Kodi Full Driver

Installation and Usage Guide

Contents

Overview

This driver is developed for the Kodi Entertainment Center (formerly known as XBMC).

Kodi Entertainment Center is a software based media player that can be installed on Windows, MAC, Linux, Raspberry Pi and Android based platforms including Nvidia Shield and Amazon Fire TV. Kodi offers a beautiful simple interface that enriches your playback experience. The Chowmain Kodi Full driver enables us to integrate the Kodi Entertainment Center into the Control4 home automation system with seamless control and feedback.

For example you could have the system automatically turn the tv and receiver on when you send content from your smart phone (via airplay or UPnP) to the Kodi or if you have fallen asleep whilst watching a movie have it automatically turn the tv and receiver off when Kodi goes into screen saver mode.

The driver is the only Control4 driver to have full library integration including Movies, TV Shows, Live TV/PVR, Music, Files and Addons like Youtube and VEVO. It makes movie playback in high end cinemas easy with automatic masking via video aspect ratio detection.

This is the ultimate media player integration in Control4 with features that no other media player driver offers. Read the installation guide to get a better understanding of what the driver can do.
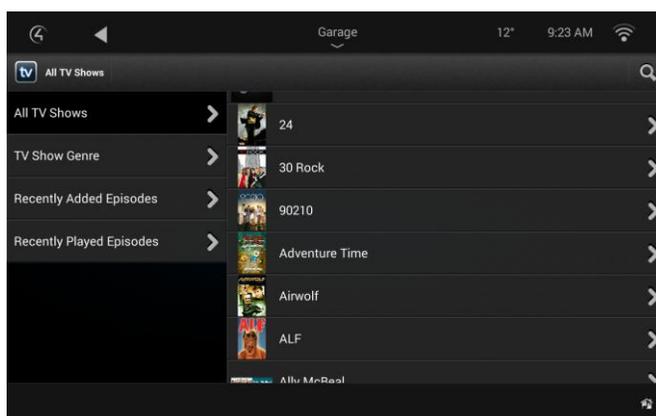
Features

- IP based communications

- Live Library integration including resuming playback

  - TV Show Library integration

  - Live TV / PVR integration

  - Movie Library integration

  - Video File integration

  - Video Add on integration

  - Music Library integration

  - Music File integration

  - Music Add on integration

  - Picture Library integration

  - You Tube Add on integrationVEVO Add on integration

- Transport controls

  - Numerical buttons act as jump to percentage during video playback or SMS style quick navigation when in navigational modes.

  - Support for PVR (Guide, Record, DVR, Channel Up, Channel Down buttons)

  - Assignable buttons for non intuitive buttons

- Automatic Room On (like the music bridge) on playback detection and automatic Room Off on screen saver activate.

- 2 way feedback via the JSON API for play, pause, stop, screen saver active/deactive, Detected File Type, Video Aspect Ratio, Video Resolution, Video/Music/TV/Radio currently playing, Memory usage, CPU usage, CPU Frequency, System Total Space, System Uptime, System Temperature, Client Platform, Client Version & Client Name

- Wake-on Lan functionality / Power off options

- Ability to send custom messages to Kodi Entertainment Center via Kodi Notifications (similar to Control4 Announcements via Navigator).

- Ability to playback audio announcements stored on the Controller in any room (combine it with our Advanced Announcements driver for dynamic text to speech generation).

- Ability to return to onscreen navigator on playback ended. This is great if you want to hide Kodi's interface and use Control4 only.

- Ability to disable room off when windowed. This is for certain addons that window Kodi to run another application in the foreground.

- Audio End-Point assignment for line level volume up/down/mute functionality

- Video End-Point assignment

- Support for Android boxes like Nvidia Shield and Amazon Fire TV (if XBMC app is closed it will launch upon ON command, also if XBMC exited by user you can navigate and control Android applications). If you are using the Video Storm IRUSB then it will also add an IR output to the driver.
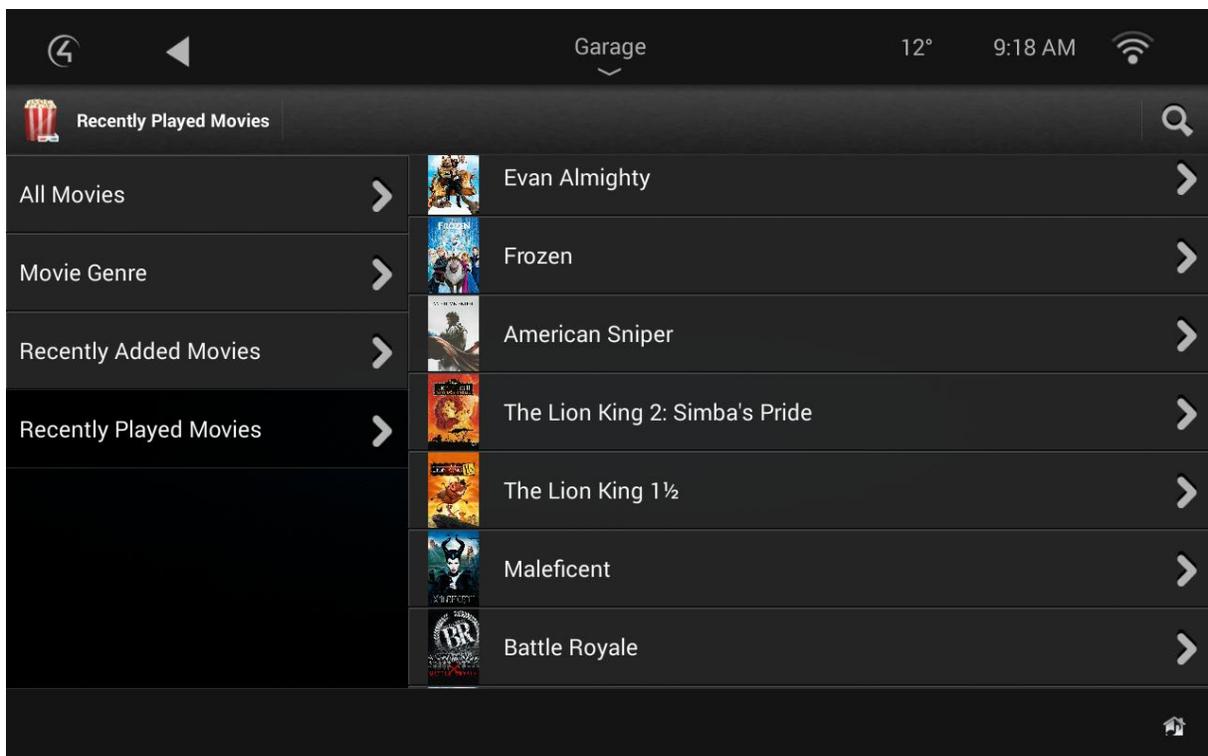
FAQ

Why is this driver called KODI Full?

Initially we wanted to make the best KODI driver around however as we kept working on it our aspirations just kept getting higher and higher. As such the development efforts and timeframe has expanded exponentially. To get the driver to market quickly we decided to make two drivers. KODI Lite and KODI Full. Kodi Lite is still one of the best media player drivers on the market with exceptional features. Kodi Full however is THE best media player driver on the market with full library navigation, live meta data, cover art and more. They are both priced accordingly. Some people won't want all the features available in KODI Full so we've made KODI Lite which is priced to suit.

Can you give us some examples of how we could use this driver?

- Now with Android support you can purchase Android Set Top Boxes for under $200 that will provide you with the full XBMC experience and Android experience. Play games, surf the web and use XBMC.

- The driver also adds an IR output if you are using the Video Storm IRUSB for IP control. The IR output is useful for controlling local devices such as TV's in that particular room.

- Create the perfect cinema experience by dimming the lights down when a movie starts, ramp it back up when the movie ends or if the user pauses or stops the movie. Also automatically set the cinema to different modes based upon the movie aspect ratio.

- Program an action to select a specific TV Channel, Movie, TV Episode or Video File upon event. Great for playing your child's favorite movie or to playback a video file in a commercial environment for example.

- It can be very disruptive while watching a movie to have navigator pop up and tell me that someone is at my front door or perhaps i have a new email or something. This driver provides the ability to send Kodi announcements. Like a Control4 Announcement this will pop up a custom message however in this case it will not interrupt the current Kodi activity. It will just pop up in the bottom right hand corner for a few seconds and then hide away.

- This driver provides two way feedback on what media you're consuming and what the state of the media player is. It will tell you when the movie is playing, paused, stopped or if it is a movie, episode, song or unknown media type. This information is useful for customising your lighting and environment to suit your customer's requirements.

- The driver has the ability to automatically turn rooms on and off. Using this functionality you can essentially turn on your tv and receiver upon airplay or UPnP photos, video or music playback. If you leave the room for too long or fall asleep at the tv the driver will automatically turn the room off (all av devices off) upon detection of screensaver activation.

- Some projects have the option of clearing out the black bars in movies. This driver reports back the aspect ratio of the video it is currently playing as a variable. Using this information we can automate these projection modes and as such make the user experience nicer.

- This driver has feedback on CPU usage, Memory usage and CPU temperature. This information is extremely important for maintaining the health of the hardware platform it is on. Using this information

we can automate shutdowns so that no damage can occur on the device.

What hardware will this work on?

This driver is designed for Kodi Entertainment Center Version 15.0 Isengard. This driver should work on XBMC versions 12 Frodo, 13 Gotham, 14 Helix as well without any issues however it will not work on XBMC version 11 Eden.

It has been tested on Android, OSX, Windows, Linux, Nvidia Shield and Raspberry Pi Platforms. If you choose to use it on any other platform you do so at your own risk. It is recommended that prior to purchasing this driver you utilise the free 7 day trial period for testing.

Change Log

Version #20171122 - 22-NOV-2017
- Added support for VideoStorm IRUSB. This adds IP control for android devices like Amazon Fire TV and Nvidia Shield. Note you need to purchase the device to use it.

Version #20170710 - 10-JUL-2017
- Migrated to driverCentral.

Version #20160606 - 06-JUN-2016
Fixed Return to Onscreen Navigator

Version #20160317 - 17-MAR-2016
Driver will now hide the virtual switcher automatically.
Will also hide the mini driver's from watch/listen depending on what mini driver it is. Eg music will now only appear under listen. TV shows will now only appear under watch.

Version #20160308 - 08-MAR-2016
Implementex fix for Czech.

Version #20151230 - 30-DEC-2015
Fixed issue with Video Playback Mode
FIxed Live TV/Radio Mini Driver not displaying notification when Kodi is offline.
Added OS 2.8.1 icon for Kodi Control satellite driver.

Version #20151221 - 21-DEC-2015
Added ability to map skip fwd/skip rev functionality to BIG_STEP_FWD/REV or NEXT/PREV buttons. With recent builds of Kodi this is more logical.
Number buttons will now input numbers upon Radio or TV Channel playback detection. Useful for quick jumping to specific channel during playback.

Version #20151111 - 11-NOV-2015
Added Kodi Full Live Radio mini driver.
Can browse, playback & record Live Radio Channels.
Can view Guide data
Can browse and playback Recorded content
Can browse Scheduled Content.
The Following has not been implemented due to a lack of API from KODI
Record Show from Guide
Delete Recorded Content
Delete Scheduled Content
Changed Live TV and Live Radio to support pagination. Will assist with speed on large channel listings.

Version #20151107 - 07-NOV-2015
Improved error checking for PVR mini driver.

Version #20151028 - 28-OCT-2015
Added ability to programatically playback channels

Version #20151026 - 26-OCT-2015
Added ability to programatically change Audio Channels, Audio Passthrough, Video Resolution, Video Refresh Rate, Video Windowed Mode. Should assist with various matrixed setups.

Version #20151020 - 20-OCT-2015
Made improvements to licencing algorithm. Should resolve issues on OS 2.8 systems with intermittent internet connections.

Version #20151015 - 15-OCT-2015
Fixed Shuffle and Repeat Commands to work with not only audio but video as well.

Version #20151009 - 09-OCT-2015
Added Kodi Full Live TV mini driver.
Can browse, playback & record Live TV Channels.
Can view Guide data
Can browse and playback Recorded content
Can browse Scheduled Content.
The Following has not been implemented due to a lack of API from KODI
Record Show from Guide
Delete Recorded Content
Delete Scheduled Content

Version #20151007 - 07-OCT-2015
Recently Played Episodes now show date/time of when episode was played.

Version #20151003 - 03-OCT-2015
Added additional debug logs for return to navigator on stop
Fixed issue where return to navigator would only work if Kodi Control has been selected.

Version #20150918 - 18-SEP-2015
Fixed episode browsing in TV Show mini driver for languages other than english.

Version #20150911 - 11-SEP-2015
Fixed XML Escape issue effecting T3 touchscreens and file browsing (effects Photos, Video Files, Audio Files, Youtube, VEVO, Video Addons, Audio Addons).
ADDED - If the Folder image is not set it will default to a default folder image located on the controller.

Version #20150909 - 09-SEP-2015
Fixed issue effecting selection of seasons in language other than english.

Version #20150907 - 07-SEP-2015
Implemented Suspend functionality
Implemented Select Onscreen Navigator on Stop command
Implemented "Disable Room Off when windowed". This is useful for when you are maintaining Kodi in a windowed state "\" or utilise an addon that changes it to a windowed state so that it can start another program.
EXPERIMENTAL - Implemented Audio Announcement functionality. Driver should return the room to the previous state after the announcement has finished.

Version #20150828 - 28-AUG-2015
Added Notificaiton to advise of licence expiry upon selection of any MSP.
Added ability to enter activation key in settings page and reactivate licence if licence expired (note settings UI will not update until you quit and re-enter

Version #20150821 - 21-AUG-2015
Fixed browsing and playback of files from navigator (broken in last update)
Fixed issue with episodes containing & signs.
Fixed issue with turning room on upon selection of addon, youtube, vevo, file browsing or photos.
Unknown media types will now perform skip next/prev on dashboard transport next prev

Version #20150819 - 19-AUG-2015
Implemented increased error checking on data in
Fixed browsing and playback of files from programming tab in composer

Fixed playback of episodes from programming tab in composer

Version #20150818 - 18-AUG-2015
Implemented Dealer Demo Licencing

Version #20150817 - 17-AUG-2015
Fixed issue where driver would select the Virtual Switcher for the auto on source. The driver will now select the Kodi Control Sat proxy and only if none of the other proxies are selected.
Fixed issue with VEVO, Youtube, Settings proxies not being detected during playback causing issues with auto room on and screensaver shutdown.
Fixed Room on again after selection of new video
Fixed issue with Video Files browsing.
Changed System Status to only poll once per minute rather than once per 15 seconds. Changed System information to only poll on connected status (not every 15 seconds).
Changed Dashboard Transport Buttons Skip Forward / Skip Backwards will skip next/prev track on song. For everything else it will perform a small step forward backwards using adaptive seeking (KODI 15 onwards)
Added Folder Image property. You can now define what folder image you use (eg folder.jpg, poster.jpg, banner.jpg, etc) for video and music folder browsing.
Fixed Stop Command not clearing music queue.
Code Clean up.

Version #20150813 - 13-AUG-2015
Added MPAA rating browse for movies
Fixed list issue for TV shows and Movies on OS 2.8.0 Beta IOS navigator.

Version #20150806 - 06-AUG-2015
Fixed crash issue with list navigator on OS 2.8.0 Beta
Renamed mediaplayer_kodi_full.c4z to kodi_full_main.c4z
Added nicer icon for Control4 Connected Notification.
Seperated Settings MSP from main driver. You can now add it in if you want to change the settings.

Version #20150804 - 04-AUG-2015
Fixed Android Mode navigation
Fixed device not selectable in list navigator.
Fixed Queue not clearing on stop
Fixed issue with multiple json messages joined together for feedback
Fixed issue with empty json array feedback
Implemented REQUEST_CURRENT_MEDIA_INFO for Sat proxy
Removed Jump to now playing command as this causes an issue with T3 touchscreens (waiting for Control4 to fix before reimplementing).

Version #20150803 - 03-AUG-2015
Resolved issues with auto-room off
Resolved issues with multiple MSP notifications.
Removed KODI Formatting from labels (eg [b]Sign In[/b])
If KODI returns an error due to addon issues it'll now show a list with 0 length
Will now ignore any script files returned as plugins

Version #20150727 - 27-JUL-2015
Added VEVO child driver
Implemented Button Config for settings page
Implemented Popup message if system is disconnected. Will automatically try to boot the system via a ON proxy command (WOL and Android KODI app selection).

Version #20150624 - 24-JUN-2015
Changed architecture to child drivers.
Changed from JSON-RPC port 9090 to HTTP JSON-RPC
Implemented Recently Played Movies
Implemented Recently Played Episodes
Implemented ✓ for played episodes

Version #20150525 - 25-MAY-2015

Fixed room not turning on when media selected.
Implemented Music Queue
Implemented Browse by Genre, Recently Added
Fixed IOS browsing and IOS Crashing
Known issue T3 Now Playing Screen.

Version #20150522 - XX-APR-2015 - 22-MAY-2015

Implemented Movie browsing with cover art/meta data
Implemented TV show browsing with cover art/meta data
Implemented Music browsing
Implemented File browsing
Implemented Add-On browsing
Implemented Searching
Implemented Driver configuration from Settings tab.
Implemented Licencing
Migrated code from Kodi Lite to Kodi Full

Version #20150407 - 07-APR-2015

Resolved issue where logs on 2.6 systems would fill out controller storage causing system stability issues. This only effects systems where people have set the debug logs to 'print and log' or 'log' and have forgotten about it over longer periods of time.

Version #20150305 - 05-MAR-2015
Improved movie import algorithm. Should now import all movies regardless if the movie ID is sequential or not. Also if cover art is not available for download (poor internet connection or URL does not return an image) then it will insert the movie with no cover art.
Resolved issue where automatic update of movie library would not work if controller is rebooted.

Version #20150305 - 05-MAR-2015

Resolved issue on some systems where automatic on sends on command again every time a new file plays.

Version #20150303 - 03-MAR-2015
Number 1 now jumps to first page in navigation mode
Number 0 now jumps to last page in navigation mode

Version #20150220 - 20-FEB-2015

Modified Auto Room On code. Now selects device as audio or video only depending on audio, video or photo. Note there are times when Kodi's API returns an unknown media type. In this case it will turn it on as a video source.

Version #20150218 - 18-FEB-2015
Added Random All, One and Off commands to programming tab
Added Play URL programming command for playback of videos and photos

Version #20150113 - 13-JAN-2015

Added customisable PREV & CANCEL buttons as some customers were not happy with the mapping.

Version #20141218 - 18-DEC-2014
Modification to driver to skip istream based movies from the xbmc library. This resolves an issue where KODI's JSON-RPC port would crash upon play file command.

Version #20141215 - 15-DEC-2014
System will only perform an automated scan when it detects at least one new movie rather than when a scan has finished (there are times when a scheduled scan returns no new movies)
Added CODEC_INFO configurable button as per request
Found undocumented Window Activation links to tv/radio recordings, tv/radio guide and tv/radio search. Added as configurable button as per request and mapped as default for logical buttons.

Version #20141211 - 11-DEC-2014

Initial Public Release

Version #20141210 - 10-DEC-2014
Improved Android functionality with press and hold repeat commands for up, down, left, right, page up and page down
Fixed issue with mouse down, mouse up command
Added Automatic Refresh Navigator option that sends a refresh navigator request when the movies have finished updating. This will help mobile devices and tablets that seem to cache the movie library.

Version #20141208 - 08-DEC-2014

Improved memory management
Changed next queued item processing to after network traffic is received.
Fixed playback of movie from device physically off state.
Fixed WOL from physically off state
Minimised queud traffic when device is physically off

Version #20141205 - 05-DEC-2014

Added automatic import on library update notification.
Changed image import algorithm to utilise google+ web based image resizing. Now movies import at a rate of 1 per 3 seconds. If google+ is not available director will resize however imports will be slower.
XBMC driver will now detect if you have deleted a movie from the Control4 library and rescan that movie back in. No more having to start the library scan from scratch.

Version #20141204 - 04-DEC-2014

Merged Android Driver with Kodi Lite Driver

Version #20141203 - 03-DEC-2014
Beta Release

Developer Information

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http://www.chowmain.co.nz

Important Notice

This driver is designed for Kodi Entertainment Center Version 15.0 Isengard. This driver should work on XBMC versions 12 Frodo, 13 Gotham and 14 Helix as well without any issues however it will not work on XBMC version 11 Eden.

It has been tested on Android, OSX, Windows, Linux and Raspberry Pi Platforms. If you choose to use it on any other platform you do so at your own risk. It is recommended that prior to purchasing this driver you utilise the free 48 hour trial period for testing.

This driver will only work on Control4 OS 2.7.0 and above.

Note that some Video Addon's and Audio Addon's will put the driver in a frozen state requiring you to manually close a dialog box on KODI. If you utilise the Video Addon's or Audio Addon's slave drivers you accept that this may happen and that the addon's you have chosen for your customers do not have these dialog box popups.

Driver Installation

1. The driver you have downloaded will be in a zip file. Double click on this file to open it in your preferred zip program (WinZip, WinRar, etc.).

2. Extract the c4z files to the My Documents\Control4\Drivers directory. If you are using Windows 7 or 8 this will be extracted to the Libraries\Documents\Control4\Drivers directory.
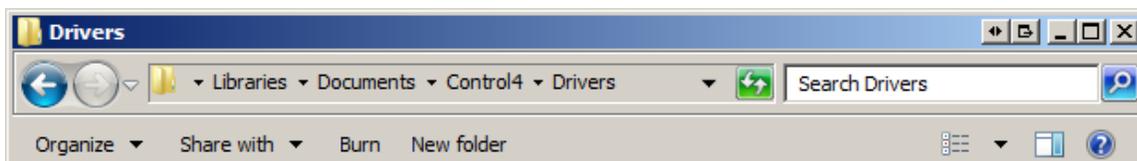
3. You are now ready to add and configure the driver via the Composer Pro software.

ANDROID ONLY: Installing LANmote Deluxe (Android 4.0 and below)

This part of the documentation only applies to those who have a rooted Android box. Rooted Android boxes can be controlled when not in XBMC mode. This can be quite useful for launching other 3rd party applications like Netflix or Hulu.

Note that this will only work on Android devices with LANmote Deluxe installed and operating. Lanmote Deluxe can only be installed onto Android devices with root access and only on Android versions 4 and below. Not all Android devices are root capable. It is recommended that you install the LANmote Deluxe application first and test it out to ensure it works on your device prior to purchasing this driver. The driver will change to Android mode if it is disconnected from XBMC. As such XBMC must be exited properly rather than application switched.

1. Purchase & download LANmote Deluxe from Play Store
   (https://play.google.com/store/apps/details?id=com.portable.LANmote.Deluxe)
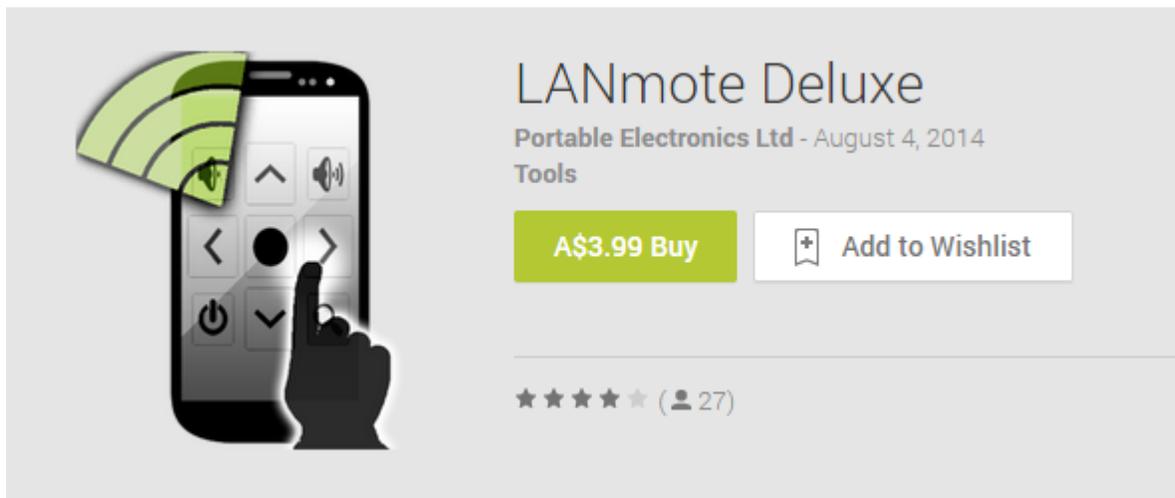
2. Check the box labeled 'Start LANmote on boot'

3. Check the box labeled 'CPU Wake Lock'
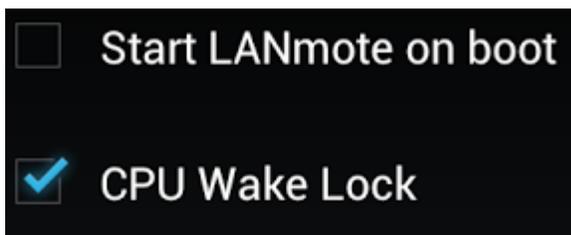
4. Click on the button labeled 'Start Server'.

Start Server
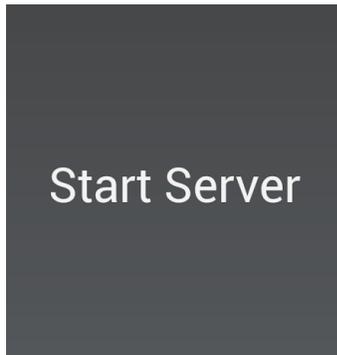
5. It will then display a QR code along with a web address for the server. Take note of the IP address

http://192.168.1.228:9999

6. Visit the URL in your favourite web browser to ensure it is working.
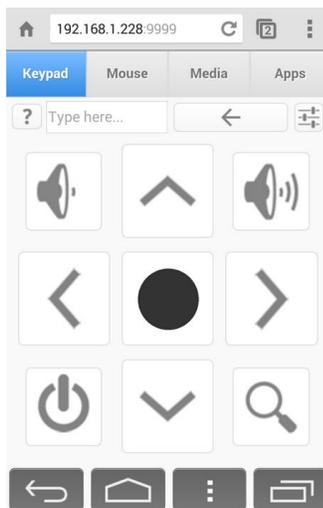
7. Click on the navigation buttons to ensure that it is navigating.

8. Congratulations you have setup LANmote Deluxe.

ANDROID ONLY: Installing VideoStorm IRUSB (Android 5.0 and above)

This part of the documentation only applies to those who have a the Video Storm IRUSB. The Video Storm IRUSB enables Android boxes to be controlled when not in XBMC mode. This can be quite useful for launching other 3rd party applications like Netflix or Hulu.

Compatible Android boxes include the Nvidia Shield and Amazon Fire TV.

The driver will change to Android mode if it is disconnected from XBMC. As such XBMC must be exited properly rather than application switched.

1. Purchase an IRUSB from Video Storm (http://www.video-storm.com/proddetail.asp?prod=irusb)

2. Plug in the IRUSB to your android device

3. Download Video Storm's IrUSB from Play Store
   (https://play.google.com/store/apps/details?id=com.videostorm.irusb)

4. Launch IRUSB on your android device

5. It will prompt you to allow the app to access the USB device. Click on YES.

6. Click on Refresh to make sure that the device is detected

7. Click on UPDATE FIRMWARE to make sure IRUSB device is updated to the latest firmware

8. Congrulations you have setup the IRUSB.
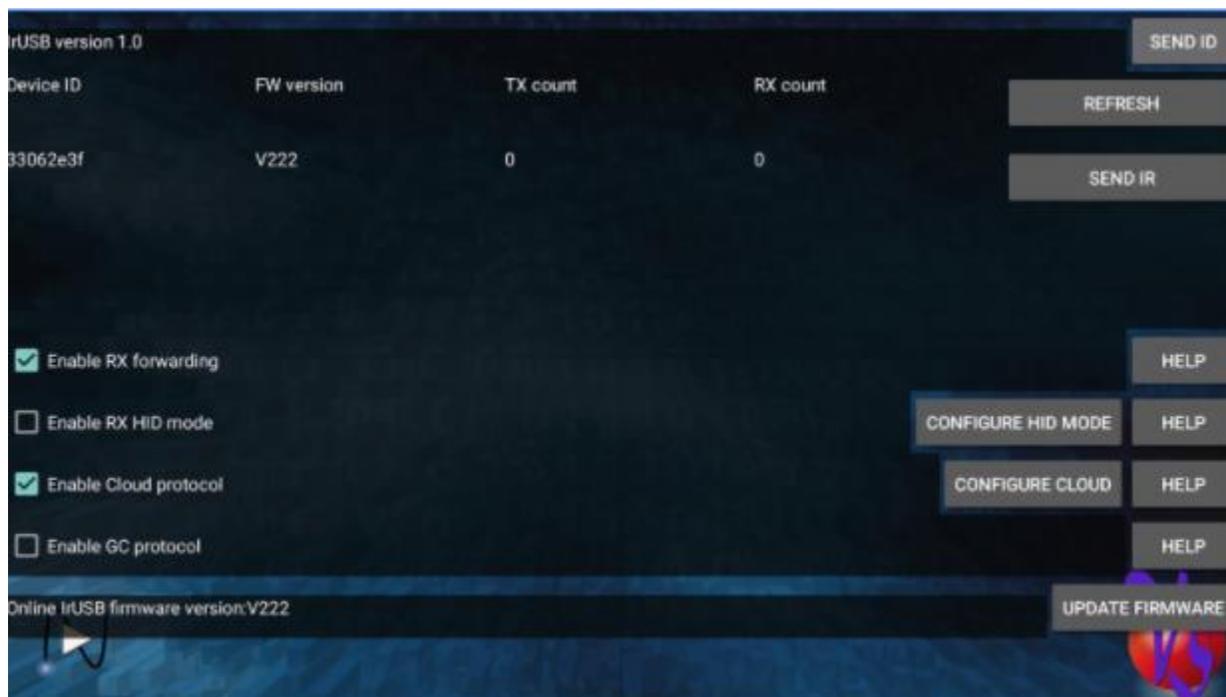
Setting up Kodi

The following section details how to enable 2 way control for Kodi.

1. Launch Kodi on your platform

2. Navigate to the System page

3. Click on Services

4. **IMPORANT STEP** - Under '**Webserver**' enable '**Allow control of Kodi via HTTP**'.

5. **IMPORANT STEP** - Take note of the Port number.

6. **IMPORANT STEP** - Under '**Remote control**' enable '**Allow programs on other systems to control Kodi**' (this is used for the majority of control).

7. If you want you can also enable UPnP and Airplay through the UPnP and AirPlay menu's

8. If you are using Android you will need to exit the Kodi app and restart the app for the port to open up.

9. Setup and scan your movies into the Kodi database as per Kodi's website documentation.

10. Congratulations you have setup Kodi.

Adding the drivers to your project

IMPORTANT – Before undertaking the installation of the driver please follow the licencing steps outlined at the end of this document.

The KODI Full driver works via a master driver and several slave drivers. The master driver is essentially the KODI LITE driver with a setting page which can be hidden from Navigator if you do not want to give customers the ability to change how the driver works. The slave drivers should be added depending on what you want to show on Navigator (eg you might want to just show music for this installation or perhaps just Youtube).

Movie Library

Pictures

Music Library

Video Files

Music Files

Video Addons

KODI
Main Driver

Audio Addons

TV Show Library

VEVO Addon

Youtube Addon
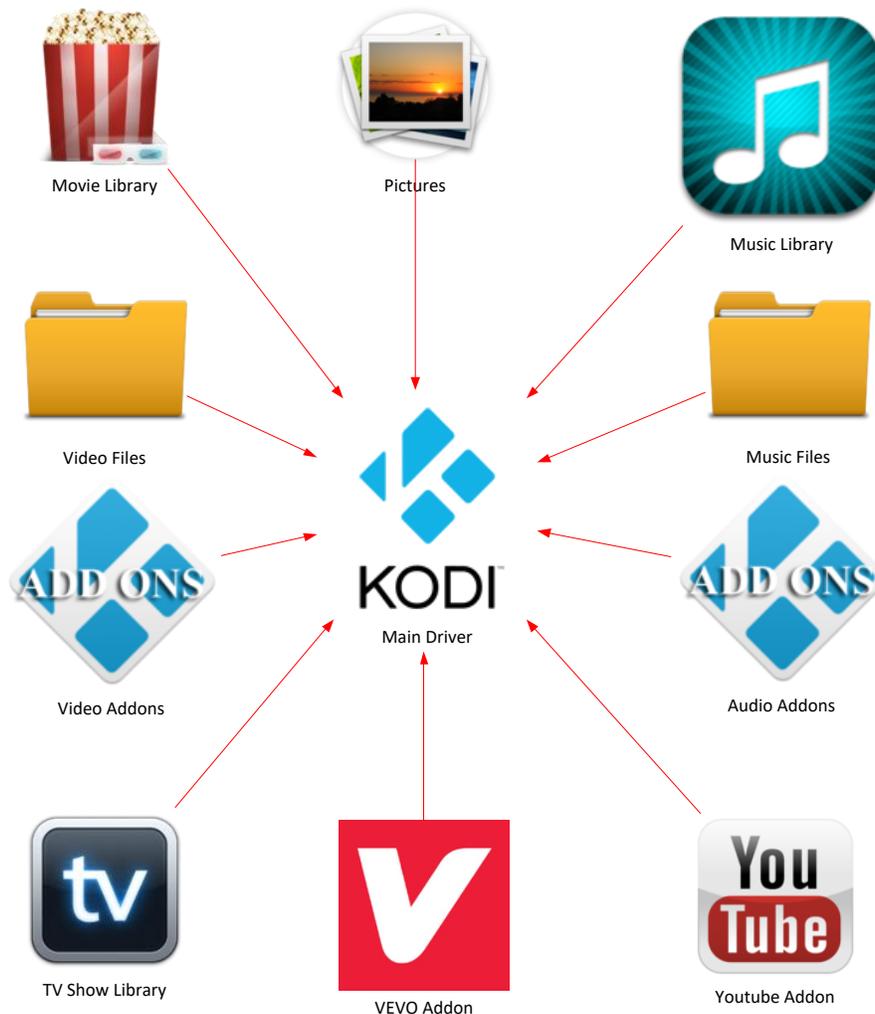
1. Launch the Composer Pro application and connect to your project

2. In the '**System Design**' page select the '**Search**' tab on the right hand side.

3. Select '**KODI**' as the manufacturer.

4. Double click on the '**KODI (FULL)**' driver to add it to your project

5. Double click on any additional KODI slave drivers you want to add to your system

   Eg KODI Video Files, VEVO, Youtube, Movies, TV Shows, Audio and Video Addons, etc

6. Highlight the '**KODI Control**' driver on the left hand side.

7. Set Show Driver Config to '**True**'

Show Driver Config	True ▼
	True
__NETWORK CONFIG__	False

8. If you plan on using this to control an Android set top box set the property labelled '**Android Control**' to either LANmote or IRUSB (see relevant sections for details on how to setup LANmote or IRUSB).

Android Control	IRUSB ⌄
	LANmote
KODI HOST or IP	IRUSB
	NONE

9. **IMPORANT STEP -** Enter in the Kodi HOST or IP

    Note: It is recommended that Kodi be placed on a static IP address or have a reserved IP address for stability purposes.

KODI HOST or IP	openelec

10. **IMPORANT STEP -** Enter in the web server port we took note of in the Kodi setup.

KODI Webserver Port	8080

11. If you wish to start up the computer Kodi is on upon Control4's ON command enter in the computers MAC address.

KODI WOL MAC Address	

12. If you wish to shut down the computer Kodi is on upon Control4's OFF command set the Power Off drop down to Shutdown (you can also set it to perform other commands as well if you do not want to turn the PC off eg for android I recommend Stop Command then Home Window).

Power Off	Stop Command then Home Window ▼
	Quit
Dedicated Network File Stor:	Shutdown
	Suspend
Auto Import on XBMC Update	Hibernate
	Restart
Auto Room(s) Select	Stop Command then Home Window
	Stop Command

13. Assign the non intuitive buttons to the function you want.

Custom 1 Button	Un-mapped
Custom 2 Button	Un-mapped
Custom 3 Button	Un-mapped
Red Button	Un-mapped
Green Button	Un-mapped
Yellow Button	Un-mapped
Blue Button	Un-mapped
GUIDE	TV_GUIDE
PVR	CONTEXT_MENU
Hash Button	NEXT_SUBTITLE
Star Button	AUDIO_NEXT_LANGUAGE
Prev Button	BACK
	PREVIOUS_MENU
Cancel Button	BACK

14. Click on the Connections tab.

Connections

15. Highlight the '**KODI Virtual Switcher**' driver on the left hand side.

16. Bind the audio/video outputs to the relevant inputs.

Audio/Video Outputs

OUTPUT	Video	COMPOSITE	Output	
OUTPUT	Video	SVIDEO	Output	
OUTPUT	Video	COMPONENT	Output	
OUTPUT	Video	HDMI	Output	Receiver->INPUT BD
OUTPUT	Video	VGA	Output	
OUTPUT	Audio	STEREO	Output	
OUTPUT	Audio	DIGITAL_OPTICAL	Output	
OUTPUT	Audio	DIGITAL_COAX	Output	

17. If you are using any of the slave drivers bind the Audio/Video input and the Control Input for them

NOTE you need both the Control and Audio/Video inputs to be bound for it to work.

Audio/Video Inputs

Movie Library	Video	RF_KODI_MOVIES	Input	KODI Movies->Movie Library
TV Show Library	Video	RF_KODI_TVSHOWS	Input	KODI TV Shows->TV Show Library
LIVE TV	Video	RF_KODI_TV	Input	
Video Files	Video	RF_KODI_VIDEO_FILES	Input	Video Files->Video Files
Video Addons	Video	RF_KODI_VIDEO_AD...	Input	Video Addons->Video Addons
Photos	Video	RF_KODI_PHOTOS	Input	Photos->Photos
YouTube Addon	Video	RF_KODI_YOUTUBE_...	Input	YouTube->YouTube Addon
VEVO Addon	Video	RF_KODI_VEVO_ADD...	Input	VEVO->VEVO Addon
Music Library	Audio	RF_KODI_MUSICLIBR...	Input	KODI Music->Music Library
Music Files	Audio	RF_KODI_MUSIC_FILES	Input	Music Files->Video Files
Music Addons	Audio	RF_KODI_MUSIC_AD...	Input	Audio Addons->Music Addons
Radio	Audio	RF_KODI_RADIO	Input	

Control Inputs

Movie Library	Control	LINK_KODI_MOVIES	Input	KODI Movies->Movie Library
TV Show Library	Control	LINK_KODI_TVSHOWS	Input	KODI TV Shows->TV Show Library
LIVE TV	Control	LINK_KODI_TV	Input	
Video Files	Control	LINK_KODI_VIDEO_FI...	Input	Video Files->Video Files
Video Addons	Control	LINK_KODI_VIDEO_A...	Input	Video Addons->Video Addons
Photos	Control	LINK_KODI_PHOTOS	Input	Photos->Photos
YouTube Addon	Control	LINK_KODI_YOUTUB...	Input	YouTube->YouTube Addon
VEVO Addon	Control	LINK_KODI_VEVO_AD...	Input	VEVO->VEVO Addon
Music Library	Control	LINK_KODI_MUSICLIB...	Input	KODI Music->Music Library
Music Files	Control	LINK_KODI_MUSIC_FI...	Input	Music Files->Video Files
Music Addons	Control	LINK_KODI_MUSIC_A...	Input	Audio Addons->Music Addons
Radio	Control	LINK_KODI_RADIO	Input	

18. Click on System Design

19. Repeat steps 21 to 28 for each room KODI is an available source in

20. Click on the room
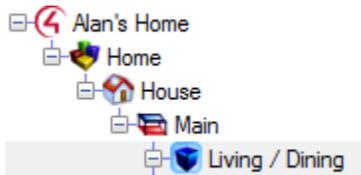
21. Click on the Navigator Tab
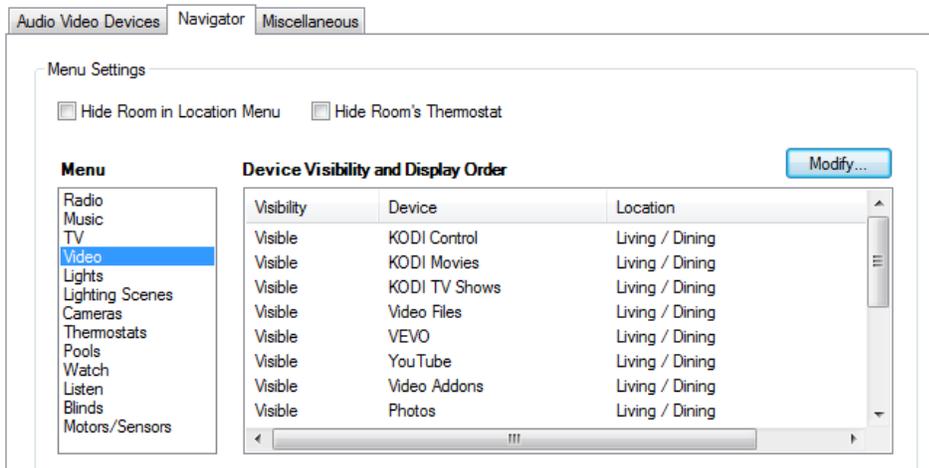
22. Hide all KODI related drivers under Radio

23. Hide the following KODI drivers under Music – KODI Virtual Switcher, KODI Settings, KODI Control, KODI Movies, KODI TV Shows, Video Files, Video Addons, VEVO, Youtube, Photos

24. Hide all KODI related drivers under TV

25. Hide the following KODI drivers under Video – KODI Virtual Switcher, KODI Settings, KODI Music, Music Files, Audio Addons

26. Hide the following KODI drivers under Listen – KODI Virtual Switcher, KODI Settings, KODI Control, KODI Movies, KODI TV Shows, Video Files, Video Addons, VEVO, Youtube, Photos

27. Hide the following KODI drivers under Watch – KODI Virtual Switcher, KODI Settings (Optional depending on if you want customers to edit the driver settings), KODI Music, Music Files, Audio Addons

28. Click on the File and Refresh Navigators. Congratulations you have set up the Kodi FULL driver.

Setting up automatic room on/off

1. Highlight the 'KODI Control' driver on the left hand side.

2. If you want to automatically select the device for the room upon detection of playback then click on the **'Select'** button next to '**Auto Room(s) Select**' and select the room/s you want to turn on.

Auto Room(s) Select		Select

3. If you want to automatically turn the room off upon screensaver then set the '**Room Off on Screensaver**' dropdown box to '**Enabled**'.

Room Off on Screensaver	Enabled ▼

4. Congratulations you have setup automatic room on/off

Importing movies from Kodi into Control4

The KODI Full driver pulls the movie library in on demand. Unlike the KODI Lite driver it does not require importing of movies from KODI into Control4. You will need to add in the slave Movies driver and bind it to KODI for it to work.

Using KODI Full – Browsing Movies

This section assumes that you have a working KODI installation with Movies scanned into the KODI Movie library and have the KODI Full driver setup with the Slave Movies driver bound.

1. The Kodi Movie Icon can be found under the watch section of Control4

2. Select the KODI Movies icon to bring up the Movies interface
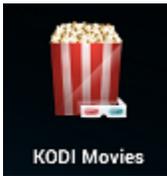

3. The interface is split up into 4 sections
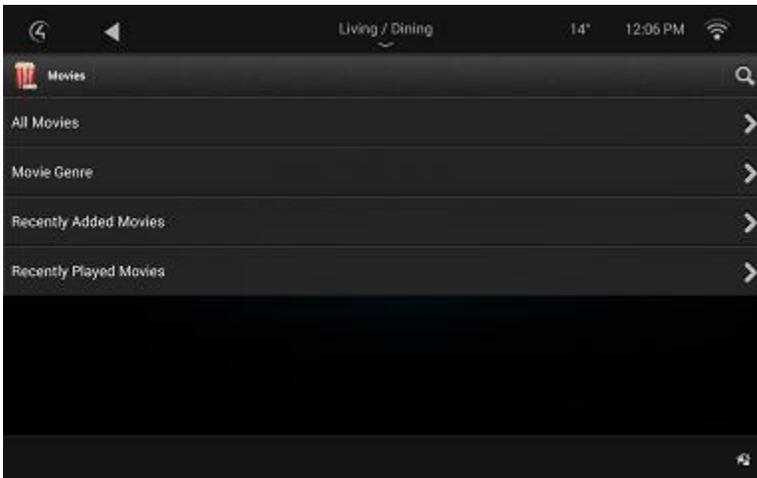
4. **All Movies –** Shows the entire movie library alphabetically
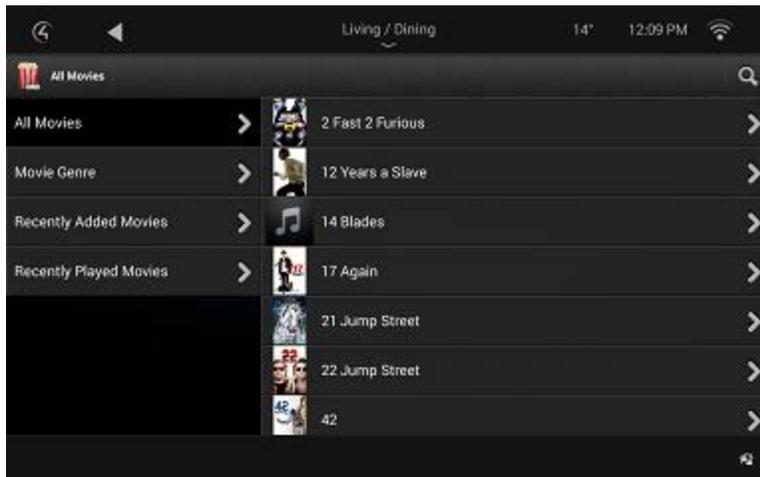
5. **Movie Genre –** Shows a list of Movie Genres that your movies come up in
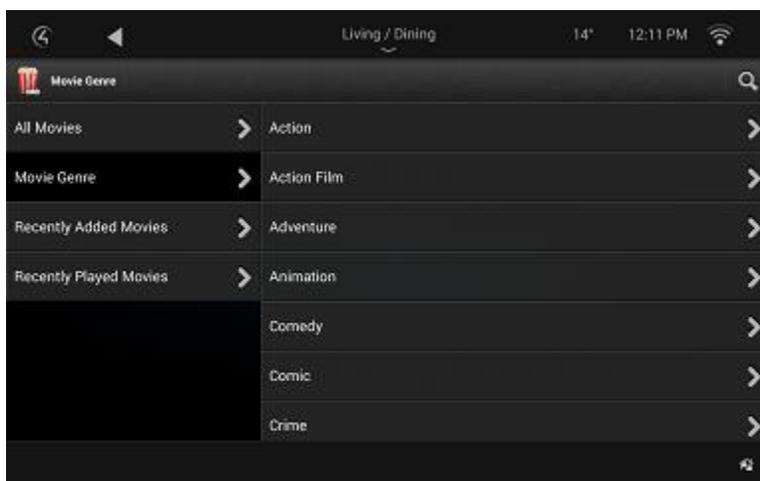

6. **Recently Added Movies –** Brings up a list of movies that has recently been scanned into KODI
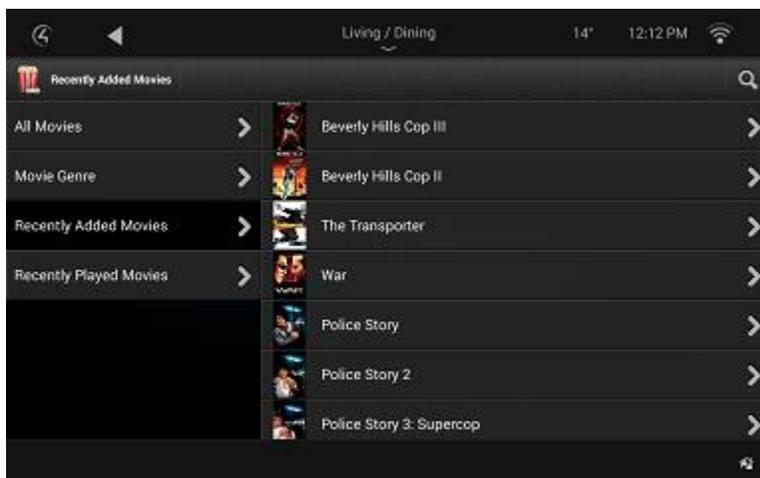
7. **Recently Played Movies –** Brings up a list of movies that has recently been played on KODI (great for resuming movies from where you left off).
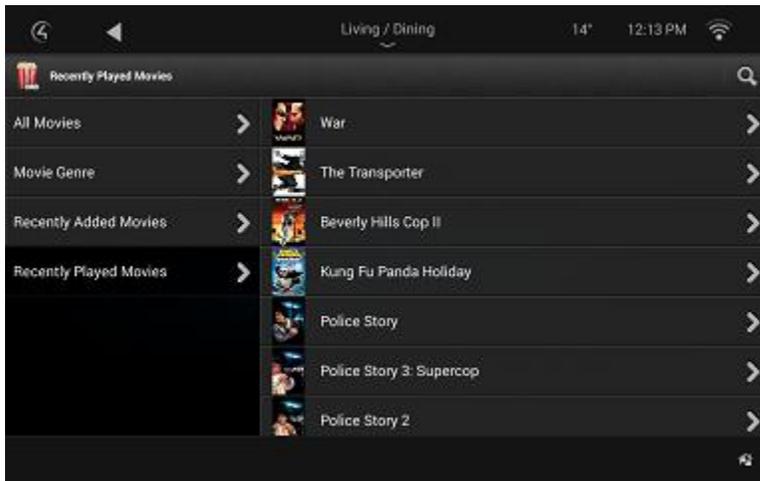
8. Selection of a movie will bring up the playback options.
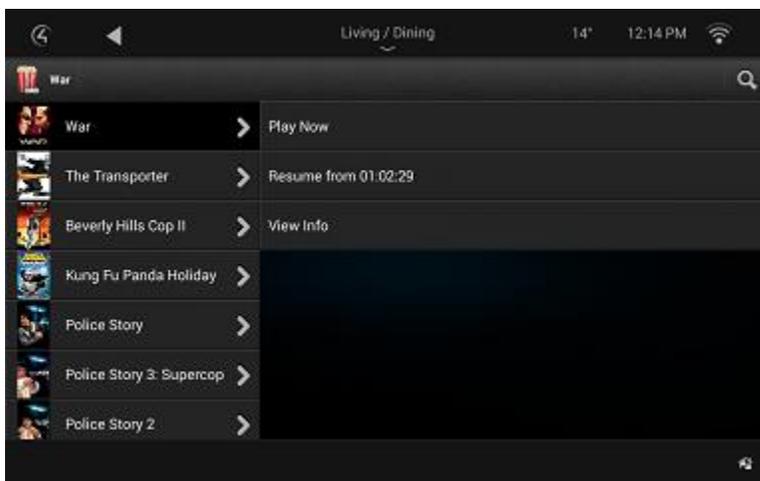
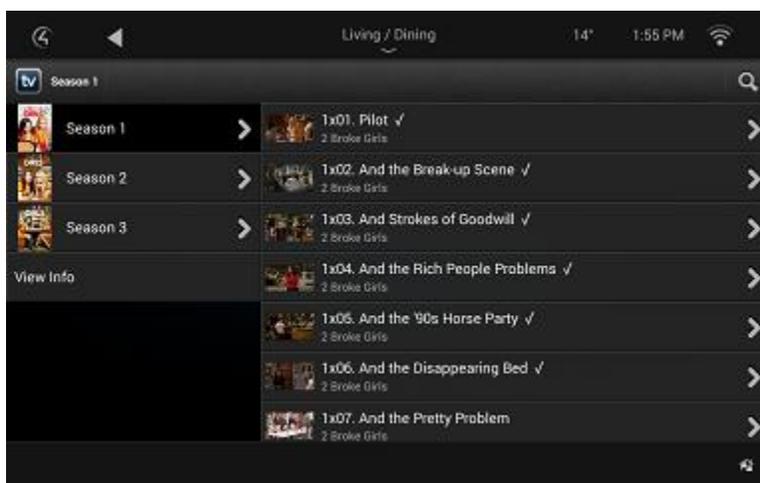- Play Now – Starts playback of the movie from the start

- Resume from XX:XX;XX – Starts playback of the movie from the position it was last stopped at.

- View Info – Shows a poster of the movie with the synopsis of the movie

9. You can also search for movies by clicking on the Search button. You can filter it by

- Movie Title

- Movie Actors

- Movie Directors

- Movie Studio

- Movie Genre
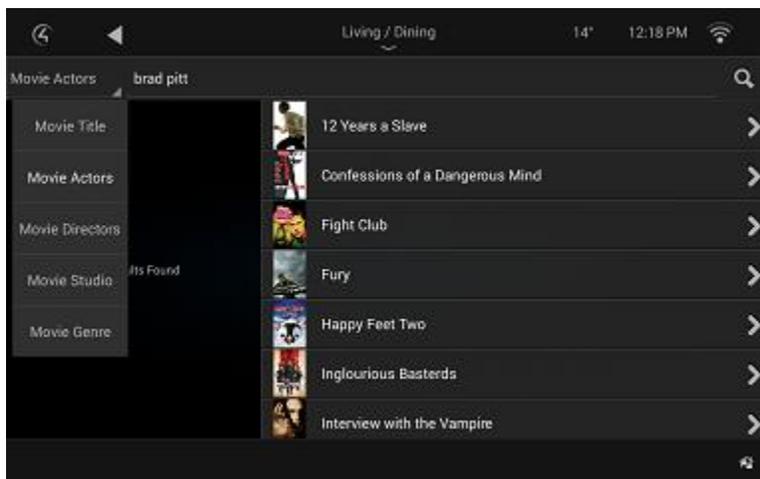
Using KODI Full – Browsing TV Shows

This section assumes that you have a working KODI installation with TV Shows scanned into the KODI TV library and have the KODI Full driver setup with the Slave TV Shows driver bound.
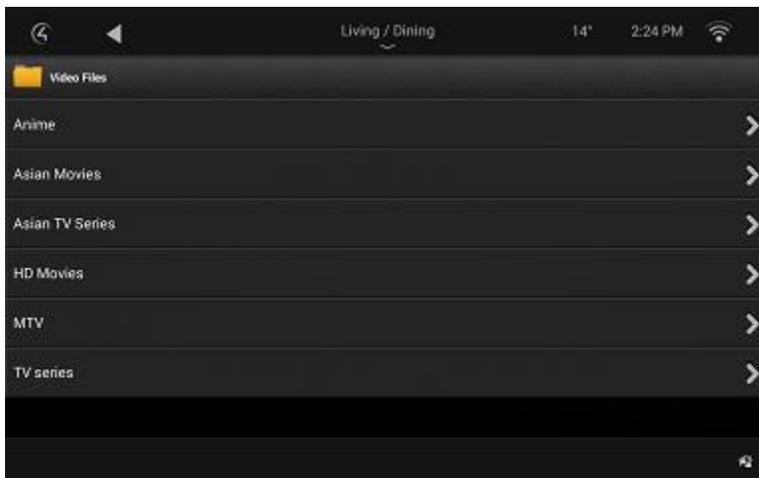
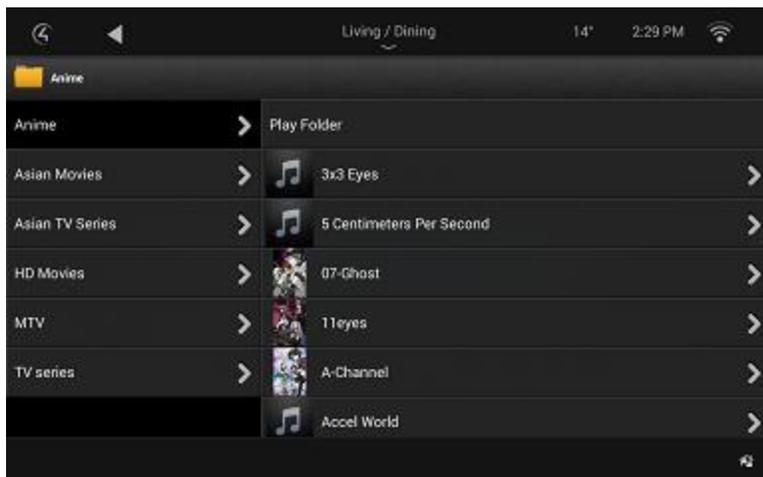1. The TV Shows Icon can be found under the watch section of Control4

2. Select the KODI TV Shows icon to bring up the Movies interface

3. The interface is split up into 4 sections
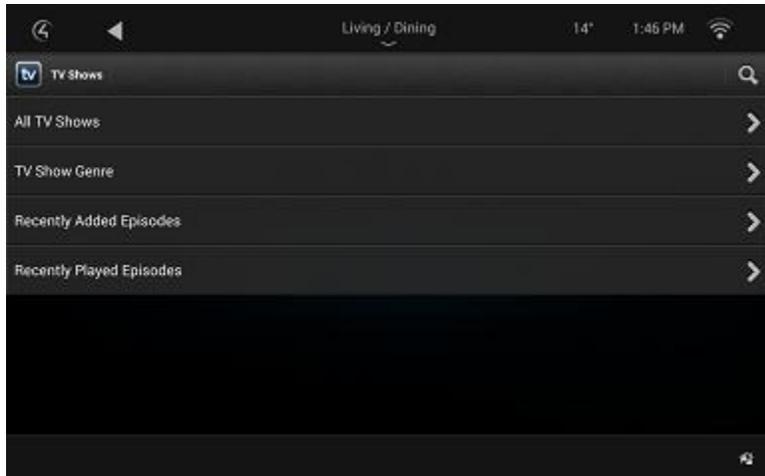
4. **All TV Shows –** Shows the entire movie library alphabetically
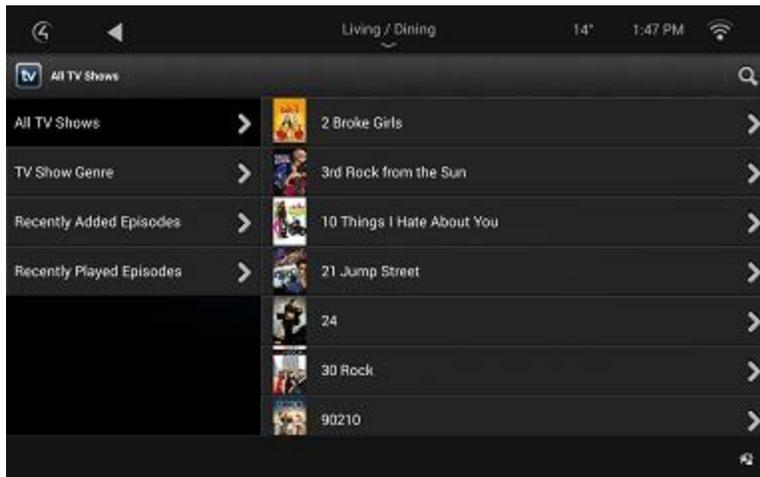
5. **TV Show Genre** - Shows a list of TV Genres that your shows come up in
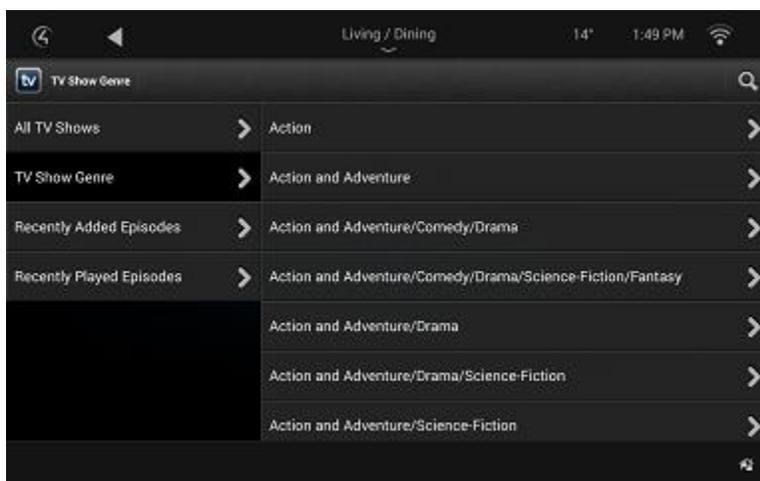
6. **Recently Added Episodes** - Brings up a list of episodes that has recently been scanned into KODI
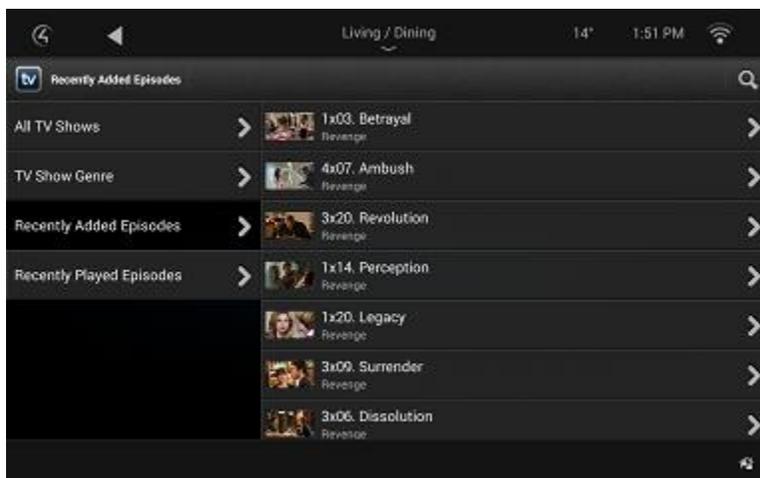
7. **Recently Played Episodes –** Brings up a list of episodes that has recently been played on KODI (great for resuming episodes from where you left off).
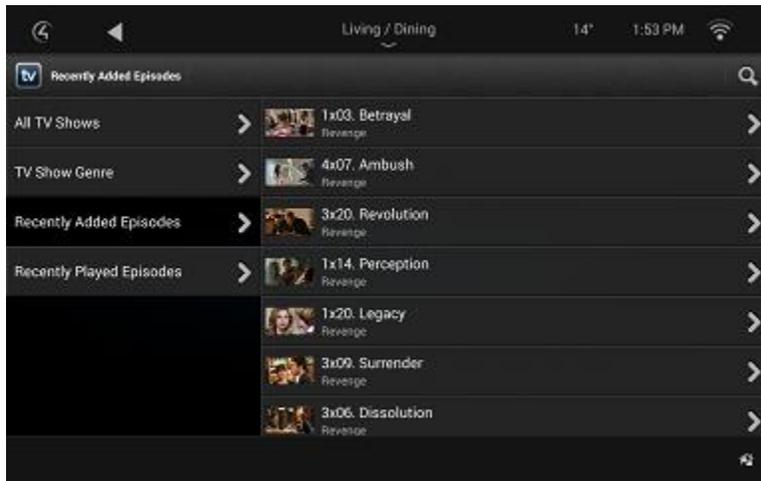
8. Selection of a show will bring up the shows seasons and info.
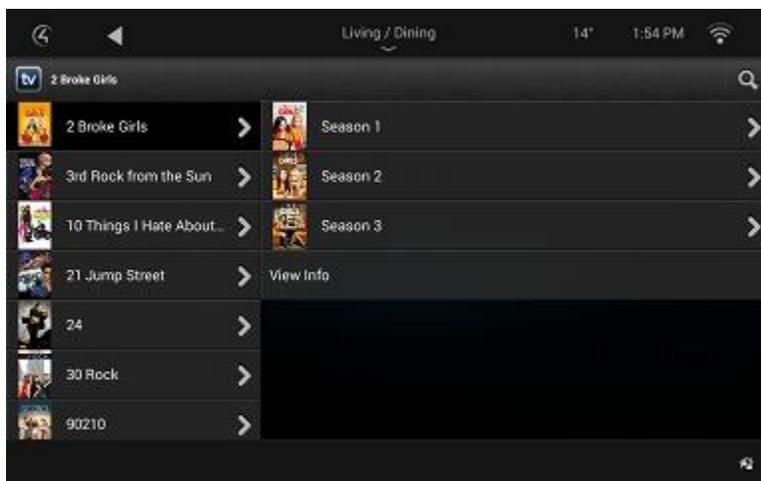
9. By Selecting View Info you can view information about the show

10. Selection of a season will bring up the episodes for that season.

   NOTE: Episodes with ticks next to them signify that it has already been watched at least once.

11. Selection of a movie will bring up the playback options.
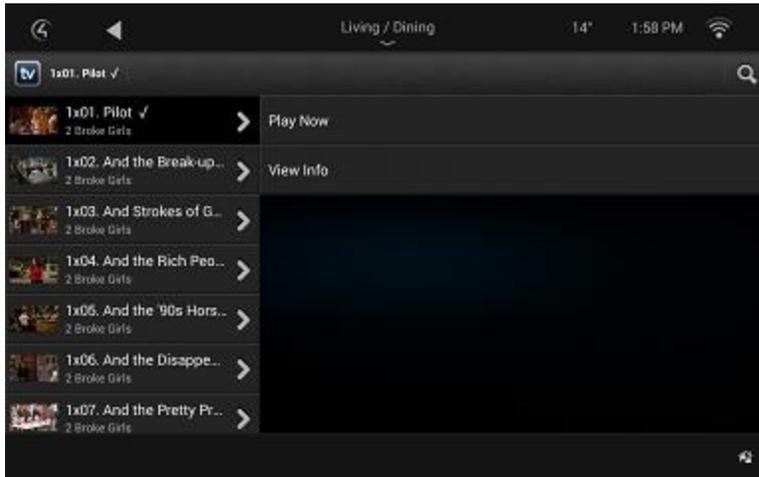
- Play Now – Starts playback of the movie from the start

- Resume from XX:XX;XX – Starts playback of the movie from the position it was last stopped at.

- View Info – Shows a poster of the movie with the synopsis of the movie

12. You can also search for TV Shows by clicking on the Search button. You can filter it by

- TV Show Title

- TV Show Actors

- TV Show Studio

- TV Show Genre
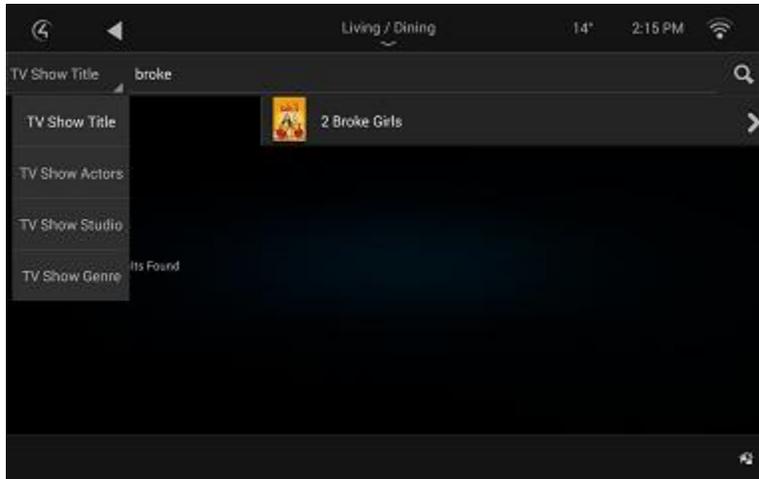
Using KODI Full – Browsing Video Files

This section assumes that you have a working KODI installation with Video Sources added and have the KODI Full driver setup with the Slave Video Files driver bound.

1. The Video Files Icon can be found under the watch section of Control4


2. Select the Video Files icon to bring up the Movies interface

3. The interface will now display all video sources on your KODI system.

4. Select a source to bring up folders and files for that source

5. Select Play Folder to play all files in that folder and subfolders

   Note: This is not recommended for folders which have multiple subfolders of files. This can cause lockups in KODI if you do this.

6. Select a folder to view the contents of that folder

7. Select a file to play back that file.

Using KODI Full – Browsing Photos

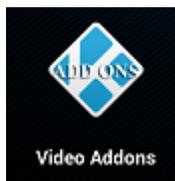This section assumes that you have a working KODI installation with Photo Sources added and have the KODI Full driver setup with the Slave Photos driver bound.

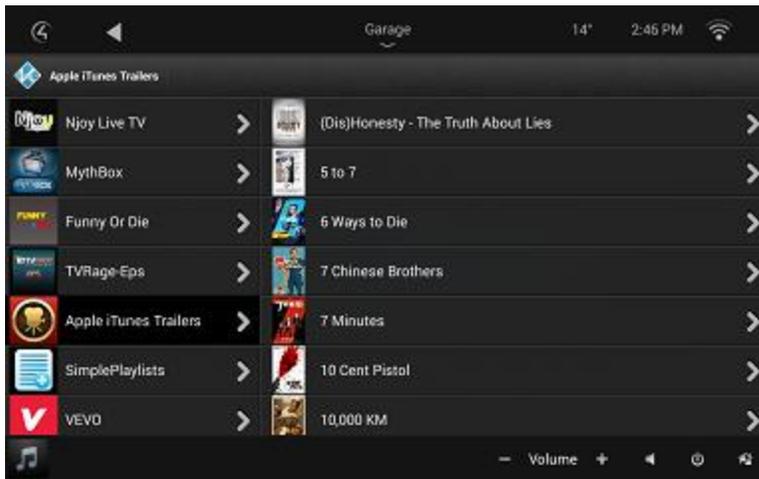1. The Photos Icon can be found under the watch section of Control4

2. Select the Photos icon to bring up the Movies interface
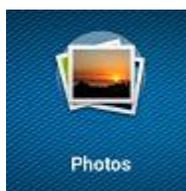
3. The interface will now display all photo sources on your KODI system.
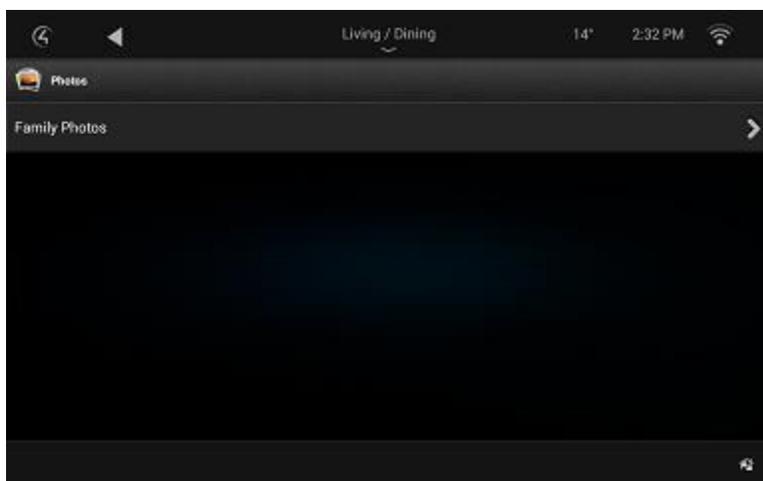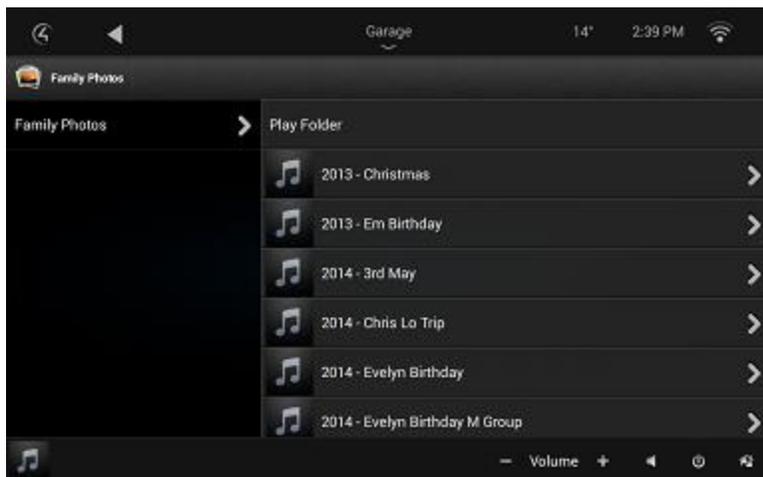
4. Select a source to bring up folders and files for that source

5. Select Play Folder to play all files in that folder and subfolders

   Note: This is not recommended for folders which have multiple subfolders of files. This can cause lockups in KODI if you do this.

6. Select a folder to view the contents of that folder

7. Select a file to play back that file.

Using KODI Full – Browsing Video Addons

This section assumes that you have a working KODI installation with Video Addons added and have the KODI Full driver setup with the Video Addons driver bound.

NOTE: Some KODI Addon's will freeze up the KODI Driver. This is due to a dialog box popup which causes a lockup in the KODI API. The only way to fix it is by closing the dialog box. If you utilise the Video Addons functionality in the driver it is your responsibility to ensure that the addons you install on your customers system do not utilise any popup dialog boxes. Test all functionality before leaving the site. Addons which are script based will not display in the addons driver. This is because script based addons will not work at all.
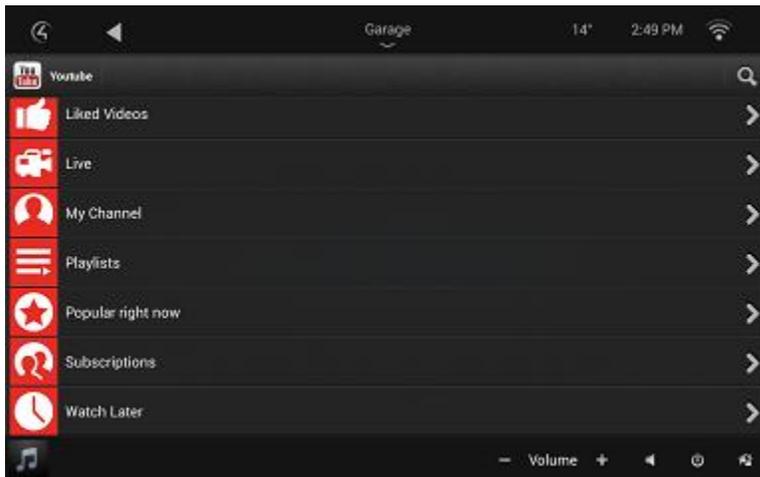
1. The Video Addons Icon can be found under the watch section of Control4

2. Select the Video Addons icon to bring up the Movies interface

3. The interface will now display all video addons on your KODI system.
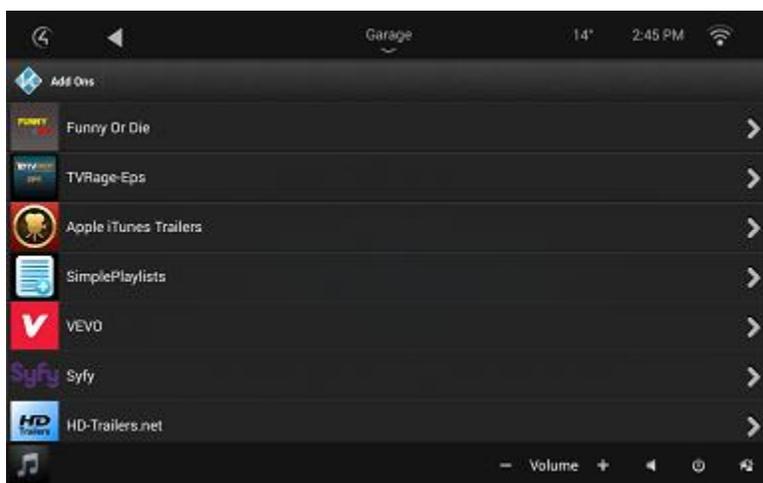
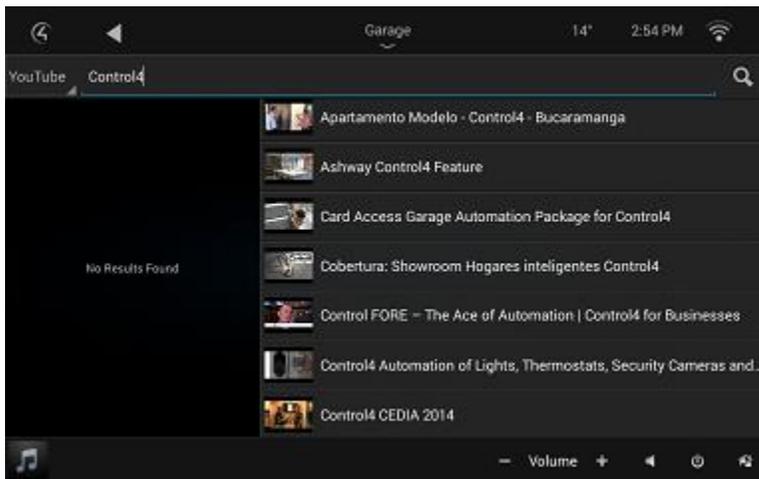4. Select a source to bring up folders and files for that source

5. Select a folder to view the contents of that folder

6. Select a file to play back that file.

Using KODI Full – Browsing YouTube

This section assumes that you have a working KODI installation with Youtube Addon added and have the KODI Full driver setup with the Youtube driver bound.

NOTE: You will need to utilise the KODI interface to perform initial setup of the addon if you want to sign in to your customer's YouTube account. After you have signed in additional options will appear in the menu automatically.

1. The YouTube Icon can be found under the watch section of Control4

2. Select the YouTube icon to bring up the Movies interface

7. The interface will now display the YouTube addon on your KODI system.

8. Select an option to bring up folders and files for that option

9. Select a folder to view the contents of that folder

10. Select a file to play back that file.

11. Alternatively you can select the search button to search YouTube

Using KODI Full – Browsing VEVO

This section assumes that you have a working KODI installation with VEVO Addon added and have the KODI Full driver setup with the VEVO driver bound.
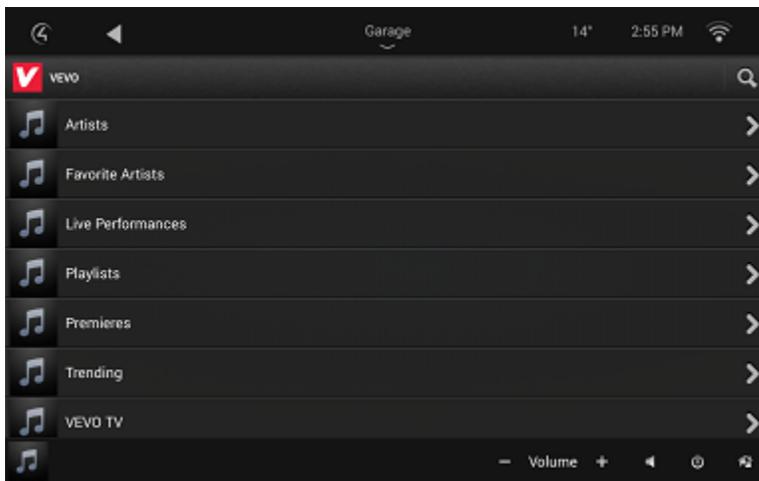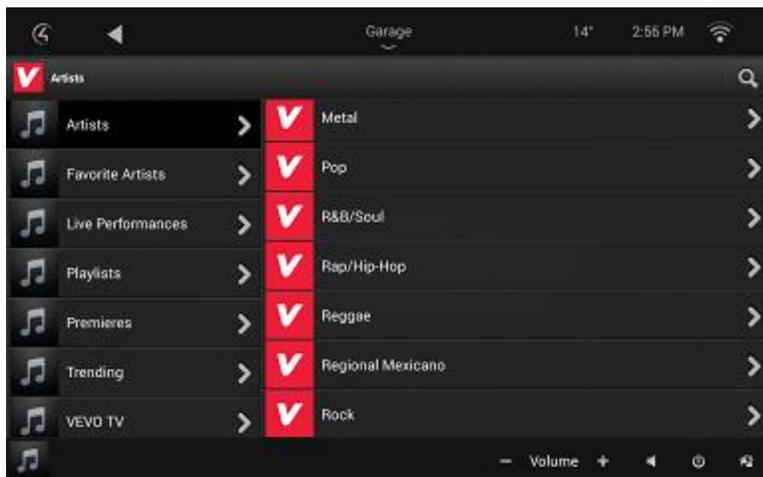
1. The VEVO Icon can be found under the watch section of Control4

2. Select the VEVO icon to bring up the Movies interface

12. The interface will now display the VEVO addon on your KODI system.

13. Select an option to bring up folders and files for that option

14. Select a folder to view the contents of that folder

15. Select a file to play back that file.

16. Alternatively you can select the search button to search VEVO
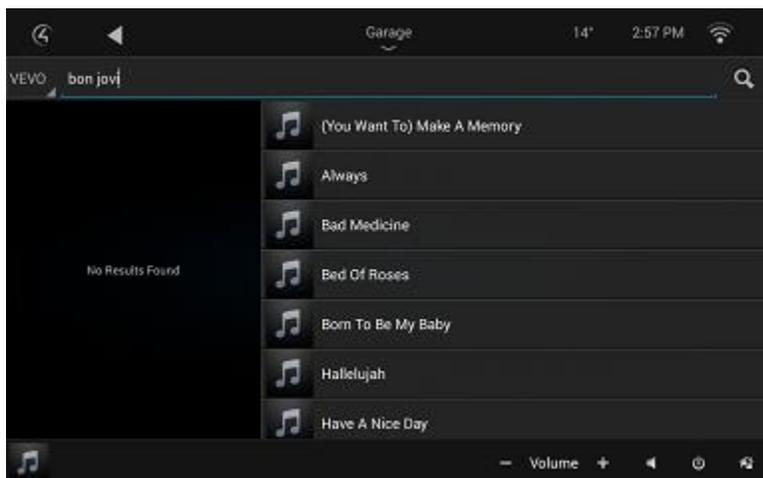
Using KODI Full – Browsing Live TV

This section assumes that you have a working KODI installation with PVR functionality setup and have the KODI Full driver setup with the Slave Live TV driver bound. Note there are some limitations which are as follows.

- Kodi does not have an API command to schedule recording of a broadcast via Guide. Only live recording is enabled via API.

- Kodi does not have the ability to delete recordings via API. Manual deletion needs to be done through Kodi's own on screen GUI.

- Kodi does not have the ability to remove scheduled recordings via API. Manual stopping is required to be done through Kodi's own on screen GUI.
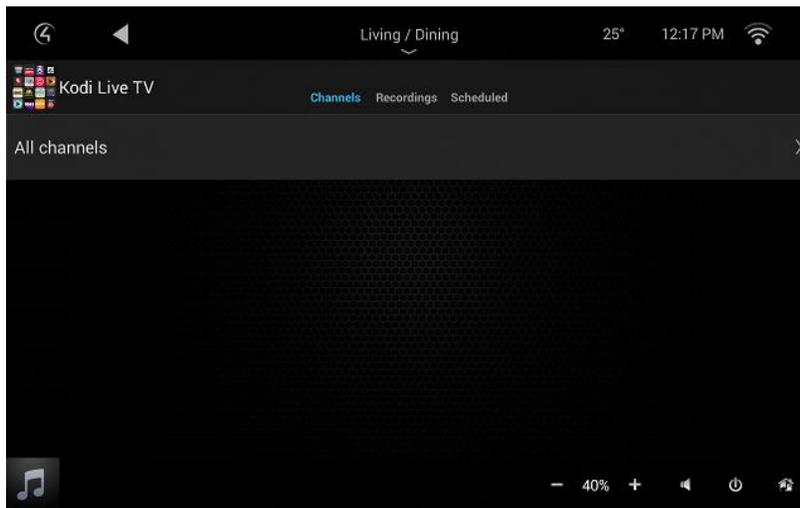
1. The Kodi Live TV Icon can be found under the watch section of Control4
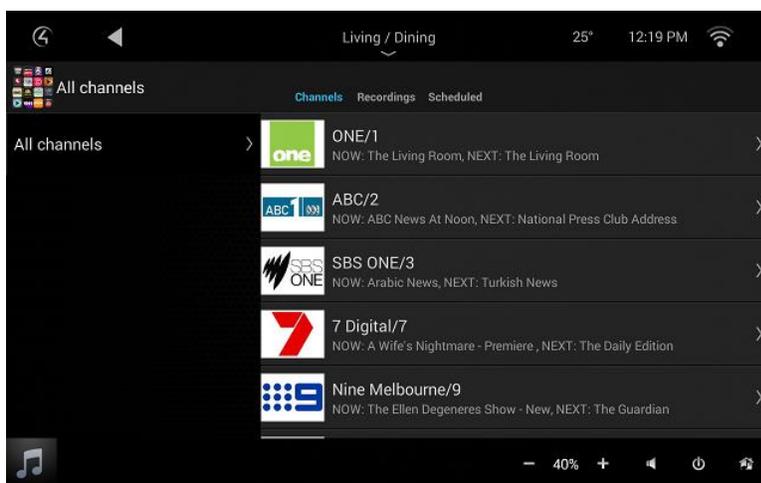

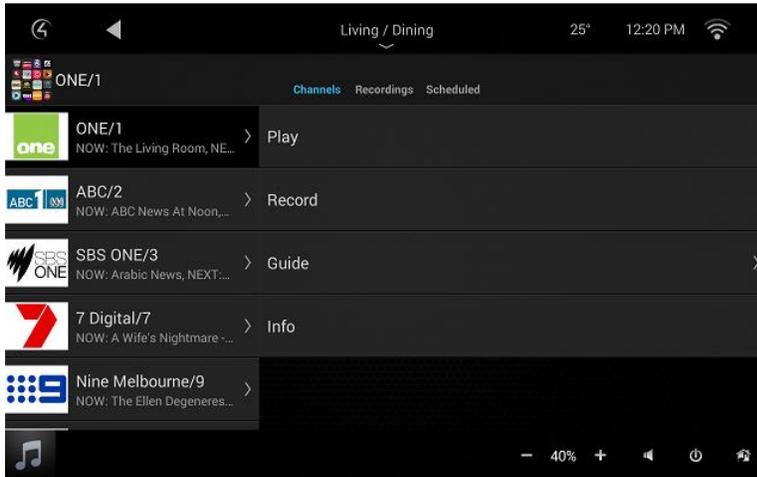2. Select the Live TV icon to bring up the Live TV interface
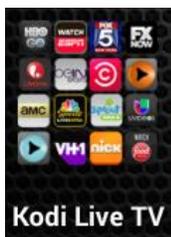
3. The interface will now display Channels, Recordings and Sheduled.

4. If you want to watch, record or view the guide for a channel now click on Channels and your Channel Group (in this case it is All Channels)

5. Select the Channel you are interested in (note how it tells you whats currently playing on that channel)
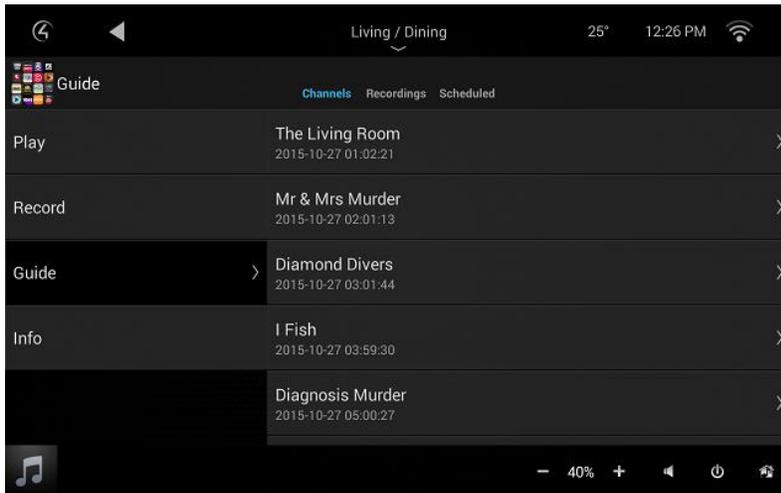

6. Click on Info to see detailed information about what is currently playing on the channel
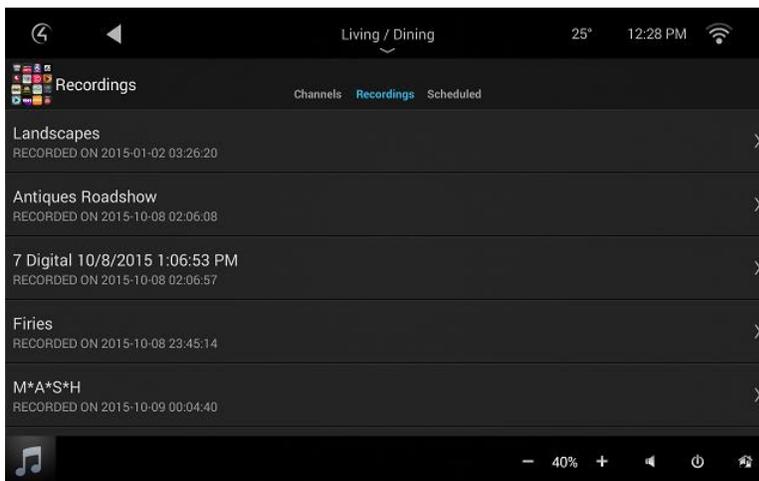

7. Press Play if you want to playback channel immediately.

8. Press Record if you want to start recording whats on the channel immediately.

9. Press Guide if you want to see the TV Guide for the channel
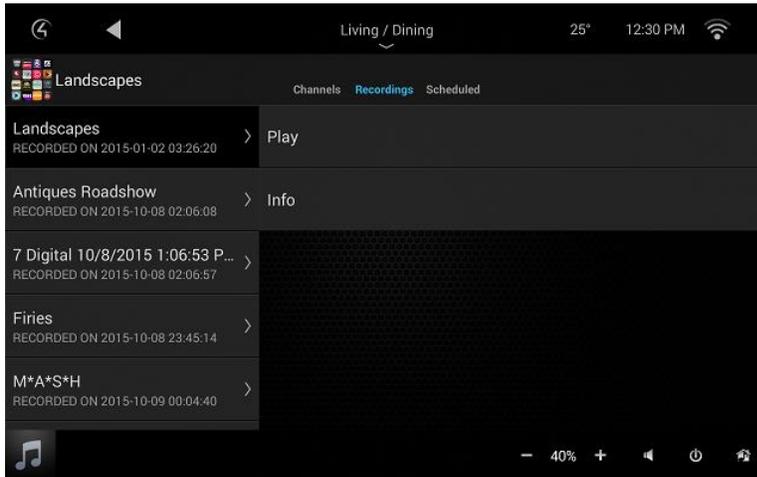

10. Click on the Show/Movie name and click on Info if you want to see further details.
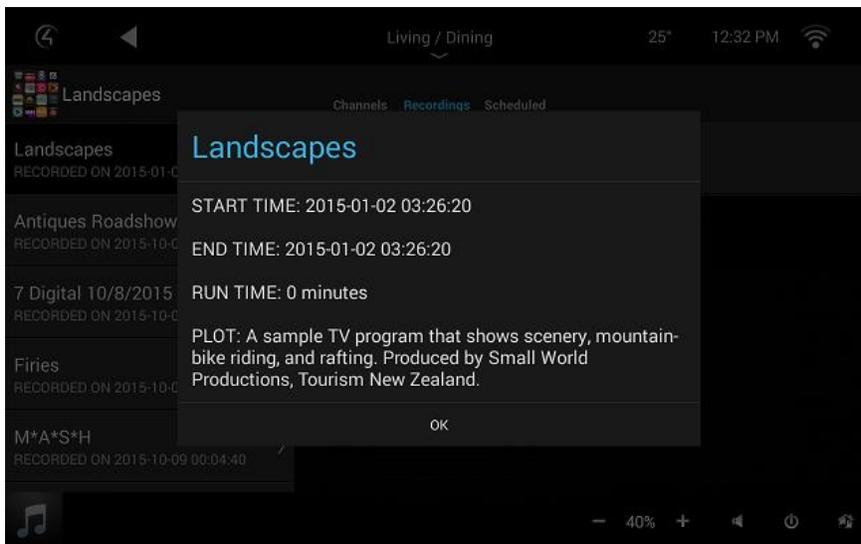
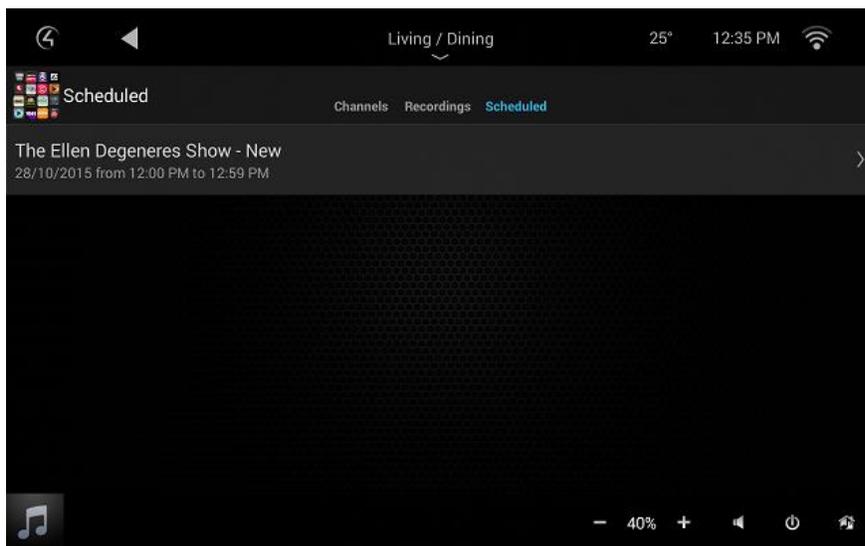11. Click on Recordings to view all recorded content

12. Click on a Recording to either Play or see more info
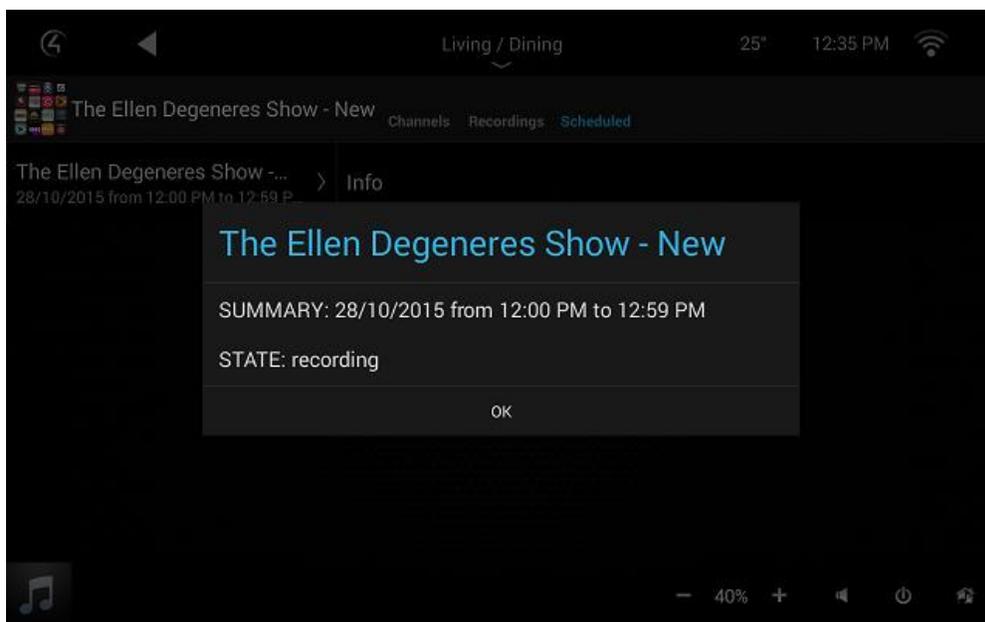

13. More info will display the start, end, runtime and plot of the recorded episode/movie

14. Click on Sheduled to see all content scheduled for recording or is recording on the PVR

15. Click on the recording to view info about the recording.

Using KODI Full – Browsing the Music Library

This section assumes that you have a working KODI installation with Music scanned into the KODI Music library and have the KODI Full driver setup with the Slave Music Library driver bound.
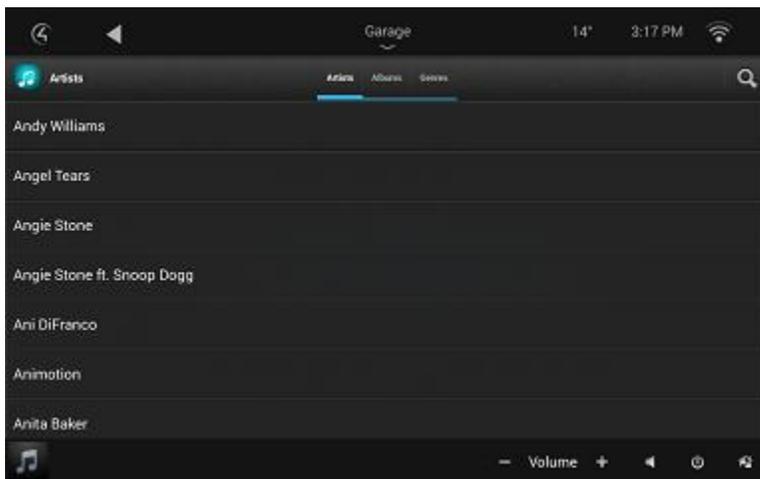
1. The Kodi Music Icon can be found under the watch section of Control4

2. Select the KODI Music icon to bring up the Movies interface

3. The interface is split up into 3 sections

4. **Artists –** Will bring up a list of all artists scanned into KODI. Selection of the Artist will bring up that artists albums and upon selection of an album it will bring up the tracks for that album.

5. **Albums** – Will bring up a list of all albums scanned into KODI. Upon selection of an album it will bring up the tracks for that album.
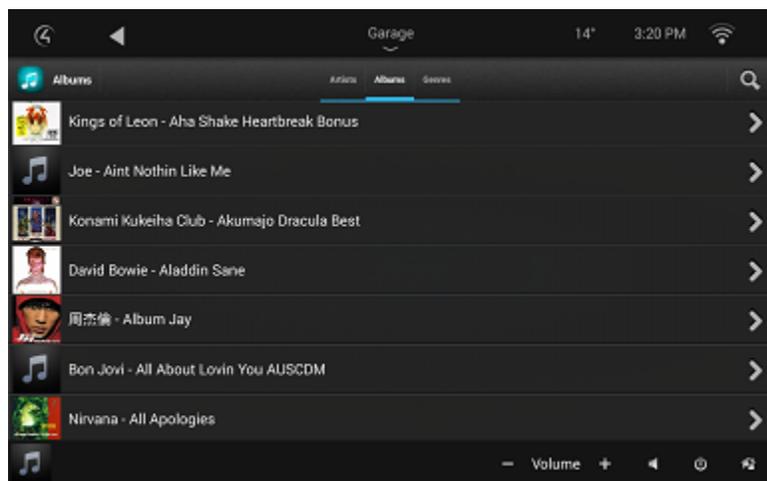
6. **Genres** – Will bring up a list of all genres scanned into KODI. Upon selection of a genre it will bring up a list of artists and so on.
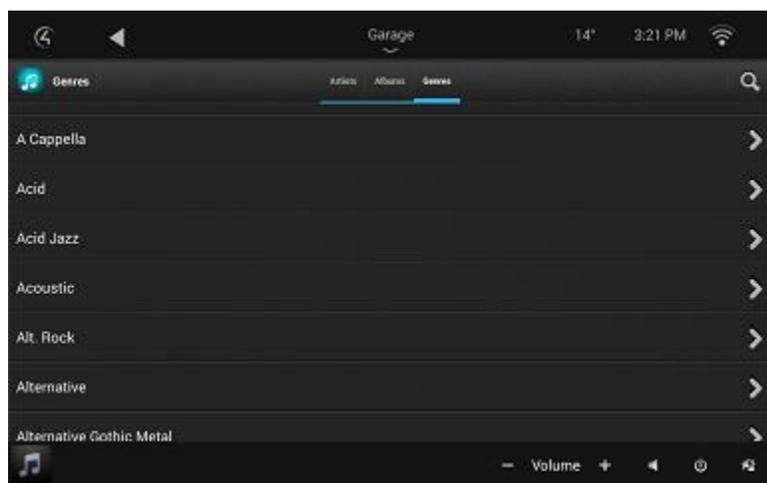
7. Selection of an Album will bring up the tracks for that album along with playback commands.
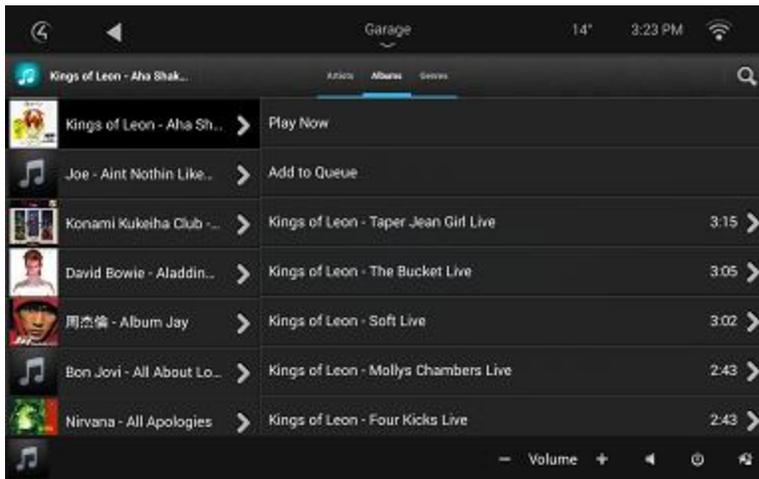
8. You can select Play Now to play the album now or add to queue to add the whole album to the queue.

9. Alternatively you can select an individual track to bring up the Play Now and Add To Queue items for that one track.

13. You can also search for music by clicking on the Search button. You can filter it by

- Song Title

- Music Artists

- Music Albums

- Music Genre

Using KODI Full – Browsing Music Files

This section assumes that you have a working KODI installation with Music sources added into the KODI music sources section and have the KODI Full driver setup with the Slave Music Files driver bound.

1. The Kodi Music Files Icon can be found under the watch section of Control4

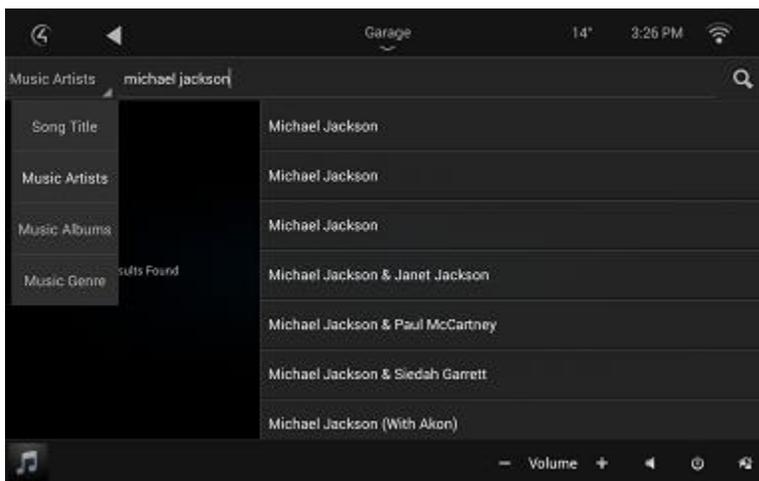2. Select the KODI Music Files icon to bring up the Movies interface
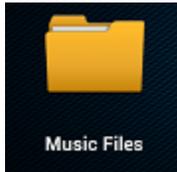
16. The interface will now display all music sources on your KODI system.
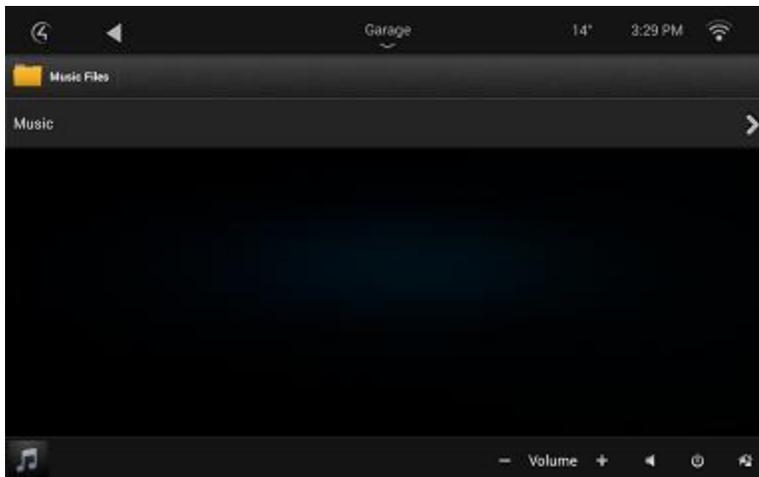
17. Select a source to bring up folders and files for that source
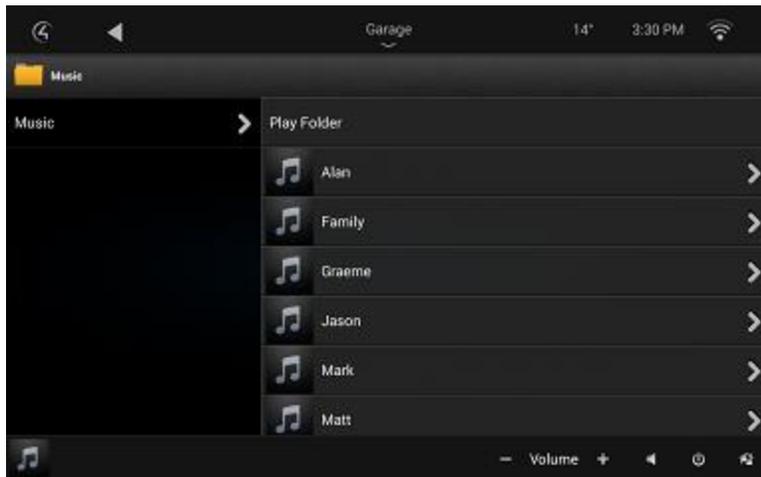
18. Select Play Folder to play all files in that folder and subfolders

    Note: This is not recommended for folders which have multiple subfolders of files. This can cause lockups in KODI if you do this.

19. Select a folder to view the contents of that folder

20. Select a file to play back that file.

Using KODI Full – Browsing Audio Addons

This section assumes that you have a working KODI installation with Audio Addons added and have the KODI Full driver setup with the Audio Addons driver bound.

NOTE: Some KODI Addon's will freeze up the KODI Driver. This is due to a dialog box popup which causes a lockup in the KODI API. The only way to fix it is by closing the dialog box. If you utilise the Audio Addons functionality in the driver it is your responsibility to ensure that the addons you install on your customers system do not utilise any popup dialog boxes. Test all functionality before leaving the site.

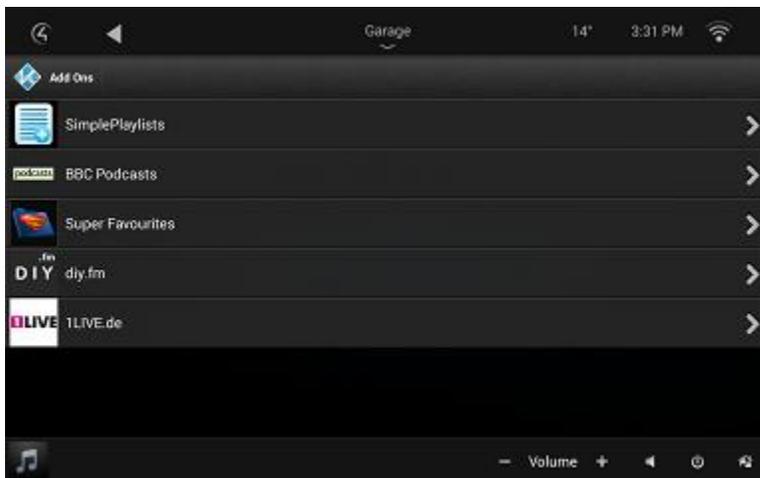1. The Audio Addons Icon can be found under the watch section of Control4
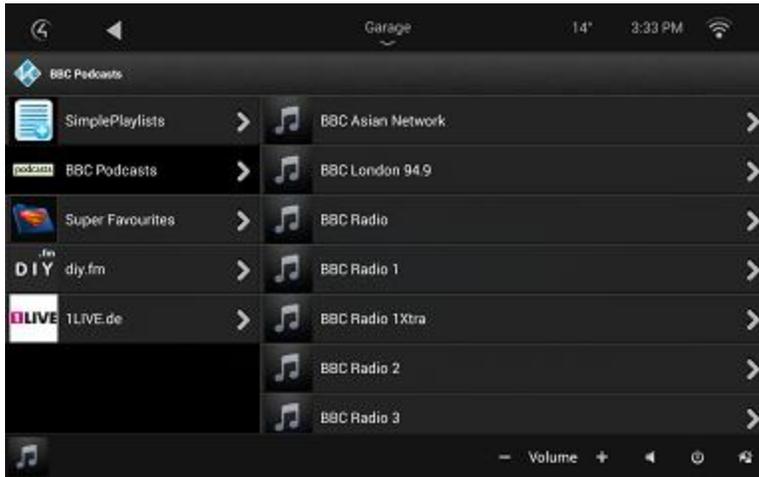

2. Select the Audio Addons icon to bring up the Movies interface

17. The interface will now display all video addons on your KODI system.

18. Select a source to bring up folders and files for that source

19. Select a folder to view the contents of that folder

Select a file to play back that file.

Using KODI Full – Onscreen Settings

This section assumes that you have a working KODI installation with Audio Addons added and have the KODI Full driver setup with the Audio Addons driver bound.

NOTE: Some KODI Addon's will freeze up the KODI Driver. This is due to a dialog box popup which causes a lockup in the KODI API. The only way to fix it is by closing the dialog box. If you utilise the Audio Addons functionality in the driver it is your responsibility to ensure that the addons you install on your customers system do not utilise any popup dialog boxes. Test all functionality before leaving the site.

1. The KODI Settings Icon can be found under the watch section of Control4

3. Select the KODI Settings icon to bring up the Settings interface

20. The interface will now display all settings for your KODI system.
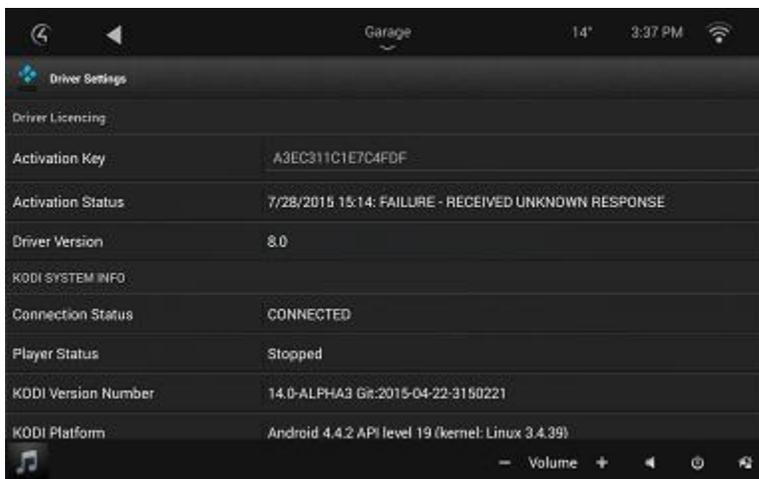
21. A customer can enter in their Activation Key if they are using a trial licence.

22. A customer can also view the status of their KODI system

23. A customer can also change the network settings of KODI should it ever change.
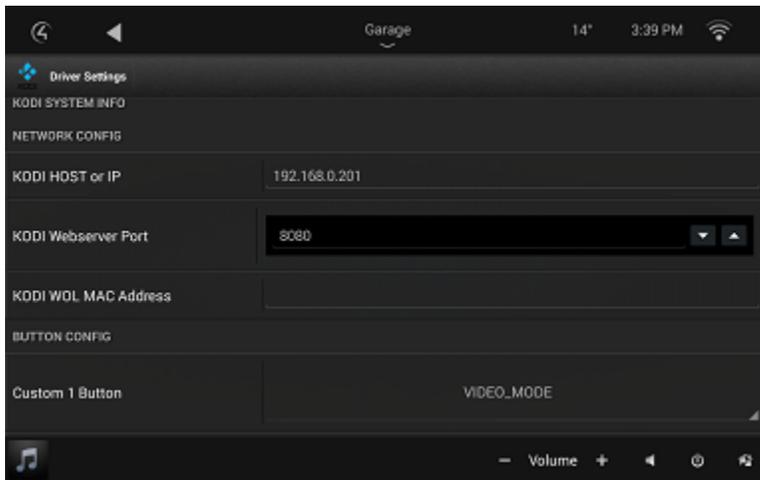
24. A customer can also change the customisable button functionality.
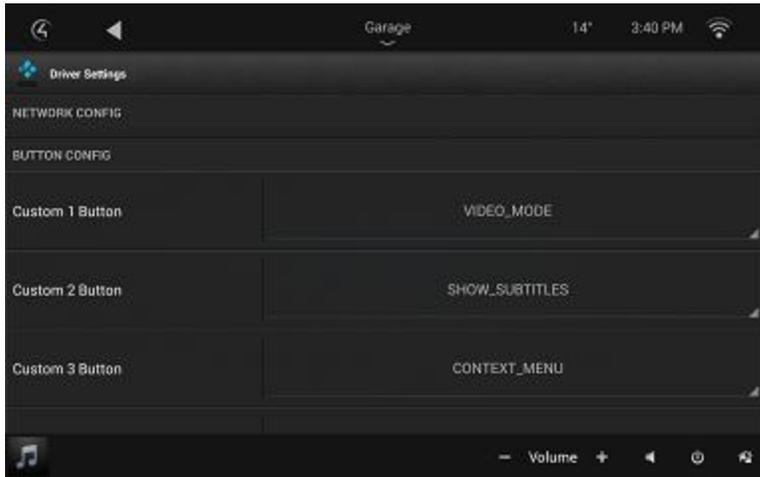
25. A customer can change the room off command and automatic room off on screensaver preferences.
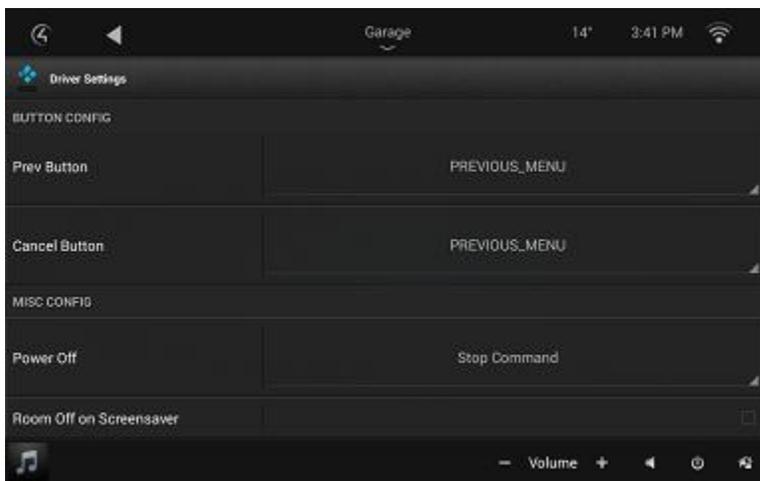
26. The only thing they can't do is select which room they want to automatically turn on. They can however do this in Composer Home Edition if they have it.

Programming Example – Selection of Movies, TV Episodes or Video Files via programming

With KODI Full we decided to get rid of Media importation into Control4. As such we no longer select Movies like we did in KODI LITE. With OS 2.7.0 we can now programmatically select Movies, TV shows or Video Files. It is assumed you have setup the KODI Full driver wit the Movies, TV Shows and Video Files slave drivers in working order. It is also assumed you have setup KODI's library populated with Movies, TV Episodes and have added Video Sources to KODI.

1. Click on the **Programming Tab**.

2. Select the Slave driver you want to select media from (KODI Movies, TV Shows or Video Files)

3. Select the Radio Button next to Device Specific Command

4. Select the … button next to Movies, Episode or File

5. The driver will now return a list of Moviesl, TV Shows or Folders
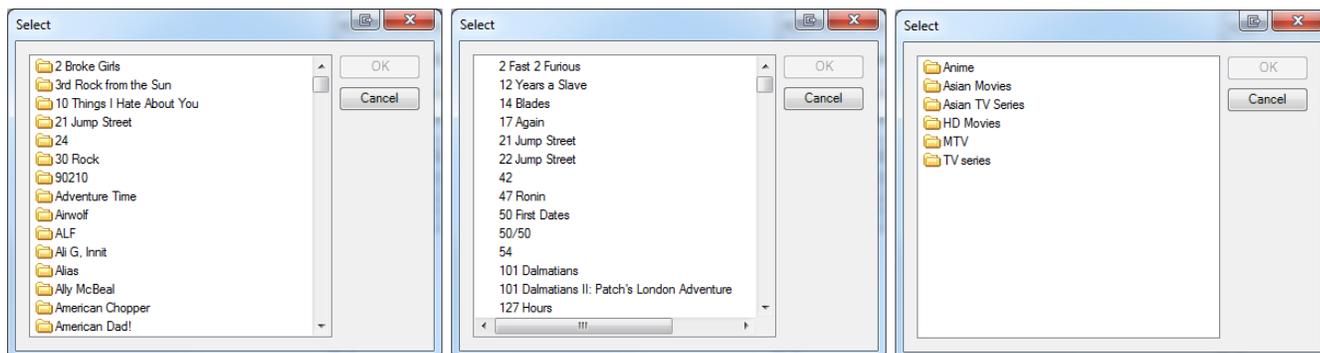
6. If there is a folder icon you can double click to browse to the next section. Otherwise select the movie, episode or file you want to play and click on the Ok button.

7. The movie, episode or file name will now populate the box.

8. Click on the … button next to Room

9. Select the room you wish to play the movie, tv episode or video file in. Note that KODI must be accessible in that room otherwise it will not work.
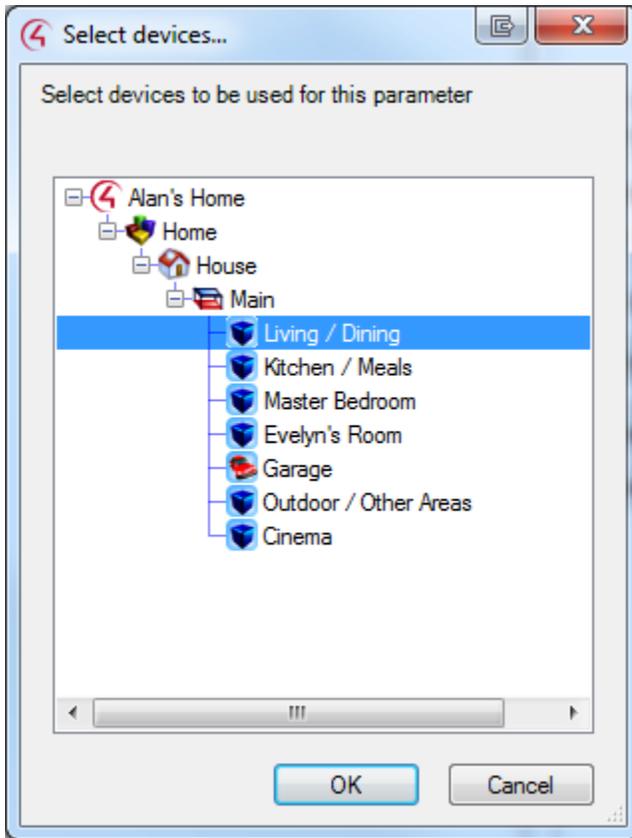
10. Drag and drop the green arrow into the script for the event you want to execute action on.

Play Movie 2 Fast 2 Furious in Main->Living / Dining

11. Congratulations you have programmatically selected a movie, tv episode or video file.

Programming Example – Executing announcements via Kodi notifications

Kodi has the abilities to show custom notifications on the bottom right hand corner of the screen. This is usually used for system messages however we can use it to output messages from the Control4 system. This can include anything that is text based.
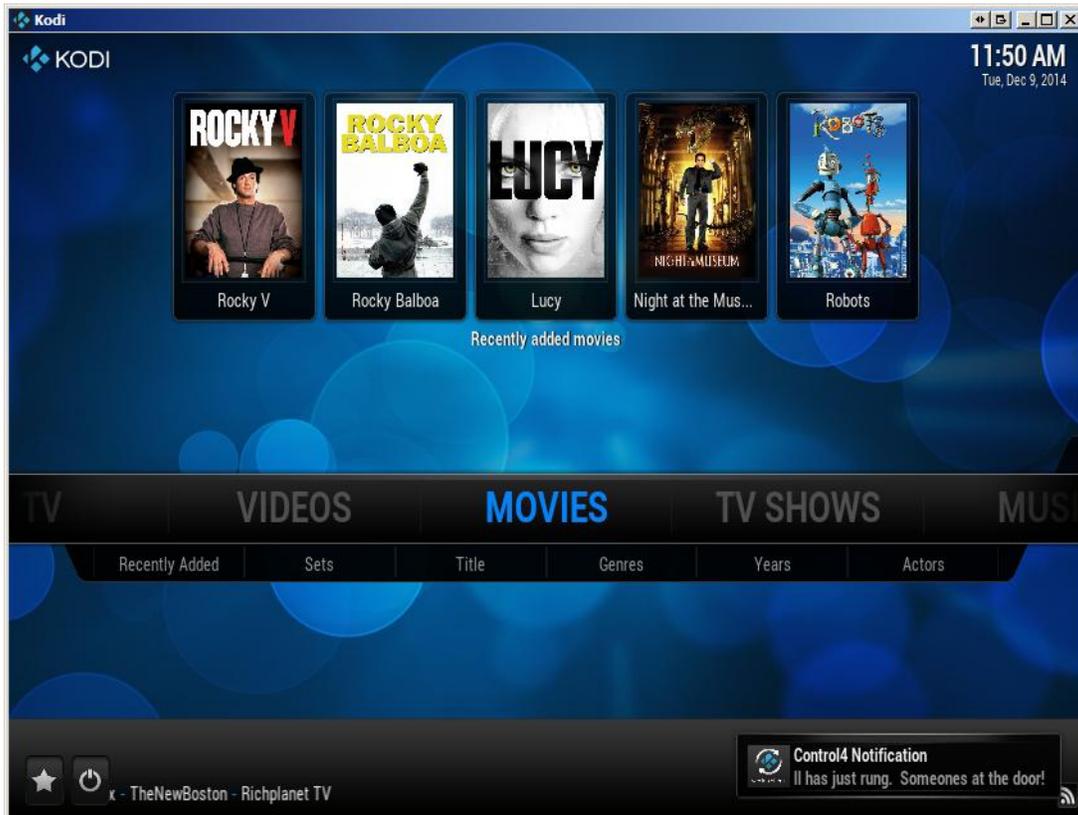
1. Click on the '**Programming'** tab.
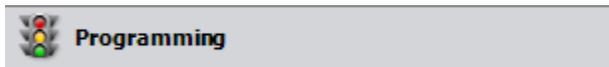
2. Under Device Events select the event you want to trigger the notification on.

3. Under Device Actions select the **Kodi Control** driver.

4. Select the radio button next to Device Specific Command

5. Select **Send KODI Notification**

6. Type in the Title and Message you want to send to Kodi

Send KODI Notification	▼

Title	Control4 Notification	▼
Message	Your doorbell has just rung. Someones at the door!	▼

7. Drag the green arrow and drop it onto the script section.

8. Congratulations you have set up the system to send a KODI notification.

Programming Example – Starting up and Shutting down based upon Security Armed/Disarmed events.

One of the issues with using a Home Theater PC is that the power consumption whilst it is not being used is quite high. A method we can use to introduce power saving to help improve this issue is to shut the system down when we're not at home and to start it back up when we are at home.

Note that you will need to set up your PC to allow for wake on lan for this to work. It is also assumed that you have setup the driver properties correctly as per the section labelled 'Adding the driver to your project'.

1. Click on the '**Programming'** tab.
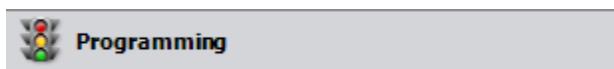
2. Under Device Events select your integrated **security system**.

3. Select the '**has been armed to Away**' event

4. Under Device Actions select the **KODI control** driver.

5. Select the radio button next **to Device Specific Command**

6. Select **Send Shutdown Command**

7. **Drag the green arrow and drop** it onto the script section.

8. Select the **'has been Disarmed'** event

9. Under Device Actions select the **KODI Control** driver.

10. Select the radio button next **to Device Specific Command**

11. Select **Send WOL**

12. **Drag the green arrow and drop** it onto the script section.

13. Congratulations you have set up the system to startup and shutdown when your security system arms/disarms.

Programming Example – Setting up automatic masking to suit the video aspect ratio

One of the cool features of this driver is the ability to detect the aspect ratio of the video that is playing at the moment. Using this functionality we can automatically switch the projector mode to suit and as such crop any black bars which may appear in the movie. Note that if the black bars are encoded into the movie (it shouldn't be but if you haven't ripped the movies right it will) then it will not report back the correct aspect ratio.

1. Click on the '**System Design**' tab

2. Highlight the **'KODI Control'** driver and view the properties window.

3. Play back a movie and you will see the Video Aspect Ratio box change to reflect the aspect ratio. Take not of this.

Currently Playing	Rocky V
Video Resolution	1080
Video Aspect Ratio	1.85

4. Click on the '**Programming'** tab.

Programming
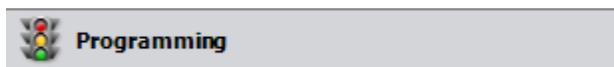
5. Under Device Events expand the KODI Control driver and click on Video Aspect Ratio

KODI Control
  Device Variables
    POWER_STATE
    KODI Client Name
    KODI Version
    KODI Platform
    Media Type
    Video Aspect Ratio
    Video Resolution
    Currently Playing
    CPU Usage
    Memory Usage
    System Temperature
    System Uptime
    System Total Space
  KODI Settings
  KODI Virtual Switcher
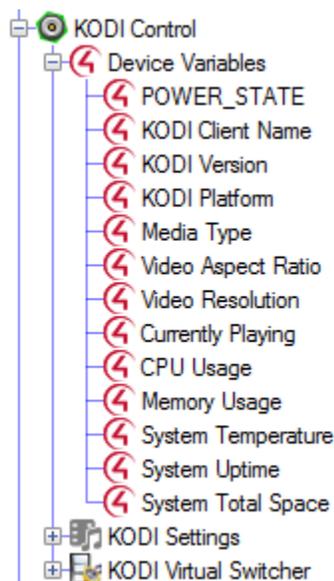
6. Under Device Actions expand the Control driver and click on Video Aspect Ratio

7. Click on Conditionals

8. Click on the Is radio button and the = dropdown box

9. In the text box type in the resolution you noted down earlier

○ Is | = | ▼ | 1.85

10. Drag the question mark into the script

When the variable Development->KODI Entertainment
Center->Video Aspect Ratio changes

? If Development->KODI Entertainment Center->Video Resolution EQUAL TO 1.85

11. Drag in the macro or action into the conditional to change the project mode to that aspect ratio

When the variable Development->KODI Entertainment
Center->Video Aspect Ratio changes

? If Development->KODI Entertainment Center->Video Resolution EQUAL TO 1.85
➡ Execute Macro 'Change projector to 185 mode'

12. Repeat steps 1 to 11 for each aspect ratio detected. Note the common aspect ratios are as follows

- 1.33

- 1.375

- 1.50

- 1.66

- 1.78

- 1.85

- 2.00

- 2.35

- 2.39

- 2.40

- 2.66

13. Congratulations you have setup automatic masking.

Kodi Button Mapping

The buttons are as follows when the XBMC application is connected (if it is disconnected it will run in Android mode).

DEFINABLE BUTTONS

As the Red, Green, Yellow, Button, Guide, DVR, */-, #/- buttons are non intuitive (or may not be used regularly) they can be custom definable in the properties page of the driver to the following commands

VIDEO_MODE	FULLSCREEN_TOGGLE	JUMP_TO_MUSIC_FILES
SHOW_SUBTITLES	NEXT_SUBTITLES	JUMP_TO_VIDEO_FILES
AUDIO_NEXT_LANGUAGE	CONTEXT_MENU	JUMP_TO_MY_WEATHER
EJECT_TRAY	PVR_MENU	JUMP_TO_PROGRAMS
TV_GUIDE	RADIO_GUIDE	JUMP_TO_MUSIC_LIBRARY
TV_RECORDINGS	RADIO_RECORDINGS	JUMP_TO_VIDEO_LIBRARY
TV_SEARCH	RADIO_SEARCH	JUMP_TO_MY_PICTURES
CODEC_INFO	DO NOTHING	JUMP_TO_HOME
		JUMP_TO_TOP

NUMBER BUTTONS

These buttons have a dual function. In navigation mode they can be used to perform SMS style searching within a list of items. In video playback mode they can be used to jump to a percentage of the video.

TRANSPORT & OTHER BUTTONS

Play/Pause – These buttons fire the same Play/Pause command.

Stop – Stops the media playback

Skip Forward – Skips to the next chapter or performs a big jump forwards.

Skip Reverse – Skips to the previous chapter or performs a big jump backwards.

Fast Forward – If held sets speed to 8x. If tapped performs a small jump forwards.

Rewind – If held sets speed to -8x. If tapped performs a small jump backwards.

Cancel – Cancels the menu item or jumps to home screen.

Menu – Brings up the playback menu

Info – Brings up the media information

Mute – Mutes the audio (if set to audio endpoint)

Vol + - Increases the volume (if set to audio endpoint)

Vol - - Decreases the volume (if set to audio endpoint)

Prev – Jumps back one level in the menu

Page Up – Jumps up one page in navigation

Page Down – Jumps down one page in navigation

Select – Selects the current highlighted item

Up,Down,Left,Right – Menu Navigation

Channel Up,Down – Changes the tv channel up and down

Record – Sends a record command to Kodi

Android Button Mapping

The SR-250 can control the android box via the following buttons when the XBMC app is <u>EXITED</u>.

TRANSPORT & OTHER BUTTONS

Up	-	Navigate Up
Down	-	Navigate Down
Left	-	Navigate Left
Right	-	Navigate Right
Select	-	Enter Key
Page Up	-	Page Up on Selected Panel
Page Down	-	Page Down on Selected Panel
Prev	-	Back
Guide	-	Home Screen
Volume Up	-	Volume Up (need to set to audio endpoint)
Volume Down	-	Volume Down (need to set to audio endpoint)
Mute	-	Mute Toggle (need to set to audio endpoint)
Info	-	Recent Apps
Menu	-	Menu
Cancel	-	Back
Play	-	Play/Pause
Pause	-	Play/Pause
Stop	-	Stop
Skip Forward	-	Next Track
Skip Reverse	-	Previous Track
Scan Forward	-	Fast Forward
Scan Revese	-	Rewind

NUMBER BUTTONS

Note that the numerical keypad can change functionality by using the Keyboard mode and Mouse mode buttons.

Star	-	Keyboard Mode
Pound/Hash	-	Mouse Mode
Record	-	backspace
Number 0	-	Mouse Down, Mouse Up (mouse mode); space or 0 (keyboard mode)
Number 1	-	Move cursor up-left (mouse mode); . : / @ or1 (keyboard mode)
Number 2	-	(mouse mode); a,b,c or 2 (keyboard mode)
Number 3	-	Move cursor up-right (mouse mode); d,e,f or 3 (keyboard mode)
Number 4	-	Move cursor left (mouse mode); g,h,i or 4 (keyboard mode)
Number 5	-	Click (mouse mode); j,k,l or 5 (keyboard mode)
Number 6	-	Move cursor right (mouse mode); m,h,o or 6 (keyboard mode)
Number 7	-	Move cursor down-left (mouse mode); p,q,r,s or 7 (keyboard mode)
Number 8	-	Move cursor down (mouse mode); t,u,v or 8 (keyboard mode)
Number 9	-	Move cursor down-right (mouse mode), w,x,y,z or 9 (keyboard mode)

Licencing

Chowmain drivers require a valid licence to use the driver. Drivers can be purchased from our distributor driverCentral however all Chowmain drivers come with a 7 day trial. We recommend that prior to purchasing a driver that you test the driver out to ensure that it will work with your hardware and will meet your requirements. The licencing procedure is broken down into 4 steps. A summary of the steps are below along however we have also provided detailed steps if the summary is not sufficient.

Summary

1. Create your project on the driverCentral.io website (This will generate a specific token which you will use in the next step)

2. Download, install and activate the driverCentral cloud driver in your project (Only once per project. Use the token generated in step 1)

3. (Optional) To try a driver, simply download it and install it in your project

4. To purchase a driver:

   a. On driverCentral, purchase a license and register it to your project

   b. If the driver is not already installed in your project, download it and install it

   c. If necessary, use the cloud driver's Action: "Check Drivers" to force licence download to the project.

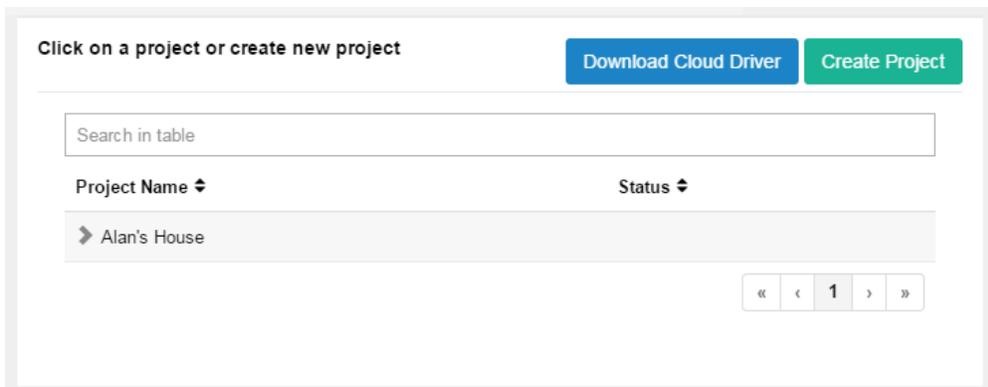## STEP 1 - Creating your project on driverCentral

1. Visit http://www.drivercentral.io

2. Log into your driver Central dealer account.

3. Visit the Project Portal

4. Click on Create Project
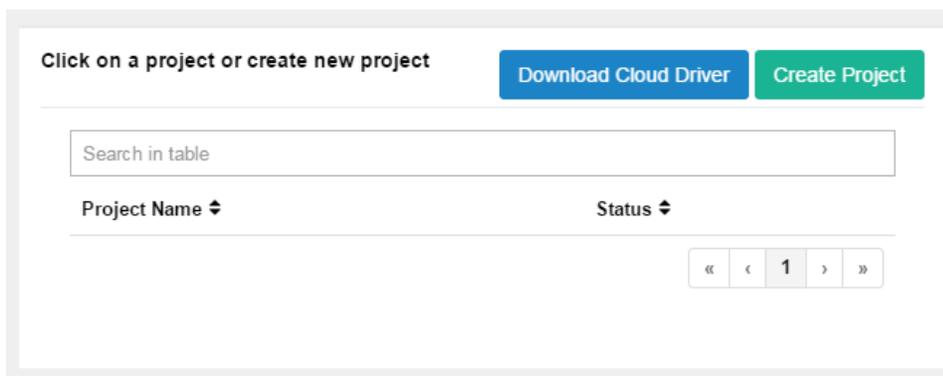
5. It will prompt you for a project name. Type in a meaningful name for your customer's project
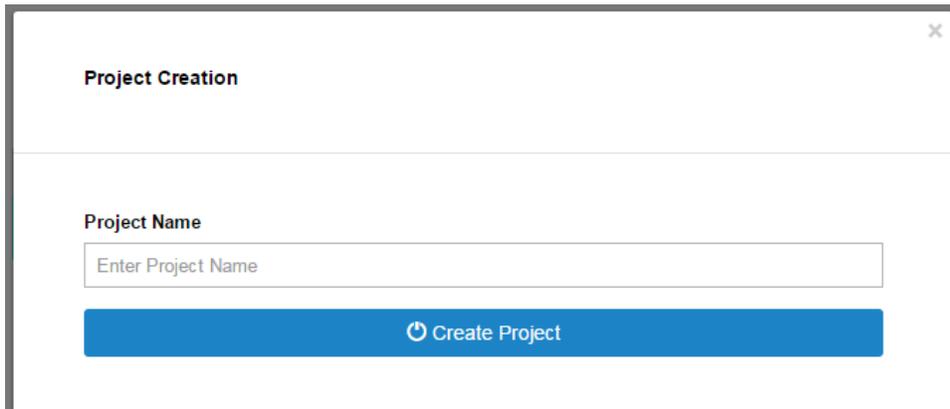
6. Click on Create Project

7. Click on the project we just created to expand the project

8. Take note of the Project Token as this will be used in STEP 3 when we install the driverCentral cloud driver.
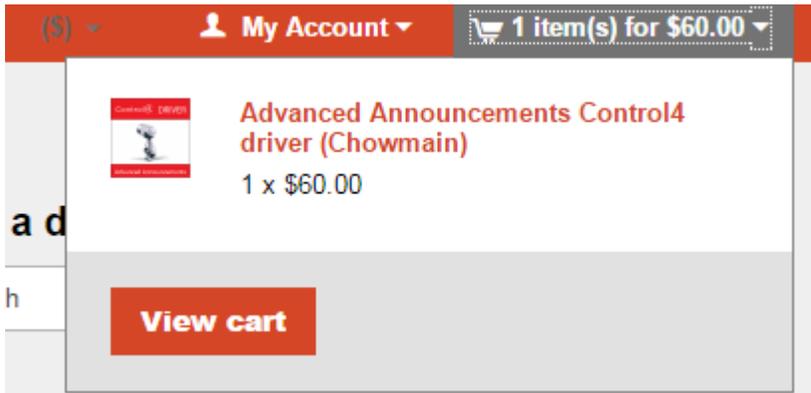
STEP 2 –Purchase driver licence

1. Visit https://www.drivercentral.io/chowmain-ltd/ and find the product/driver you want to purchase a licence for.

2. Click on the Add to Cart button

3. Click on the Shopping Cart icon in the top right corner and click on View cart

4. Confirm that your order is correct and click on Proceed to checkout

5. Follow the prompts and click on Sib,ot ,u Prder

6. This will take you to PayPal for payment.

7. Pay via PayPal. It will automatically return to the marketplace when confirmed.

8. You will now be at a page where you can see your purchased licence.

9. From here assign the licence to the project we created or if you did not follow that step create a new project
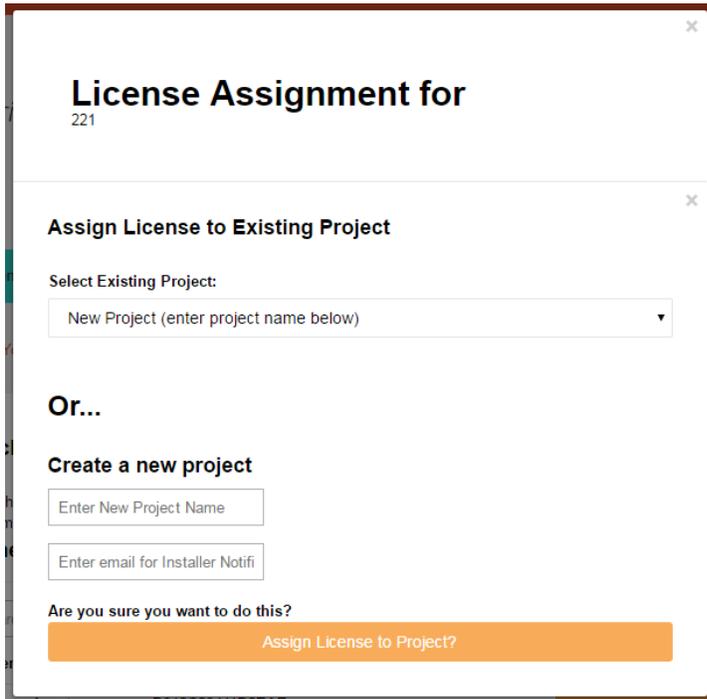
STEP 3 – Install and activate the driverCentral cloud driver

NOTE: Only one instance of the driverCentral cloud driver installed per project. Do not install additional cloud drivers.

1. Visit http://www.drivercentral.io

2. Log into your driver Central dealer account.

3. Visit the Project Portal

4. Click on Download Cloud Driver
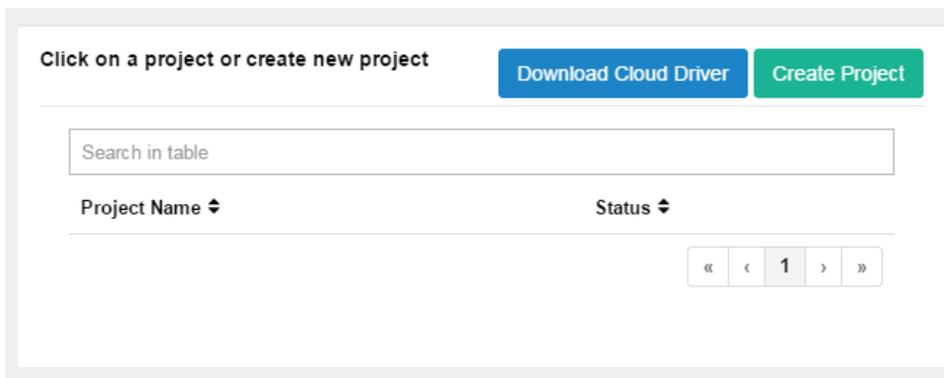
5. Copy the C4Z driver to My Documents\Control4\Drivers directory.

6. Add the driver to your project.

7. Click on the driver to view it's properties

Cloud Status	Please enter cloud project token below....
Project Information	(1) Total, (0) Licensed, (0) Trials, (1) Expired, (0) Updates.
Driver Version	1001
Project Token	
	Project token from driverCentral.io project portal
Driver Actions	⌄
Debug Mode	Off ⌄

8. Type in the project token we took note of in STEP 1.

9. Click on the Actions tab

10. Click on Check Drivers

STEP 4 – Install Chowmain driver

1. Install the Chowmain driver

2. You will notice that the Activation Status reflects a Licence Activated state.

3. Any driver that does not have a purchased licence will have a trial licence activated via the marketplace. Note that there is no way to reactivate the trial so please use wisely.

4. If you do not then press the Check Drivers action in the driverCentral Cloud driver again.

Activation Status	Update Available!!! License Activated
Driver Version	1002
Driver Information	Navigate to connections tab and make serial binding
Automatic Updates	Off ⌄