

Revision: 1.01

<https://iot-portal.com> Yes

<https://iot-portal.com/app> Yes

Mobile: Yes

Desktop: Yes

## Restricting Keypad Access to One Output

By default, keypad codes and tags can be used on either reader to operate the door they are linked to with the Play Events control (see below). Each reader can be assigned to either output (door) or both. It is also possible to restrict a keypad code to one output (door) so that this keypad code can only operate one output (door) and not the other output.

## Play Events

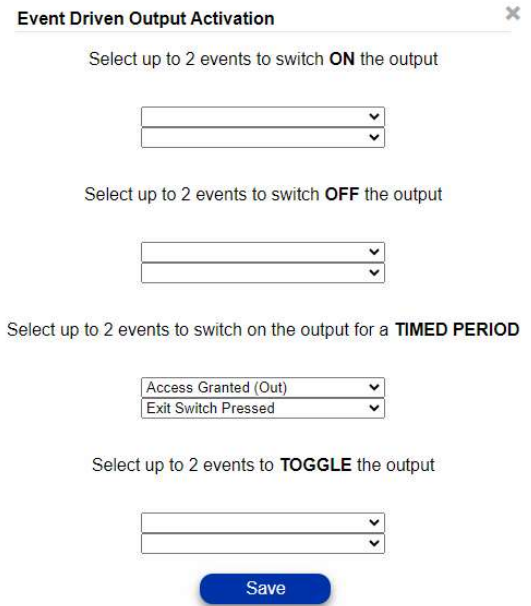
Each output can be controlled by numerous events internal to the controller. For example, a valid tag presented to the reader generates an event which can be used to activate an output.

The activation can either be a timed period, an 'on' activation, an 'off' activation or a toggle activation (on, off, on of etc...).

Each activation type can have 2 trigger events. By default, the '1/#' output is activated for a timed period by the 'Exit Switch' input and the 'Access Granted (Out)' event. This means a valid code or tag on the 'Outer Reader' will operate the # Output for 10s.

The second '2/\*' output is operated by the 'Inner Reader' for a timed period of about 10s by default.

These settings can be viewed from the Live Screen by pressing the 'Play' button on each output card. Output 1 (#) is shown to the right.



The screenshot shows a configuration window titled "Event Driven Output Activation" with a close button (X) in the top right. It contains three sections for selecting events to trigger actions on the output:

- Select up to 2 events to switch ON the output:** Two empty dropdown menus.
- Select up to 2 events to switch OFF the output:** Two empty dropdown menus.
- Select up to 2 events to switch on the output for a TIMED PERIOD:** Two dropdown menus, the first containing "Access Granted (Out)" and the second containing "Exit Switch Pressed".
- Select up to 2 events to TOGGLE the output:** Two empty dropdown menus.

A blue "Save" button is located at the bottom center of the window.

## Restricted Access

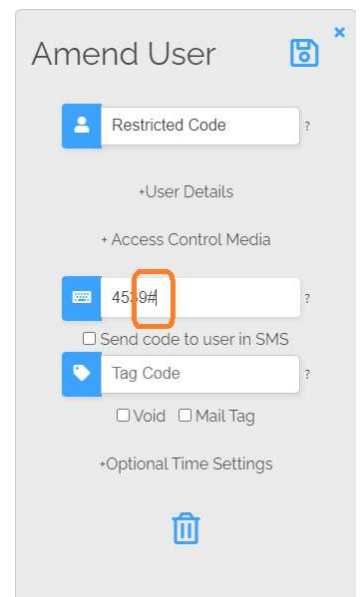
By making use of the additional \* and # keys on most keypads, a keypad code can be set which generates an event that is only able to operate one output (or door). Whereas a standard numerical only code operates the output dependent on reader, the Restricted Code operates the output dependent on the code entered. This means one controller can be used to operate 2 doors with different sets of codes for each door.

## Setting a Code

In order to restrict a code, the last character in the code should be set to \* or # when entering it on the New/Amend User Screen. It's important it is the last character.

**When saved, the # key will be translated into the 'B' character and the \* key will be translated into the A character. These characters are interchangeable (i.e. you can enter A in place of \* and vice versa).**

When the user types this code into the keypad, it will not be a valid code until they have also entered the \*/# key.



The screenshot shows the "Amend User" screen with a close button (X) in the top right. It features several input fields and options:

- Restricted Code:** A text input field with a question mark icon.
- +User Details:** A section header.
- + Access Control Media:** A section header.
- 45-0#:** A text input field with a keypad icon and a question mark icon. The "#" character is highlighted with an orange box.
- Send code to user in SMS:** An unchecked checkbox.
- Tag Code:** A text input field with a question mark icon.
- Void / Mail Tag:** Two unchecked checkboxes.
- +Optional Time Settings:** A section header.

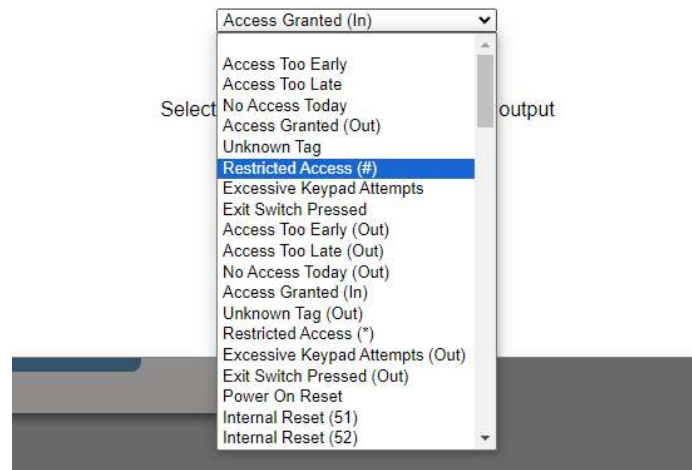
A trash can icon is located at the bottom right of the screen.

### Selecting the Output

The installer should then return to the Live Screen and click the 'Play Events' button on the chosen output in order to set this as the output for the # code. **It does not necessarily have to be the # output!**

The required event is the 'Restricted Access (#)' for keypad codes ending in a # key. Similarly the required event is 'Restricted Access (\*)' for codes ending in the \* key.

Select up to 2 events to switch on the output for a **TIMED PERIOD**



With reference to the picture above, when a code ending in # is entered on a keypad, this output will activate. It is also possible to add 'Access Granted' to this output to allow people with unrestricted codes to operate this door.

### Limitations

It's unfortunate that the Output is named #/\* and most keypads have a #/\* key on the keypad. This can cause confusion. The two things are unrelated!

There are only 2 timed events per output. If an exit switch is used there will only be space for one other event.

A code ending in # or star will operate the corresponding door regardless of which keypad is it entered into. This is not normally a problem as the user who knows the correct code for the door will normally be operating the correct door.

There is no way of restricting access when using tags.

### Security

Ensure only admin users have a 'Full Access' email address and/or 'Admin' phone number in the device's Users page.

Each user should have their own code.

### Threats to Existing Installations and Recommended Testing

Ensure the Play Events are set correctly on both outputs if implementing this solution.