Grenton

GRENTON SMART PANEL

SPS-001-T-01

FOUR CAPACITIVE BUTTONS TOUCH PANEL WITH THE OLED DISPLAY AND HAND GESTURE CONTROL

Replacing traditional wall switches, Smart Panel allows to control not only the light, but also any device in a smart home. The Panel provides information from sensors, system parameters or its functional data. The versatile and intuitive control interface make it easy and quick to control an individual device or a whole home.

- smart design matching every interior
- four touch buttons, executing up to four independent functions
- each button can signal corectness of activation or errors: ShowOK and ShowError
- OLED screen
- sound signals
- proximity sensor and hand gesture control
- temperature and light sensors
- unlimited functionality - wide programming possibility

BUTTONS PARAMETERS

CHARACTERISTICS

Name	Description
Value	Returns input state as 0 or 1
Mode	Returns the selected mode of button action (0 – monostable, 1 – bistable, 2 – locked). In locked mode, the diode is illuminated in continuous red light
HoldDelay	Time in milliseconds after which, when pressing and holding a button, the OnHold event occurs
HoldInterval	Cyclical interval in milliseconds after which, when pressing and holding a button, the OnHold event occurs
Label	The text that describes the button
IconA	The file name of the icon assigned to the button in monostable and bistable mode in the OFF position. The name preceded by '~' displays the graphic in negative. IconA has priority on the Label feature
IconB	The file name of the icon assigned to the button in bistable mode in the ON position. The name preceded by '~' displays the graphic in negative

METHODS

Name	Description
SetMode	Sets mode of button action (0 - monostabilny (monostable), 1 - bistabilny (bistable), 2 - zablokowany (locked)). In locked mode, the diode is illuminated in continous red light
SetHoldDelay	Sets HoldDelay value
SetHoldInterval	Sets HoldInterval value
ShowError	Causes the red diode on the button to flash for 2 seconds (frequency 500 ms). The green diode on the button is off
ShowOK	Causes the green diose on the button to flash for 2 seconds (frequency 500 ms). The red diode on the button is off
LedSwitchOn	Activates the green diode on the button
LedSwitchOff	Deactivates the green diode on the button
SetLabel	Sets Label value
SetIconA	Sets IconA value
SetIconB	Sets IconB value

EVENTS

Name	Description
OnChange	Occurs when a change in the input state takes place (regardless of the value)
OnSwitchOn	Occurs when the high state is set at input
OnSwitchOff	Occurs when the low state is set at input
OnShortPress	Occurs after pressing the button for 500 - 2000 ms
OnLongPress	Occurs after pressing the button for two seconds
OnHold	Occurs for the first time after HoldDelay time passes and then cyclically every HoldInterval value
OnClick	Occurs after pressing the button for less than 500 ms

PANEL PARAMETERS

CHARACTERISTICS

Name	Description
GestureIconUp	The BMP file name of the icon for gesture Up (without extension)
GestureIconDown	The BMP file name of the icon for gesture Down (without extension)
GestureIconLeft	The BMP file name of the icon for gesture Left (without extension)
GestureIconRight	The BMP file name of the icon for gesture Right (without extension)
ProximitySens	Sensitivity of the proximity sensor
ProximityTimeout	The time after which the display will be blanked
ProximityValue	Proximity sensor value
BuzzerValue	Sound indication control (ON/OFF)
VibraValue	Vibration control (ON/OFF)

METHODS

Name	Description
SwitchOnDisplay	Wakes the display from sleep mode
ShowButtons	Changes display mode into "buttons". Clears the display and shows the icons (or text) for every button
ClearScreen	Clears the display in "freedraw" mode
PrintText	Displays the text in "freedraw" mode
PrintFloat	Displays the float number in "freedraw" mode
DrawLine	Draws the line in "freedraw" mode
DrawPoint	Draws the point in "freedraw" mode
DrawIcon	Draws the icon (bmp) in "freedraw" mode
DisplayContent	Displays the memory graphic buffer content. Changes display mode to "freedraw"
SetGestureIconUp	Sets the icon for gesture Up
SetGestureIconDown	Sets the icon for gesture Down
SetGestureIconLeft	Sets the icon for gesture Left
SetGestureIconRight	Sets the icon for gesture Right
SetProximitySens	Sets the ProximitySens value
SetProximityTimeout	Sets the ProximityTimeout value (in seconds)
SetBuzzerValue	Sets the BuzzerValue
SetVibraValue	Sets the VibraValue

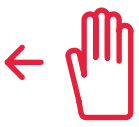
EVENTS

Name	Description
OnGestureUp	Occurs after gesture Up
OnGestureDown	Occurs after gesture Down
OnGestureLeft	Occurs after gesture Left
OnGestureRight	Occurs after gesture Right
OnProximityDetect	Occurs when the panel detects the object

GESTURES

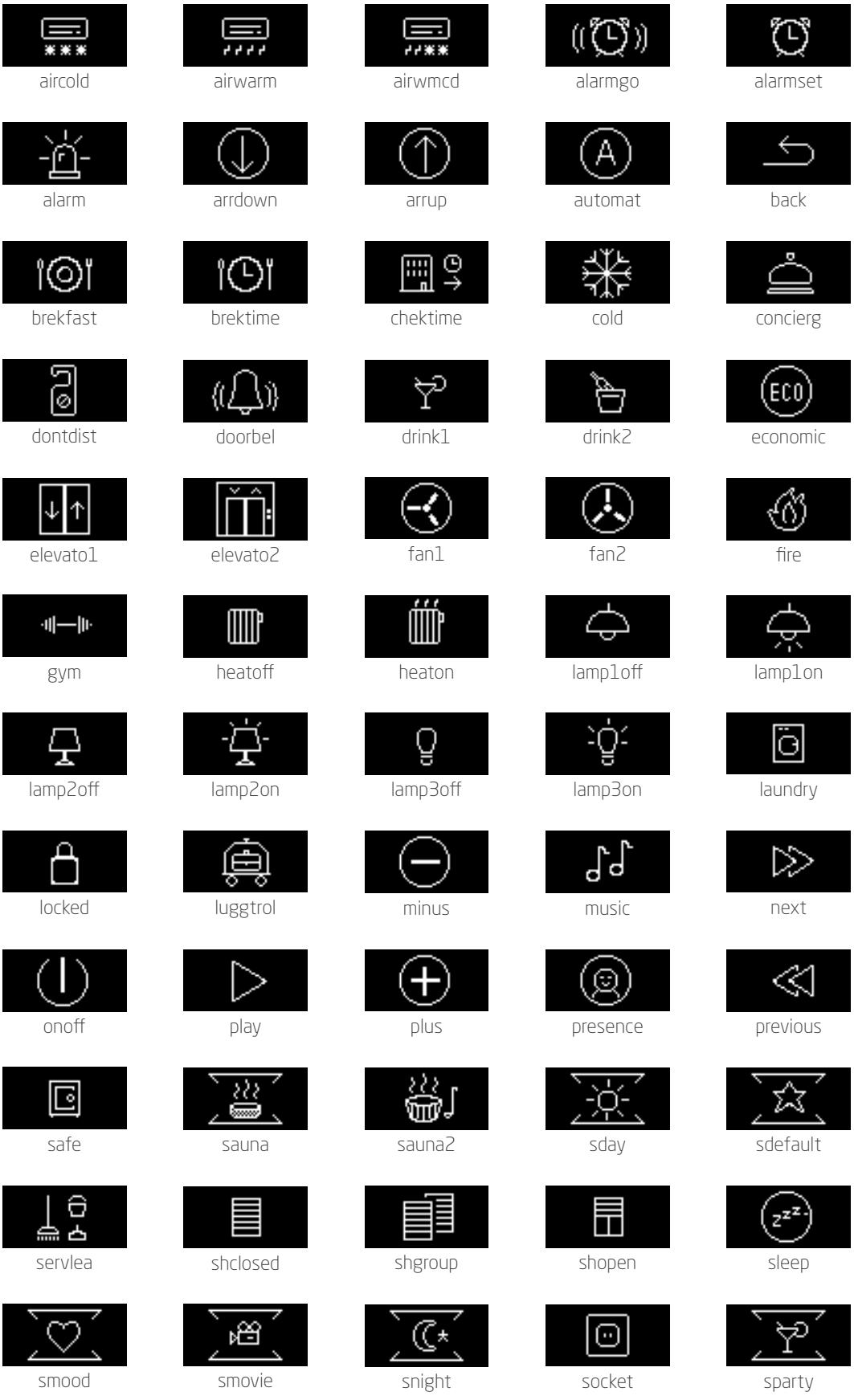

Gesture Up


Gesture Down


Gesture Left


Gesture Right

PREINSTALLED PICTOGRAMS




stoppaus


sun

taxi


temp


tempcold


tempwarm


unlocked


warning


winclose


wingroup


winopen

SENSORES PARAMETERS

CHARACTERISTICS

Name	Description
Value	Input value: for temperature sensor from 0.0 to 45.0 (°C)
Threshold	Hysteresis size (accuracy 0.1°C) specifying the sensitivity when the following events are generated: OnChange, OnLower, OnRise
Sensitivity	Time (in ms) for which the sampled values are averaged
MinValue	Minimum value of the Value characteristic after exceeding which the OnOutOfRange event is generated
MaxValue	Maximum value of the Value characteristic after exceeding which the OnOutOfRange event is generated

EVENTS

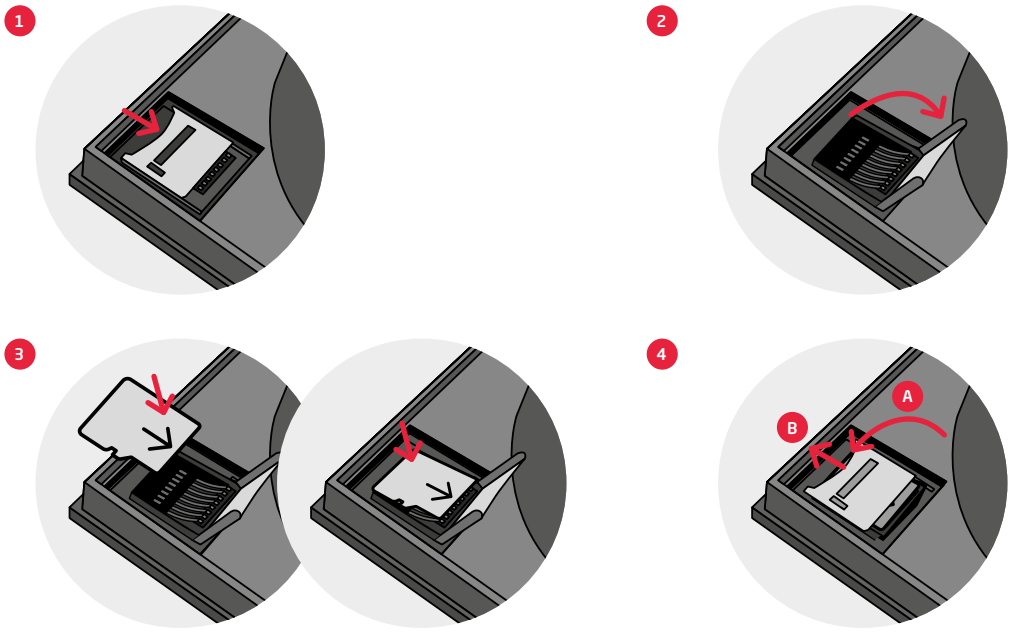
Name	Description
OnChange	Event resulting from changing input state
OnRaiseValue	Event resulting from exceeding the upper threshold of hysteresis
OnLowerValue	Event resulting from exceeding the lower threshold of hysteresis
OnOutOfRange	Event resulting from exceeding any range

TECHNICAL SPECIFICATIONS

DC supply	5 - 24V
average current input in a standby mode for 5 V	20 mA
max. current input for 5 V	80 mA
weight	120 g
dimmensions (H/W/D)	surface part: 80/80/10 mm, concealed part: Ø 50 mm / h: 22 mm
operating temperature range	0 - 45°C (without condesantion)

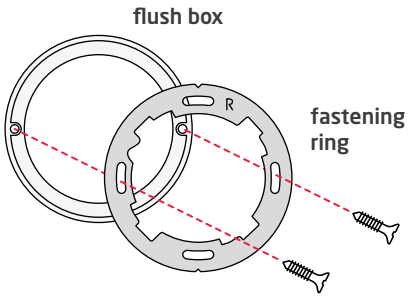
microSD CARD INSTALLATION

The card should be installed with the power supply turned off.



WIRING DIAGRAM

1



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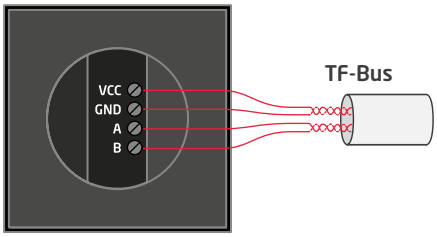

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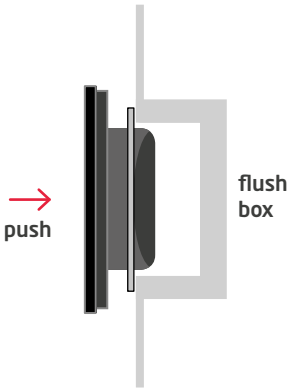

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