# header

# Harmony Universal Remote Control

## System Overview

One of the challenges when you build up an audio/video system is; how can I control them without having multiple remotes, tons of cables and noise free components.

Universal remotes have been used for years, and do a pretty good job covering most if not all current A/V devices. Most universal remotes control devices via IR (Infrared light). IR is considered to be a point to sight device where you have to point the remote at the device you want to control, and the IR receiver has to be in sight. The IR light needs to have no obstructions, but IR does have the ability to bounce off walls, and eventually reach the device it is controlling.

There is also RF (Radio Frequency) and Bluetooth Universal remotes that have a much more powerful signal that can travel through call, and can control devices much farther away.

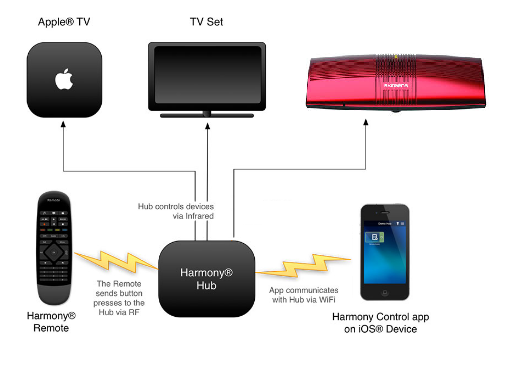
## Harmony Elite Universal Remote



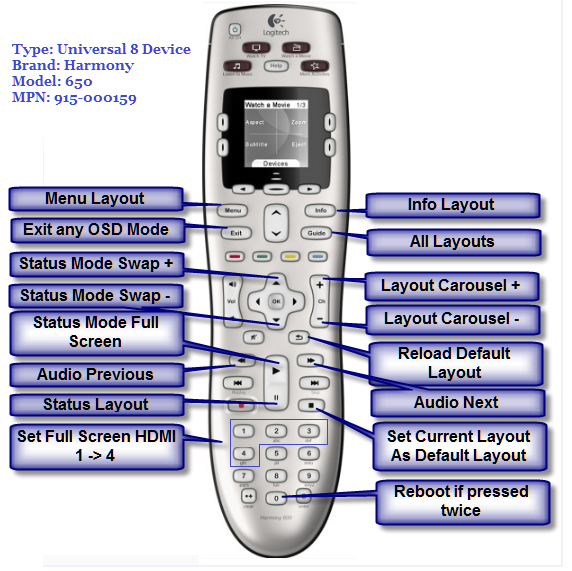
The Harmony Elite is an IR/Bluetooth remote. The remote emits both signals for each key press. The Bluetooth signal is used to communicate with a paired Harmony hub. The IR signal is used to go directly to the device that you want to control. IR is also used when the Harmony hub is not available.

The Harmony hub is the center of your home entertainment and home control solution. Placed near your television, cable/satellite box, game console and other equipment, it uses two Infrared (IR) Blaster transmitter cables to control your various devices.

There are 5 Harmony remote Keyfiles available in the Skreens unit. Because the Skreens unit doesn’t have an entry as a universal remote, we need to use an existing set of key definitions used for other devices. The idea is to select one of the keyfiles that doesn’t interfere with other devices in your setup.



## Harmony 650 Universal Remote Control



This Harmony universal remote control operates the same way as the Elite, except that this is a IR line-of-site remote that requires you to be within site of the IR receiver located on the Skreens unit. The same Harmony Elite universal remote key Keyfiles functions the same with this remote.

### Remote Programming

To program these Keyfiles into a new remote, do the following:

* Download the myHarmony remote app from their website.
* Run the app and select google+ to login.
* User = [skreensurc@gmail.com](mailto:skreensurc@gmail.com) , pass = MarcT0dd. The 0 is a zero.
* Plug the remote into your USB port.
* Select the remote you are using, and then press SYNC.

### Remote Keyfile synchronization

On the remote, press the “devices” key. This will display all of the loaded devices on the remote. The devices called “skreens keyfile” are special devices used by the Skreens unit.

If the selected keyfile interferes with other components in youre A/V setup, select another keyfile to see if the interference stops. Once a new keyfile is selected on the remote, press the “info” key a few times until the OSD info display appears. This will sync up the Skreens unit with the new keyfile.

### Skreens Remote control Commands

The Skreens Remote control commands are used to control the appearance of the video display and the audio sources. These commands are used to navigate the screen layout positioning and window configurations. Remote keystrokes are mapped to specific On Screen Display operation. A detailed description of each command is described in another section listed below.

## Skreens On Screen Display (OSD) Operation

The On Screen Display (OSD) control consists of 5 options: Layouts, help, status, swap, and info. These 5 options are detailed below.

The On Screen Display will remain active for a predefined time if the screen is left idle.

### Layouts Control

Layouts control is initiated by pressing the GUIDE key on the Harmony remote.

Once the layout control is initiated, a series of layout diagrams appear on the bottom of the display. Here you can navigate to a specific layout using the left and right arrows keys, and make your selection by pressing OK.



### Status Control

Status control is initiated by pressing the PAUSE key when no other OSD mode is selected. A yellow frame will appear to determine which window has the focus. The right and left arrow keys are used to navigate to other windows. At this point, you can either press the OK key to move the audio to the currently selected window, or you can press the PLAY key to bring the currently selected window to full screen. For either of these operations, the audio will follow the selected window, and all remote control keys will now be sent directly to device providing the A/V source.



### Swap Control

Swap control navigation is done when you have a multiple window layout loaded, and you are in OSD status mode. The UP and DOWN keys are used to swap windows from one position to another. The example layout below illustrates how to watch a program of interest in a large window, and when another interest starts playing, you can quickly swap windows to start watch the other program in the large window.



### Info Control

Info control is initiated by pressing the INFO key on the Harmony remote.

Info Control displays the video content for all 4 inputs, plus an illustration of the remote control layout. There are audio icons for each video input so you can see when input audio is selected. Use the LEFT and RIGHT keys to navigate between inputs and the FAST FORWARD and FAST REVERSE to change the audio source. Once your selections are made, pressing the OK key will loaded the selected input to full screen.



## Skreens Remote Control key definitions

Skreens remote control keys are used to navigate through a series of video screen layouts and to alter audio sources. Below is the list of keystrokes and a definition for each.

### GUIDE

Enters LAYOUT OSD mode: Displays a layout selector strip on the bottom of the display. Use the Left/Right keys for navigation.

### OK

Used by many operations to initiate a sequence.

### INFO

Enters INFO OSD mode: Displays the video content for all 4 inputs, plus an illustration of the remote control layout.

### MENU

Enters MENU OSD mode: Not available yet,

### RIGHT

Navigate to the right by one window.

### LEFT

Navigate to the left by one window.

### UP

While in OSD status mode - Swap UP sequence.

### DOWN

While in OSD status mode - Swap Down sequence.

### CH+

Preview each available layout forward.

### CH-

Preview each available layout backward.

### EXIT

Exits all On Screen Display (OSD) modes.

### STOP

Sets the currently loaded layout as the new default layout.

### BACK

Reinitializes configuration options, and loads the default layout.

### PLAY

While in OSD status mode: the selected window goes to full screen.

### FAST FORWARD

Advance the audio selection forward to the next HDMI device.

### FAST REVERSE

Retreat the audio selection backward to the previous HDMI device.

### NUMBER 1

Load full screen layout for HDMI 1.

### **NUMBER 2**

Load full screen layout for HDMI 2.

### NUMBER 3

Load full screen layout for HDMI 3.

### NUMBER 4

Load full screen layout for HDMI 4.

### NUMBER 0

Reboot the Skreens unit if pressed twice in a row.

### Record (Special Operation)

If pressed twice in a row, will put the Skreens unit into a OSD demo mode. Here a macro runs, and cycles through all of the available OSD displays. While in this mode, pressing any key will exit demo mode.

## Configuration web page

The universal remote options configuration web page is used to configure the Universal remote control communicates with the Skreens unit. Pressing the “Options Help” button will describe what all the options are used for.

Start a web browser and go to the URL address for the Skreens unit. The default port number is 8081.



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