

Game instructions

RetroTink 4K Pro/CE and Logitech Harmony Home Hub setup tips

Prerequisites

- An IR Mini Blaster (Emitter) for Harmony Hub
- A Windows PC with a USB input
- A micro USB wire that can be connected to a USB format accepted by your PC.
- (optional) An IR remote for a device you no longer use.

Physical setup

The RetroTINK 4K IR sensor does not always receive a signal, especially when powered off. Try putting the IR mini blaster right in front of it, pointed directly at the power light, but don't be surprised if it sometimes misses your power-on signal.

RetroTINK 4K setup

Disable Auto Power Up

RetroTINK 4K has an "Auto Power Up" feature on by default that can confuse Harmony Hub, so I recommend turning it off by following these steps:

1. Push the RetroTINK 4K remote's "Menu" button.
2. From the RetroTINK 4K "Main Menu," select "Advanced Settings."
3. From the "Advanced Menu" "System" subsection, select "OSD/Firmware."
4. From the "OSD/Firmware" menu's "Power Control" section, change "Auto Power Up" to "Off."

Assign at least one profile

You'll want to assign at least one profile to a profile button (1-12). If you've already done this, you can skip this section. If you haven't, follow these steps:

1. Push the RetroTINK 4K remote's "Prof" button.
2. From the RetroTINK 4K's "Profiles" menu, select "Load From File" under the "Load Profile" submenu and pick a profile that's appropriate for your configuration. Or, manually configure the RetroTINK 4K for your inputs, and select "Save As New" under the "Save Profile" submenu.

3. Select "Button 1" under the "Assign Profile" submenu to assign the profile to the remote's "1" button. Now, at any time, you can push the "1" button to load this profile, which will later be leveraged on the Harmony Hub.

MyHarmony setup

Download the MyHarmony app for Windows PC here:

<https://support.myharmony.com/en-us/download>

If you have trouble logging in while running the app, check your primary web browser tabs. Sometimes MyHarmony opens a tab on your browser, but it doesn't gain focus as it does so, so it looks like the MyHarmony app is stuck at login.

Note: In various sections below, you'll be instructed to "teach" your Harmony device commands for your RetroTINK. I find quickly pushing the desired remote button and giving ~3 seconds for the app to notify you that it succeeded or failed is more reliable than holding down or repeatedly pressing the remote button. Doing so makes Harmony Hub more likely to learn the wrong command.

Add RetroTINK 4K device

Note: if you've already done this step, be aware a couple choices I made may affect behaviors you are seeing:

- Using the unknown (by Harmony) "4K CE" device model number.
- Calling it an "Audio/Video Switch."

Follow these steps to add a RetroTINK 4K device:

1. Select the "Devices" tab from the MyHarmony PC app.
2. Select "➕Add device."
3. For "Manufacturer," type "RetroTINK".
4. For "Device Model Number," type "4K Pro" or "4K CE". Note: "5X Pro" is actually recognized by MyHarmony as a known device type, but I didn't use it in this guide. If you choose it, the rest of this guide may be invalidated.
5. Confirm that your device model number is correct.
6. When asked to "Tell us more about your RetroTINK 4K," say that it's an "Audio/Video Switch" and select "Save."
7. When asked if you "have the remote that came with your RetroTINK 4K," say "Yes, I have it" and select "Next."
8. Plug the Harmony Hub (micro USB) into your PC, if you haven't already.
9. Point the RetroTINK remote at the Harmony Hub and push the "Power" button.
10. When asked "How do you change what you're listening to on your RetroTINK 4K," select "I press different buttons that directly switch to CD player or other inputs."
11. Skip ahead to [this step](#) to teach it how to load profiles.

Use profiles as inputs

I recommend you eschew "input" selection in favor of profiles, and lie to Harmony Hub, telling it that profiles *are* input selection. This will have the following benefits:

1. If a Harmony Hub activity fails to start, you can use Harmony app's "Fix" command to select the profile you want.
2. You don't need any special commands; just start RetroTINK and pick the profile.

It's not as straightforward as you might expect, though. Assuming you didn't follow the [Add RetroTINK 4K device](#) section of this doc, you adjust your existing input settings by following these steps:

1. Select the "Devices" tab from the MyHarmony PC app.
2. Select RetroTINK device from the list of devices.
3. Select "Change Device Settings" from the RetroTINK device menu.
4. Select "Input settings."
5. Select "I press different buttons..."
6. Clear all the existing "Device Inputs."
7. For each profile you want to configure:
 - a. Select "Input missing"
 - b. Name the input. I call mine "# system", such as "3 Saturn" or "4 Genesis," where the number is the profile number.
 - c. Select "Teach a brand new command for input <your input name>."
 - d. Plug the Harmony Hub (micro USB) into your PC, if you haven't already.
 - e. Point your RetroTINK remote at the Harmony Hub and push the corresponding profile button.
8. Select "Finish" from the "Input Settings" menu.
9. Select "Add or Fix a Command" from the RetroTINK device menu.
10. Select "Fix a command that doesn't work," pick the "ShowInputMenu" command, and select "Next."
11. Your objective is to BREAK this command. A bit of background: Even though you picked "I press different buttons..." input selection method, Harmony Hub will still execute the following commands, in sequence, when changing inputs: ShowInputMenu, <profile number button>, OK. This is disastrous for what we're trying to accomplish with profiles, because effectively it opens the RetroTINK input menu, changes to the desired profile, then hits OK, which typically changes the input to HDMI and always leaves the input menu open. If you break the ShowInputMenu button, the automatic OK button press will no longer select HDMI and you won't have the input menu stuck open. You can leave the OK button functioning and it'll be a no-op unless you have a RetroTINK menu open when you change inputs. (Feel free to break the OK button, as well, but I prefer to have it working.) Here are a couple options for breaking this command:
 - a. Teach it RetroTINK profile 12. This should effectively be a no-op even if you use profile 12, though it may cause the screen to flicker.

- b. Grab a remote to a device you no longer use and teach it some command using that.

Teach non-input buttons

1. Select the "Devices" tab from the MyHarmony PC app.
2. Select RetroTINK device from the list of devices.
3. Select "Add or Fix a Command"
4. Fix the following commands:
 - (very optional) "1" through "9"
 - Back
 - DirectionDown
 - DirectionLeft
 - DirectionRight
 - DirectionUp
 - Menu
 - Ok
5. Add the following missing commands. ActuallyShowInputMenu is just the "input" button on the RetroTINK remote, the rest are self explanatory.
 - ActuallyShowInputMenu
 - ADC
 - Diag
 - Output
 - Profile
 - Safe
 - Scaler
 - Stat

Power

1. Select the "Devices" tab from the MyHarmony PC app.
2. Select the RetroTINK device from the list of devices.
3. Select "Change Device Settings".
4. Select "Device delay settings."
5. Set "Power-on delay" to at least 15.0 seconds. (This is what worked for me, anyways.)
6. The other delays can be left at their default values.

Setup activities

1. Select the "Activities" tab from the MyHarmony PC app.
2. Select "Add Activity"
3. From the "Add An Activity" wizard's first menu, select "Additional Custom" and "Next."
4. If you need an icon for your activity, you might find it here:  Harmony icons .

5. Progress through the "Add An Activity" wizard with selections appropriate to your setup until you reach "What inputs should your RetroTINK 4K be set to when your ~ activity."
6. Select the appropriate profile and "Next."
7. Select "Finish."
8. And that's it! No need to select "Customize this Activity" from the Activities tab