OVERVIEW

The TAP-5 is a 24V 5 button capacitive switch plate for use with 24V home automation systems.

It features 5 * 24V digital outputs for connection into the digital inputs of 24V home automation systems.

The switch plate also features a 1-wire temperature sensor for measuring the temperature of the room.

The temperature sensor is located at the bottom of the switch plate to ensure good airflow.

The TAP-5 is available in several finishes, these can be seen at www.faradite.com.

The metallic finishes can be engraved using a laser or rotary engraving machine.

The TAP-5 features haptic vibration feedback, which gives the user confirmation of touch.

The TAP-5 is compatible with EU and UK back-boxes. As seen in the dimensions, the UK TAP-5 sits 4.7mm off the wall and the EU TAP-5 sits 7.7mm off the wall (due to additional back plate).

The TAP range works perfectly with Loxone home automation systems. The switch plate can be star wired back to the panel or it can be attached to a Nano DI Tree module see “ELECTRICAL INSTALLATION”.

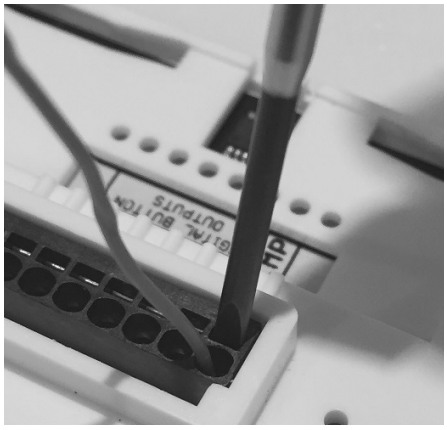
TECHNICAL DATA

Power supply (consumption)	24V DC @ 24V (3mA)
Digital Output Voltage	24V DC
Ambient operating temperature	(Indoor Only)
IP Rating	IP20
Back-box	Mounts in 60mm center EU or UK backbox
Push-fit connectors	AWG 20- 24 CAT5 / CAT6 / CAT7
DS18B20 : 1-wire temperature sensor	Measures temperatures from -55°C to +125°C (-67°F to +257°F) ±0.5°C accuracy from -10°C to +85°C

PUSH-FIT CONNECTORS

It is recommended to use CAT cable to connect the TAP-5 to the building automation system.

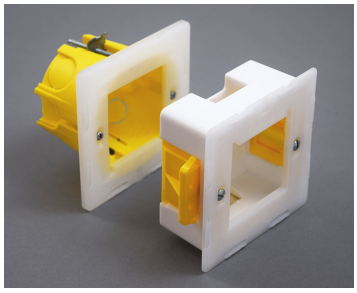
1: Strip the cable back 6mm.
2: Push into circular hole on the connector.
3: To remove the wire, insert the supplied tool or a small screwdriver in the slot behind the wire.



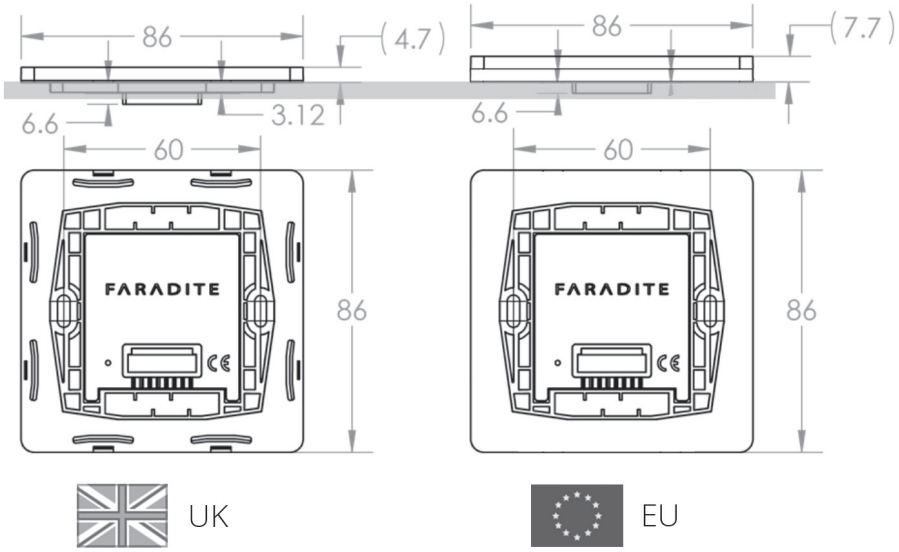
MECHNICAL INSTALLATION

The TAP Range can be installed in EU and UK back-boxes.

If you wish to fit the TAP range in EU back-boxes please ensure that you select the EU back-box option when ordering. If the EU option is selected, we will add a 3mm plastic EU ring to your order. The ring fits over the backplate prior to installation. Please note it only fits in one orientation.



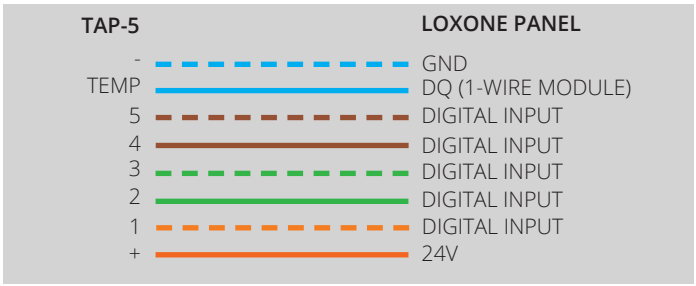
DIMENSIONS

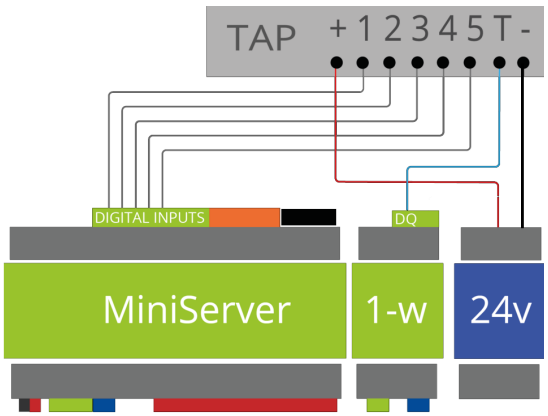


The TAP range requires a stable 24V power supply - we therefore do not recommend the Nano IO Air 24V power supply

ELECTRICAL INSTALLATION - CONNECTION TO A LOXONE PANEL (STAR WIRE)

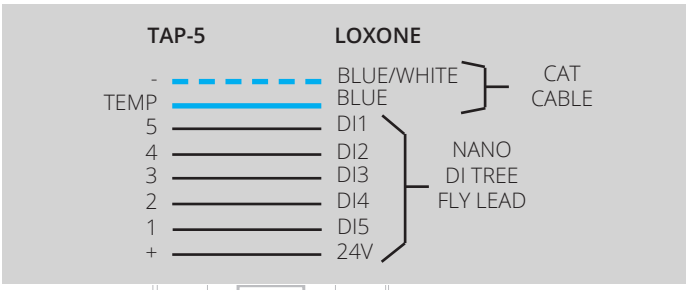
Connection to the Loxone panel is simple: connect the digital outputs of the TAP-5 to the digital inputs in the Miniserver / Extention (remember the handy DI extention) and the TEMP output to the DQ input of the 1-wire module.

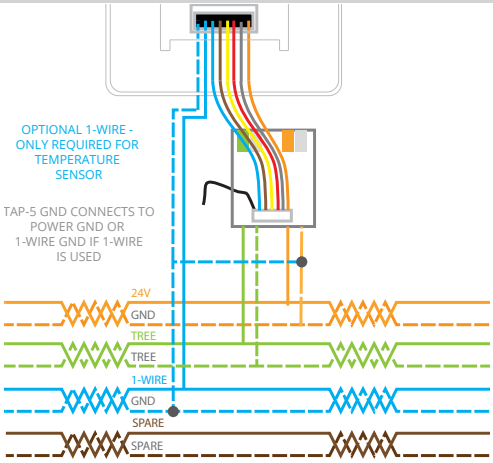




ELECTRICAL INSTALLATION - CONNECTION TO LOXONE NANO DI TREE (TREE WIRE)

The Nano DI Tree module is our recommended way to connect a TAP-5 to Loxone. The Nano DI Tree module has 6 digital inputs, we recommend using 5 inputs for the TAP-5 and then the 6th input can be used for the Motion Sensor 360 in that room. The 1-wire bus can run in the same CAT cable as the Tree bus (see below).

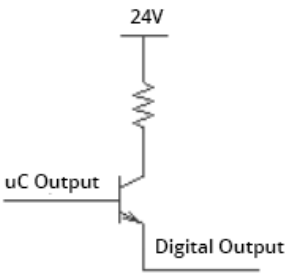




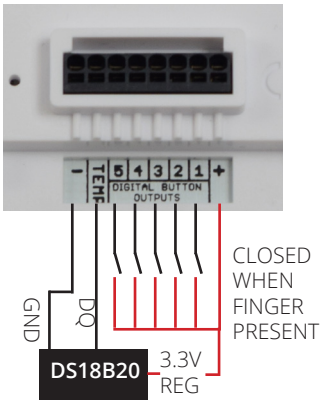
NOTE: WHEN TWO TAP-5s HAVE THE SAME FUNCTION - WIRE IN PARALLEL (E.G. EITHER SIDE OF A DOUBLE BED)

ELECTRICAL INSTALLATION - EQUIVALENT CIRCUIT

The TAP range has transistor line driven outputs, for use with GND referenced digital inputs.



The diagram below is an equivalent circuit of the internal circuitry of the TAP-5.



The DS18D20 is internaly powered so it should be treated in the Loxone config as a standard temperature sensor NOT a parasitically powered sensor.

TEST POINTS

Test points are provided to probe the inputs and output of the TAP-5 once it is installed as the push fit connectors don't have screw terminals.

MOUNTING & SAFETY PRECAUTIONS

1) Do not under any circumstance use the TAP-5 outside the range of its ratings shown in the technical data.

2) Faradite is committed to making products of the highest quality and reliability. Nevertheless, all electrical components are subject to natural deterioration, and the product durability will depend on the operating environment and conditions of use.

RoHS CE