FARADITE

TAP-5 KNX
ETS MANUAL

TAP-KNX

V1

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Introduction

The KNX coupler offers KNX integrators a huge range of powerful functions making the KNX coupler as technically powerful as our front plates are aesthetically beautiful.

There are two operating modes for the keypad:

- Five individual buttons
- Smart scene plate

When configured in “Five individual buttons” each button can be configured to any of the function types available on the product including:

- Switching
- Dimming
- Scenes
- Blinds
- Value sending

The advanced value sending supports a huge range of datapoint types including HVAC and RGB, a 2nd value sending object can also be configured. In the advanced value sending menu different values can be sent on press / release / long press / short press / double press button interactions.

When configured as a “Smart scene plate” the keypad has a powerful logic built in to optimise the user experience. The logic engine allows the central button on the switch to be used as a room ON/OFF toggle. If the room is off, a tap on the middle button will activate the last selected scene (or a configured scene) and turn on the corner LED for that scene. A further TAP of the middle button will turn the lights OFF.

To ensure the toggle state is maintained the smart scene plate has 16 1 bit feedback objects to monitor all the lighting circuits in the room. The powerful smart scene plate feature allows the KNX integrator to create an intuitive switch layout with ease. The smart scene plate has a motion sensor blocking output for intelligent blocking of a motion sensor.

The powerful smart scene plate functionality also allows for blind control by giving an option for the right hand buttons or the left hand buttons to be used as blinds up and down

The integrated temperature sensor gives accurate temperature reporting to the KNX bus, allowing for zonal; temperature control to be achieved without the need for any other bulky, standalone temperature sensors in the room. Threshold objects are available for further temperature monitoring functions.

The KNX coupler features RGBW status feedback LED lights that gently illuminate the 4 corners of the switch. For example, these LEDs can be used to indicate the selected lighting scene. There are also 3 notification LED options that can be used to notify users of events around the building, such as, doorbell notifications, alarm status, and many others. The feedback status LEDs can also be configured to be permanently on at a reduced brightness to provide a subtle orientation light.

Day / Night modes can be utilised to adjust the brightness of the feedback LEDs depending on the time of day. The day night mode can also be used to change which lighting scene is triggered during day and night time operation.

The motion sensor blocking feature allows users to override motion sensor functionality when the switch has been used to manually adjust the room, even when used for scene control.

We have included a number of useful diagnostics tools as well, including a heartbeat mode that will monitor the devices KNX bus connection, a tamper object which can alert maintenance that a switch has been removed from the wall, and a cleaning object which blocks switch functionality for a set time so the switch plate can be cleaned.

The KNX Coupler can be installed directly in round EU back boxes and square UK back boxes.

Feature Overview

5 gang capacitive touch switch

- Native KNX connectivity
- Fits both EU round and UK square back boxes
- Interchangeable front plate and coupler product architecture

Faradite's intuitive Smart scene plate functionality.

- Delivers intuitive, simple lighting control
- Simple status feedback LEDs indicate active scene
- Fast and consistent configuring for ETS user

5 Function types

- Switching
- Dimming
- Blind
- Scene
- Value sending (with 10 different object types - including HVAC)

Powerful Feedback LED features

- Status feedback LEDs can be illuminated to indicate active scene/circuit
- Notification group objects can use the halo light to flash/rotate in various colour options to indicate actions on the system (e.g. doorbell press)
- Orientation LED options so users can find the switch in a dark room.

Day / night functionality

- Have different LED options during day/night time
- Set different default scene for day / night time use

Temperature sensor

Set key parameters via group objects

Diagnostic options

- Cleaning object to lock switch functionality temporarily
- Tamper object
- Heartbeat object

Operating Modes

Smart scene plate

Our powerful smart scene plate option gives an intuitive, intelligent scene configuration for the user. Essentially, the smart scene plate operating mode allows the central button to always act as a toggle so guests have simple control of the room. It also allows the integrator to set which of the outer 4 scenes is activated first if the middle button is pressed from an 'Off' state or to trigger the last active scene from 'Off'.

It is possible to set different initial scenes during day and night time operation.

The smart scene plate operating mode can be set up as 4 scenes or 2 scenes with the left or right hand buttons reserved for blind control. This is great in rooms where shading and lighting scenes are to be controlled.

Five independent buttons

In this operating mode, each of the 5 buttons on the TAP-5 can be commissioned individually to any of the available function types. This mode gives the KNX integrator complete flexibility to set up the switch in any way required. The function types available in this operating mode are:

Switching

The switching function provides a simple ON / OFF 1 bit output for simple control of switched lighting circuits.

Dimming

Full control over dimmed circuits using any of the push buttons, support for short press (ON / OFF) and long press (Dim UP / DOWN).

Blind

Easily control blinds/shades/curtains from the switch by using discrete up / down commands or with the single button operation option.

Scene

The scene function follows the KNX standard for scene triggering. The sensor can be configured to send individual scenes from the switch.

Different scenes can be commissioned to be sent from the same switch during day time operation and night time operation.

There is also the option to save scenes on long press so users can adjust lighting scenes dynamically (via switches or other KNX GUI devices) and save these scenes to a button on the switch using a long press. Alternatively, a long press can be used for single button scene dimming, where a press and hold on the button will dim all lights in the scene up/down.

Value sending

Fully customisable value sending can be achieved. This advanced feature is intended for advanced KNX integrators with a need to create bespoke automation using value sending. The full list of value send options are:

- 1 bit
- 1 Byte Unsigned
- 1 Byte Percentage
- 1 Byte Signed
- 2 Byte Unsigned
- 2 Byte Signed
- 2 Byte DP9
- RGB 3 X 1-Byte Objects
- RGB 3 X 1-Byte Object 232.600 DPT
- HVAC

Advanced Features

Temperature Sensor

Mounted to the bottom edge of all compatible TAP-5 front plates is a temperature sensor. We have created a small air gap near the temperature sensor to allow air flow across the sensor and ensure accurate temperature sensing of the air in the room.

Upper and lower threshold objects are available in ETS to create temperature based automation where needed.

Corner Status, Notification and Orientation halo.

The outer edge of the coupler features embedded RGBW LEDs that are configurable for various uses on the switch. These LEDs can be used for 3 core functions; Orientation LED's, Status feedback LEDs and Notification LEDs.

The three various LED control methods each have a priority level.

Orientation LEDs **(Priority lowest)** can be configured to glow to help users find the switch in darker room and to provide a visual enhancement.

The Status feedback LEDs (Individual buttons) / Status Halo (Smart scene plate) **(Priority middle)** allow each of the four corners to illuminate independently and are intended to indicate which lighting scene is active or in the case of controlling individual circuits the ON/OFF status of that channel . The integrator can choose from a range of RGB/W colours for the status feedback LEDs The status feedback LEDs can be controlled by the status of the function configured on that button or they can be controlled via a separate group object (see Status Feedback LED control) there are multiple options for the type of object that can be used for external control.

Notification LEDs (see Notification LEDs) **(Priority highest)** are used to alert users to other actions around the KNX system. Theoretically these can be linked to anything in the KNX building via a 1 bit object but a typical example might be to link it to the doorbell. When the doorbell is pressed, the notification LEDs can flash green for 1 minute to visually alert users that there is someone at the door. A second notification could be configured to flash red when the front gate is open, for example. If a notification is active then this overrides any status feedback LEDs.

When using day / night mode on the switch, it is possible for all three types of LED control to set different brightness levels for day and night for all three types of LED control.

Tamper

The tamper object can be used to send system notifications to the facilities manager that a front plate has been removed from the KNX coupler.

Cleaning Mode

The cleaning mode will temporarily disable the capacitive touch buttons on the switch to allow the switch to be cleaned without triggering anything on the KNX system. A clean, damp cloth can be used to clean the switch if required. We do not advise using any cleaning chemicals as this may damage the finish of the metal and/or the electronics.

Parameters - General

General

GENERAL	
Parameter	**Description**
Operating Mode	Sets if the switch is being set up as "Five independent buttons" or if the "Smart scene plate" option will be used. **Options** ● Select option (default) ● Five independent buttons ● Smart scene plate (recommended) **Behaviour** When "Five independent buttons" is selected, the menu will show all five buttons which can be configured individually for switching, dimming, blind, scene and value sending. When "Smart scene plate" is selected (recommended) the menu will show a “Smart scene plate” tab. When using "Smart scene plate" it is very quick to set up efficient lighting and blind control and is the Faradite recommended approach.
Orientation halo colour	The switch can be configured to have always on LED’s which illuminates the outer edge of the switch in a set colour. This light does not respond to button presses and remains at the configured state permanently. Here we set the colour of the orientation halo and the brightness. **Colour** ● Warm white (default) ● Red ● Magenta ● Blue ● Cyan ● Green ● Yellow ● Custom colour 1 ● Custom colour 2 ● Custom colour 3
Orientation halo brightness 	The switch can be configured to have always on LED’s which illuminates the outer edge of the switch in a set colour. This light does not respond to button presses and remains at the configured state permanently. Here we set the brightness of the orientation halo. **Brightness** ● Disabled (OFF) ● Level 1 (subtle in a dark room) ● Level 2 (visible in a dark room) ● Level 3

	• Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Level 9 • Level 10 (Bright)
*Status Feedback LED's colour *only visible when 'Operating mode' is set to 'Five independent buttons'	Allows the configuration of the feedback LED's on the four corners of the keypad. **Colour** • Warm white • Red • Magenta • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3 • Different per button **Behaviour** Sets the colour of the status feedback LED, if colour is set to "Different per button" then a parameter is shown per button for the colour to be selected.
*Status Feedback LED's brightness *only visible when 'Operating mode' is set to 'Five independent buttons'	Allows the configuration of the brightness of the feedback LED's on the four corners of the keypad. **Brightness** • Disabled (OFF) • Level 1 (subtle in a dark room) • Level 2 (visible in a dark room) • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Level 9 • Level 10 (Bright) **Behaviour** Sets the brightness of the status feedback LED, if day night mode is enabled then a different brightness level can be set for the day compared to the night.

General - Advanced

GENERAL - ADVANCED	
Parameter	**Description**
Startup delay	Introduces a time delay before the keypad starts to perform in the configured manner. **Value** • Min: 0 • Max: 255 • Step: 1 • Default: 0 • Unit: seconds **Behaviour** For example, if set to '10', when the keypad is powered up it will wait for 10 seconds before performing any programmed functions.
Heartbeat object	Enables the heartbeat functionality. **Options** • Disable (default) • Enable **Behaviour** When set to 'Enable' the device will periodically (at the Heartbeat period) verify its online status by sending a 1 bit ON telegram via the "Heartbeat - Heartbeat output" group object.
*Heartbeat period *Only shown when "Heartbeat object" is "Enabled"*	Sets the heartbeat period. **Value** • Min: 00:00:10 • Max: 12:00:00 • Default: 00:01:00 **Behaviour** Controls period of heartbeat verification telegrams sent out on "Heartbeat - Heartbeat output" group object.
Cleaning object	Shows an object which can be used to lock the front plate capacitive sensors for a set period of time to allow the switch to be physically cleaned. **Options** • Disable (default) • Enable **Behaviour** When a '1' is sent to the group object 'Cleaning - Cleaning object input' all the 5 buttons will be disabled. This allows the switch to be cleaned without triggering unwanted lights/blinds etc.

*Cleaning timeout enable *Only shown when "Cleaning object" is "Enabled"*	Allows a timeout to be added to the cleaning object to avoid it being left in cleaning mode indefinitely and causing the switch to not perform as expected. **Options** • Disable (default) • Enable **Behaviour** When disabled, the switch will remain in cleaning mode indefinitely after being turned "ON" using a 1 bit telegram. When enabled is selected the option to set the number of minutes the switch will stay in cleaning mode before releasing will become visible.
*Cleaning timeout *Only shown when "Cleaning timeout enable" is "Enabled*	Sets the cleaning timeout period in minutes. **value** • Min: 1 • Max: 30 • Step: 1 • Default: 10 • Unit: Minutes **Behaviour** Sets the number of minutes the switch will be in cleaning mode for from the moment the "Cleaning - Cleaning object input" group object receives a '1'.
Tamper object	Enables the "Tamper - Tamper output" object. **Options** • Disable (default) • Enable **Behaviour** When enabled the group object "Tamper - Tamper output" group object is shown. If the front plate of the switch is removed from the wall the object will send a '1'. This can be used to notify facility managers of a switch being removed.
Notification objects	This enables a 'notifications' tab in the ETS menu which is where the various notifications can be configured. **Options** • Disable • Enable (default) **Behaviour** When set to 'enabled' the notifications tab will become available. See 'Notifications' for more information.
Global LED Control Object	Enables the 'Global LED - Global LED enable (1) / disable (0) input' object. **Options** • Disable (default) • Enable **Behaviour** Once enabled the group object "Global LED - Global LED Enable (1) / Disable (0) input" will be available for use. When a '0' is sent to this object the all LED's on the switch are turned off. Orientation LEDs, Corner status LED's,

	Status Halo,, Notification LEDs, and any other configured LEDs will all be blocked from being on. When a '1' is sent all LED's will be allowed to perform as programmed.
Custom colour 1	Defines a custom colour that can be used for "Status feedback LEDs", "Orientation LED's", "Status halo LEDs" and "Notification LEDs".
Custom colour 2	Defines a custom colour that can be used for "Status feedback LEDs", "Orientation LED's", "Status halo LEDs" and "Notification LEDs".
Custom colour 3	Defines a custom colour that can be used for "Status feedback LEDs", "Orientation LED's", "Status halo LEDs" and "Notification LEDs".
Orientation LEDs brightness object	Enables the 'Orientation LEDs - Orientation LED's brightness value input' group object. This can be used to set the brightness of the orientation LEDs from other devices in the KNX system e.g. a GUI. **Options** • Hide group objects (default) • Show group objects - Overwrite with parameter value on ETS download • Show group objects - Don't overwrite with parameter value on ETS download **Behaviour** By default, the orientation LEDs brightness is set on commissioning and doesn't change. If these brightness group objects are enabled the user can adjust the orientation brightness from other devices in the KNX system by sending a value to the group object. When set to 'Show group objects - Overwrite with parameter value on ETS download' it will change the brightness back to whatever is set in ETS on download. When set to 'Show group objects - Don't overwrite with parameter value on ETS download' an ETS download will not overwrite the brightness value that the user has previously set via the group object.
Orientation LED's switching object	Enables the 'Orientation LEDs - Orientation LED's switching input' group object. This can be used to switch on/off the orientation LEDs from other devices in the KNX system e.g. a GUI. **Options** • Hide group objects (default) • Show group objects - Overwrite with parameter value on ETS download • Show group objects - Don't overwrite with parameter value on ETS download **Behaviour** By default, the orientation LEDs switching state is "ON". Assuming the orientation brightness is not set to "Disabled" If the switching group object is enabled the user can adjust the orientation state (ON / OFF) from other devices in the KNX system by sending a value to the group object. When set to 'Show group objects - Overwrite with parameter value on ETS download' will change the state to ON on download. When set to 'Show group objects - Don't overwrite with parameter value on ETS download' an ETS download will not overwrite the state (ON / OFF) that the user has previously set via the group object.

Day / night mode	When enabled, it will be possible to define separate "Day" and "Night" parameters for some functions. **Options** • Disable (default) • Enable **Behaviour** If day / night mode is disabled the switch will perform in the same manner 24 hours a day. If day / night mode is enabled each function can be configured to have different behaviour during the day compared to the night. If bus power is cycled when day / night mode is enabled, the switch will resume operation in its last active mode (day/night).
*Day / night trigger *Only shown when "Day / night mode" is Enabled*	Select the Data Point Type that is used to select whether the switch is in day or night mode. **Options** • DPT 1.1 (1 bit object) • DPT 10.1 (time of day object) **Behaviour** The DPT 1.1 (1 bit object) offers the option to use another device in the KNX system to dictate whether the switch performs in day or night mode e.g. a manual switch / a GUI or a server with a time clock, day (0) and night (1). Alternatively the DPT 10.1 (time of day object) can be used to send the switch the current time. Night - > day time (AM) and Day - > night time (PM) parameters are then used to define the time at which the night to day and day to night transitions happen.
*Night - > day time (AM) *Only shown when "Day / night mode" is Enabled & "Day / night trigger" is set to "DPT 10.1 (Time of day object)"*  Set key parameters via group objects *Parameter can be overridden using the "Day / night mode - Night -> day time input" group object.*	Sets the time at which the switch will transition to day mode. **Value** • Min: 00:00 • Max: 23:59 • Default: 06:00 **Behaviour** This is the time after which the switch will transition to the configured daytime functionality. If the value is set to 06:00 (default) then at exactly 06:00 the switch will begin performing in daytime mode. ***Please note:** The "Night -> day time (AM)" time has to be earlier in the day than the "Day -> night time (PM)" time.*
*Day - > night time (PM) *Only shown when "Day / night mode" is Enabled & "Day / night trigger" is set to "DPT 10.1 (Time of day object)"*  Set key parameters via group objects	Sets the time at which the switch will transition to night mode. **Value** • Min: 00:00 • Max: 23:59 • Default: 22:00 **Behaviour** This is the time after which the switch will transition to the configured nighttime functionality. If the value is set to 22:00 (default) then at exactly 22:00 the switch will begin performing in nighttime mode.

Parameter can be overridden using the "Day / night mode - Day -> night time input" group object.	***Please note:** The "Night -> day time (AM)" time must be earlier in the day than the "Day -> night time (PM)" time.*

*dependant on other parameter selections

Temperature

TEMPERATURE	
Parameter	**Description**
Correction adjustment	Adjusts the reported temperature value by the specified amount. **value** • Min: -10 • Max: 10 • Step: 0.1 • Default: 0 • Unit: Kelvin **Behaviour** Offsets the temperature that is being reported to the bus by the amount set.
Transmit update on	Defines when a temperature switch value update telegram is sent. **Options** • Disable sending • Cyclical • Change of value (default) • Cyclical and change of value **Behaviour** All transmissions are on the "Temperature - Temperature level output" group object. If "Disable sending" is selected then the "Temperature - Temperature level output" group object will still be visible but it won't send any updates, but it can be "Read" from If "Cyclical" is selected the temperature value will be sent at regular intervals. If "Change of value" is selected then the new value will only be sent if it is bigger or smaller than the previously sent value by a set amount "Transmission after change greater than". If "Cyclical and change of value" is selected then a hybrid approach is taken.
*Cyclical transmission of temperature *Only shown when "Transmit update on" is set to "Cyclical" or "Cyclical and change of value"*	Defines the period between temperature sensor update telegrams. **Value** • Min: 2 • Max: 65536 • Step: 1 • Default: 60 • Unit: seconds

*Transmission after change greater than *Only shown when "Transmit update on" is set to "Change of value" or "Cyclical and change of value"*	Defines how much the temperature sensor reading has to change compared with the previously transmitted value to trigger the sending of an updated value. **Value** • Min: 0.1 • Max: 5 • Step: 0.1 • Default: 0.2 • Unit: Kelvin
Threshold trigger objects	Enables the trigger objects. **Options** • Disable (default) • Enable
**Trigger when *Only shown when "Threshold trigger objects" are set to "Enable"*	Defines the condition on which the trigger activates. **Options** • Never • Value greater than threshold • Value less than threshold **Behaviour** When set to 'Value greater than threshold', the Threshold trigger object will send value set on 'Value sent on trigger' parameter when the the value set at 'Threshold' is exceeded. When the value drops below this threshold (after considering any 'dead band set on the 'Hysteresis' parameter the Threshold trigger object will send the inverse of the "Value sent on trigger". For 'Value less than threshold' the inverse is true.
**Threshold *Only shown when "Threshold trigger objects" are set to "Enable" & Trigger when is not equal to "Never"*	Defines the threshold to which the temperature value is compared using the logic operation defined in "Trigger when". **Value** • Min: -20 • Max: 100 • Step: 0.1 • Default: 0 • Unit: degrees celsius
**Hysteresis *Only shown when "Threshold trigger objects" are set to "Enable" & Trigger when is not equal to "Never"*	Defines a hysteresis band to prevent oscillation of the trigger objects at the point of threshold. **Value** • Min: 0.1 • Max: 5 • Step: 0.1 • Default: 0.5 • Unit: Kelvin
**Value sent on trigger	Defines the value sent when the trigger is activated.

Only shown when "Threshold trigger objects" are set to "Enable" & Trigger when is not equal to "Never"	**Options** • 0 • 1 (default)
Threshold adjustment object	Enables the 'Threshold adjustment' group object that can be used to update the threshold. E.g. providing the user with a GUI where they can adjust the threshold through an app. **Options** • Hide group objects (default) • Show group objects - Overwrite with parameter value on ETS download • Show group objects - Don't overwrite with parameter value on ETS download **Behaviour** When set to 'Hide group objects' group objects are hidden and not used. When set to ' Show group objects - Overwrite with parameter value on ETS download' this will create the group object for adjustments, but anytime an ETS download is done to the device, the value set on 'Threshold' in ETS will override the setting in the device. When set to 'Show group objects - Don't overwrite with parameter value on ETS download' the group object will be enabled but ETS download will not override what was last set by the user.

*dependant on other parameter selections
** dependant on other parameter selections (same for both triggers)

Notifications

*Only shown when 'Notification objects' is 'Enabled' ,in the "General" menu.
Notification 1 has priority over Notification 2 and Notification 2 has priority over Notification 3.

NOTIFICATIONS	
Parameter	**Description**
Notification LEDs brightness 	Notification LEDs can be used to alert users of an action around the building such as a doorbell press. Here we set the brightness of the notification LED function. **Brightness** • Disabled (OFF) • Level 1 (subtle in a dark room) • Level 2 (visible in a dark room) • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Level 9 • Level 10 (Bright)
Number of notifications	Defines how many notifications there will be available to configure. **Value** • Min: 1 • Max: 3 • Step: 1 • Default: 1

Notification 1 (/ 2 / 3)

*Only shown when 'Notification objects' is 'Enabled' in the "General" menu.

NOTIFICATION 1 (/ 2 / 3)	
Parameter	**Description**
Effect	Defines the type of 'movement' the LED status lights will perform for each notification. **Options** • Halo rotate • Flash • Permanently on **Behaviour** When set to 'Halo rotate' the notification will trigger a light effect where the LEDs appear to rotate when active. When set to 'Flash' the notification will trigger the light effect where all 4 corners will come on/off together. When set to 'Permanently on' the notification will trigger the LED's to be always on for the duration of the notification.
*Flash speed Only shown when 'Effect' is set to 'Flash'	Defines the frequency the LEDs turn on and off during the notification period (when set to 'Flash') **Options** • Very fast • Fast • Medium (default) • Slow • Very slow
Colour	Sets the colour of the LEDs for this notification. **Options** • Warm White • Red (default) • Magenta • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3
Duration	Sets the time the notification will be active from the moment it is triggered. **Options** • Permanent (Default) • Timeout **Behaviour** When set to permanent the notification will be turned on when the group object "Notification [x] - Notification switching input" is receiving a '1' and OFF when it receives a '0'.

	When set to 'Timeout' the notification will be active for the duration set at 'Timeout'. After the timeout elapses the LEDs will revert to the previous state, adhering to the LED state priority.
*Timeout Only shown when 'Duration' is set to 'Timeout'	Sets the time, in seconds, that the notification will be active for before reverting to the previous LED state (according to priority) **Value** ● Min: 0 ● Max: 255 ● Step: 1 ● Unit: Second ● Default: 10

Parameters - Smart Scene Plate

Smart Scene Plate

FUNCTION TYPE: SMART SCENE PLATE	
Parameter	**Description**
Corner button layout	Dropdown to select the button layout of the switch. **Options** • 4 scene buttons • 2 scene select buttons (left) + 2 blind buttons (right) • 2 scene select buttons (right) + 2 blind buttons (left) **Behaviour** When set to '4 scene buttons' all 4 outer buttons will be used for scene control. When set to '2 scene select buttons (left) + 2 blind buttons (right)' the top left and bottom left buttons will be part of the smart scene functionality but the top right and bottom right will be configured for blind control. When set to '2 scene select buttons (right) + 2 blind buttons (left)' the top right and bottom right buttons will be part of the smart scene functionality but the top left and bottom left will be configured for blind control.
Centre button activates	Defines the scene that is triggered from the centre button, assuming the room is "OFF". Once the room is "ON" any subsequent press of the centre button will result in the room turning "OFF". **Options** • Last selected scene • Specific scene **Behaviour** When set to 'Last selected scene, from 'OFF', an initial press of the centre button will activate the scene that was last on in that room. When set to 'Specific scene', from 'OFF', an initial press of the centre button will always activate the defined scene on 'Specific scene' parameter.
*Specific scene Only shown when "Centre button activates" is set to "Specific scene" 	Configures which scene is the first to be activated when the centre button is pressed from the room being "OFF".. **Options** (when 'Corner button layout' is set to ' 4 scene buttons') • Top left scene • Top right scene • Bottom left scene • Bottom right scene **Options** (when 'Corner button layout' is set to ' 2 scene select buttons (left) + 2 blind buttons (right)') • Top left scene • Bottom left scene

	Options (when 'Corner button layout' is set to ' 2 scene select buttons (right) + 2 blind buttons (left)') • Top right scene • Bottom right scene **Behaviour** If the room is 'OFF', then an initial press of the centre button will activate the specific scene, the scene can then further be changed by pressing an alternative corner scene button. The feedback LED's will show the currently selected scene. If the room is 'ON' then a press of the centre button will turn the room "OFF", this means the centre button acts as a simple room ON/OFF toggle at all times.
Status halo light Brightness	Here we set brightness of the status halo lights. **Brightness** • Disabled (OFF) • Level 1 (subtle in a dark room) • Level 2 (visible in a dark room) • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Level 9 • Level 10 (Bright)
Colour	This defines the colour of the status halo light for each corner of the switch that is not currently active/selected. **Options** • White (default) • Red • Magenta • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3 • Disable **Behaviour** When the room is "OFF", the status halo light will be off, when the room is then turned "ON", the status halo light will illuminate. The active scene will be illuminated with the colour set at 'Selected scene colour' the other 4 corners will be illuminated in the colour set on this parameter.
Selected scene colour	This defines the colour of the status halo light in the corner of the switch that is currently active. **Options** • White • Red • Magenta (default) • Blue • Cyan

	• Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3 • Different per corner **Behaviour** The scene that is active will be illuminated with the colour set on this parameter. When set to 'Different per corner' it is possible to define the colour of each scene separately, essentially colour coding the lighting scenes for the user.
Selected scene colour / blinds (momentary colour) Only shown when "Corner button layout" is set to a layout that includes blinds.	This defines the colour of the status halo light in the corner of the switch for the selected scene. For buttons that are also used for blind control this colour is also shown temporarily during a button press. **Options** • White • Red • Magenta (default) • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3 • Different per corner **Behaviour** The scene that is active will be illuminated with the colour set on this parameter. When set to 'Different per corner' it is possible to define the colour of each scene separately, essentially colour coding the lighting scenes for the user. When blind buttons are pressed this colour is shown during the button press.
*Top left colour Only shown when "Selected scene colour" is set to "Different per corner"	Sets the Halo light colour when the top left scene is selected. **Options** • White • Red • Magenta (default) • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3
*Top right colour Only shown when "Selected scene colour" is set to "Different per corner"	Sets the Halo light colour when the top right scene is selected. **Options** • White • Red • Magenta (default) • Blue • Cyan • Green • Yellow • Custom colour 1

	• Custom colour 2 • Custom colour 3
*Bottom left colour Only shown when "Selected scene colourSelected scene colour" is set to "Different per corner"	Sets the Halo light colour when the bottom left scene is selected. **Options** • White • Red • Magenta (default) • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3
*Bottom right colour Only shown when "Selected scene colourSelected scene colour" is set to "Different per corner"	Sets the Halo light colour when the bottom right scene is selected. **Options** • White • Red • Magenta (default) • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3
Activate scenes using	Defines how scenes are activated. **Options** • Scene object (default) • Scene activation objects **Behaviour** When set to 'Scene object' the group object 'Smart Scene Plate - Call up / save scene output' object will send the configured scene number when scene buttons are pressed. When set to 'Scene activation objects' There will be 5 X 1 bit group objects available: • Smart Scene Plate - Top right scene activate output • Smart Scene Plate - Bottom right scene activate output • Smart Scene Plate - Bottom left scene activate output • Smart Scene Plate - Top left scene activate output • Smart Scene Plate - Off scene activate output The corresponding group object will send a '1' when the corresponding scene is selected on the switch. This is useful when there is a third party server that is controlling and managing scenes and the switch is intended to discreetly trigger specific scenes. Optionally instead of sending a 1 bit (1) on the "Smart Scene Plate - Off scene activate output" group object to activate an OFF scene you can also send a 1 bit (0), by setting "Turn room off using" to "1 bit (0) telegram".

*Top left button “ON” scene number Only shown when “Activate scenes using” is set to “Scene object”	Configures the “ON” scene for the specified button. **Value** • Min: 1 • Max: 64 • Step: 1 • Default: 1 **Behaviour** On pressing the specified button the “ON” scene will be sent on the “Scene Plate - Call up / save scene output” group object, unless the scene is already selected in which case the room will be turned OFF using the “OFF scene” or via a 1 bit discrete OFF depending on the configuration of the “Turn room off using” parameter.
*Top right button “ON” scene number Only shown when “Activate scenes using” is set to “Scene object”	Configures the “ON” scene for the specified button. **Value** • Min: 1 • Max: 64 • Step: 1 • Default: 2 **Behaviour** On pressing the specified button the “ON” scene will be sent on the “Scene Plate - Call up / save scene output” group object, unless the scene is already selected in which case the room will be turned OFF using the “OFF scene” or via a 1 bit discrete OFF depending on the configuration of the “Turn room off using” parameter.
*Bottom left button “ON” scene number Only shown when “Activate scenes using” is set to “Scene object”	Configures the “ON” scene for the specified button. **Value** • Min: 1 • Max: 64 • Step: 1 • Default: 3 **Behaviour** On pressing the specified button the “ON” scene will be sent on the “Scene Plate - Call up / save scene output” group object, unless the scene is already selected in which case the room will be turned OFF using the “OFF scene” or via a 1 bit discrete OFF depending on the configuration of the “Turn room off using” parameter.
*Bottom right button “ON” scene number Only shown when “Activate scenes using” is set to “Scene object”	Configures the “ON” scene for the specified button. **Value** • Min: 1 • Max: 64 • Step: 1 • Default: 4 **Behaviour** On pressing the specified button the “ON” scene will be sent on the “Scene Plate - Call up / save scene output” group object, unless the scene is already selected in which case the room will be turned OFF using the “OFF scene” or via a 1 bit discrete OFF depending on the configuration of the “Turn room off using” parameter.
*”OFF” scene number	Defines what scene number the “OFF” scene is.

Only shown when "Activate scenes using" is set to "Scene object"	**Value** • Min: 1 • Max: 64 • Step: 1 • Default: 64
*Action on long press Only shown when "Activate scenes using" is set to "Scene object"	Allows the long press functionality to be configured. **Value** • Do nothing (Default) • Save scene • Single button toggle dimming **Behaviour** When set to 'save scene' If the user has manually adjusted the light circuits that are connected to the currently active scene, a long press on the button will update the scene in the device that is being used to manage the scenes. The next time this scene is called the lights will be set to the new, saved scene setting. If set to 'Single button toggle dimming', a long press will send a 4-bit dim down 100% telegram and on release it will send a break telegram. The next long press will send a 4-bit dim up 100% telegram and on release it will send a break telegram. The long press for dimming will only work on the currently selected scene and the centre button, long presses on all other buttons will simply be ignored.
**Long press starting at Only shown when 'Action on long press" is set to 'Save scene' or 'Single button toggle dimming'	Defines the time in milliseconds that a long press is detected. Button presses lasting less than this defined period will be classed as a short press. **Options** • 300 ms • 400 ms (default for 'Single button toggle dimming') • 500 ms • 600 ms • 700 ms • 800 ms • 900 ms • 1000 ms (default for 'save scene') • 2000 ms • 3000 ms • 4000 ms • 5000 ms **Behaviour** When set to the smallest possible value (300 ms) long press functionality will begin as soon as the user's finger remains on the button for at least 300 ms. *NOTE: monitor the user interacting with the switch. If they are prone to slow/long button presses we would recommend increasing this 'long press starting at' parameter to avoid them accidentally triggering long presses when they meant to perform a short press.*
Enable motion sensor blocking object	Enables a 1bit blocking object. **Options** • Disable (default) • Enable

	Behaviour When enabled a 'Motion sensor blocking output' object will become available. The 'Smart scene plate - Motion sensor blocking output' object can be used to block a motion sensor from timing out. When enabled, the 'Motion sensor blocking output' object will be sent a '1' at the same time a "ON" scene is sent and a "0" when a "OFF" scene is sent. (Assuming default setting of "Motion sensor blocking polarity")
Motion sensor blocking polarity Only shown when 'Enable motion sensor blocking object' is set to 'Enabled'	Set the polarity of the motion sensor blocking object. **Options** • 1 = Block / 0 = Unblock • 0 = Block / 1 = Unblock **Behaviour** If set to "1 = Block / 0 = Unblock" sends a 1 on Smart scene plate - Motion sensor blocking output group object to block the motion sensor when any of the "ON" scenes are selected, it will send a 0 when turned "OFF". If set to "0 = Block / 1 = Unblock" sends a 0 on Smart scene plate - Motion sensor blocking output group object to block the motion sensor when any of the "ON" scenes are selected, it will send a 1 when turned "OFF".
*Blind control set up Stop blinds by Only visible when 'Corner button layout' is set to ' 2 scene select buttons (left) + 2 blind buttons (right)' or '2 scene select buttons (right) + 2 blind buttons (left)'	Defines how the blinds can be stopped during travel. **Options** • Release the button • Short press (default) **Behaviour** When set to 'Short press', during the travel of the blinds, another short press on the same button will stop the blinds where they are. When set to 'Release the button' the blinds will travel while the user has their finger on the button, as soon as they remove their finger from the button the blinds will stop movement.
*Long press starting at Only visible when 'Corner button layout' is set to ' 2 scene select buttons (left) + 2 blind buttons (right)' or '2 scene select buttons (right) + 2 blind buttons (left)'	Defines the time in milliseconds that a long press is detected. Button presses lasting less than this defined period will be classed as a short press. **Options** • 300 ms • 400 ms (default) • 500 ms • 600 ms • 700 ms • 800 ms • 900 ms • 1000 ms • 2000 ms • 3000 ms • 4000 ms • 5000 ms
Number of feedback objects	To ensure the toggle state remains correct, the global room ON / OFF state has to be determined dynamically. By connecting monitoring objects to the feedback objects of controlled channels the global room state can be determined.

	Value ● Min: 1 ● Max: 16 ● Step: 1 ● Default: 2 It is important to connect the feedback objects (1-16 depending on how many lighting channels are present in the room) as they enable the keypad to keep track of the global room ON/OFF status which is important for toggle operation.

Smart Scene Plate - Advanced

FUNCTION TYPE: SMART SCENE PLATE - ADVANCED	
Parameter	**Description**
* Increase brightness during long press Only shown when 'Action on long press" is set to 'Save scene' or 'Single button toggle dimming' or the "Corner button layout" includes blinds	When enabled the halo status light will temporarily increase in brightness for the duration of the long press to visually acknowledge a long press. **Options** • Disable • Enable (default)
Turn room off using	Defines what data point type is used to turn the room off. **Options** • OFF scene (default) • 1 bit (0) telegram
Feedback evaluation delay after scene activation	Defines the time in seconds that the toggle algorithm waits before evaluating all the feedback channels to determine the room status (ON / OFF). This parameter should be set to be 2 seconds longer than the longest dimming time (0% -> 100%). **Value** • Min: 1 • Max: 15 • Step: 1 • Default: 5
Enable 1 bit double click object	Enables a 1 bit group object that responds to double press on any of the 5 buttons on the switch. **Options** • Disable (default) • Enable
* Double click speed Only shown when 'Enable 1 bit double click object" is set to 'Enable'	Defines the speed at which a double tap must be done. **Options** • Slow • Medium • Fast (default)
*Value sent on double click Only shown when 'Enable 1 bit double click object" is set to 'Enable'	Defines what value is sent ('1' or '0') on the 'Double click output' group object when a double click is detected. **Options** • On • Off (default) **Behaviour** This is a useful secondary function that can be enabled on the switch to allow for certain switches to perform actions such as 'global off' functions. E.g. double tap on the bedside switches can turn the whole house off.

Parameters - Per Function (Five independent buttons)

Here we explain the parameters available for each of the 5 buttons on the switch. These buttons appear in the left hand menu when the operating mode is set to 'Five independent buttons.

No Function

FUNCTION TYPE: NO FUNCTION	
Parameter	**Description**
Function	Dropdown to select the function type required for that specific button. **Options** • **No function** (SELECTED) • Switching • Dimming • Blind • Scene • Value sending **Behaviour** The list of available group objects and parameters will change depending on the selected function type.
Status feedback LEDs	See Status Feedback LEDs table

Switching

FUNCTION TYPE: SWITCHING	
Parameter	**Description**
Function	Dropdown to select the function type required for that specific button. **Options** • No function • **Switching** (SELECTED) • Dimming • Blind • Scene • Value sending **Behaviour** The list of available group objects and parameters will change depending on the selected function type.
Command on pressing	Defines the value sent at output when the button is pressed (rising edge). **Options** • No reaction • ON • OFF • Toggle (default) **Behaviour** If set to 'ON' when the button is pressed a '1' will be sent on the "Button name - Switching output" group object. If set to 'OFF', when the button is pressed a '0' will be sent on the "Button name - Switching output" group object. If set to 'Toggle' after power cycle the first press will send a '1', the next press will send a '0'.
Command on releasing	Defines the value sent at output when the button is released (falling edge). **Options** • No reaction (default) • ON • OFF • Toggle **Behaviour** If set to 'ON' when the button is released a '1' will be sent on the "Button name - Switching output" group object. If set to 'OFF', when the button is released a '0' will be sent on the "Button name - Switching output" group object. If set to 'Toggle' after power cycle the first press will send a '1', the next press will send a '0'.
Status feedback LEDs Behaviour	See Status Feedback LEDs table

Dimming

FUNCTION TYPE: DIMMING	
Parameter	**Description**
Function	Dropdown to select the function type required for that specific button. **Options** ● No function ● Switching ● **Dimming** (SELECTED) ● Blind ● Scene ● Value sending **Behaviour** The list of available group objects and parameters will change depending on the selected function type.
Reaction to long / short press	Defines how the button will react to long press and short presses. **Options** ● Single button operation (default) ● Brighter / ON ● Brighter / Toggle ● Darker / OFF ● Darker / Toggle **Behaviour** When set to **'Single button operation'** will allow the single button to dim up on the first long press and dim down on the next long press. A short press will turn the lights off and the next short press will turn the lights on. When set to **'Brighter / ON**' a long press will only dim up, and a short press will turn the lights on. When set to **'Brighter / Toggle'** a long press will dim lights up, and a short press will toggle between lights on and off. When set to **'Darker / OFF'** a long press will only dim down, and a short press will turn the lights off. When set to **'Darker / Toggle'** a long press will dim lights down, and a short press will toggle between lights on and off.
Long press starting at	Defines the time in milliseconds that a long press is detected. Button presses lasting less than this defined period will be classed as a short press. **Options** ● 300 ms ● 400 ms (default) ● 500 ms ● 600 ms ● 700 ms ● 800 ms ● 900 ms ● 1000 ms ● 2000 ms ● 3000 ms

	• 4000 ms • 5000 ms **Behaviour** When set to the smallest possible value (300 ms) long press functionality will begin as soon as the user's finger remains on the button for at least 300 ms. *NOTE: monitor the user interacting with the switch. If they are prone to slow/long button presses we would recommend increasing this 'long press starting at' parameter to avoid them accidentally triggering long presses when they meant to perform a short press.*
*Advanced parameters Only shown when 'Reaction to long / short press' is set to 'Brighter / ON' , 'Brighter / Toggle', 'Darker / OFF' or 'Darker / Toggle'	Enables or disables the advanced dimming parameters. **Options** • Disable (default) • Enable
**Send stop Telegram Only shown when 'Advanced parameters' is set to 'Enable'	Defines if a 'stop' telegram is sent when finger is released from the keypad. **Options** • On (default) • Off
**Brightness increment Only shown when 'Advanced parameters' is set to 'Enable'	Sets the % change in brightness per step. **Options** • 100% (Default) • 50% • 25% • 12.5% • 6% • 3% • 1.5%
**Telegram repetition Only shown when 'Advanced parameters' is set to 'Enable'	Turns ON/OFF the telegram repetition when the finger remains on the button. **Options** • On • Off (default)
***Time between telegrams Only shown when 'Telegram repetition' is set to 'On'	Sets the frequency of telegrams sent to bus during dimming. **Value** • Min: 100 • Max: 65535 • Step: 100 • Default: 200 • Unit: Miliseconds
Status feedback LEDs	See Status Feedback LEDs table

Blind

FUNCTION TYPE: BLIND	
Parameter	**Description**
Function	Dropdown to select the function type required for that specific button. **Options** ● No function ● Switching ● Dimming ● **Blind** (SELECTED) ● Scene ● Value sending **Behaviour** The list of available group objects and parameters will change depending on the selected function type.
Operation	Defines how the button controls the connected blinds. **Options** ● Single button operation (default) ● Down ● Up **Behaviour** Single button operation will toggle between up and down commands. The first long press will raise the blinds, the next long press will lower the blinds and so on. A short press will step the blinds toggling between up / down. When set to 'Down' a press of the button will bring the blinds down. A short press will step the blinds in the same direction. When set to 'Up' a press of the button will bring the blinds up. A short press will step the blinds in the same direction. *Note: Single button mode is intended only for roller blinds. In this mode both the STOP/STEP object and the MOVE objects will toggle between sending UP and DOWN commands.*
Long press starting at	Defines the time in milliseconds that a long press is detected. Button presses lasting less than this defined period will be classed as a short press. **Options** ● 300 ms ● 400 ms (default) ● 500 ms ● 600 ms ● 700 ms ● 800 ms ● 900 ms ● 1000 ms ● 2000 ms ● 3000 ms

	• 4000 ms • 5000 ms **Behaviour** When set to the smallest possible value (300 ms) long press functionality will begin as soon as the user's finger remains on the button for at least 300 ms. *NOTE: monitor the user interacting with the switch. If they are prone to slow/long button presses we would recommend increasing this 'long press starting at' parameter to avoid them accidentally triggering long presses when they meant to perform a short press.*
Stop blinds by	Defines how the user can stop the blinds during the travel if desired. **Options** • Release the button • Short press (default) **Behaviour** If set to "Short press" the blinds will begin full travel up/down on a long press. A short press on the same button will stop the blinds where they are in their travel. If set to 'Release the button' the user must keep their finger on the button to keep the blinds travelling up/down and when they remove their finger the blinds will stop at their current location.
Status feedback LEDs Behaviour	See Status Feedback LEDs table

Scene

FUNCTION TYPE: SCENE	
Parameter	**Description**
Function	Dropdown to select the function type required for that specific button. **Options** • No function • Switching • Dimming • Blind • **Scene** (SELECTED) • Value sending **Behaviour** The list of available group objects and parameters will change depending on the selected function type.
Scene mode	Defines how the button controls the connected blinds. **Options** • Send single scene (default) • Toggle (ON / OFF) scene **Behaviour** When set to 'Send single scene' a press on the button will send the scene value set on 'Scene number' to the "Button name - Scene value output" group object. Subsequent presses on the same button will send the same command again (room state will not change) (Discrete command). When set to 'Toggle (ON / OFF) scene' the first press of the button will send the ON 'Scene number' the next press will send the 'OFF' scene.
*Turn room off using Only shown when 'Scene mode' is set to 'Toggle (ON / OFF) scene	Defines what data type is sent when the OFF scene is called. **Options** • OFF scene • 1 bit (0) telegram **Behaviour** When set to "OFF scene" the configured "OFF scene" will be sent on the Button name - Scene value output when the room is to be turned OFF. If set to 1 bit (0) telegram. Then the group object "Button name - Scene switching (OFF) output" will be visible. This object will send a logic 0 to turn the lights OFF and can be connected directly to the switching input of the lighting channels.
*Scene number Only visible when 'Scene mode' is set to 'Send single scene' 	Sets the scene number which is sent on this button **Value** • Min: 1 • Max: 64 • Step: 1 • Default: 1

*ON - Scene number Only shown when "Scene mode" is set to "Toggle (ON / OFF) Scene" 	Defines what scene number is sent for the 'ON' scene. **Value** • Min: 1 • Max: 64 • Step: 1 • Default: 1
*OFF - Scene number Only shown when "Scene mode" is set to "Toggle (ON / OFF) Scene" and 'Turn room off using' is set to 'OFF scene' 	Defines what scene number is sent for the 'OFF' scene. **Value** • Min: 1 • Max: 64 • Step: 1 • Default: 64
Action on long press	This defines what happens when a long press is detected on this button. **Options** • Do nothing • Save Scene • Single button dimming **Behaviour** When set to 'do nothing' a long press will not do anything. When set to 'Save scene', a long press will save the currently configured lighting scene to the scene number of the connected button. When set to 'Single button dimming' the first long press will start dimming the selected scene down in brightness, subsequent long press will start dimming up the brightness of the scene.
*Long press starting at Only visible when 'Action on long press' is set to 'Save scene' or ' single button dimming'	Defines the time in milliseconds that a long press is detected. Button presses lasting less than this defined period will be classed as a short press. **Options** • 300 ms • 400 ms (default) • 500 ms • 600 ms • 700 ms • 800 ms • 900 ms • 1000 ms • 2000 ms • 3000 ms • 4000 ms • 5000 ms **Behaviour** When set to the smallest possible value (300 ms) long press functionality will begin as soon as the user's finger remains on the button for at least 300 ms. *NOTE: monitor the user interacting with the switch. If they are prone to slow/long button presses we would recommend increasing this 'long press starting at' parameter to avoid them accidentally triggering long presses when*

	they meant to perform a short press.
Enable motion sensor blocking object	Enables a 1 bit blocking group object 'Button name - Motion sensor blocking output' **Options** • Disable (default) • Enable **Behaviour** When enabled a 'Button name - Motion sensor blocking output' object will become available.. The 'Motion sensor blocking output' can be used to block a motion sensor from timing out or turning the lights "ON" when motion is detected.
*Value sent on 1 bit motion sensor blocking object Only shown when 'Scene mode' is set to 'Single scene'	Defines the value sent on the 'Motion sensor blocking output' Group object when the scene is called. **Options** • 1 (default) • 0
*Value sent on 1 bit motion sensor blocking object (ON) Only shown when 'Scene mode' is set to 'Toggle (ON/OFF) scene'	Defines the value sent on the 'Motion sensor blocking output' Group object when a "ON" scene is called. **Options** • 1 (default) • 0
*Value sent on 1 bit motion sensor blocking object (OFF) Only shown when 'Scene mode' is set to 'Toggle (ON/OFF) scene'	Defines the value sent on the 'Motion sensor blocking output' Group object when "OFF" scene is called. **Options** • 1 • 0 (default)
Status feedback LEDs Behaviour	See Status Feedback LEDs table

Value Sending

FUNCTION TYPE: VALUE SENDING	
Parameter	**Description**
Function	Dropdown to select the function type required for that specific button. **Options** ● No function ● Switching ● Dimming ● Blind ● Scene ● **Value sending** (SELECTED) **Behaviour** The list of available group objects and parameters will change depending on the selected function type.
Long press starting at	Defines the time in milliseconds that a long press is detected. Button presses lasting less than this defined period will be classed as a short press. **Options** ● 300 ms ● 400 ms ● 500 ms ● 600 ms ● 700 ms ● 800 ms ● 900 ms ● 1000 ms (default) ● 2000 ms ● 3000 ms ● 4000 ms ● 5000 ms **Behaviour** When set to the smallest possible value (300 ms) long press functionality will begin as soon as the user's finger remains on the button for at least 300 ms. *NOTE: monitor the user interacting with the switch. If they are prone to slow/long button presses we would recommend increasing this 'long press starting at' parameter to avoid them accidentally triggering long presses when they meant to perform a short press.*
Double press speed	Defines how fast a double press function must be performed for the switch to acknowledge it as a double press. **Options** ● Slow ● Medium ● Fast (default) **Behaviour** When set to 'Fast' two presses must be performed in quick succession to perform the double click function. When set to 'Slow' the double press can be slower and the switch will still register a double press.

Object type	Dropdown menu to select the specific data type required to be sent. These are advanced functions for expert KNX integrators. **Options** • 1 Bit (default) • 1 Byte unsigned • 1 Byte percentage • 1 Byte signed • 2 Bytes unsigned • 2 Byte signed • 2 Byte DPT9 float • RGB 1 X 3 Byte objects • RGB 1 X 3 Byte object DPT 232.600 • HVAC
*Value 1 (0...255) *Value 2 (0...255) *Value 3 (0...255) *Only shown if "Object type" is "1-Byte unsigned"* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: 0 • Max: 255 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name - 1-Byte unsigned output" group object.
*Value 1 (0...100%) *Value 2 (0...100%) *Value 3 (0...100%) *Only shown if "Object type" is "1-Byte percentage"* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: 0 • Max: 100 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name - 1-Byte percentage output" group object.
*Value 1 (-128...127) *Value 2 (-128...127) *Value 3 (-128...127) *Only shown if "Object type" is "1-Byte signed"* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: -128 • Max: 127 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name - 1-Byte signed output" group object.
*Value 1 (0...65535) *Value 2 (0...65535) *Value 3 (0...65535) *Only shown if "Object type" is "2-Byte unsigned "*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: 0 • Max: 65535 • Step: 1 • Default: 0

	**Behaviour** When triggered the value defined here is sent on the "Button name - 2-Byte unsigned output" group object.
*Value 1 (-32768...32767) *Value 2 (-32768...32767) *Value 3 (-32768...32767) *Only shown if "Object type" is "2-Byte signed "* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: -32768 • Max: 32767 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name - 2-Byte signed output" group object.
*Value 1 (-671088.64...670760.96) *Value 2 (-671088.64...670760.96) *Value 3 (-671088.64...670760.96) *Only shown if "Object type" is "2-Byte float "* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: -671088.64 • Max: 670433.28 • Step: 1 • Default: 1 **Behaviour** When triggered the value defined here is sent on the "Button name - 2-Byte float output" group object.
*RGB Value 1 *RGB Value 2 *RGB Value 3 *Only shown if "Object type" is "RGB 3 X 1-Byte objects"* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Default: #000000 Use the colour palette selection tool by clicking on the square button to right of value box or input colour value **Behaviour** When triggered the value defined here is sent on the "Button name - RGB red output", "Button name - RGB green output" and "Button name - RGB blue output" group objects.
*RGB Value 1 *RGB Value 2 *RGB Value 3 *Only shown if "Object type" is "RGB 1 X 3-Byte objects DPT 232.600"* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Default: #000000 Use the colour palette selection tool by clicking on the square button to right of value box or input colour value **Behaviour** When triggered the value defined here is sent on the "Button name - RGB output" group object.
*Value 1 *Value 2 *Value 3 *Only shown if "Object type" is*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Options** • 0 - Auto • 1 - Comfort

"HVAC" 	• 2 - Standby • 3 - Economy • 4 - Building protection **Behaviour** When triggered the value defined here is sent on the "Button name - HVAC output" group object.
Button Event Only shown when 'Object type' set to '1 bit' 	Defines if the button will perform with short/long/double click functions or press and release. **Options** • Short / Long / Double Click (default) • Press Release **Behaviour** When set to 'Short / Long / Double Click' there is the option to configure what data is sent on each type (short press, long press and double click). When set to 'Press / Release' there is the option to configure the data sent on press and release only.
*Command on short press Only shown when "Button Event" is set to "Short / Long/ Double Click" Only shown when 'Object type' set to '1 bit'	Defines what value is sent on a short press. **Options** • No reaction (Default) • ON • OFF • Toggle **Behaviour** When set to 'No reaction', no value is sent when a short press is detected. When set to 'ON' a '1' is sent when a short press is detected. When set to 'OFF' a '0' is sent when a short press is detected. When set to 'Toggle' a '1' is sent on the first short press, then a '0' on the subsequent short press and so on.
*Command on long press Only shown when "Button Event" is set to "Short / Long/ Double Click" Only shown when 'Object type' set to '1 bit'	Defines what value is sent on a long press. **Options** • No reaction (Default) • ON • OFF • Toggle **Behaviour** When set to 'No reaction', no value is sent when a long press is detected. When set to 'ON' a '1' is sent when a long press is detected. When set to 'OFF' a '0' is sent when a long press is detected. When set to 'Toggle' a '1' is sent on the first long press, then a '0' on the subsequent long press and so on.
*Command on double press Only shown when "Button Event" is set to "Short / Long/ Double Click" Only shown when 'Object type' set to '1 bit'	Defines what value is sent on a double click. **Options** • No reaction (Default) • ON • OFF • Toggle **Behaviour**

	When set to 'No reaction', no value is sent when a double click is detected. When set to 'ON' a '1' is sent when a double click is detected. When set to 'OFF' a '0' is sent when a double click is detected. When set to 'Toggle' a '1' is sent on the first double click, then a '0' on the subsequent double click and so on.
Command on bus recovery Only shown when "Button Event" is set to "Short / Long/ Double Click" Only shown when 'Object type' set to '1 bit'	Defines what value is sent on a bus recovery. **Options** • No reaction (Default) • ON • OFF **Behaviour** Defines what value is sent on bus recovery.
**Command on pressing Only shown when "Button Event" is set to "Press / Release"	Defines what value is sent when button press is detected (rising edge). **Options** • No reaction (Default) • ON • OFF • Toggle **Behaviour** When set to 'No reaction', no value is sent when button press is detected. When set to 'ON' a '1' is sent when a button press is detected. When set to 'OFF' a '0' is sent when a button press is detected. When set to 'Toggle' a '1' is sent on the first button press, then a '0' on the subsequent button press and so on.
**Command on releasing Only shown when "Button Event" is set to "Press / Release"	Defines what value is sent when button release is detected (falling edge). **Options** • No reaction (Default) • ON • OFF • Toggle **Behaviour** When set to 'No reaction', no value is sent when button release is detected. When set to 'ON' a '1' is sent when a button release is detected. When set to 'OFF' a '0' is sent when a button release is detected. When set to 'Toggle' a '1' is sent on the first button release , then a '0' on the subsequent button release and so on.
*Send on pressing Only shown when 'Button event' is set to 'Short / long / double press' And Object type is NOT set to '1 bit'	Defines the value sent on pressing the button. **Options** • Nothing (Default) • Value 1 • Value 2 • Value 3 • Toggle between value 1 and 2
*Send on release Only shown when 'Button eventButton Event' is set to 'Short / long / double press'	Defines the value sent on releasing the button **Options** • Nothing (Default) • Value 1

And Object type is NOT set to '1 bit'	• Value 2 • Value 3 • Toggle between value 1 and 2
*Send on short press Only shown when 'Button eventButton Event' is set to 'Short / long / double press' And Object type is NOT set to '1 bit'	Defines the value sent on short press **Options** • Nothing (Default) • Value 1 • Value 2 • Value 3 • Toggle between value 1 and 2
*Send on long press Only shown when 'Button event' is set to 'Short / long / double press' And Object type is NOT set to '1 bit'	Defines the value sent on a long press. **Options** • Nothing (Default) • Value 1 • Value 2 • Value 3 • Toggle between value 1 and 2
*Send on double press Only shown when 'Button event' is set to 'Short / long / double press' And Object type is NOT set to '1 bit'	Defines the value sent on a double press. **Options** • Nothing (Default) • Value 1 • Value 2 • Value 3 • Toggle between value 1 and 2
*Send on bus recovery Only shown when 'Button event' is set to 'Short / long / double press' And Object type is NOT set to '1 bit'	Defines what value is sent after the device is taken offline and returns online. E.g. a bus power cycle. **Options** • Value 1 • Value 2 • Value 3 **Behaviour** The value defined for 'Value 1', 'Value 2' and 'Value 3' can be selected from to be sent when bus recovers.
Status feedback LEDs Behaviour	See Status Feedback LEDs table

2nd Object

2nd Object	
Parameter	**Description**
Enable 2nd Object	Allows a second value sending group object to be configured in addition to the standard button functionality. See '2nd object' **Options** • Disable (default) • Enable
*Telegram sending delay Only shown when 'Enable second object' is set to 'Enabled'	Allows a delay to be configured between the first telegram (main function) and this second telegram being sent to the bus. **Value** • Min: 00:00:00 • Max: 23:59:59 **Behaviour** This is the time in hours, minutes and seconds that will be waitied after the button press before the second configured telegram will be sent to the bus.
*Object type Only shown when 'Enable second object' is set to 'Enabled'	Dropdown menu to select the specific data type required for the 2nd object. These are advanced functions for expert KNX integrators. **Options** • 1 Bit (default) • 1 Byte unsigned • 1 Byte percentage • 1 Byte signed • 2 Bytes unsigned • 2 Byte signed • 2 Byte DPT9 float • RGB 1 X 3 Byte objects • RGB 1 X 3 Byte object DPT 232.600 • HVAC For more information please see 'Function type: value sending'
*Send on short press Only shown when 'Button eventButton Event' is set to 'Short / long / double press' And Object type is NOT set to '1 bit'	Defines the value sent on a short press. **Options** • Nothing • Value 1 • Value 2 • Value 3 • Toggle between value 1 and 2
*Send on long press Only shown when 'Button eventButton Event' is set to 'Short / long / double press'	Defines the value sent on a long press. **Options** • Nothing • Value 1

And Object type is NOT set to '1 bit'	• Value 2 • Value 3 • Toggle between value 1 and 2
*Send on double press Only shown when 'Button eventButton Event' is set to 'Short / long / double press' And Object type is NOT set to '1 bit'	Defines the value sent on a double press. **Options** • Nothing • Value 1 • Value 2 • Value 3 • Toggle between value 1 and 2
*Send on bus recovery Only shown when 'Button event' is set to 'Short / long / double press' And Object type is NOT set to '1 bit'	Defines what value is sent after the device is taken offline and returns online. E.g. a bus power cycle. **Options** • Value 1 • Value 2 • Value 3 **Behaviour** The value defined for 'Value 1', 'Value 2' and 'Value 3' can be selected from to be sent when bus recovers.
*Value 1 (0...255) *Value 2 (0...255) *Value 3 (0...255) *Only shown if "Object type" is "1-Byte unsigned"* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: 0 • Max: 255 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name 2nd Object - 1-Byte unsigned output" group object.
*Value 1 (0...100%) *Value 2 (0...100%) *Value 3 (0...100%) *Only shown if "Object type" is "1-Byte percentage"* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: 0 • Max: 100 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name 2nd Object - 1-Byte percentage output" group object.
*Value 1 (-128...127) *Value 2 (-128...127) *Value 3 (-128...127) *Only shown if "Object type" is "1-Byte signed"*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: -128 • Max: 127 • Step: 1 • Default: 0 **Behaviour**

	When triggered the value defined here is sent on the "Button name 2nd Object - 1-Byte signed output" group object.
*Value 1 (0...65535) *Value 2 (0...65535) *Value 3 (0...65535) *Only shown if "Object type" is "2-Byte unsigned "* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: 0 • Max: 65535 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name 2nd Object - 2-Byte unsigned output" group object.
*Value 1 (-32768...32767) *Value 2 (-32768...32767) *Value 3 (-32768...32767) *Only shown if "Object type" is "2-Byte signed "* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: -32768 • Max: 32767 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name 2nd Object - 2-Byte signed output" group object.
*Value 1 (-671088.64...670760.96) *Value 2 (-671088.64...670760.96) *Value 3 (-671088.64...670760.96) *Only shown if "Object type" is "2-Byte float DPT9 "* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: -671088.64 • Max: 670433.28 • Step: 1 • Default: 1 **Behaviour** When triggered the value defined here is sent on the "Button name 2nd Object - 2-Byte float output" group object.
*RGB Value 1 *RGB Value 2 *RGB Value 3 *Only shown if "Object type" is "RGB 3 X 1-Byte objects"* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Default: #000000 Use the colour palette selection tool by clicking on the square button to right of value box or input colour value **Behaviour** When triggered the value defined here is sent on the "Button name 2nd Object - RGB red output", "Button name 2nd Object - RGB green output" and "Button name 2nd Object - RGB blue output" group objects.
*RGB Value 1 *RGB Value 2 *RGB Value 3	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Default: #000000

Only shown if "Object type" is "RGB 1 X 3-Byte objects DPT 232.600" 	Use the colour palette selection tool by clicking on the square button to right of value box or input colour value **Behaviour** When triggered the value defined here is sent on the "Button name 2nd Object - RGB output" group object.
*Value 1 *Value 2 *Value 3 *Only shown if "Object type" is "HVAC"* 	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Options** • 0 - Auto • 1 - Comfort • 2 - Standby • 3 - Economy • 4 - Building protection **Behaviour** When triggered the value defined here is sent on the "Button name 2nd Object - HVAC output" group object.

Status Feedback LED control

The following LED function parameters are available across all the function types. This menu explains the variations and factors which are adjusted.

Status Feedback LED's Only shown on outside corner buttons not the centre button, as the centre button does not have its own dedicated status feedback LED's.	Configures how the LED status feedback will perform on the selected button. **Options** (when 'Function' is set to ' Switching' or 'Dimming') • ON • OFF • Status indication • Inverted status indication • Control via separate object **Options** (when 'Function' is set to 'Blind', 'Scene' or 'Value sending') • ON • OFF • Control via separate object **Behaviour** When set to 'ON' the status LED in question will remain on at all times. When set to 'OFF' the status LED in question will remain off at all times, unless "Turn on during touch" is enabled. When set to 'Status indication', if the connected actuator channel is on, the status LED will be on, when the connected actuator channel is off, the status LED will be off (only for 'Switching' and 'Dimming'), for ' Scenes' the LED is on when the scene corresponding is selected). When set to 'inverted status indication', if the connected actuator channel is on, the status LED will be off, when the connected actuator channel is off, the status LED will be on. (only for 'Switching' and 'Dimming', for ' Scenes' the LED is off when the scene corresponding is selected). 'Control via separate object' allows the status LED in question to be controlled via a separate group object shown configured in "Status feedback LED control object type".
*Turn on during touch	Defines if the status feedback LEDs illuminate during touch. **Options** • Yes • No **Behaviour** When set to 'Yes' the status feedback LEDs will illuminate as soon as a button press is detected regardless of the Status Feedback LED defined "Behaviour". For the centre button all 4 corners will illuminate while the finger is touching the button, for a corner button only that corner will illuminate.
* Increase brightness during long press Only shown when 'Function' is set to 'Dimming', 'Blind' and 'Value sending' & 'Turn on during touch' is 'Yes'.	When enabled the halo status light will temporarily increase in brightness for the duration of the long press to visually acknowledge a long press. **Options** • Disable • Enable (default)
Colour	This colour is defined in the General menu under 'Status feedback LEDs' colour. If this is set to 'Different per button' the following dropdown menu will be available:

*dropdown only shown when 'Status feedback LEDs' colour is set to 'Different per button' in 'General menu'.	**Options** • White (default) • Red • Magenta • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3
*Status feedback LED control object type Only shown when 'Status Feedback LED's' is set to 'Control via separate object'	Sets the data type that is controlling the status LED **Options** • 1 bit (default) • RGB 1 X 3 byte object DPT 232.600 • RGBW 4 X 1 byte objects • HVAC operating mode • 1 byte signed • 1 byte unsigned
**Status feedback LED mode Only shown when 'Status Feedback LED's' is set to 'Control via separate object' and 'Status feedback LED control object type" is set to '1 bit'	Defines how the status LED will perform when the function is active. **Options** • 1 = ON / 0 = OFF • 1 = OFF / 0 = ON • 1 = FLASH / 0 = OFF • 1 = OFF / 0 = FLASH
**Auto Colour Only shown when 'Status Feedback LED's' is set to 'Control via separate object' and 'Status feedback LED control object type' is set to 'HVAC operating mode'	Defines the colour the status LED will illuminate when the HVAC mode is set to 'Auto' mode. **Options** • **Warm white (default)** • Red • Magenta • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3
**Comfort Colour Only shown when 'Status Feedback LED's' is set to 'Control via separate object' and 'Status feedback LED control object type' is set to 'HVAC operating mode'	Defines the colour the status LED will illuminate when the HVAC mode is set to 'Comfort' mode. **Options** • Warm white • **Red (default)** • Magenta • Blue • Cyan • Green • Yellow

	• Custom colour 1 • Custom colour 2 • Custom colour 3
**Standby Colour Only shown when 'Status Feedback LED's' is set to 'Control via separate object' and 'Status feedback LED control object type' is set to 'HVAC operating mode'	Defines the colour the status LED will illuminate when the HVAC mode is set to 'Standby' mode. **Options** • Warm white • Red • Magenta • Blue • **Cyan(default)** • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3
**Economy Colour Only shown when 'Status Feedback LED's' is set to 'Control via separate object' and 'Status feedback LED control object type' is set to 'HVAC operating mode'	Defines the colour the status LED will illuminate when the HVAC mode is set to 'Economy' mode. **Options** • Warm white • Red • Magenta • Blue • Cyan • **Green (default)** • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3
**Building protection colour Only shown when 'Status Feedback LED's' is set to 'Control via separate object' and 'Status feedback LED control object type' is set to 'HVAC operating mode'	Defines the colour the status LED will illuminate when the HVAC mode is set to 'Building protection colour' mode. **Options** • Warm white • Red • Magenta • Blue • Cyan • Green • **Yellow (Default)** • Custom colour 1 • Custom colour 2 • Custom colour 3
**Status LED on when Only shown when 'Status Feedback LED's' is set to 'Control via separate object' and 'Status feedback LED control object type' is set to '1 byte signed' or '1 byte unsigned'	Defines how the status light performs in relation to the received value compared to a set threshold. **Options** • Received value greater than threshold • Received value less than threshold • Received value equal to threshold **Behaviour** If set to 'Received value greater than threshold' and received value is higher than the threshold set on 'Threshold', the status LED will be "ON" else it will be "OFF"

	If set to 'Received value less than threshold' and received value is lower than the threshold set on 'Threshold', the status LED will be "ON" else it will be "OFF" If set to 'Received value equal to threshold' and received value is the exact same value as the threshold set on 'Threshold', the status LED will be "ON", else it will be "OFF"
**Threshold Only shown when 'Status Feedback LED's' is set to 'Control via separate object' and 'Status feedback LED control object type' is set to '1 byte signed'	Threshold used for logical evaluation **Value** • Min: -128 • Max: 127 • Step: 1 • Default: 5
**Threshold Only shown when 'Status Feedback LED's' is set to 'Control via separate object' and 'Status feedback LED control object type' is set to '1 byte unsigned'	Threshold used for logical evaluation **Value** • Min: 0 • Max: 255 • Step: 1 • Default: 5
Override colour *Centre button only.	Defines the colour of the middle button halo light feedback **Options** • White (default) • Red • Magenta • Blue • Cyan • Green • Yellow • Custom colour 1 • Custom colour 2 • Custom colour 3 **Behaviour** The colour set here will determine what colour will be illuminated during a press of the middle button (momentary). This is designed to provide a momentary visual confirmation of the middle button being pressed. It will override all 4 outer feedback LED's with the selected colour for the duration of the press.

Advanced Object Types

FUNCTIONAL BLOCK TYPE: ADVANCED OBJECT TYPES	
Parameter	**Description**
Object type	Dropdown menu to select the specific data type required to be sent. These are advanced functions for expert KNX integrators. **Options** • 1 Bit (default) • 1 Byte unsigned • 1 Byte percentage • 1 Byte signed • 2 Bytes unsigned • 2 Byte signed • 2 Byte DPT9 float • RGB 1 X 3 Byte objects • RGB 1 X 3 Byte object DPT 232.600 • HVAC
*Value 1 (0...255) *Value 2 (0...255) *Value 3 (0...255) *Only shown if "Object type" is "1-Byte unsigned"*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: 0 • Max: 255 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name - 1-Byte unsigned output" group object.
*Value 1 (0...100%) *Value 2 (0...100%) *Value 3 (0...100%) *Only shown if "Object type" is "1-Byte percentage"*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: 0 • Max: 100 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name - 1-Byte percentage output" group object.
*Value 1 (-128...127) *Value 2 (-128...127) *Value 3 (-128...127) *Only shown if "Object type" is "1-Byte signed"*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: -128 • Max: 127 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name - 1-Byte signed output" group object.

*Value 1 (0...65535) *Value 2 (0...65535) *Value 3 (0...65535) *Only shown if "Object type" is "2-Byte unsigned "*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: 0 • Max: 65535 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name - 2-Byte unsigned output" group object.
*Value 1 (-32768...32767) *Value 2 (-32768...32767) *Value 3 (-32768...32767) *Only shown if "Object type" is "2-Byte signed "*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: -32768 • Max: 32767 • Step: 1 • Default: 0 **Behaviour** When triggered the value defined here is sent on the "Button name - 2-Byte signed output" group object.
*Value 1 (-671088.64...670760.96) *Value 2 (-671088.64...670760.96) *Value 3 (-671088.64...670760.96) *Only shown if "Object type" is "2-Byte float DPT9 "*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Min: -671088.64 • Max: 670760.96 • Step: 1 • Default: 1 **Behaviour** When triggered the value defined here is sent on the "Button name - 2-Byte float DPT9 output" group object.
*RGB Value 1 *RGB Value 2 *RGB Value 3 *Only shown if "Object type" is "RGB 3 X 1-Byte objects"*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Default: #000000 Use the colour palette selection tool by clicking on the square button to right of value box or input colour value **Behaviour** When triggered the value defined here is sent on the "Button name - RGB red output", "Button name - RGB green output" and "Button name - RGB blue output' group objects.
*RGB Value 1 *RGB Value 2 *RGB Value 3 *Only shown if "Object type" is "RGB 1 X 3-Byte objects DPT 232.600"*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Value** • Default: #000000 Use the colour palette selection tool by clicking on the square button to right of value box or input colour value **Behaviour** When triggered the value defined here is sent on the "Button name - RGB output" group object.

*Value 1 *Value 2 *Value 3 *Only shown if "Object type" is "HVAC"*	Defines the value sent on 'Value 1' / 'Value 2' / 'Value 3'. **Options** • 0 - Auto • 1 - Comfort • 2 - Standby • 3 - Economy • 4 - Building protection **Behaviour** When triggered the value defined here is sent on the "Button name - HVAC output" group object.

*dependant on other parameter selections

How-To Guides

Smart Scene plate (Basic)

For an intuitive user experience, use the 'Smart scene plate' operating mode. It allows control of 4 scenes with the centre button toggling lights on/off.

The 'Smart scene plate' is designed so that every time the user presses a button on the switch, the room will respond. If the active scene button is pressed, it will toggle and turn the room off. If an unselected scene is pressed it will select that scene. Pressing the middle button when any of the light scenes are on will turn the room off, if no scenes are selected it will select the last selected scene.

To set up the switch in this configuration:

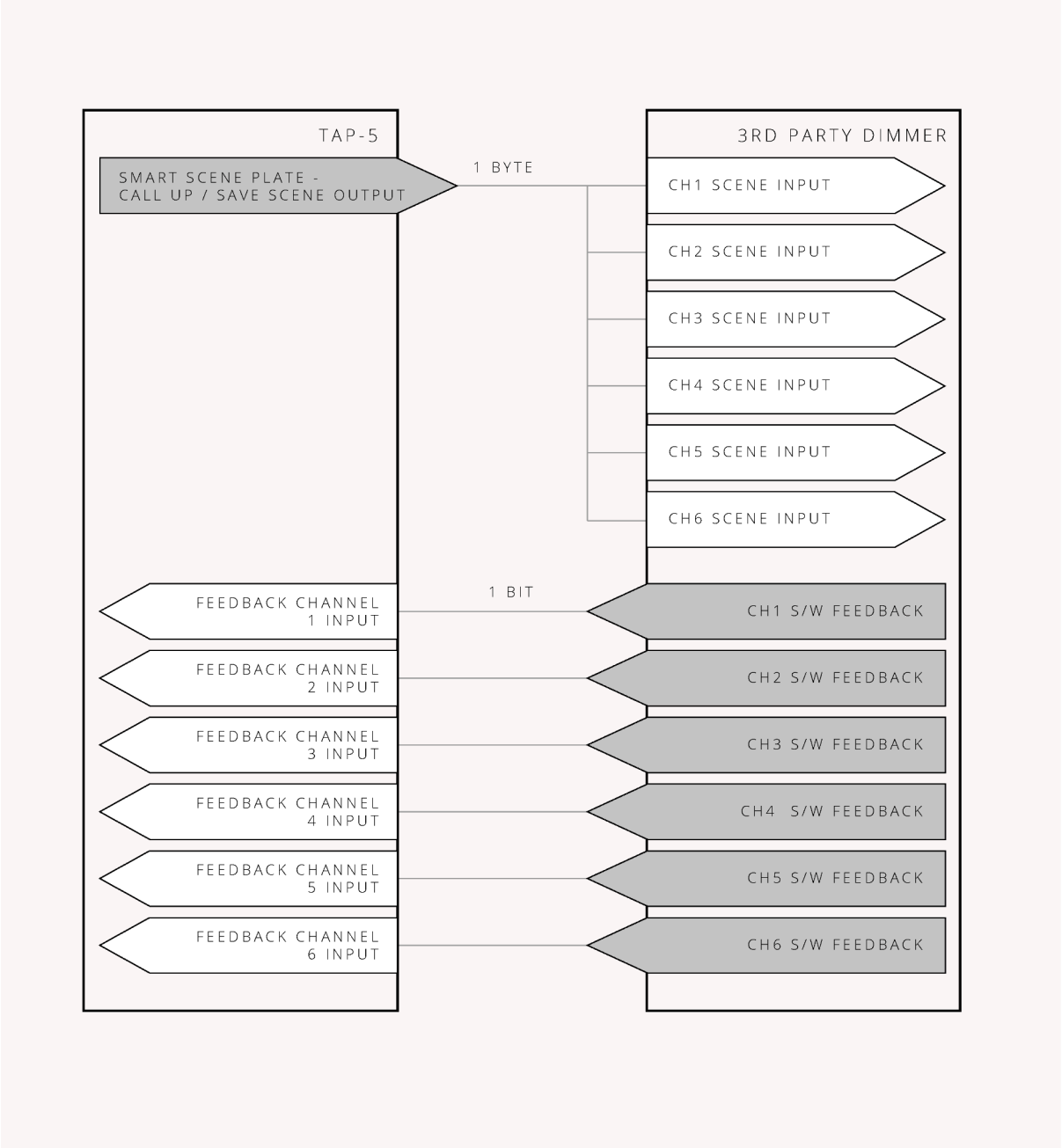
1. Go to the 'General' tab and choose 'Smart scene plate (recommended)' from the 'Operating mode' dropdown.
2. Switch to the 'Smart scene plate' tab. Here, you can assign the button layout on the switch. In this case, we'll use the default '4 scene buttons' layout.
3. Set the default initial scene that is turned on from the centre button, in this example we will leave it with the default of “Last selected scene”.
4. Assign scene numbers to each of the four outer buttons. We'll use the 'Scene object' option to activate scenes. Configure the scene number for each corner button as well as an ‘OFF’ scene.
5. The 'Smart scene plate' features a monitoring function where it will monitor the 1 bit feedback status of every lighting circuit controlled via the configured scenes. This will ensure that the toggle state of all buttons is maintained, even if there are external changes made such as an “All house off”. There are 6 lighting circuits in the room in question, we can set the ‘Number of feedback objects’ to ‘6’.

The status feedback halo will indicate the selected scene in magenta as default, the rest of the halo will glow white when the room is “ON” as per the default and be off when the room is “OFF”.

The table below shows an example of a 4 scene set up with 6 lighting channels at their various brightness % for each scene. There is also scene 64 which is our all off scene. The management of scenes will be done by another device in the system.

SCENE	CH1 %	CH2 %	CH3 %	CH4 %	CH5 %	CH6 %
1	100	100	100	100	100	100
2	100	45	45	90	0	0
3	0	0	80	80	0	0
4	10	10	0	10	10	0
64 (OFF)	0	0	0	0	0	0

The diagram below shows the connections that need to be made to get a simple smart scene plate working.



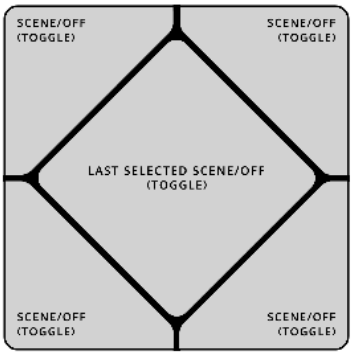
Group Objects 9 | Parameters

-.-.- TAP-5 ORE / ALPHA > Smart scene plate

- General
  - Advanced
- Smart scene plate
- Temperature
- Notifications

Corner button layout: 4 scene buttons

Centre button activates: Last selected scene / Specific scene



Status halo light

Brightness: Level 10 (Bright)

Colour: White

Selected scene colour: Magenta

Lighting control setup

Activate scenes using: Scene object / 1-bit activation objects

Activate scenes using scene object: For use when the keypad is directly calling up / saving scenes in an actuator.

Top left button "ON" scene number: 1

Top right button "ON" scene number: 2

Bottom left button "ON" scene number: 3

Bottom right button "ON" scene number: 4

"OFF" scene number: 64

Action on long press: Do nothing

Enable motion sensor blocking object: Disable / Enable

To ensure the toggle state remains correct the global room ON / OFF state has to be determined dynamically. By connecting monitoring objects to the feedback objects of controlled channels the global room state is determined.

Number of feedback objects: 6

Smart Scene plate (With Blinds)

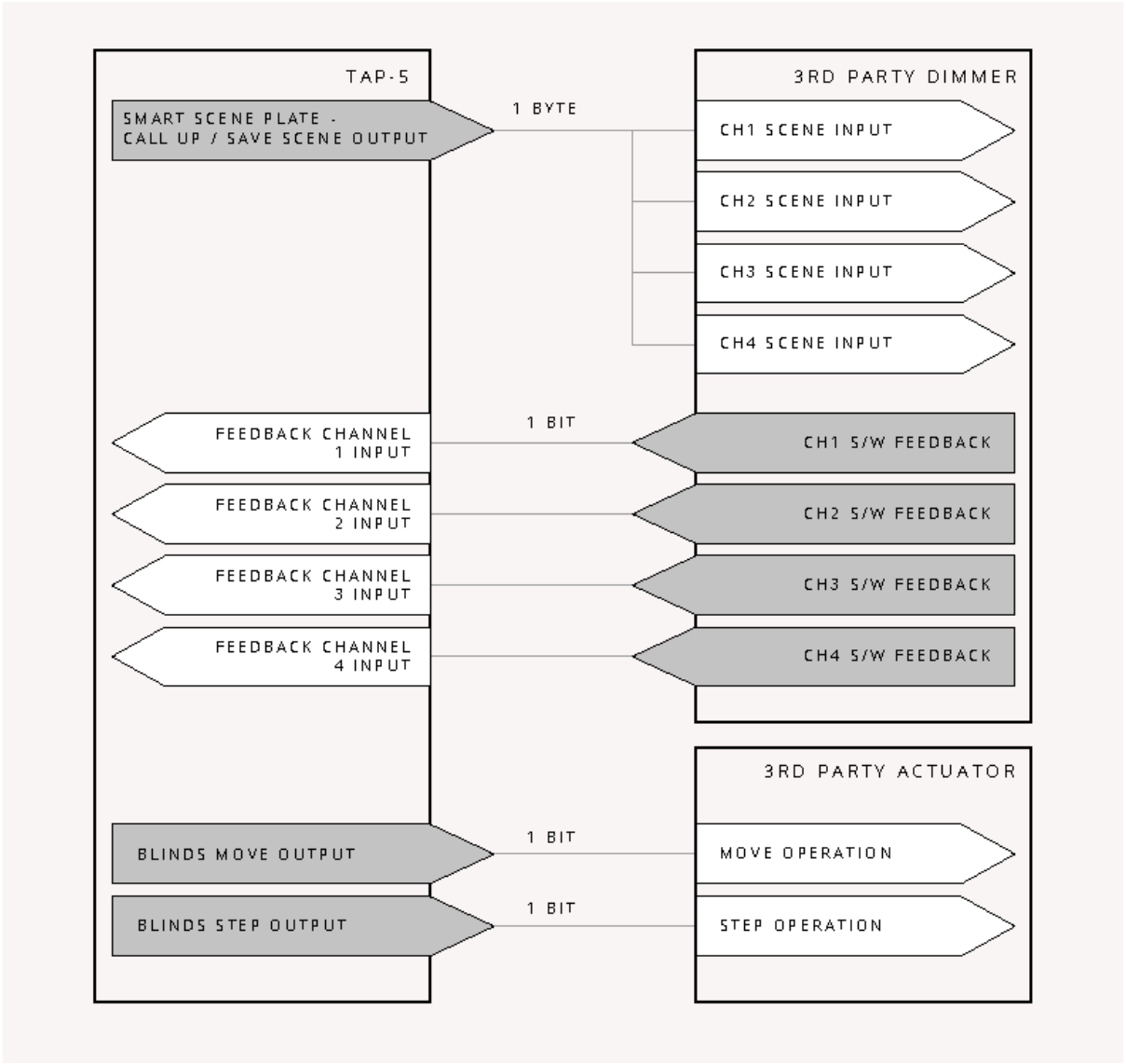
For this example we are going to assume we also have blinds in the room and we are only going to have 2 lighting scenes.

SCENE	CH1 %	CH2 %	CH3 %	CH4 %
1	100	75	75	60
2	50	10	10	90
64 (OFF)	0	0	0	0

To set up the switch in this mode:

1. Go to the 'General' tab and choose 'Smart scene plate (recommended)' from the 'Operating mode' dropdown.
2. Switch to the 'Smart scene plate' tab. Here, you can assign the button layout on the switch. For this example we are going to set the ‘Corner button layout’ to ‘2 Scene buttons (left) + 2 blind buttons (right)’.
3. Set the default initial scene that is turned on from the initial press of the centre button, in this example we will leave it with the default of “Last selected scene”.
4. Assign scene numbers to the two buttons used for scene control. We'll use the 'Scene object' option to activate scenes.
5. The 'Smart scene plate' features a monitoring function where it will monitor the status of every lighting circuit controlled via the configured scenes and will ensure that the toggle state of the centre button is maintained, even if there are external changes made such as an “All house off”. There are 4 lighting circuits in the room in question, we can set the ‘Number of feedback objects’ to ‘4’.
6. There will be 2 group objects in ETS for blinds up and blinds down, connect these to the relevant group addresses for “Move” and “Step” blinds.

The diagram below shows the connections that need to be made to get a simple smart scene plate working when you have blinds.


TAP-5
SMART SCENE PLATE -
CALL UP / SAVE SCENE OUTPUT
1 BYTE
3RD PARTY DIMMER
CH1 SCENE INPUT
CH2 SCENE INPUT
CH3 SCENE INPUT
CH4 SCENE INPUT
FEEDBACK CHANNEL
1 INPUT
1 BIT
CH1 S/W FEEDBACK
FEEDBACK CHANNEL
2 INPUT
CH2 S/W FEEDBACK
FEEDBACK CHANNEL
3 INPUT
CH3 S/W FEEDBACK
FEEDBACK CHANNEL
4 INPUT
CH4 S/W FEEDBACK
3RD PARTY ACTUATOR
BLINDS MOVE OUTPUT
1 BIT
MOVE OPERATION
BLINDS STEP OUTPUT
1 BIT
STEP OPERATION

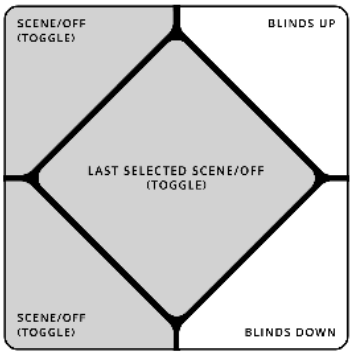
Group Objects 9 | Parameters

-.-.- TAP-5 ORE / ALPHA > Smart scene plate

- General
  - Advanced
  - Smart scene plate
  - Temperature
  - Notifications

Corner button layout: 2 scene buttons (left) + 2 blind buttons (right)

Centre button activates: Last selected scene / Specific scene



Status halo light

Brightness: Level 10 (Bright)

Colour: White

Selected scene / blinds (momentary) colour: Magenta

Lighting control setup

Activate scenes using: Scene object / 1-bit activation objects

Activate scenes using scene object: For use when the keypad is directly calling up / saving scenes in an actuator.

Top left button "ON" scene number: 1

Bottom left button "ON" scene number: 3

"OFF" scene number: 64

Action on long press: Do nothing

Enable motion sensor blocking object: Disable / Enable

Blind control setup

Stop blinds by: Release the button / Short press

Long press starting at: 400 ms

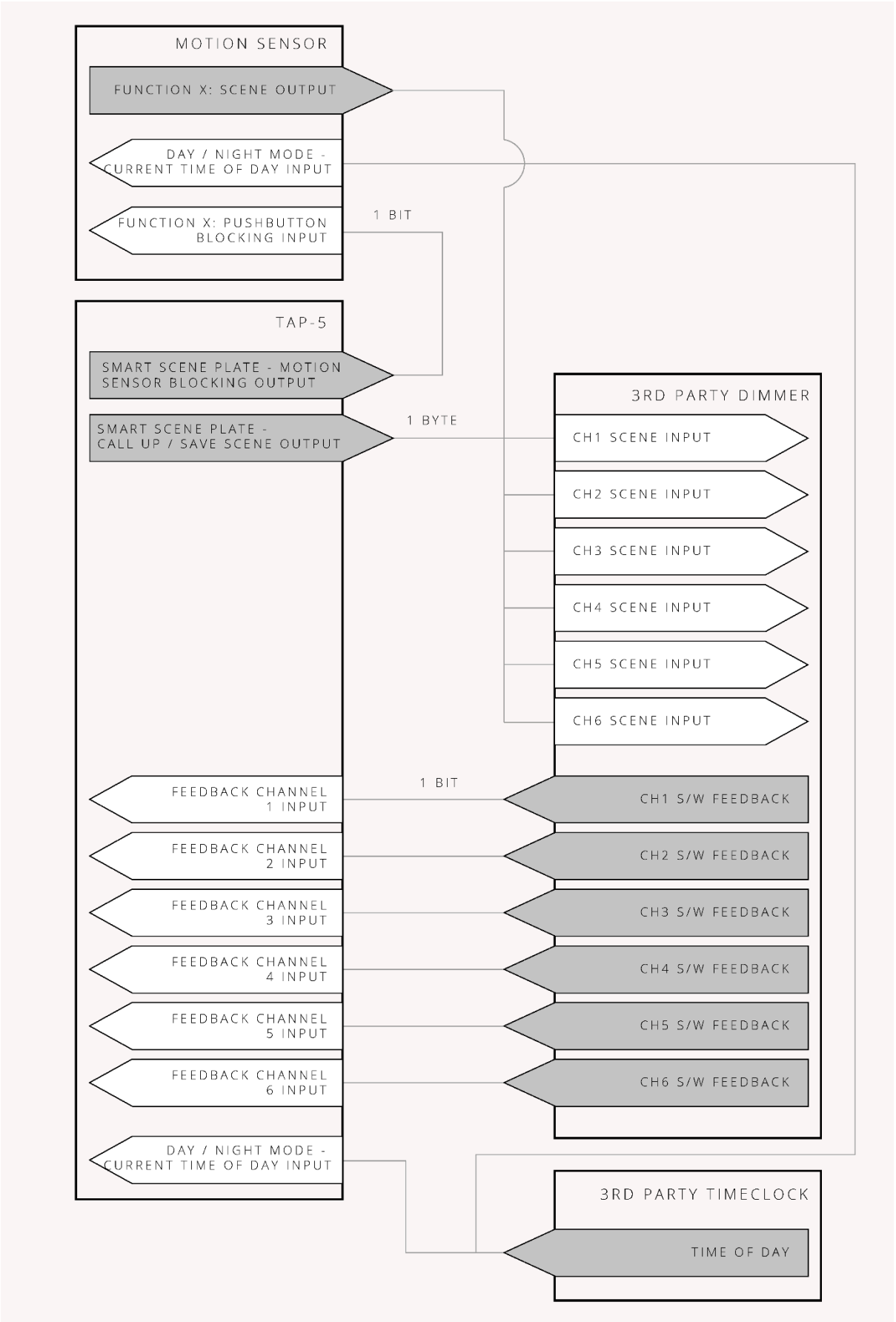
To ensure the toggle state remains correct the global room ON / OFF state has to be determined dynamically. By connecting monitoring objects to the feedback objects of controlled channels the global room state is determined.

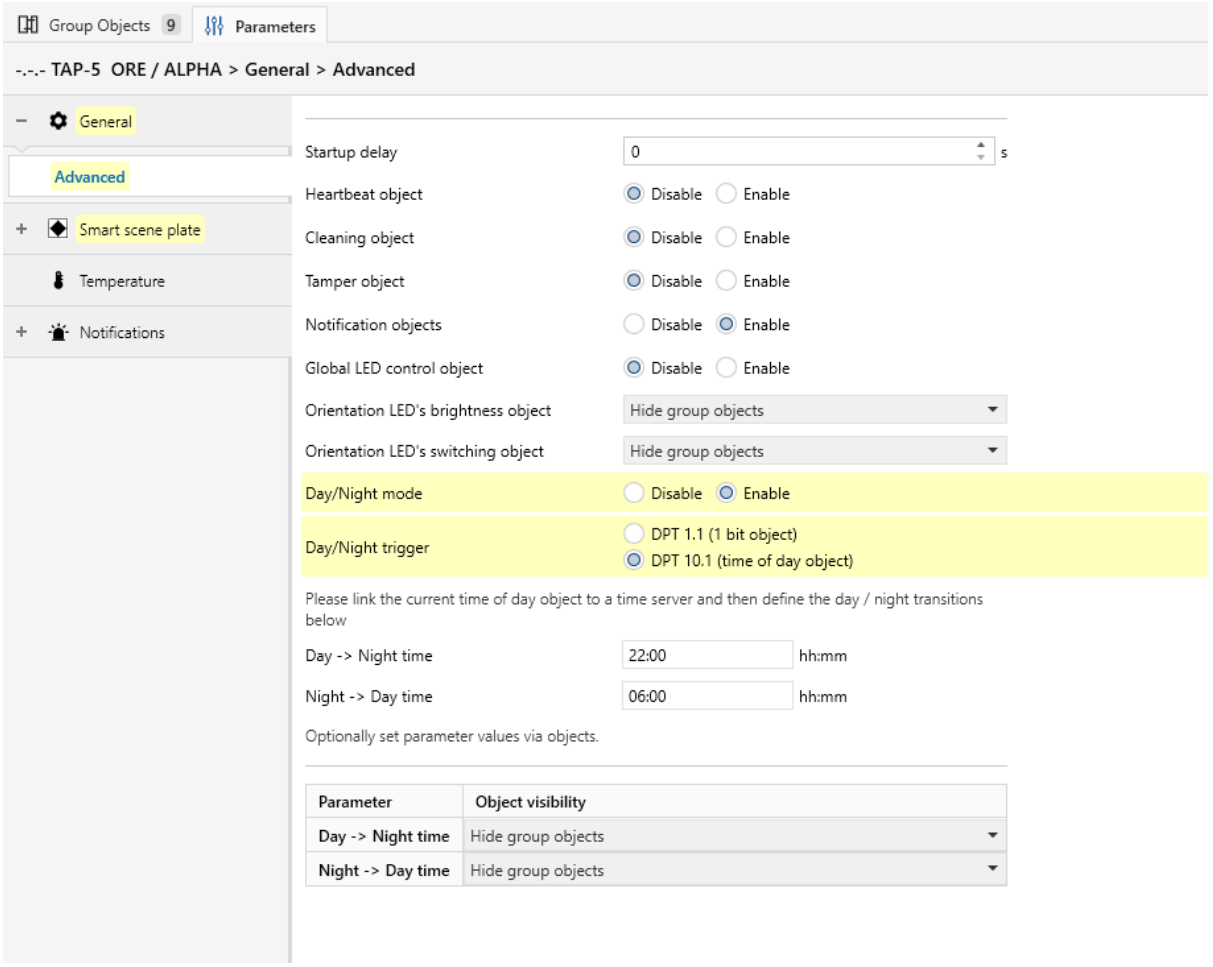
Number of feedback objects: 4

Smart Scene plate (advanced)

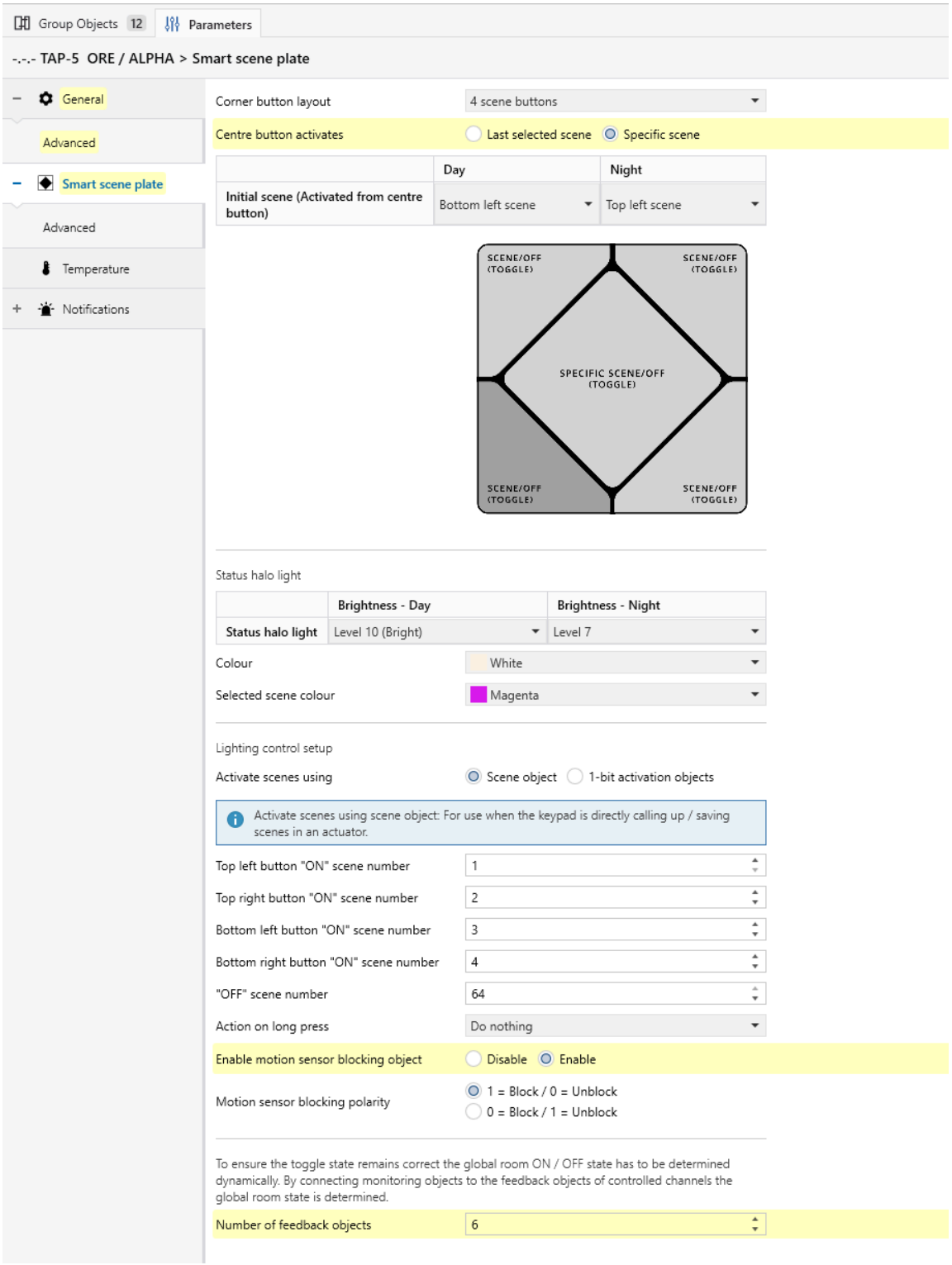
In this example we are going to expand on the basic example by adding:

- A motion sensor configured alongside the switch to automatically turn on the night scene (only during the night)
- Day / night mode so we can send the “Day” scene on the initial press of the centre button during the day compared to the “Night” scene during the night, preventing the user from being dazzled with bright lights during the night .


MOTION SENSOR
FUNCTION X: SCENE OUTPUT
DAY / NIGHT MODE - CURRENT TIME OF DAY INPUT
FUNCTION X: PUSHBUTTON BLOCKING INPUT
1 BIT
TAP-5
SMART SCENE PLATE - MOTION SENSOR BLOCKING OUTPUT
SMART SCENE PLATE - CALL UP / SAVE SCENE OUTPUT
1 BYTE
3RD PARTY DIMMER
CH1 SCENE INPUT
CH2 SCENE INPUT
CH3 SCENE INPUT
CH4 SCENE INPUT
CH5 SCENE INPUT
CH6 SCENE INPUT
1 BIT
FEEDBACK CHANNEL 1 INPUT
FEEDBACK CHANNEL 2 INPUT
FEEDBACK CHANNEL 3 INPUT
FEEDBACK CHANNEL 4 INPUT
FEEDBACK CHANNEL 5 INPUT
FEEDBACK CHANNEL 6 INPUT
CH1 S/W FEEDBACK
CH2 S/W FEEDBACK
CH3 S/W FEEDBACK
CH4 S/W FEEDBACK
CH5 S/W FEEDBACK
CH6 S/W FEEDBACK
DAY / NIGHT MODE - CURRENT TIME OF DAY INPUT
3RD PARTY TIMECLOCK
TIME OF DAY



First, let's enable 'Day/Night mode' in the General > Advanced menu. For this example we will use the 'DPT 10.1 (time of day object)' where we can set the day/night changeover. We will keep the day - > night time as 22:00 and the Night - > Day time as 06:00.

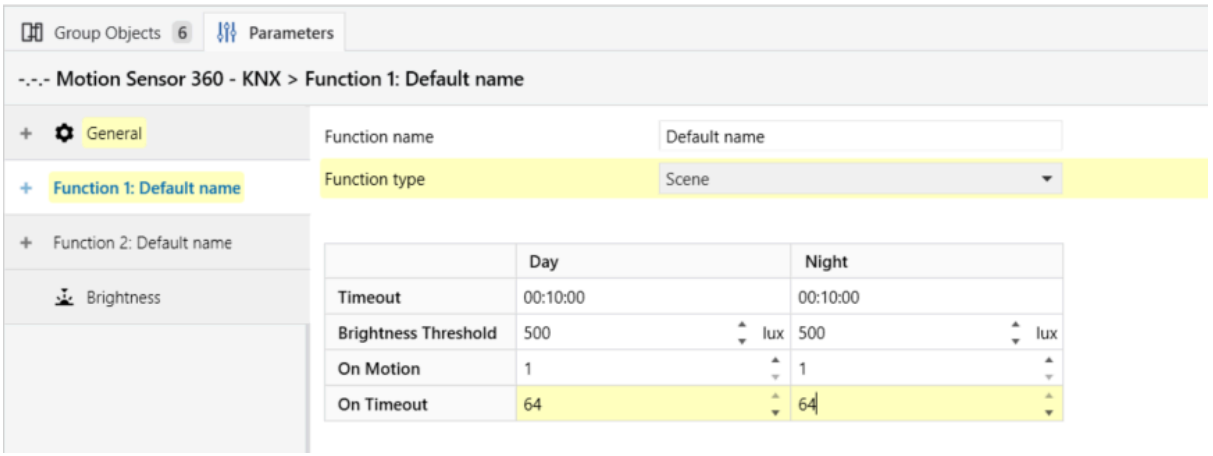


Change the ‘Centre button activates’ to ‘Specific scene’ (when this is set to ‘Last selected scene’ there is no Day/Night variation possible, the last selected scene will always be triggered). Now you will see a table where you can define the scene that is triggered during the day compared to at night. For this example we will trigger the ‘Bottom left scene’ during day time and the ‘Top left scene’ “Night scene” during the night time.

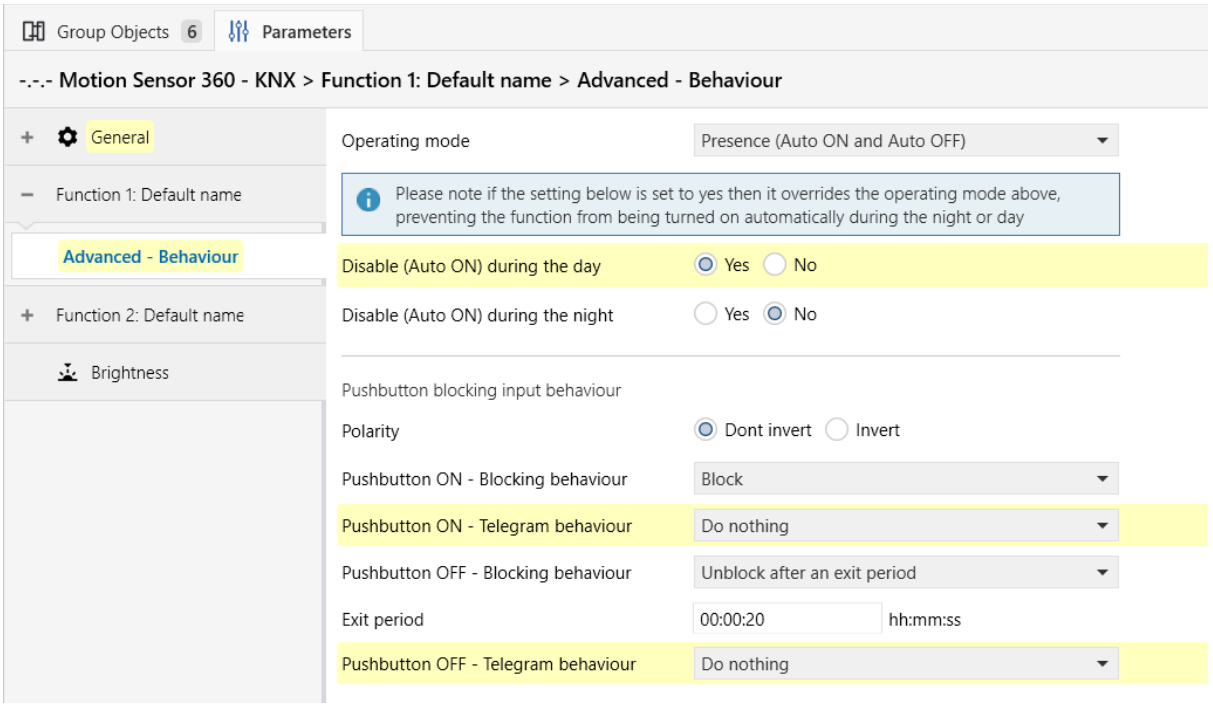
The example configuration we are creating here will block the motion sensor from timing out and turning the lights off automatically when the lights have been turned on manually. On manually turning the lights "OFF" the motion sensor will be unblocked.

To enable motion sensor blocking capability set 'Enable motion sensor blocking object' to ' Enable'. This will make an object called "Smart scene plate - Motion Sensor blocking output" visible. This has to be connected as per the group address connection diagram above.

We want to set the motion sensor to turn on scene 1 automatically at night and turn the lights off using scene 64. We will leave the day "On motion" scene as 1 but this does don't matter in this instance as we are going to disable the sensor from automatically turning on during the day anyway. But it is important to set the day OFF scene to 64.



In this instance we just want to simply block the motion sensor with the blocking input as we will be turning the lights ON / OFF directly from the keypad not via the motion sensor. So we want to configure the blocking input on the motion sensor as follows. Note: We are going to disable the sensor working during the day by setting "Disable (Auto ON) during the day" to "Yes".



Appendix - Group object list

Number	Name	Object Function	Object Size	Datapoint Type
Global - Group objects				
1	Temperature	Temperature level output	2 Bytes	DPST-9-1
2	Temperature	Temperature trigger 1 output	1 Bit	DPST-1-1
3	Temperature	Temperature trigger 2 output	1 Bit	DPST-1-1
4	Temperature	Temperature threshold 2 adjustment input	2 Bytes	DPST-9-1
5	Temperature	Temperature threshold 1 adjustment input	2 Bytes	DPST-9-1
6	Orientation LEDs	Orientation LEDs brightness value input	1 Byte	DPST-5-1
7	Orientation LEDs	Orientation LEDs brightness value input (Day)	1 Byte	DPST-5-1
8	Orientation LEDs	Orientation LEDs brightness value input (Night)	1 Byte	DPST-5-1
9	Orientation LEDs	Orientation LEDs switching input	1 Bit	DPST-1-1
10	Global LED	Global LED enable (1) / disable (0) input	1 Bit	DPST-1-1
11	Cleaning	Cleaning object input	1 Bit	DPST-1-1
12	Day / Night Mode	Day (0) / Night (1) mode output	1 Bit	DPST-1-24
13	Day / Night Mode	Day (0) / Night (1) mode select input	1 Bit	DPST-1-24
14	Day / Night Mode	Day -> Night time	3 Bytes	DPST-10-1

		input		
15	Day / Night Mode	Night -> Day time input	3 Bytes	DPST-10-1
16	Day / Night Mode	Current time of day input	3 Bytes	DPST-10-1
17	Tamper	Tamper output	1 Bit	DPST-1-1
18	Heartbeat	Heartbeat output	1 Bit	DPST-1-1
19	Smart scene plate	Call up / save scene output	1 Byte	DPST-18-1
20	Smart scene plate	Motion sensor blocking output	1 Bit	DPST-1-1
21	Smart scene plate	Top left scene activate output	1 Bit	DPST-1-1
22	Smart scene plate	Top right scene activate output	1 Bit	DPST-1-1
23	Smart scene plate	Bottom left scene activate output	1 Bit	DPST-1-1
24	Smart scene plate	Bottom right scene activate output	1 Bit	DPST-1-1
25	Smart scene plate	Off scene activate output	1 Bit	DPST-1-1
26	Smart scene plate	Switching (OFF) output	1 Bit	DPST-1-1
27	Smart scene plate	Dimming output	4 Bit	DPST-3-7
28	Smart scene plate	Blinds stop/step output	1 Bit	DPST-1-7
29	Smart scene plate	Blinds move output	1 Bit	DPST-1-8
30	Smart scene plate	Double click output	1 Bit	DPST-1-1
42	Smart scene plate	Feedback channel 1 input	1 Bit	DPST-1-1
43	Smart scene plate	Feedback channel 2 input	1 Bit	DPST-1-1
44	Smart scene plate	Feedback channel 3 input	1 Bit	DPST-1-1
45	Smart scene plate	Feedback channel 4 input	1 Bit	DPST-1-1
46	Smart scene plate	Feedback channel 5 input	1 Bit	DPST-1-1

47	Smart scene plate	Feedback channel 6 input	1 Bit	DPST-1-1
48	Smart scene plate	Feedback channel 7 input	1 Bit	DPST-1-1
49	Smart scene plate	Feedback channel 8 input	1 Bit	DPST-1-1
50	Smart scene plate	Feedback channel 9 input	1 Bit	DPST-1-1
51	Smart scene plate	Feedback channel 10 input	1 Bit	DPST-1-1
52	Smart scene plate	Feedback channel 11 input	1 Bit	DPST-1-1
53	Smart scene plate	Feedback channel 12 input	1 Bit	DPST-1-1
54	Smart scene plate	Feedback channel 13 input	1 Bit	DPST-1-1
55	Smart scene plate	Feedback channel 14 input	1 Bit	DPST-1-1
56	Smart scene plate	Feedback channel 15 input	1 Bit	DPST-1-1
57	Smart scene plate	Feedback channel 16 input	1 Bit	DPST-1-1
Notifications				
35	Notification 1	Notification switching input	1 Bit	DPST-1-1
36	Notification 2	Notification switching input	1 Bit	DPST-1-1
37	Notification 3	Notification switching input	1 Bit	DPST-1-1
Button - Group objects				
(61 , 96 , 131 , 166 , 201)	Button name	Switching output	1 Bit	DPST-1-1
(62 , 97 , 132 , 167 , 202)	Button name	Dimming output	4 Bit	DPST-3-7
(63 , 98 , 133 , 168 , 203)	Button name	Blinds stop/step output	1 Bit	DPST-1-7
(64 , 99 , 134 , 169 , 204)	Button name	Blinds move output	1 Bit	DPST-1-8
(65 , 100 , 135 , 170 , 205)	Button name	Blind height feedback % input	1 Byte	DPST-5-1
(66 , 101 , 136 , 171 , 206)	Button name	Motion sensor blocking output	1 Bit	DPST-1-1
(67 , 102 , 137 , 172 , 207)	Button name	Scene value output	1 Byte	DPST-18-1

(68 , 103 , 138 , 173 , 208)	Button name	Scene switching (OFF) output	1 Bit	DPST-1-1
(69 , 104 , 139 , 174 , 209)	Button name	2 Bytes unsigned output	2 Bytes	DPT-7
(69 , 104 , 139 , 174 , 209)	Button name	2 Bytes signed output	2 Bytes	DPT-8
(69 , 104 , 139 , 174 , 209)	Button name	2 Byte float output	2 Bytes	DPT-9
(70 , 105 , 140 , 175 , 210)	Button name	1 Byte unsigned output	1 Byte	DPT-5
(70 , 105 , 140 , 175 , 210)	Button name	1 Byte signed output	1 Byte	DPT-6
(70 , 105 , 140 , 175 , 210)	Button name	1 Byte percentage output	1 Byte	DPT-5 DPST-5-1
(71 , 106 , 141 , 176 , 211)	Button name	RGB red output	1 Byte	DPST-5-1
(72 , 107 , 142 , 177 , 212)	Button name	RGB green output	1 Byte	DPST-5-1
(73 , 108 , 143 , 178 , 213)	Button name	RGB blue output	1 Byte	DPST-5-1
(74 , 109 , 144 , 179 , 214)	Button name	RGB output	3 Bytes	DPST-232-600
(75 , 110 , 145 , 180 , 215)	Button name	HVAC output	1 Byte	DPST-20-102
(76 , 111 , 146 , 181 , 216)	Button name - 2nd Object	Switching output	1 Bit	DPST-1-1
(77 , 112 , 147 , 182 , 217)	Button name - 2nd Object	1 Byte unsigned output	1 Byte	DPT-5
(77 , 112 , 147 , 182 , 217)	Button name - 2nd Object	1 Byte signed output	1 Byte	DPT-6
(77 , 112 , 147 , 182 , 217)	Button name - 2nd Object	1 Byte percentage output	1 Byte	DPT-5 DPST-5-1
(78 , 113 , 148 , 183 , 218)	Button name - 2nd Object	2 Byte float output	2 Bytes	DPT-9
(78 , 113 , 148 , 183 , 218)	Button name - 2nd Object	2 Bytes signed output	2 Bytes	DPT-8
(78 , 113 , 148 , 183 , 218)	Button name - 2nd Object	2 Bytes unsigned output	2 Bytes	DPT-7
(79 , 114 , 149 , 184 , 219)	Button name - 2nd Object	RGB red output	1 Byte	DPST-5-1
(80 , 115 , 150 , 185 , 220)	Button name - 2nd Object	RGB green output	1 Byte	DPST-5-1
(81 , 116 , 151 , 186 , 221)	Button name - 2nd Object	RGB blue output	1 Byte	DPST-5-1
(82 , 117 , 152 , 187 , 222)	Button name - 2nd	RGB output	3 Bytes	DPST-232-600

	Object			
(83 , 118 , 153 , 188 , 223)	Button name - 2nd Object	HVAC output	1 Byte	DPST-20-102
(84 , 119 , 154 , 189 , 224)	Button name	1 bit LED control input	1 Bit	DPST-1-1
(85 , 120 , 155 , 190 , 225)	Button name	HVAC LED control input	1 Byte	DPST-20-102
(86 , 121 , 156 , 191 , 226)	Button name	1 byte signed LED control input	1 Byte	DPST-6-10
(87 , 122 , 157 , 192 , 227)	Button name	1 byte unsigned LED control input	1 Byte	DPST-5-10
(88 , 123 , 158 , 193 , 228)	Button name	RGB LED control input	3 Bytes	DPST-232-600
(89 , 124 , 159 , 194 , 229)	Button name	RGBW LED control red input	1 Byte	DPST-5-1
(90 , 125 , 160 , 195 , 230)	Button name	RGBW LED control green input	1 Byte	DPST-5-1
(91 , 126 , 161 , 196 , 231)	Button name	RGBW LED control blue input	1 Byte	DPST-5-1
(92 , 127 , 162 , 197 , 232)	Button name	RGBW LED control white input	1 Byte	DPST-5-1