

Driver documentation –version 106

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# General notes and warnings

☐ System requirements: OS 2.8.0 and later.

# <u>Driver setup and properties</u>

### Setup

- 1. Enter License Key and activate the license.
- 2. Determine the IP Address of the Echo (see Driver Notes section for details on setting and determining IP address) and enter it in the Echo IP property.
- 3. Enter Trigger name in the "Add Trigger Name" field and click Set.
- 4. Verify that Trigger was added by viewing the dropdown list in the "Delete Trigger" field.
- 5. Once you are ready to register these Triggers with the Echo, say "Alexa, Discover Devices", then click the "Send Discovery" action button in Composer. Alternately, you can use the Alexa mobile app or browser interface (<a href="http://echo.amazon.com">http://echo.amazon.com</a>) settings menu to initiate Device Discovery, under Settings->Connected Home->Devices->Discover Devices link
- 6. Verify that the Triggers defined in Composer were discovered. The Discovered property should be set to true, and you should see the devices listed within the Connected Home Devices in the Alexa web/mobile settings menu.
- 7. Program the Trigger On/Off/Up/Down events as explained in the Programming section below.
- 8. If you modify the list of Triggers, repeat steps 5-6 to register the new Triggers with Echo.

### **Properties**

Echo IP-Enter the IP address of the Amazon Echo

License Key- Enter a valid License Key for the driver.

License Status-Displays the status of License Key activation

**Triggers Discovered**- Displays the status of whether the Triggers have been successfully discovered by Echo.

Debug Mode- Sets the logging level.

Add Trigger Name- This field is used to define new Triggers.

**Delete Trigger-** This field is used to show a list of all Triggers which have been defined, and if desired, to remove Triggers from the system. (select a trigger and click the Set button to delete the Trigger)

### Actions

**Send Discovery-** This is used to send the Device information to the Echo during device discovery. Click the button once and wait for Echo to complete the discovery.

# Programming

For each trigger which is defined in System Design, 4 events are auto-generated for programming:

On- Use this event to turn something on, activate a lighting scene, trigger a Macro, etc.

Off- Use this event to turn something off, de-activate a lighting scene, trigger a Macro, etc.

**Up-** Use this event to turn something up, for example to raise the volume, temperature setpoint in the room, or raise blinds. **Echo sometimes can have difficulty distinguishing between "up" and "off", so you can also try other words such as "raise", "increase", or "brighten" to trigger the up event.** 

**Down-** Use this event to turn something down, for example to lower the volume, lower the temperature set point, or lower blinds. **Other words which you can try to trigger the Down event are "dim"**, "lower", "decrease".

It is recommended that you create Macros for your programming logic, and then simply trigger the existing Macros from within the Echo driver events. This way, if you decide that you want to re-name a Trigger for any reason, you will not lose the programming logic and can re-apply that Macro within the newly created Trigger (currently re-naming Triggers is not supported...only deletion and creation)

# Driver notes and limitations

## Notes & Tips

The driver will add custom event triggers for the Amazon Echo. The defined triggers will show up in programming, under the Amazon Echo driver section.

Multiple instances of the driver can be added to support multiple Echos in one home.

NOTE: Here are some keywords for the Echo which you should avoid using in your trigger names:

- Music
- Goodnight
- Play
- Pandora
- Prime

### In order to trigger events from your Echo:

## Sample:

Trigger Name: **Downstairs** 

Voice Command: "Alexa, turn ON/OFF Downstairs" (triggers the On or Off event

programming...activates a lighting scene for example)

Voice Command: "Alexa, INCREASE/RAISE/BRIGHTEN/TURN UP Downstairs" (triggers the

Up event programming...ramps up a lighting scene for example)

NOTE: Echo sometimes has a difficult time discerning between the words "On" and "Up"...you must clearly annunciate when using both of these events for a single Trigger name

Voice Command: "Alexa, DECREASE/DIM/LOWER **Downstairs**" (triggers the Down event programming)

## To Determine the IP Address of your Echo:

This can be a little bit tricky because the Echo does not announce itself using typical IP address scanning utilities. The best method is to use the management console for the wireless router to see what IP address has been assigned to the Echo.

Although it is not required, we recommend configuring a Static IP address for the Echo, so that you can easily determine the IP address, and also to ensure that the IP address will remain constant when performing the "Send Discovery" action (this is the only time in which a connection needs to be made with the Echo).

In order to set a Static IP, it is best to configure DHCP reservation on your router for the Echo. Alternately, you can use the Echo mobile app or Echo web app (<a href="http://echo.amazon.com">http://echo.amazon.com</a>) to set a static IP:

- 1. Under the Settings menu, select the Echo from within the Alexa Devices section
- 2. Select Update Wi-fi.
- 3. Press the Action button on the Echo for 5 seconds until the light ring turns orange.
- 4. Press Continue. Once connected to the Echo, select the Wi-fi network you'd like to connect it to
- 5. Click the "Show Advanced Options" link and enter the details to configure a static IP, router IP, subnet mask, and DNS server address. NOTE: If the "Show Advanced Options" link is missing, click the "Forget this Network" link in order to reset the settings for that network and then the advance options link will re-appear.
- 6. Enter the Wi-fi network password and click Connect to complete the setup.

#### Limitations

- 1. A maximum of 30 Triggers per driver instance is currently being imposed. This is a limitation of the Echo itself (at this point in time...hopefully that will change soon).
  - a. NOTE: The Triggers that you define are being registered with Echo as Connected Home devices...Echo currently has limitations on the total number of devices which can be connected (30 per Amazon account), thus if there are other devices already registered with Echo, you may need to reduce the number of Control4 Triggers in order to keep the total device count under the limit. If you are over the limit, the devices will not register properly and will show as (offline) and greyed-out.
- 2. If using multiple Echos in the same project, and they are registered on the same Amazon account, you only should use ONE instance of the Echo driver to configure your keywords they will be recognized by all Echos in the project.
- 3. If you want to have more than 30 triggers, then you will need to configure additional Echos to be registered under a different Amazon account, and you will need to add an additional instance of the driver to the project (1 instance per Amazon account).
- 4. Re-naming of Triggers is currently not supported. If you would like to re-name a Trigger, you simply need to delete the trigger and create a new one with the new name. It is recommended that you encapsulate your event programming logic into Macros in order to insulate yourself from Trigger re-naming. Additionally, if you delete a trigger in the driver, it does not automatically delete the device on the Echo. You need to "forget" the device using the Alexa app or echo.amazon.com (Settings->Connected Home->Devices).