (see fig. 19) (on boilers with evolved electronics such as Superior kW visualisation only, settable on the boiler).

- Self-learning (AUTO A), it defines when the self-learning function is to be activated, ON is the standard setting. This function allows the Super CAR to adapt the adjustment of the speed at which room temperature, delivery temperature, etc., is reached, adapting itself to the room in which it is installed.

11. CODE PROTECTED FUNCTIONS (CODE).

These are advanced character settings (reserved for qualified technicians) and to gain access to them you have to enter a 4-digit code (code: 1122).

Press the **Mode** push button and turn the parameter selector until the word "CODE" appears. Press the selector and enter the code, selecting the digits by turning the selector and confirming them by pressing the selector.

You can now see and change the following functions.

11.1 Room probe (AMB ON).

Used to turn the room probe in the Super CAR on or off. Depending on the parameter setting, it will be possible to adjust the following options:

- AMB ON set ON (standard setting) a room probe reading correction factor can be selected is possible.
- AMB CR: room probe reading correction, you can correct reading of the room probe within a range of + 1.0 - 1.0°C.
- AMB ON set OFF the system will not work by adjusting room temperature but only according to the hourly programme that has been set. During the times when it is working in the reduced mode you will be able to select the following two modes:

- ECONOM OFF: when working in the reduced mode the Super CAR turns the boiler off.
- ECONOM ON: when working in the reduced mode the Super CAR reduces the delivery temperature by the same amount as what is set with the ECONOM option (adjustable from 0°C to -60°C).

11.2 Modulation (MODUL).

It lets you set Super CAR operation to On/Off or Modulating. With MODUL set on MOD the delivery temperature varies according to the room temperature that has been set. With MODUL set on On/Off delivery temperature will be maintained constant until the desired room temperature is reached. (Setting to be done on systems with zone board).

Note: If an external probe is installed, the delivery temperature is set according to the relative operating curve.

11.3 Antifreeze level (NO FRS).

It lets you set room temperature at which the antifreeze function starts. Adjustable from 0°C to 10°C; standard setting is 5°C.

11.4 Telephone control (REMOTE).

It lets you set Super CAR operation so that if it is started remotely it works with the automatic hourly programme if the setting is AUT. or, vice versa, it works at a continuous comfort temperature (with no hourly programme) if the setting is ON.

11.5 Antilegionella function (LEGION).

It lets you start the Antilegionella function which takes storage tank temperature to 65°C for 15 minutes. You can choose whether to activate it once a day at 2 o'clock in the morning (24h), every 7 days on Mondays at 2 o'clock in the morning (7DY) or turn it off (OFF standard function).

Note: this function must only be turned on when there is a storage tank and, if necessary, install a thermostat valve on the outlet of the domestic hot water to avoid scalding.

11.6 Language selection (LANGUG).

It lets you select the Super CAR operating language. You have a choice of Italian (ITA standard) and English (ENG).

12. INFO

By pressing the ⓘ push button you access a menu that lets you verify the Super CAR operating status.

Turn the selector to scroll the list and press it to select the various items and options. The parameters that can be displayed are listed below:

- T EXT: outside temperature (if the optional external temperature probe is installed).
- CH TMP: central heating circuit delivery temperature.
- CH SET: value requested for the delivery temperature.
- CH RET: central heating circuit return temperature (only with boilers where the return probe is installed).
- HW TMP: Storage tank water temperature or d.h.w. outlet from the boiler.
- CH PRS: System pressure, central heating circuit.
- OTHER>: it visually displays the Super CAR software version via the SERV option.

Note: the values displayed depend on the type of boiler to which the Super CAR is connected.

13. TECHNICAL SPECIFICATIONS

- Supply: 24V nominal by means of a bifilar communication Bus
- Maximum voltage 32V
- Power input: 250 mW nominal
- Room working temperature: 0 - +40°C
- Warehouse temperature: -10 - +65°C
- Protection class in compliance with EN 60730: II
- Protection class in compliance with EN 60529: IP 20
- Container measurements (WxHxD): 153 x 112 x 51
- Connection technique: 2 polarised wires
- Charge reserve time: 8 hours for hourly counting (with at least 2 hours for charging)
- Max. length of the connecting cable: 50 m (with 2x0.75mm² cable)
- Room temperature precision: +/- 0.5°C at 25°C*
- NTC room temperature sensor: 50 k a 25°C
- Clock deviation +/- 15 minutes/year

* = the indication of the room temperature can be influenced by where the Super CAR is installed (for instance on a warm wall, cold wall, height from the floor, etc.).

13.1 Product specifications.

In accordance with Regulation 811/2013 the temperature control device class is:

Class	Contribution to the environmental heating seasonal energy efficiency	Description
V	+3%	Super Remote Control
VI	+4%	Super Remote Control coupled to outer sensor

14. FACTORY SETTINGS

- Operating status Stand-by
- Operating programme Manual
- Comfort temperature 20.0°C
- Reduced temperature 16.0°C
- Room temperature on manual 20.0°C
- Antifreeze 5.0°C
- D.h.w. set point 50.0°C
- Max C.H. limit permitted in the boiler MaxRis
- D.h.w. timer TM SAN = NO
- Holiday programme HOLIDY = OFF
- Display illumination ILLUMIN = TMR (timed for 10s)
- String visually displayed STRING = RH% (relative humidity)
- Adjustment constant OFFSET = 0°C
- Building inertia dimension BUILDG = 10
- Minimum Outside temperature / OTC TE MIN = -5.0°C
- Maximum Outside temperature / OTC TE MAX = 25.0°C
- Room probe AMB ON = ON
- Reading Correction AMB CR = 0.0°C
- Reduction ECONOM = OFF
- Reduction factor ECONOM S = 0.0°C
- Modulation MODUL = MOD (Modulating type)
- Telephone control REMOTE = ON
- Antilegionella: LEGION = OFF
- Language: LANGUG = ITA (Italian)

