

1 TouchSwitch AppData specification table

PlanColourCode information for each colour section in the plan_control_file_name image	<pre> M public String colour_code_hex; //button click data M public ButtonType type = ButtonType.NON_CLICKABLE; O public CommandData command_data; O public ArrayList<MultipleButtonData> sub_buttons; O public SubButtonPopupData sub_button_layout; O public String destination_controller_id; </pre>	<pre> { "colour_code_hex": "#ffaec9", "type": "SUB_BUTTON", "sub_button_layout": {}, "sub_buttons": [] } </pre>	colour_code_hex is an AndroidHexString in the format #AARRGGBB Depending on the value stored in ButtonType the required data changes, these are also the only supported types for this mode: <ul style="list-style-type: none"> • VIEW_TRANSACTION - destination_controller_id required. • SUB_BUTTON, SUB_BUTTON_DIMMER- sub_button_layout and sub_buttons required, either 2, 3, or 4 entries. • COMMAND - command_data required. • DISMISS_VIEW - all other fields optional
GridButtonData Information for each button on screen	<pre> O public CommandData command_data; O public String label; M public GridButtonProperties properties; O public ArrayList<State> states; M public ButtonType type; O public CommandData init_command_data; O public ArrayList<MultipleButtonData> sub_buttons; O public SubButtonPopupData sub_button_layout; O public String destination_controller_id; O public Integer slider_max; O public Integer slider_min; </pre>	<pre> { "command_data": {}, "label": "Scene 1", "properties": {}, "states": [], "type": "STATE_BUTTON" } </pre>	Depending on the value stored in ButtonType the required data changes: <ul style="list-style-type: none"> • SLIDER - slider_min and slider_max are mandatory • DIMMER_COMMAND or IMAGE_DIMMER_COMMAND - <ul style="list-style-type: none"> ◦ init_command_data should be used for dimming buttons as it will send an optional command first and then every 10 repeats of the dimming command. This is useful for creating dim light up and down to send STEP_DOWN_AND_OFF or STEP_UP_AND_ON. • VIEW_TRANSACTION - destination_controller_id required. • SUB_BUTTON - sub_button_layout and sub_buttons required, either 2, 3, or 4 entries. • STATE_BUTTON or STATE_VIEW states required, at least 1 entry.
GridButtonProperties Button placement information	<pre> M public Integer column_size; M public Integer column_start; M public Integer row_size; M public Integer row_start; M public ButtonViewParameters view_parameters; </pre>	<pre> { "column_size": "1", "column_start": "1", "row_size": "1", "row_start": "4", "view_parameters": {} } </pre>	column_start and row_start define the starting position of the button in the grid defined in GridControllerDataVariant . row_count and column_count where the top left corner is (0,0). column_size and row_size are the span in each dimension. Ensure that the start and size element in both dimensions don't exceed the counts defined in GridControllerDataVariant .

ButtonViewParameters Button styling information	<pre> O public float alpha; C.1 public int button_colour; C.1 public String button_colour_hex; C.2 public int button_pressed_colour; C.2 public String button_pressed_colour_hex; O public String image_path; O public boolean skeleton_mode; C.3 public int text_colour; C.3 public String text_colour_hex; C.4 public int text_pressed_colour; C.4 public String text_pressed_colour_hex; O public float text_size; M public boolean tint_image; O public Integer text_gravity; C.5 public int button_state_unknown_colour = -12471908; C.5 public int button_state_unknown_colour_hex; C.6 public int button_state_unknown_colour = -12471908; C.6 public int button_state_unknown_colour_hex; </pre>	<pre>{ "alpha": 1, "button_colour": -12009044, "button_pressed_colour": -14272955, "image_path": "arrow-down.svg", "skeleton_mode": false, "text_colour": -1, "text_pressed_colour": -12009044, "text_size": 18, "tint_image": true }</pre>	<p>All colour values (<code>button_colour</code>, <code>button_pressed_colour</code>, <code>text_colour</code>, <code>text_pressed_colour</code>, <code>button_state_unknown_colour</code>) are a signed integer representation of the hex value <code>#AARRGGBB</code></p> <p>All colour hex values (<code>button_colour_hex</code>, <code>button_pressed_colour_hex</code>, <code>text_colour_hex</code>, <code>text_pressed_colour_hex</code>, <code>button_state_unknown_colour_hex</code>) are a String with the format <code>"#AARRGGBB"</code>. Colour hex values will override the corresponding colour value.</p> <p><code>alpha</code> is a decimal value between 0 and 1 where 0 is invisible and 1 is visible.</p> <p><code>image_path</code> should be the file name stored in the assets folder.</p> <p><code>gravity</code> see android reference https://developer.android.com/reference/android/view/Gravity</p> <p><code>button_state_unknown_colour</code> is the default colour for the state indicator</p> <p><code>tint_image</code> if set image from <code>image_path</code> will match <code>text_colour</code> and <code>text_pressed_colour</code></p>
CommandData Third Party Interface (TPI) data.	<pre> M public String ip; M public byte control; M public byte data_0; M public byte data_1; M public byte data_2; M public byte address; M public byte command; M public int port; </pre>	<pre>{ "address": 129, "command": "17", "control": 3, "data_0": 0, "data_1": 0, "data_2": 0, "ip": "192.168.0.200", "port": 5108 }</pre>	<p>See the TPI document: https://support.zencontrol.com/hc/en-us/articles/360000337175</p>
MultipleButtonData Data for buttons in a popup	<pre> M public CommandData command_data; O public CommandData init_command_data; M public String label; O public AltCommandMode alt_mode = AltCommandMode.BOTH; M public ButtonViewParameters view_parameters; </pre>	<pre>{ "command_data": {}, "label": "Max", "view_parameters": {} }</pre>	<p><code>command_data</code> command to be sent.</p> <p><code>init_command_data</code> alternate command sent based on the <code>alt_mode</code> setting:</p> <ul style="list-style-type: none"> • <code>BOTH</code> - <code>init_command_data</code> will run at start and end of hold action. • <code>START</code> - <code>init_command_data</code> will run only at start of hold action. • <code>END</code> - <code>init_command_data</code> will run only at end of hold action.
SubButtonPopupData styling information for popup window	<pre> M public String label; M public int label_text_colour; M public float label_text_size; M public int popup_width; M public int popup_height; M public int start_x; M public int start_y; </pre>	<pre>{ "label": "Zone 3", "label_text_colour": -14272955, "label_text_size": 16.0, "popup_height": 80, "popup_width": 480, "start_x": 0, "start_y": 800 }</pre>	<p><code>label_text_colour</code> is a signed integer representation of the hex value <code>#AARRGGBB</code></p> <p><code>start_x</code> and <code>start_y</code> are the row and column start positions of the popup in pixels.</p> <p><code>popup_width</code> and <code>popup_height</code> define the size of the popup in pixels.</p>

State state for STATE_BUTTON or STATE_VIEW ButtonType	M <code>public Action action;</code> M <code>public Condition condition;</code> M <code>public String event_label;</code>	{ "action": {}, "condition": {}, "event_label": "button5_variable" }	
Condition condition to match State to Event	M <code>public Answer answer;</code> M <code>public ConditionType type;</code>	{ "answer": {}, "type": "EQUALS" },	
Answer Expected answer from TPI	M <code>private final byte answer_byte;</code> M <code>private final AnswerType type;</code>	{ "answer_byte": "0", "type": "ANSWER" }	See TPI document for expected answers.
Action Action to perform when Condition matches	C.1 <code>public int status_colour;</code> C.1 <code>public String status_colour_hex;</code> M <code>public ActionType type;</code>	{ "status_colour": -14272955, "type": "VIEW" },	<i>Colour hex values will override the corresponding colour value.</i> status_colour is a signed integer representation of the hex value #AARRGGBB status_colour_hex is a String with the format "#AARRGGBB".
Event Events to query controller for. TPI mode 3 only.	M <code>public CommandData command_data;</code> M <code>public Integer interval_ms;</code> M <code>public String label;</code>	{ "command_data": {}, "interval_ms": "5000", "label": "button0_variable" }	command_data should always have the control byte set to 3 (Quick Query Commands), see TPI document for supported commands.

2 ENUMS

Enum name	Options
ActionType	<code>VIEW</code>
AnswerType	<code>OK</code> , <code>ANSWER</code> , <code>NO_ANSWER</code> , <code>ERROR</code> , <code>UNRECOGNIZED</code> ,
ButtonType	<code>COMMAND(0)</code> , <code>SUB_BUTTON(1)</code> , <code>VIEW_TRANSACTION(2)</code> , <code>NON_CLICKABLE(3)</code> , <code>IMAGE(4)</code> , <code>DISMISS_VIEW(5)</code> , <code>SUB_BUTTON_DIMMER(6)</code> , <code>SLIDER(7)</code> , <code>STATE_BUTTON(8)</code> , <code>STATE_VIEW(9)</code> , <code>IMAGE_COMMAND(10)</code> , <code>DIMMER_COMMAND(11)</code> , <code>IMAGE_DIMMER_COMMAND(12)</code> , <code>COLOUR_TC_COMMAND(13)</code> , <code>COLOUR_XY_COMMAND(14)</code> , <code>COLOUR_RGBWAF_COMMAND(15)</code> , <code>SUB_BUTTON_COLOUR_TC(16)</code> , <code>SUB_BUTTON_COLOUR_XY(17)</code> , <code>SUB_BUTTON_COLOUR_RGBWAF(18)</code> , <code>COLOUR_RGB_COMMAND(19)</code> , <code>SUB_BUTTON_COLOUR_RGB(20)</code> ,
ConditionType	<code>EQUALS</code>