Pincode Protect

1. Intro

This webview driver provides the ability to block actions with pincode. When the right pincode is entered, the pinpad is removed, and text and buttons are available.

The driver provides some interesting features, like the ability to change from 1 to 3 buttons actions when a pincode is entered, an editable text field when the valid pincode is entered, the use of real-time variable (for example a gate status) in the main text field, the ability to change the UI icon, possibly of saving History events when a valid code is entered and a button is pressed.

Compatibility:

- T3/T4: Require OS 3.1.3+
- iOS and Android: Require OS 3.2+
- **OS 3.3.0+ is recommended**

2. Properties

- *Cloud Status*: Current status of the driver license.
- *Automatic Updates*: Enable driver automatics updates (Recommended!)
- *MAC:* MAC address of the director.
- *Driver*: Driver name.
- *Driver Version:* Current driver version.
- *Driver Information:* Last debug information.
- *Debug Mode:* If On, driver will print debug information on Lua output.
- *UI Icon:* With this property you can choose the icon suits you better.
- *Pincode:* The code that will trigger the action.
- *Valid Pincode Text:* It is the text that appears when a valid code is entered. This text can contain real-time variables to shown (see “Using Real-Time variables” appendix for more info). TIP: You can use “<br>” (without quotes) to specify a new line (enter).
- *Valid Pincode Button Quantity:* You can choose from 1 to 3 buttons to display when

someone enter the valid code:

- *1:* Button Center will be displayed.
- *2:* Button Left and Right will be displayed.
- *3:* Button Left, Center and Right will be displayed.

- *Button Left/Center/Right Text or Icon:* For each button you can select if you want an icon or a text be display.
- *Button Left/Center/Right Text:* For each button, if you selected "Text", you can set the text you want to display. **Variables cannot be used here.**
- *Button Left/Center/Right Icon:* For each button, if you selected "Icon", you can set the icon you want to display.
- *History:* This option enables the function of save on history when a valid pincode is entered, so the previous events can be monitored. When enabled, other properties will be shown allowing the programmer to configure the different cells of the History event.

3. Actions

N.A.

4. Commands

N.A.

5. Events

- *Correct Pincode Entered:* It will be triggered when the code is entered correctly.
- *Invalid Pincode Entered:* It will be triggered when an invalid code is entered.
- *Left Button Pressed:* It will be triggered when the left button is pressed. Be aware that Left button is present if 2 or 3 buttons are selected on "*Valid Pincode Button Quantity*" property.
- *Center Button Pressed:* It will be triggered when the center button is pressed. Be aware that Center button is present if 1 or 3 buttons are selected on "*Valid Pincode Button Quantity*" property.
- *Right Button Pressed:* It will be triggered when the right button is pressed. Be aware that Right button is present if 2 or 3 buttons are selected on "*Valid Pincode Button Quantity*" property.

NOTE: Be aware that if you program a button and then that button is eliminated because you

changed the "*Valid Pincode Button Quantity*", the programming will be lost despite of added it again. For example, if you had "*Valid Pincode Button Quantity*" configured with 3 buttons and all of them with programming, if you change from 3 to 1 button, the programming of the center button will be remained, but button left and right will be lost although you change it again to 3 buttons.

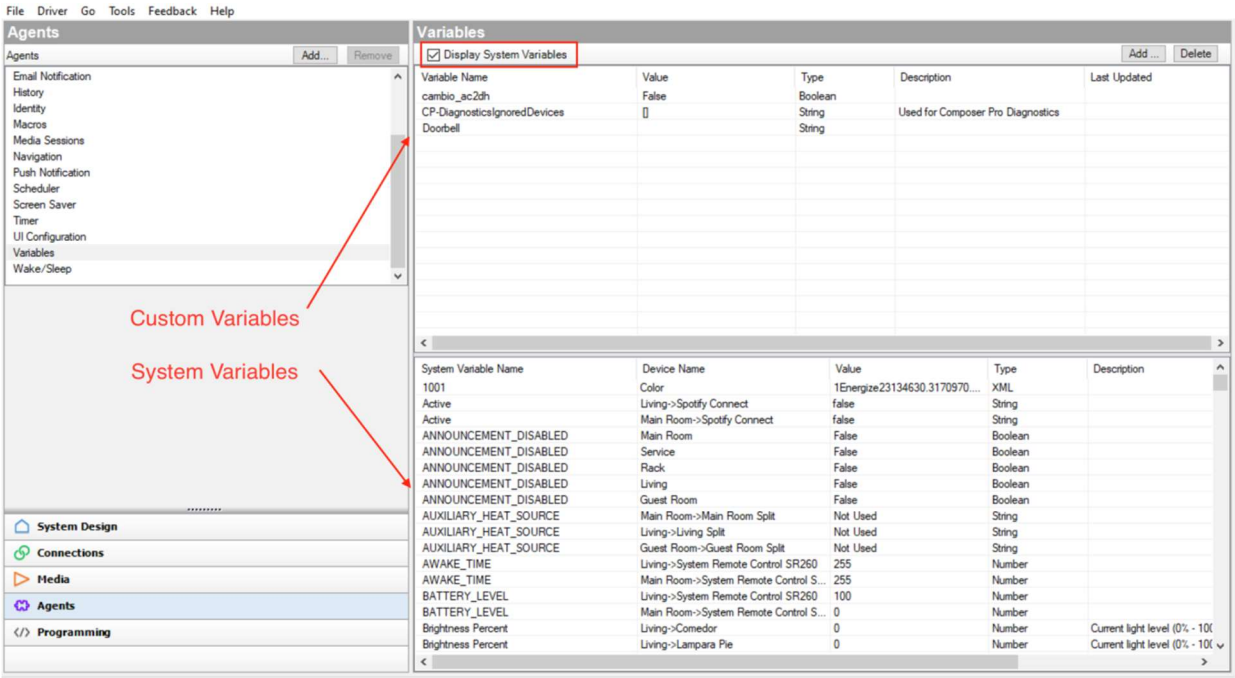
5. Driver Variables

- *LAST_MENU_SELECTED:* Last menu name that selected the driver.
- *LAST_ROOM_SELECTED:* Last ID of the room that selected the driver.

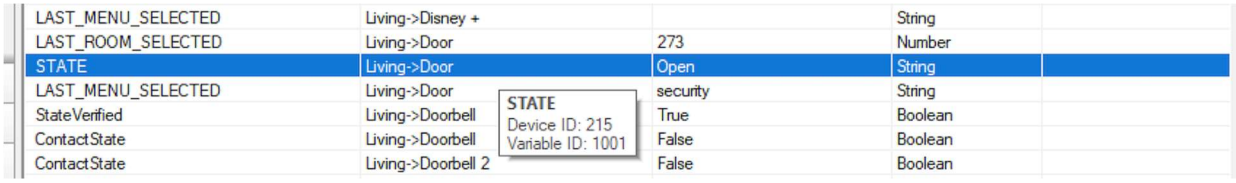
6. Using Real-Time variables

To use variables on the properties, we need the variables parameters. These are: deviceID and variableID.

To find them, we need to go to "Variables" Agent. If the variable is a custom variable (was created by the programmer), you will see it on the sheet. If the variable was created by the system (or another driver), you must check the box "Display System Variables".



Then, you must find the variable of interest, and then place the cursor above the variable to get the parameters:



In this case, deviceID=215 and variableID=1001.

To use it on the properties, we must use this format: “{xxx,yyyy}” (without quotes) where “xxx” is the deviceID of the variable, and “yyyy” is the variableID.

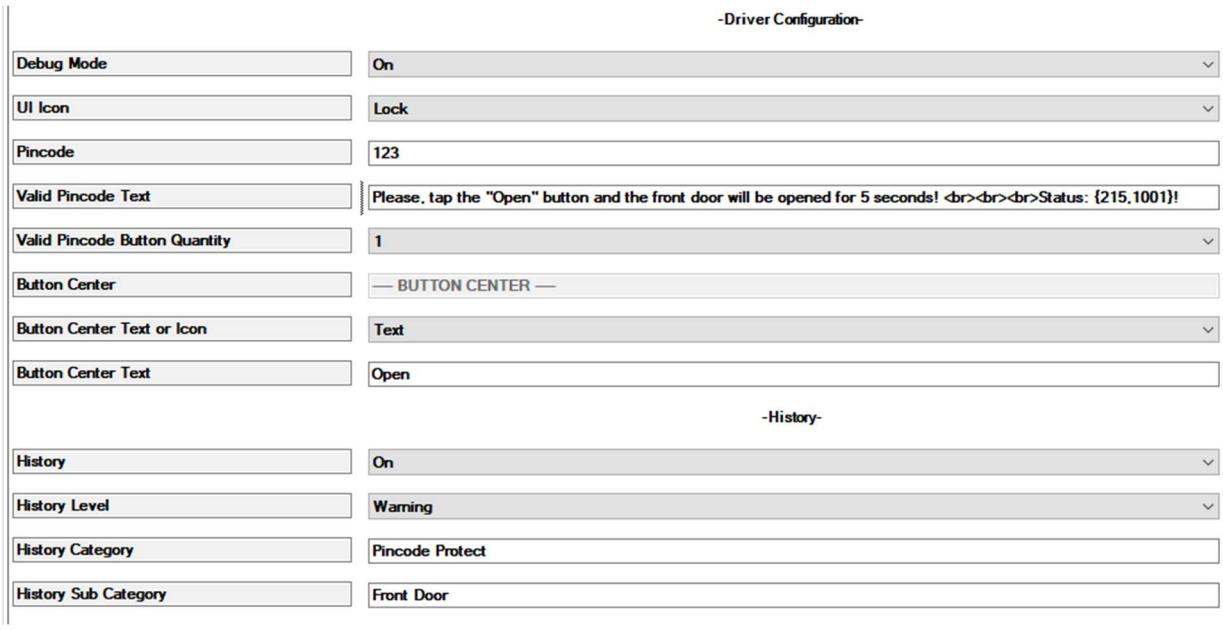
In this case would be “{215,1001}” (without quotes).

7. Examples

7.1 Example 1

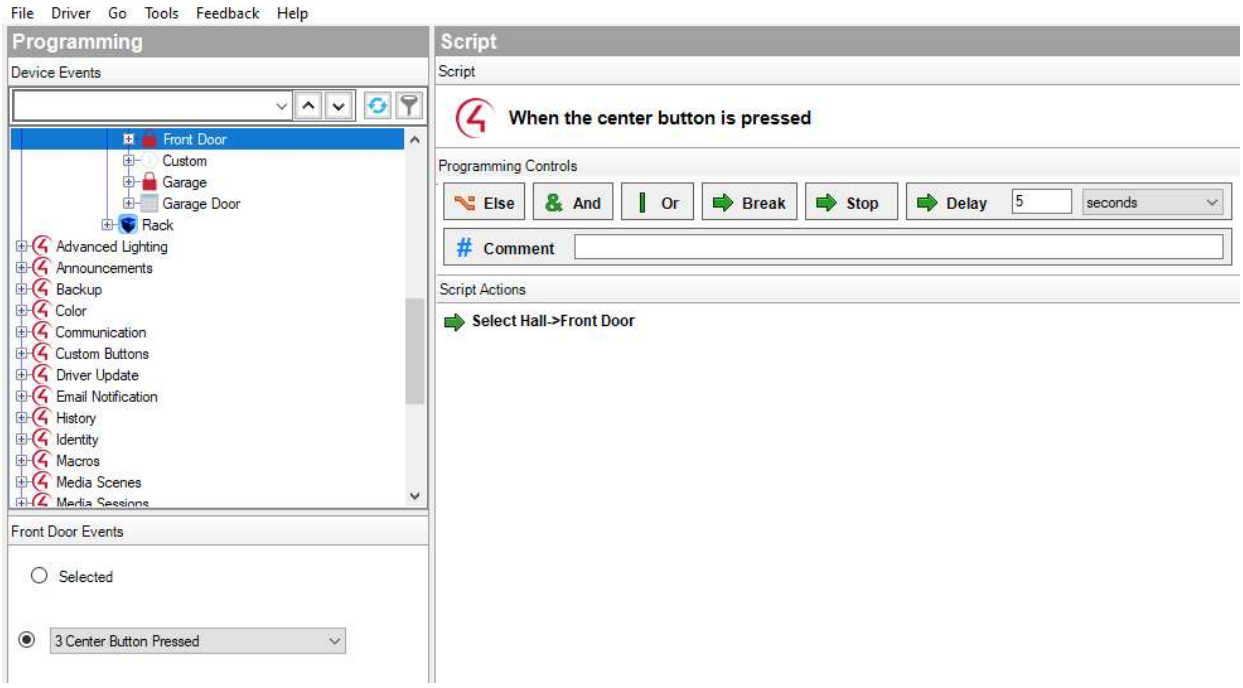
We want to block the opening of a door with the Pincode Driver with the code “123”, so when the code is entered we need a “Open” button to send the action. Additionally, we want to be able to see the status of the door so we can monitor when it is opened or closed. Finally, we want to have a record in History when someone entered a valid code and when the button is pressed.

To accomplish this, we could configure the driver as the next image:

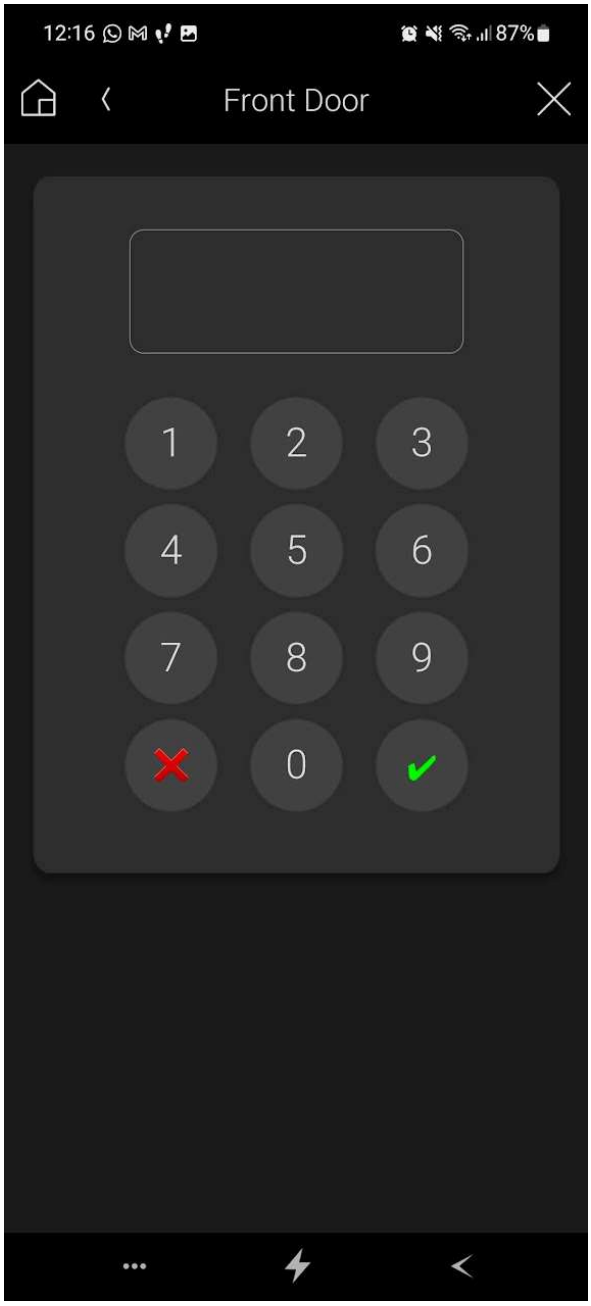


Note that we use “<br>”, this is a HTML element that means “new line” (enter).

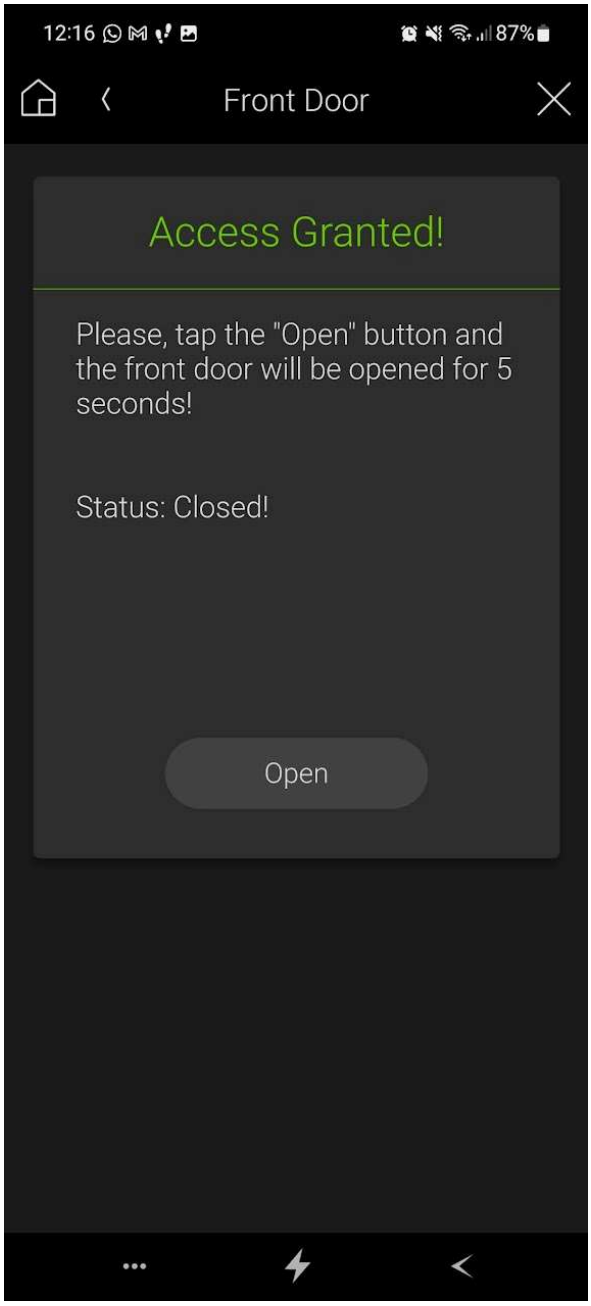
Then we need to make the “Center Button Pressed” event to open the door:



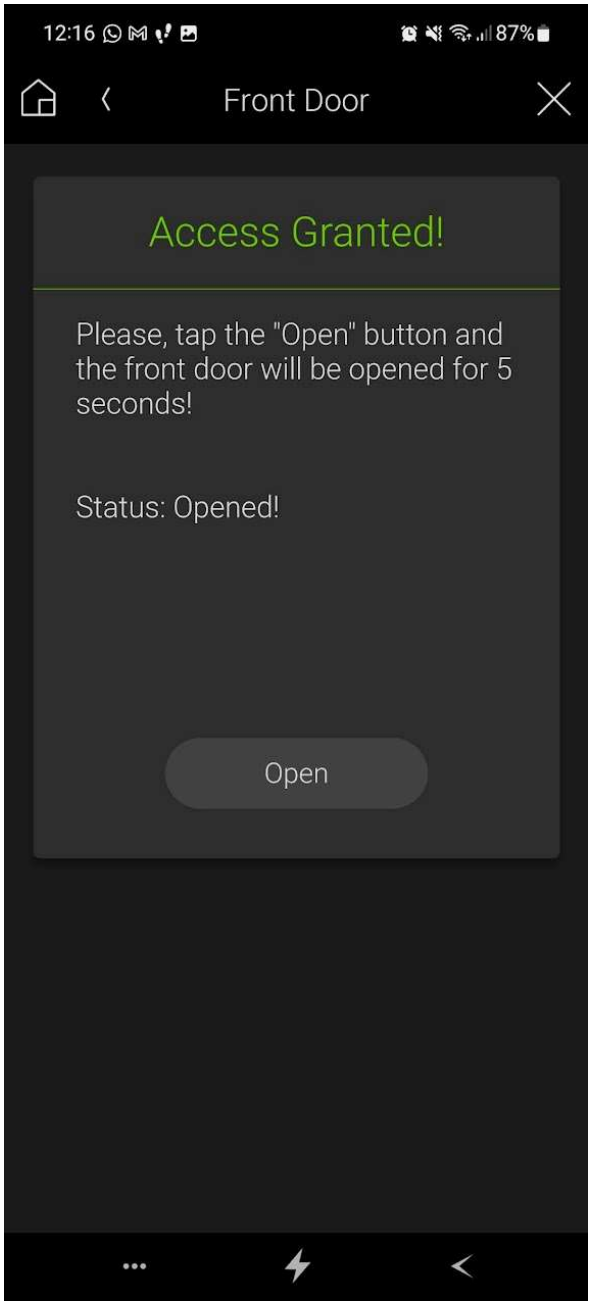
Here you can see on the UI before enter the code:



Right away after the code has been entered:



And finally, after the button is pressed the door will be opened for 5 seconds, so you will see the status “Opened” in that period of time:



And here we can see the history event recorded:

7.2 Example 2

We want to block the opening, closing and stopping of a garage door with the Pincode Driver with the code “321”. So we will configured that when someone enters the valid code, there will be 3 buttons with the three actions.

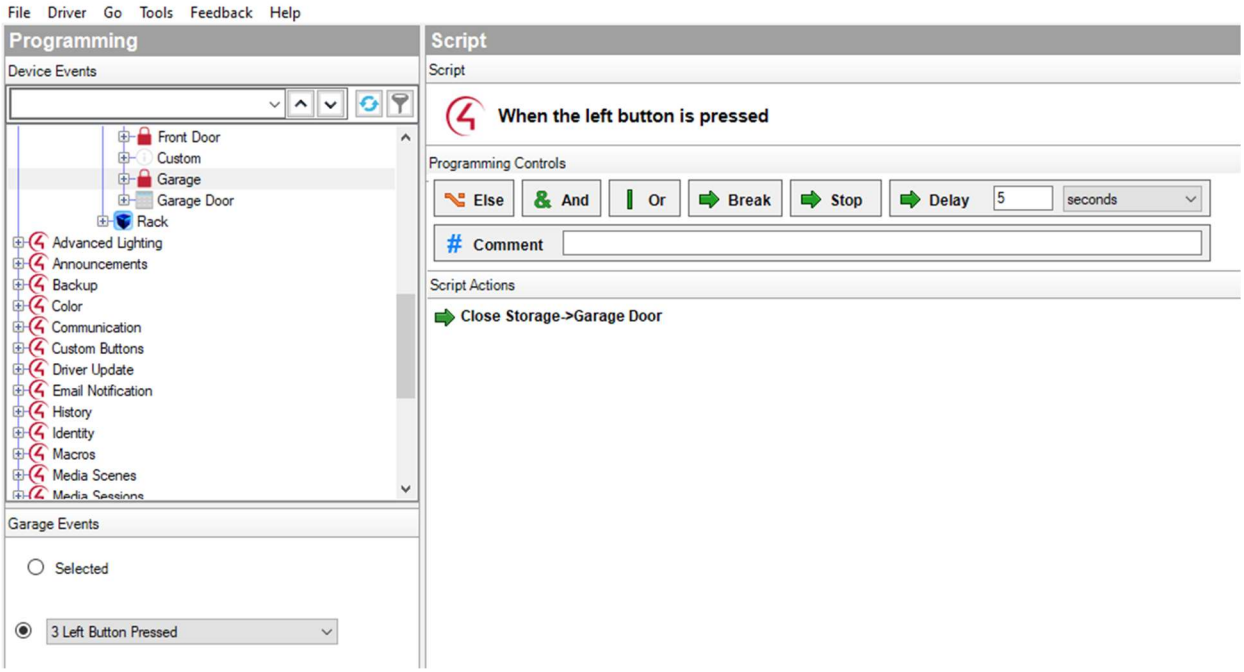
Note: To manage the garage door you will need the specific driver to handle it (for example the C4 “Relay Garage Door Controller”) and make the connections and configuration properly. Then you will need to hide the driver if you want to only control it via pincode driver.

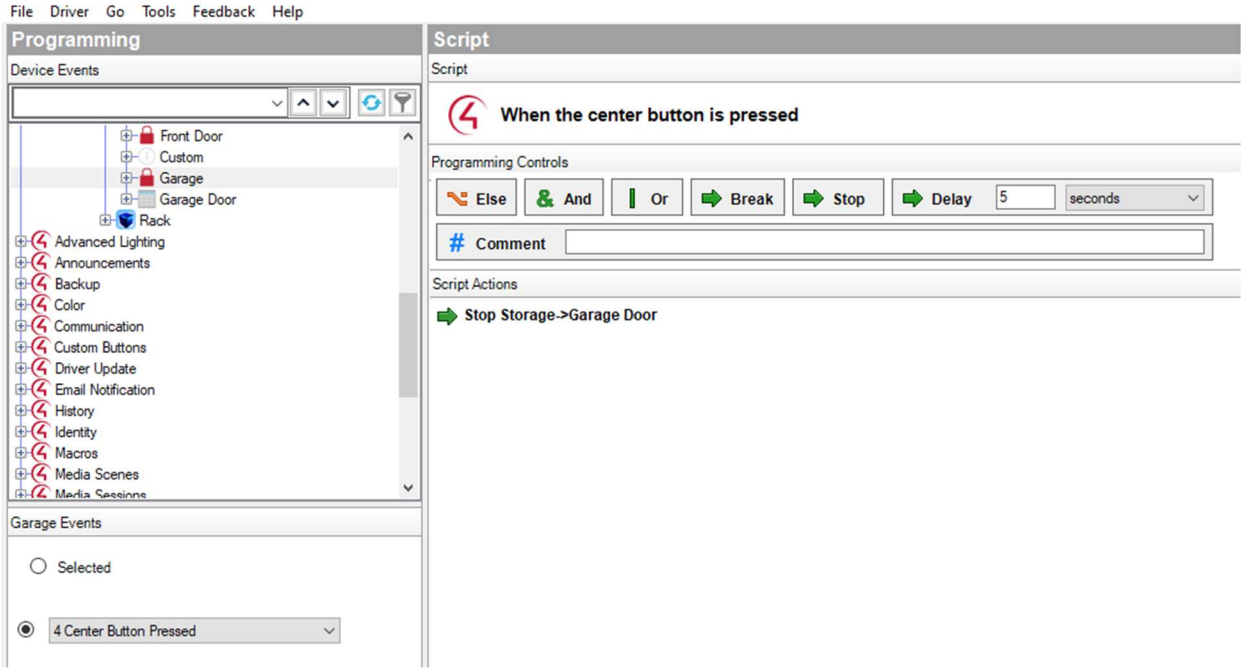
For the pincode driver, we could configure the driver as the next image:

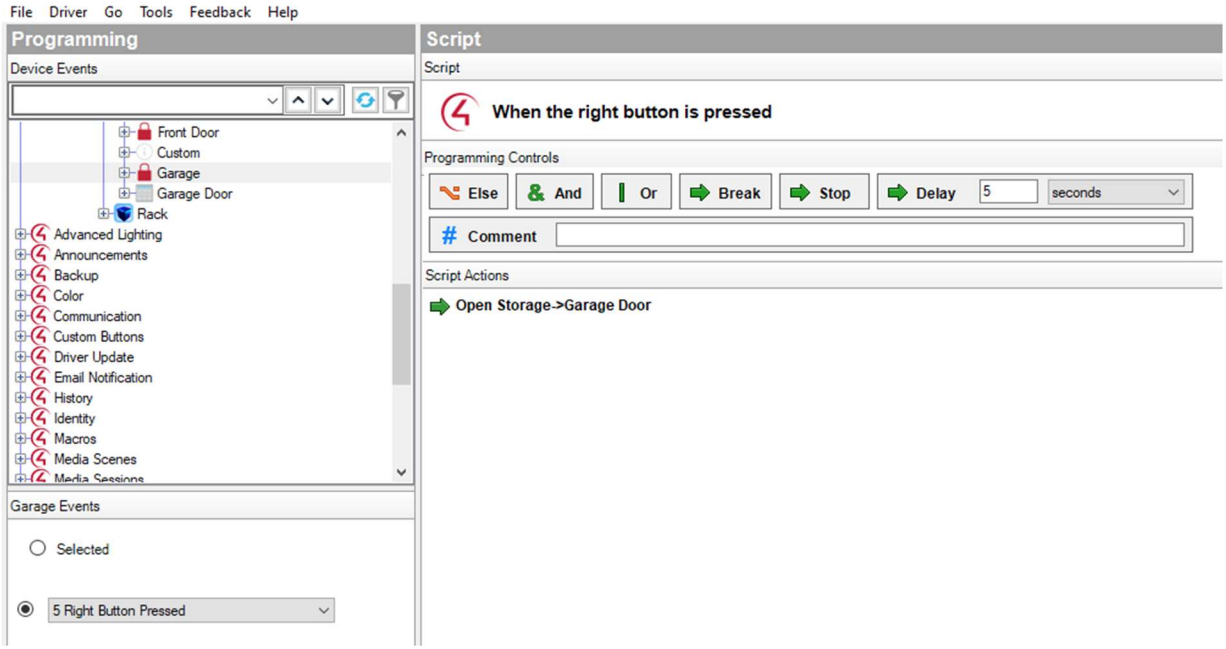
-Driver Configuration-	
Debug Mode	On
UI Icon	Garage
Pincode	321
Valid Pincode Text	Now you can control the garage door:
Valid Pincode Button Quantity	3
Button Left	— BUTTON LEFT —
Button Left Text or Icon	Icon
Button Left Icon	Arw Dn
Button Center	— BUTTON CENTER —
Button Center Text or Icon	Text
Button Center Text	Stop
Button Right	— BUTTON RIGHT —
Button Right Text or Icon	Icon
Button Right Icon	Arw Up
-History-	
History	On
History Level	Warning
History Category	Pincode Protect
History Sub Category	Garage Door

Noticed that we select the Garage icon to the UI display, and we selected three buttons: The left one is an icon arrow down, the center one is a text with “Stop”, and the right one is a icon with arrow up.

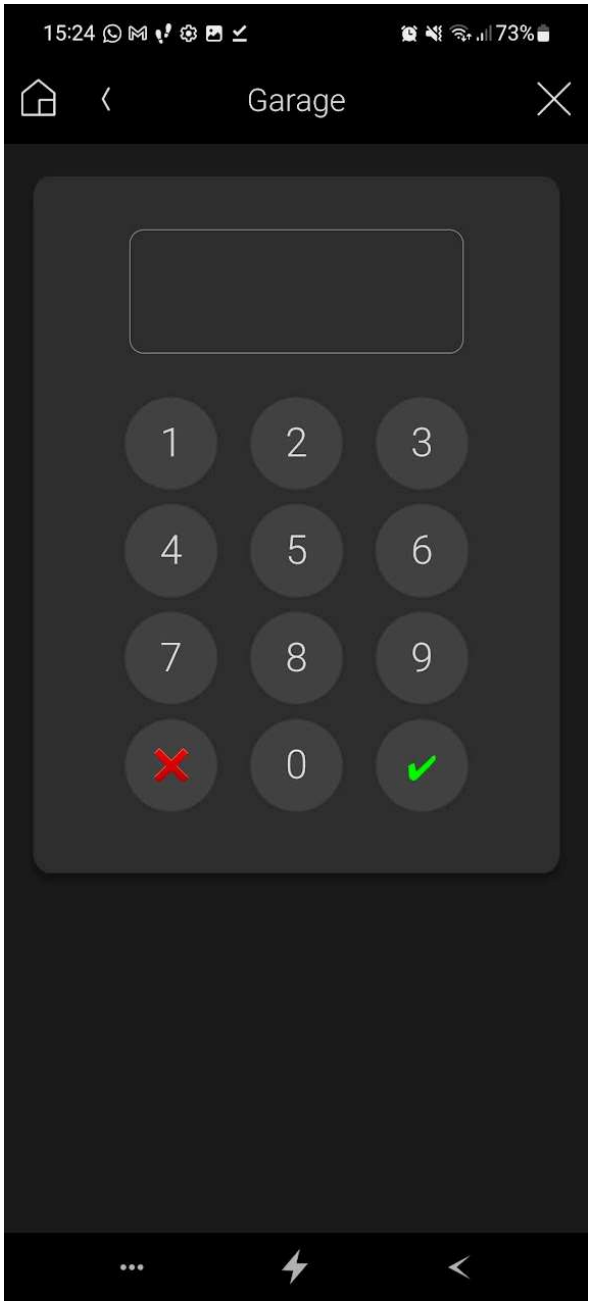
Here you can see the events programing of the different actions:


File Driver Go Tools Feedback Help
Programming
Device Events
Front Door
Custom
Garage
Garage Door
Rack
Advanced Lighting
Announcements
Backup
Color
Communication
Custom Buttons
Driver Update
Email Notification
History
Identity
Macros
Media Scenes
Garage Events
Selected
3 Left Button Pressed
Script
Script
When the left button is pressed
Programming Controls
Else
And
Or
Break
Stop
Delay
5
seconds
Comment
Script Actions
Close Storage->Garage Door


File Driver Go Tools Feedback Help
Programming
Device Events
Front Door
Custom
Garage
Garage Door
Rack
Advanced Lighting
Announcements
Backup
Color
Communication
Custom Buttons
Driver Update
Email Notification
History
Identity
Macros
Media Scenes
Garage Events
Selected
4 Center Button Pressed
Script
Script
When the center button is pressed
Programming Controls
Else
And
Or
Break
Stop
Delay
5
seconds
Comment
Script Actions
Stop Storage->Garage Door

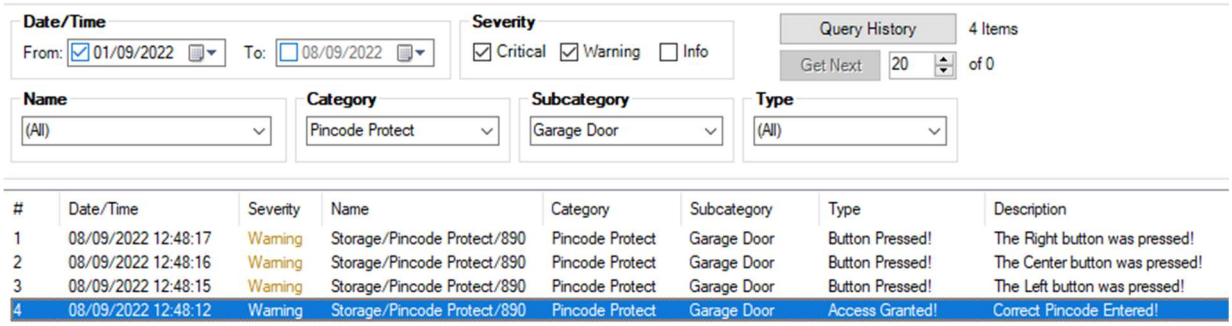


Here you can see on the UI before enter the code:



Right away after the code has been entered:

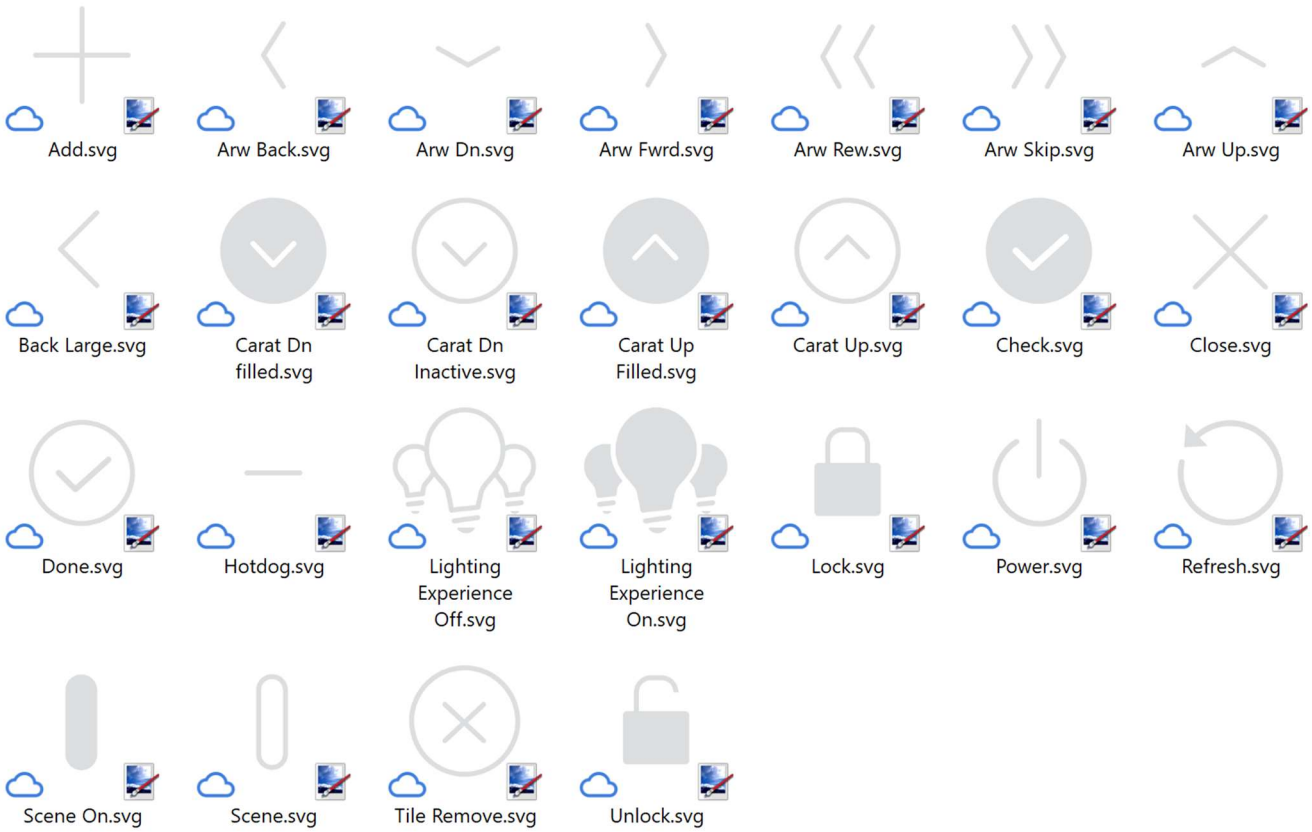
And here we can see the history events recorded:



#	Date/Time	Severity	Name	Category	Subcategory	Type	Description
1	08/09/2022 12:48:17	Warning	Storage/Pincode Protect/890	Pincode Protect	Garage Door	Button Pressed!	The Right button was pressed!
2	08/09/2022 12:48:16	Warning	Storage/Pincode Protect/890	Pincode Protect	Garage Door	Button Pressed!	The Center button was pressed!
3	08/09/2022 12:48:15	Warning	Storage/Pincode Protect/890	Pincode Protect	Garage Door	Button Pressed!	The Left button was pressed!
4	08/09/2022 12:48:12	Warning	Storage/Pincode Protect/890	Pincode Protect	Garage Door	Access Granted!	Correct Pincode Entered!

8. Button icons

Here you can see the list of icons and their names, available to use in each button if the “icon” option was selected:



*More icons could be added in a future without updating this documentation

9. Limitations

These are the current driver limitations:

- Sometimes, when you select the driver in the UI, a black background and a spinning wheel can appear for a couple of seconds before the pinpad shows up. Apparently, in that cases the Control4 app take more time to load the web-page and that is why you must wait a little bit.

10. Best practices

- The main purpose of this driver is to block actions, not to replace other driver's functionality. For example, if you want to block a garage door actions, you must first configure a garage door driver properly (for example control4 Relay Garage Door Controller), hide it from navigation and then program the buttons of the Pincode driver to send the

actions to the garage door driver as you wish.

- This driver relay on webview support of Control4 systems. This means, like any webview driver on the market, an interaction of several programming codes (Lua, JS, CSS, HTML, etc), so any change that Control4 makes could lead on the driver not working properly. Despite of the purpose of this driver is to add one more step of access control, this is not a security driver per se. Be conscious of this and test the driver as much as possible to make sure it fulfils your needs and performs accordly to your interest.
- Try to use always at least one variable, so the customer can see the change of state when a button is pressed.

11. Warranty and disclaimer

Barbini.dev provide drivers tested as much as possible. However, due to the highly variants of systems setups and the constant changing of the electronics systems, updates and/or modifications may be required to fixing bugs or improve the driver functionality.

Many of our drivers interact with systems APIs (like Control4 and/or any other 3rd party system). Therefore, if any API changes, the driver may stop functionating correctly. **Barbini.dev** cannot guarantee long-term functionality of any driver developed that uses APIs. **Barbini.dev** has the right to repair, provide updates, or discontinue a driver at any time. These repairments or updates could be free or required additional expenses. Despite the above, our efforts will always be to maintain the drivers as long as possible and free of charge of upgrades as much as possible.

13. Trial and Showroom Licenses

All the drivers have 7 days of trial, allowing dealers to test the features of any driver in a customer project before purchasing it. The trial automatically begins when a driver is installed in a project.

We enable all the Showroom licenses to have unlimited access to the drivers.

Developed By: Barbini.dev
Contact: barbini.dev@gmail.com

Barbini.dev

VERSION 22092801: Official release