| **GIRA Info** | **Touch Sensor 2 plus** Installation Instructions | # GIRA |

Touch Sensor 2 plus

2-channel

3-channel (1+2)

6-channel (2+4)

Order no.: 2052 xx

Order no.: 2053 xx

Order no.: 2056 xx

Contents

⚠️   **Safety Instructions**

Attention: Electrical equipment must be installed and fitted by qualified electricians only.

Non-observance of these warnings may damage the device and cause fire or other hazards.

**Observe the fitting instructions.**

1. Function

Touch sensor function (1)

Each key separately programmable for: switching • toggling • dimming (single- or double-sided operation) • transducer • blind / shutter control • recalling lightscapes • storing lightscapes • status indicator LED • illumination of inscription lable • selection of controller operating mode • presence button

Room temperature controller function (2)

Heating / cooling mode • comfort mode • stand-by mode • nighttime mode • frost / heat protection • comfort mode extension • controller / controller actuation lockable • 24-h-display (only with KNX/EIB-DCF77 clock) • 2-stage heating / cooling • display of actual, reference and outside temperature • heating timer

Other functions: alarm function (anti-theft protection) • locking of individual or of all key functions
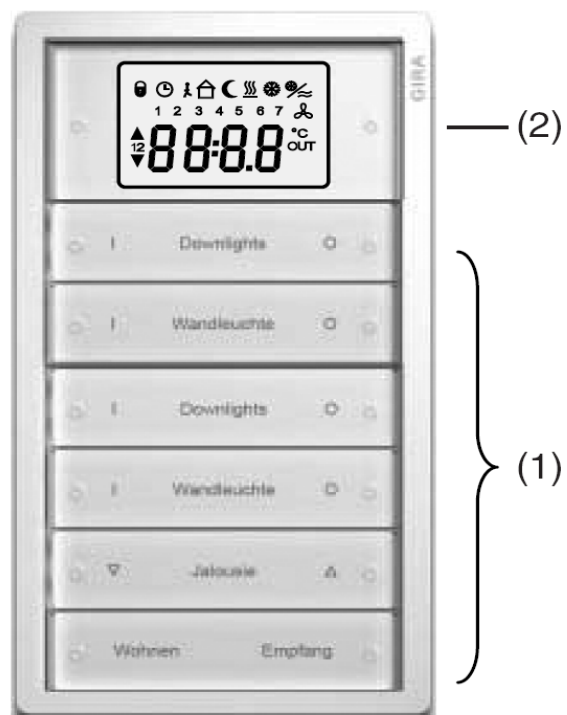
2. Display window

Symbols

|	
🔒	controller or touch sensor operation locked
🕐	heating timer on
⌂	'comfort' mode
🚶⌂	'standby' mode
☾	'nighttime' mode
❄≈	'frost-/heat protection' mode
≋	room heating active
❄	room cooling active
°C	display window indicates temperature (reference temperature, actual room temperature)
OUT	display of outside temperture
1...7	display of weekday Mon - Sun
1	control function 1 active
2	control function 2 active
▲	control function 1 or 2 switching within the last 20 s
▼	control function 1 or 2 switching within the last 20 s
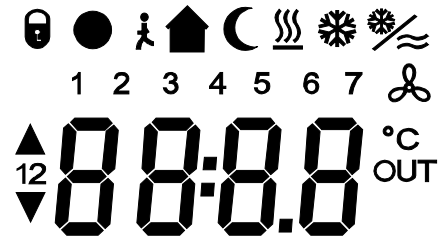
Display of temperature and time of day

Temperatures are displayed in degrees Celsius.
The actual time of day is diplayed in the 'hh:mm' format.

Contrast setting

The display window has been designed for optimal readibilty when installed within reach of your hand (ca. 1.10 m). Varying lighting conditions may require different contrast settings. The contrast is set in the programming menu if enabled.

3. Configuration

(to be filled in by the installing electrician)

	Left	Right
Key 1:		
Key 2:		
Key 3:		
Key 4:		
Key 5:		
Key 6:		
Location:		

4. Locking of functions

The Touch Sensor 2 plus can be locked completely or partially.
In locked condition, the Touch Sensor 2 plus displays a 'lock' symbol.

☐ locking of individual keys
o 1 o 2 o 3 o 4 o 5 o 6

☐ all keys:
same response as key ___

☐ temperature control operation

☐ controller

5. Room temperature controller

The integrated room temperature controller measures the room temperature and transmits the corresponding commands to the heating and cooling system installed.

The reference temperature and the respective control of the heaters and conditioners depends on the operating mode of the controller. The selection of the operating mode is valid for all control circuits.

5.1 Modes of operation

Comfort mode
Reference temperature during the presence of persons, e.g. 20°C.

Stand-by mode
Lowering of temperature during a brief absence of persons; on their return, the room temperature can fast be brought back to the reference value of the comfort mode.

Night-time operation ('Economy')
Reference temperature during the night or other prolonged periods when a room is not used so that energy can be saved.

. **Frost / heat protection**
The frost/heat protection permits energy savings, for instance, when the windows are open. The heating is activated only to such an extent that the heating pipes cannot freeze in (frost protection); installed cooling equipment is operated only to such an extent that the rooms will not be overheated (heat protection).

or

Comfort mode extension
The comfort mode extension can be activated during the night-time operation or frost/heat protection mode (exception: window open), e.g. by depressing the presence key (if programmed, or by a presence detector, etc.). The reference temperature of the comfort mode is then activated for a preset time, e.g. 1 hour before the controller goes back to the original mode of operation.

5.2 Heating and cooling

Depending on programming the Touch Sensor 2 plus can be operated for:

- heating only ☐
- cooling only ☐
- heating and cooling ☐
- heating with back-up ☐
- cooling with back-up ☐
- heating and cooling with back-up stages ☐
- control with two heating circuits ☐

(please note programming here)

The operating modes 'comfort', 'stand-by' and 'night-time' have independent reference values for 'heating' and 'cooling' and display these values (see chapter 6.1, 'Programming mode').
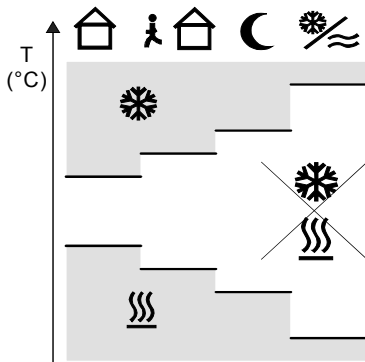
Information about operation with 2 heating circuits

The Touch Sensor 2 plus can handle 2 control circuits – e.g. for rooms with wall-mounted and floor heating elements with their own temperature sensors. The external temperature sensor is in this case installed e.g. in the floor.

- The actual temperature displayed in the LCD window is always the one measured by the internal sensor.
- For both control circuits, different reference temperatures can be selected for the individual modes of operation. The selected mode (e.g. 'Standby') is valid however for both control circuits.
- The Touch Sensor 2 plus does not control heaters and coolers at the same time.
- Key 1 is used for setting only the reference temperature for the 'internal' control circuit.

5.3 Temperature sensor

The Touch Sensor 2 plus measures the temperature in its immediate vicinity. The air in the room should be circulating to ensure that the measured value does correspond to the room temperature.

The following conditions may adversely affect the control of the temperature:

- covering up the Touch Sensor 2 plus, e.g. in a cloakroom by coats and jackets;
- covering up the touch sensor by placing furniture around it (e.g. shelves);
- draught air, e.g. near a door to a cooler corridor;
- direct exposure to sunlight;
- fitting too closely to heating and cooling appliances.

In addition to the internal temperature sensor, the Touch Sensor 2 plus can also make use of the measured values supplied by another temperature sensor. If the external temperature sensor is not used for a second heating circuit or for measuring of the outside temperature, the Touch Sensor 2 plus determines a 'weighted temperature' based on the results from both sensors to compensate for unfavourable local conditions.
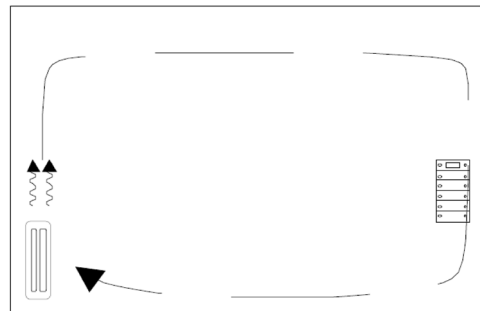
6. Settings

The room temperature controller is operated with the left and right contacts of the display (key 1).

The key is pressed   ① on the left,
                        ② on the right or
                        ③ in the center.

Change reference temperature
In normal operation, the left and right contacts of the key (①, ②) serve to readjust the actual reference temperature. This change is directly active. This change is invalidated by a change of the operating mode (manual or time-controlled).

Starting the programming mode
A press on the center of the key (③, "ENTER") switches over after 3 s to the main menu of the programming mode, if this feature is enabled.

6.1 Settings

Main menu

The main menu (see fold-out page U1) permits the selection of the controller operating mode. A press on the the left or the right side of the key (①, ②) toggles between the individual menu items ◀ ▶.

During an input, the corresponding symbol flashes; all other symbols and the temperature / clock display are off.

A press on the center of the key confirms the selection (③,"ENTER") or activates the programming menu ('level 2').

Important: Depending on the programming of the Touch Sensor 2 plus, individual or several adjustments may be disabled and are therefore not accessible.
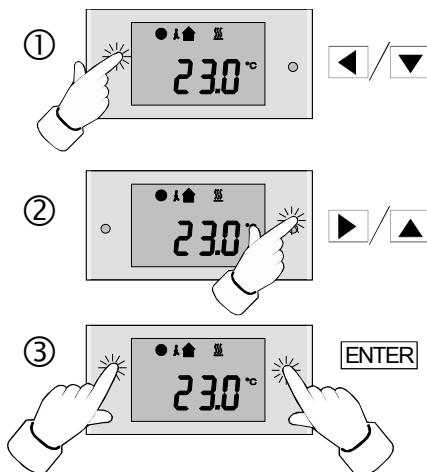
Contrast setting
Varying lighting conditions may require different contrast settings.
The contrast is set in the main menu. Select the „*Co x*" display, depress the center of key 1 for a prolonged period (③) until the 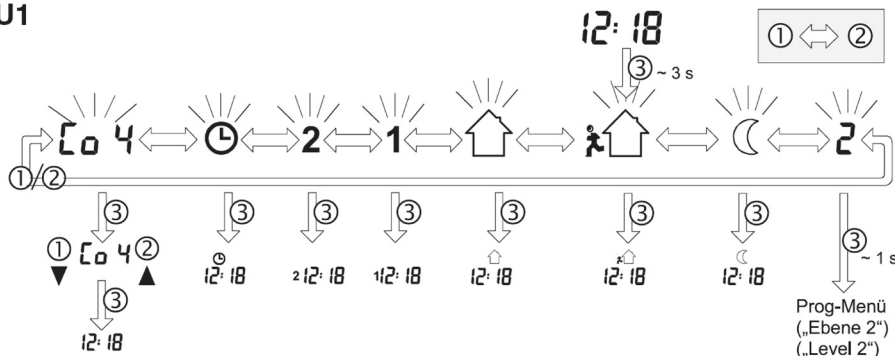display flashes. The contrast can now be changed with the left and right side of the key (contacts ①, ②). Changes made are directly valid. After a long press on the center of the key (③,"ENTER"), the display goes back to the normal mode.

Terminating the programming mode
The programming mode ends if any other key is depressed, if there is no actuation at all for 2 minutes or if another adjustment switching back to normal operation is made. Changes not 'confirmed' will not be stored (exceptions: reference value shifting and contrast setting).

Programming menu
When number „*2*" is displayed in the main menu, another long press on the center of key 1 (③,"ENTER") opens the programming menu (see fold-out page U2). In this menu, the reference temperatures for the 'comfort', 'stand-by' and 'night operation' modes can be changed.

Depending on the program ('heating', 'cooling', 'heating and cooling'), the programming menu shows the corresponding temperature reference values. The reference values are displayed with their respective symbol. The illustration (see fold-out page U2) shows the complete menu sequence for 'heating' and 'cooling'.
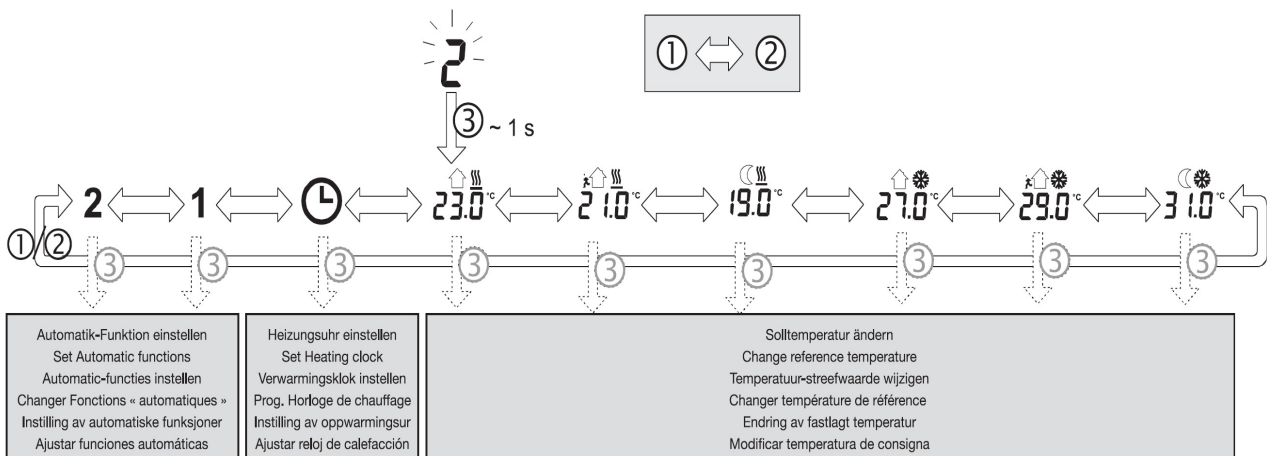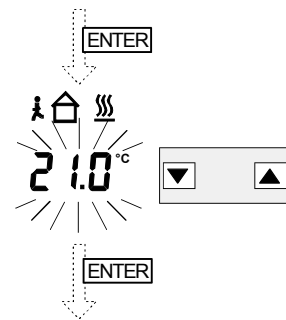
Important: Individual or several adjustments may be locked and are then not accessible.

Changing the temperature reference values
A temperature reference value is changed by selecting the corresponding menu step and by a long press on the center of key 1 (③,"ENTER") until the reference value displayed starts flashing. The reference value can now be changed with the left or right side of the key (contacts ①, ②). The change of the reference value must be confirmed by a long press on the center of the key (③,"ENTER"); the display goes back to the normal mode.

A change of the 'comfort' mode temperature changes the temperatures of the 'stand-by' and 'night-time' modes as well.
In combined operation ('heating' and 'cooling'), a change of the 'comfort heating' temperature equally affects the 'cooling' reference values of the 'comfort' 'stand-by' and 'night-time' modes.

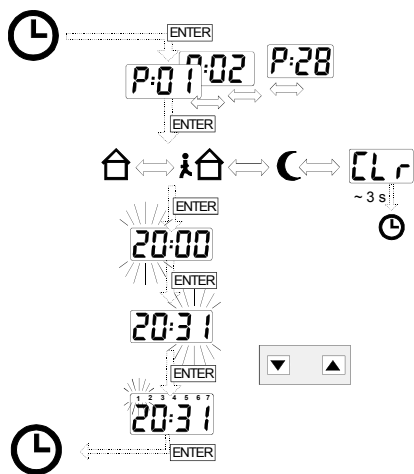|		Solltemperatur ändern
Automatik-Funktion einstellen	Heizungsuhr einstellen	Change reference temperature
Set Automatic functions	Set Heating clock	Temperatuur-streefwaarde wijzigen
Automatic-functies instellen	Verwarmingsklok instellen	Changer température de référence
Changer Fonctions « automatiques »	Prog. Horloge de chauffage	Endring av fastlagt temperatur
Instilling av automatiske funksjoner	Instilling av oppwarmingsur	Modificar temperatura de consigna
Ajustar funciones automáticas	Ajustar reloj de calefacción	

6.2 Heating timer

The heating timer of the Touch Sensor 2 plus controls the room controller's mode of operation depending on the time of day and of the weekday.

• Number of switching times: 28 (approximately 4 per weekday)

The switching times of the heating timer can be set when 'heating timer' is selected in the programming menu ('Clock' symbol) and when the center of the upper key is depressed for 1 s.

Key contacts ① and ② are used to set program location, operating mode, time of day and weekday (small numbers 1...7 = Mon-Sun) one after another. The weekdays are selected one by one or in groups (Mon-Fri, Sat+Sun, Mon-Sun). A press on the key center (③, "ENTER") after an adjustment calls up the next setting.

'Clr' deletes the selected switching time. This program location remains then empty and can be used for storage of a new setting. Depressing any other key quits the programming procedure.

When the automatic functions work in the timedependent mode, the switching times can be changed by the user as for the heating timer. Temperature-dependent functions cannot be changed.

• Number of switching times: 4 (2 per function)

The switching times for the automatic functions can be set by selecting '1' resp. '2' in the programming menu and by depressing the center of the upper key for 1 s.
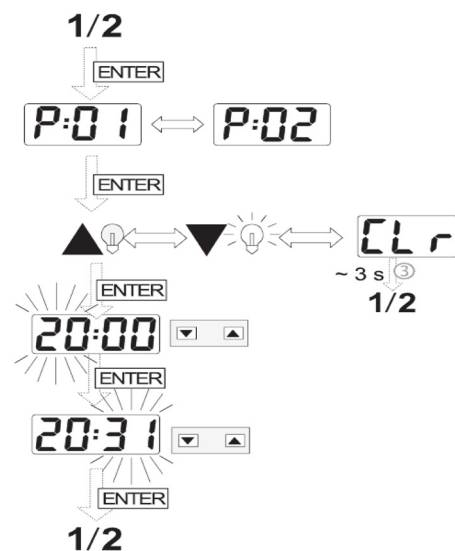
Keys ① and ② are used to set or to delete the time for the predefined functions.
A press on the key center (③,"ENTER") after an adjustment calls up the next setting.

Depressing any other key quits the programming procedure.

I**mportant:** The symbols displayed represent the following switching commands:

Display	Shutter	Consumer
▲	UP	OFF
▼	DOWN	ON (1...100 %)

6.3 Automatic functions

1 The 'Automatic 1' and 'Automatic 2' control
or functions of the Touch Sensor 2 plus switch
2 consumers or shutters depending on temperature or time.

7. Anti-theft protection

As a protection against theft, the Touch Sensor 2 plus is provided with an alarm function. An alarm is transmitted ca. 1 s after withdrawing the touch sensor from the flush-mounted bus coupler insert and can be signalled on a display or sounded by a siren or similar device.

The message can also be processed by an EIB alarm centre as a sabotage message.

8. What's to be done when .....

... the time of day is no longer displayed?

The Touch Sensor 2 plus must be informed every day of the exact time. Check the central clock.

... the sensor is to be reprogrammed?

If you want to change the automatic functions or the switching times, proceed as described under 6). If you want to change the key function, contact your electrical fitter.

... you want to program other times?

Proceed as described under 6).

... the time of day is not displayed correctly (e.g. summer / winter time change)?

Check the central clock and correct the time of day, if necessary.

... the Touch Sensor 2 plus cannot be switched into the programming mode?

The programming mode is disabled. Contact your electrical fitter.

... the automatic functions or the heating timer function are not accessible in the programming menu?

Programming of these features has been disabled. Contact your electrical fitter.

...'noPA' is displayed and the Touch Sensor 2 plus executes no functions?

The device must be (re)programmed. Contact your electrical fitter.

... the Touch Sensor 2 plus is off and other devices do not respond to command inputs either?

Check the KNX/EIB power supply. Contact your electrical fitter.

... the Touch Sensor always executes the same function?

The device is disabled state and executes only the 'emergency function'. Enable the device or check the programming.

... the room always overheats or cools down too much?

The Touch Sensor is not properly adapted to the room conditions. Contact your electrical fitter.

... heating or cooling valves open and close although the room must neither be heated nor cooled?

This is no defect. When Touch Sensor 2 plus has not actuated a valve for 24 hours, the valve is briefly opened and closed.
This valve protection function prevents the valves from gripping.

9. Acceptance of guarantee

We accept the guarantee in accordance with the corresponding legal provisions.

Please return the unit postage paid to our central service department giving a brief description of the fault:

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Giersiepen GmbH & Co. KG
Service Center
Dahlienstrasse 12
D-42477 Radevormwald

Gira
Giersiepen GmbH & Co. KG
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