

# Alexa, Harmony Project

A Project to control my TV, Cable Box, Xbox One, DVD Player, Receiver/Amplifier and Speakers



oCOSMO E40



Motorola DVR  
[Motorola DCX3510-M]



Xbox One  
[Microsoft Xbox One]



Magnavox DVD  
[Magnavox MBP5120F]



Sherwood AV Receiver  
[Sherwood RX-5502]



echo dot

Add Alexa to any room



# Components

- Amazon Echo Dot (Alexa)
- Logitech Harmony Companion (Harmony)
- Ocosmo TV
- Motorola DVR Cable Box
- Microsoft Xbox One
- Magnavox DVD Player
- Sherwood AV Receiver and Speakers
- Unify Bluetooth Receiver
- Nyrius Wireless HDMI Video Transmitter & Receiver System

# Discussion

The goal of this project is to control all the components via voice commands using Alexa.

The first thing I had to do was to get all the components in one place and connect them. I had to determine what connected to what and how. I connected the Unify Bluetooth Receiver into the Sherwood Receiver via the Aux Input jack. This is because the Sherwood does not come equipped with Bluetooth and I needed that so the Dot could stream music to it.

The Sherwood Receiver was purchased because it could control four (4) different speaker groups. This allows me to send music to the rooms I desire.

The Xbox One, DVD Player and Nyrius HDMI into one each of the TV's HDMI ports.

The reason I am using the Nyrius HDMI is that the Cable Box is in another room and it was not easy to run cables.

# More Discussion

I had to change the configuration of the TV so I did not use the TV's Speakers and then ran a cable from the TV's Audio Out into the Sherwoods CD input jack. Connected 4 sets of speakers to the Sherwood Receiver into jacks A, B, C, D. This allows me to determine which rooms get sound, I can select A, AB, ABC, B, C, D, BC, CD or all.

My TV is an older one so the Configuration data in the Harmony App does not work properly, so I had to teach Harmony how to interface with my TV.

Connected a IR blaster to my Harmony Hub and placed into the cabinet.

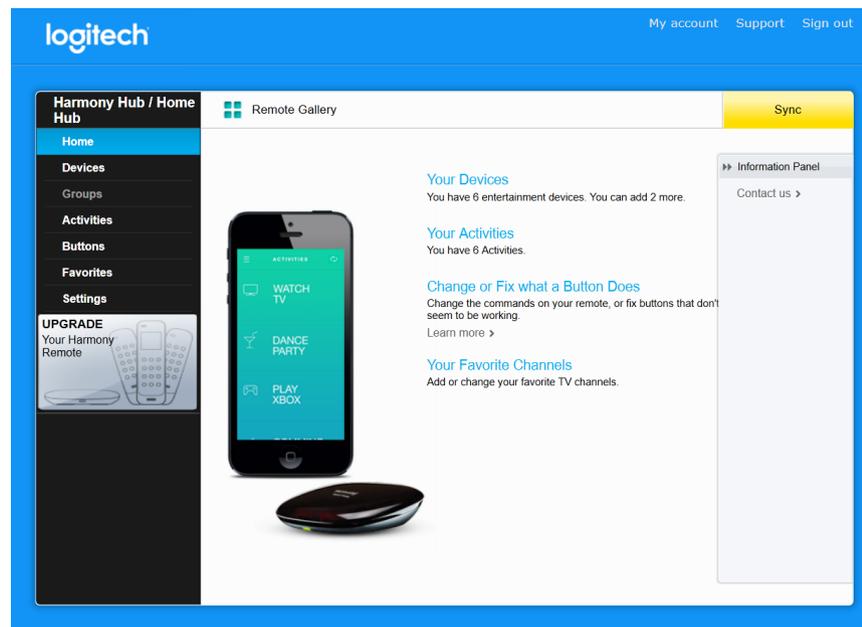
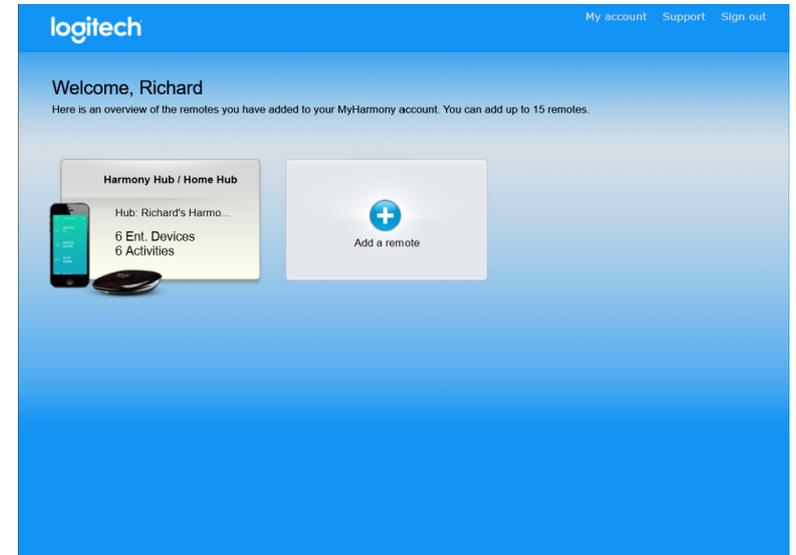
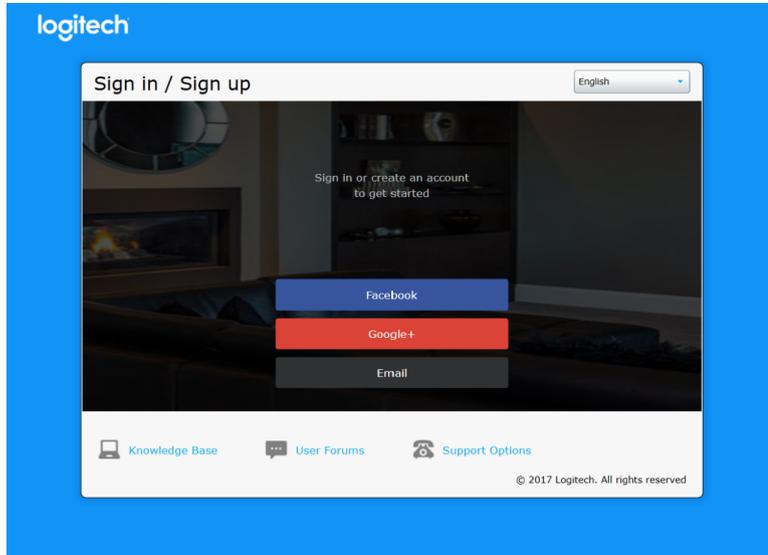
Because Xbox One's are a bit limited, the blaster needs to be placed directly in front of the IR window on the front of the console.

Once all the connections were made the next step was to start the configuration.

# Configuration Steps

- Install the Alexa app on my computer and smart phone.
- Install the Harmony app on my computer and smart phone. Connect the Harmony Hub to my computer via usb so the computer can talk directly to the Hub. (required if you want to use your computer to do the configuration, otherwise you must use your smart phone to do the configuration).
- Connected the Echo Dot to my Wi-Fi Network (used the alexa app on my computer)
- Connected the Harmony Hub to my Wi-Fi Network
- Enable the Harmony Skill in the Alexa app.
- Program the Harmony Hub via the Harmony app.

# Harmony App



# Harmony Devices Page

The screenshot shows the Logitech Harmony Hub / Home Hub interface. The top navigation bar includes the Logitech logo, "My account", "Support", and "Sign out". The left sidebar contains navigation options: "Harmony Hub / Home Hub", "Home", "Devices" (highlighted), "Groups", "Activities", "Buttons", "Favorites", and "Settings". Below the sidebar is an "UPGRADE" section for the Harmony Remote. The main content area is titled "Remote Gallery" and features a "Sync" button. It displays two tabs: "Entertainment (6)" and "Home Control (0)". Under "Entertainment", four devices are listed: "Sherwood AV Receiver [Sherwood RX-5502]", "Amazon Media Player [Amazon Echo]", "Xbox One [Microsoft Xbox One]", and "Magnavox DVD [Magnavox MBP5120F]". Small orange circles with an exclamation mark are positioned above the Amazon Echo and Xbox One devices. Below the device list, there is a message: "There is additional information available for your device. Show Details >". At the bottom, there are sections for "Add device" (with a sub-note: "Your Harmony Hub / Home Hub can control 2 more.") and "Scan for devices" (with a sub-note: "Scan for devices on Wi-Fi and enable IP parameters."). An "Information Panel" is visible on the right side of the main content area, containing a "Contact us >" link.

Notice the orange bullets above the Amazon Echo and the Xbox One.

These indicate there is additional information on these devices.

# Commands

- “Alexa, ask Harmony to turn on TV”
- “Alexa, ask Harmony to turn on Turner Clasic Movies”
- “Alexa, ask Harmony to turn on DVD”
- “Alexa, ask Harmony to eject”
- “Alexa, ask Harmony to pause”
- “Alexa, ask Harmony to play”
- “Alexa, ask Harmony to turn on Music”
- “Alexa, ask Harmony to turn on bedroom speakers”
- “Alexa, ask Harmony to turn on AB speakers”
- “Alexa, ask Harmony to turn on Xbox”

# Additional Information

- I am not going to go step by step on this projects configuration. It is too complex and too many steps.
- If you have a specific question, then you can contact us and we will be happy to give some advise.
- As the commands are issued the proper equipment starts up and selects the proper channel or rooms etc. What was running will stop if it is not needed for the current command.
- The names of activities is all up to the programmer. You can create any names that make sense to you.