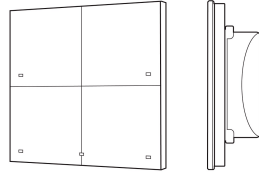


# Datasheet Touch Panel 4B

## TPA-204/404/604/804/904-T-0x

Surface mounted 4 buttons (touchpads) panel equipped with temperature sensor.



### 1. Parameters - BUTTON

Features:	
Value	Returns button input state as 0 or 1
Mode	Returns the selected mode of button action (0 - monostable, 1 - bistable, 2 - locked)
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
DistributedLogicGroup	Distributed Logic group - broadcast group for distributed logic
Methods:	
SetMode	Sets mode of button action (0 - monostable, 1 - bistable, 2 - locked)
SetHoldDelay	Sets HoldDelay value
SetHoldInterval	Sets HoldInterval value
ShowOK	Forces the green diode on the button to flash for 2 seconds (frequency 500ms). The red diode on the button is off
ShowError	Forces the red diode on the button to flash for 2 seconds (frequency 500ms). The green diode on the button is off
LedSwitchOn	Activates the green diode on the button
LedSwitchOff	Deactivates the green diode on the button
Events:	
OnValueChanged	Event occurs when a change in the input state takes place (regardless of the value)
OnSwitchOn	Event occurs when the high state is set at input
OnSwitchOff	Event occurs when the low state is set at input
OnShortPress	Event occurs after pressing the button for 500ms - 2000ms
OnLongPress	Event occurs after pressing the button for longer than 2000ms
OnHold	Event occurs for the first time after HoldDelay time passes and then cyclically every HoldInterval value
OnClick	Event occurs after pressing the button for less than 500ms

### 2. Parameters - PANEL

Features:	
BuzzerValue	Sound indication control (0 - Off, 1 - On)
Methods:	
SetBuzzerValue	Sets the BuzzerValue (0 - Off, 1 - On)

### 3. Parameters - PANELSENSTEMP (temperature sensor)

Features:	
Threshold	Hysteresis (accuracy 0.1°C) specifying the sensitivity when the following events are generated: OnValueChanged, OnValueLower, OnValueRise
Sensitivity	Period (in ms), for which the sampled values are averaged
Value	Temperature sensor value from 0.0 to 40.0°C
MinValue	Minimum value of the Value property after exceeding which the OnOutOfRange event is generated
MaxValue	Maximum value of the Value property after exceeding which the OnOutOfRange event is generated
Events:	
OnValueChanged	Event resulting from changing input state
OnValueRise	Event resulting from exceeding the upper threshold of hysteresis
OnValueLower	Event resulting from exceeding the lower threshold of hysteresis
OnOutOfRange	Event resulting from exceeding the range (MinValue - MaxValue)

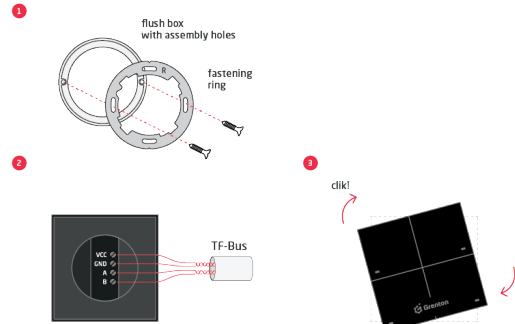
### 4. Parameters - PANELSENLIGHT (light sensor)

Features:	
Threshold	Hysteresis (accuracy 0.1%) specifying the sensitivity when the following events are generated: OnValueChanged, OnValueLower, OnValueRise
Sensitivity	Period (in ms), for which the sampled values are averaged
Value	Light sensor value from 0 to 100%
MinValue	Minimum value of the Value property after exceeding which the OnOutOfRange event is generated
MaxValue	Maximum value of the Value property after exceeding which the OnOutOfRange event is generated
Events:	
OnValueChanged	Event resulting from changing input state
OnValueRise	Event resulting from exceeding the upper threshold of hysteresis
OnValueLower	Event resulting from exceeding the lower threshold of hysteresis
OnOutOfRange	Event resulting from exceeding the range (MinValue - MaxValue)

### 5. Technical Data

Device power supply	5-24V <sub>dc</sub>
Maximal power consumption	0.17W
Maximal device current	7mA @24V
Maximal wire cross section	1.5mm <sup>2</sup>
Weight	114g
Fixing	flush mounted box Ø 60mm
Dimensions (H/W/D)	surface part: 80/80/10mm, concealed part: Ø 50mm / depth: 22mm
Operating temperature range	0 - 45°C (glass or aluminium) 10 - 35°C (wood or leather)
Humidity range	40 - 70% (wood or leather)

### 6. Wiring diagram



Vcc	power supply signal
GND	power supply ground signal
A	TF-BUS A signal
B	TF-BUS B signal

### 7. Warnings and Cautionary Statements



ATTENTION!

- Before proceeding with the assembly, read the installation schematics and full instructions available at [www.grenton.com](http://www.grenton.com). Failure to follow the guidelines contained in the instructions and other requirements of due care valid as a result of the nature of the equipment (device) may be dangerous to life / health, damage the device or installation to which it is connected, damage

other property or violate other applicable regulations. The manufacturer of the device, Grenton Sp. z o.o. does not bear any responsibility for the damage (property and non-property related) resulting from the assembly and / or use of the equipment not in accordance with the instructions and / or due diligence in handling the equipment (device).

- Device power supply, permissible load or other characteristic parameters have to be in accordance with the device specification, described in particular in the "Technical data" section.
- The product is not intended for children and animals.
- If you have technical questions or comments about the device operation, contact Grenton Technical Support.
- Answers to frequently asked questions can be found at: [www.support.grenton.com](http://www.support.grenton.com)



DANGER!

- Danger to life caused by electric current!
- The components of the installation (individual devices) are designed to work in a home electrical installation or directly in its

vicinity. Incorrect connection or use may cause a fire or electric shock.

- All work related to the installation of the device, in particular works involving interference in the electrical installation, may be performed only by a person with appropriate qualifications or licenses.
- When installing the device, make sure that the power supply voltage is disconnected from the circuit in which the device is connected or near which the assembly takes place.

### 8. CE Marking

The manufacturer declares that the device is in full compliance with the requirements of EU legislation that includes the directives of a new approach appropriate for this equipment. In particular, Grenton Sp. z o.o. declares that the device fulfills the requirements on safety, specified by law, and that it conforms

to the national regulations that implement the appropriate directives: The Directive on the electromagnetic compatibility (EMC - 2014/30/UE) and the Directive on the limitation of the use of specific substances in electrical and electronic equipment (RoHS II - 2011/65/UE).



### 9. Warranty

Warranty available at: [www.grenton.com/warranty](http://www.grenton.com/warranty)

### 10. Manufacturer Contact Details

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