

Fusion Research Amazon Fire TV Driver

for RTI

This driver provides TCP control of an Amazon Fire TV (Box or Stick).

What the driver can and cannot do

The driver provides the following functions:

- Cursor Up, Down, Left and Right
- Select and Cancel
- Rewind and Fast Forward (momentary, for some applications)
- Play/Pause (toggle)
- Home and Menu

Feedback on FireTV Power and Activity

The driver cannot provide "voice search" of the Fire TV.

The driver should not be used to play games on the FireTV.

The driver cannot perform press and hold operations (necessary for Rewind and Fast Forward in some apps)

Driver Licensing

We recommend installing the driver on your job's main (most powerful or central) controller. This driver is licensed on a system controller basis. This means that the license you purchase allows you to use any number of instances (or copies) of the driver on a single controller. If you need to put the driver on more than one controller, you will need a license for each controller.

Note: Each Fire TV will require a separate instance of the driver, but not a separate license if all instances are on the same controller.

Please read this entire document before you begin to use the driver.

Step 1: Configuring the Fire TV

Allowing the FireTV to accept commands

Your FireTV must be told it will be controlled by a trusted device in your network. This requires "ADB Debugging" to be turned on (or enabled).

Required Action : Turn on ADB Debugging

On your FireTV go to Settings / System / Developer Options. Click the ON/Off button for ADB Debugging to turn it on. You know it's on when the button is blue and reads "ON".

Placing the FireTV on your Network

Your control system must be able to reliably communicate with your FireTV. For this to happen, your FireTV will need to have a known IP address that does not change. How you accomplish this depends on your FireTV model and network capabilities.

FireTV Box (original)

You can set the FireTV's wired network interface to use a static IP address. This is done in the FireTV's Settings (System / Network).

You can assign a DHCP lease to your FireTV.

FireTV Stick

Because the FireTV Stick only supports Wifi, you will need to assign a DHCP lease to your FireTV.

Recommended Action : DHCP Lease

We recommend you assign a DHCP lease to your FireTV for all interfaces it supports (Wired and Wifi). Doing this ensures the FireTV will work properly even if the unit is reset to factory defaults.

The FireTV's network MAC addresses are found in its Settings (System / About / Network).

Step 2: Configuring the Driver

Import the driver into Integration Designer and look at the driver's configuration.

Under "FireTV" / "IP Address" enter the FireTV's IP Address where the driver can communicate with the FireTV.

Step 3: Licensing the Driver

You must enter a License Key into the appropriate driver property (License Key) to activate the driver.

You must purchase a License Key from Fusion Research (<http://www.fusionrd.com>).

Notice: Your License Key is valuable. Please retain it for future reference. Do not lose your License Key as a new one cannot be generated and an old one cannot be "looked up".

Notice: The License Key can only be used on a single controller and after installed, it cannot be used on any other controller, so be certain that you are installing and licensing the driver on the proper controller.

Notice: To activate your license, your controller must be on the Internet.

Enter your License Key (copy and paste to reduce transcription errors) into the driver setting "License Key". When the driver starts it will try to redeem the key and report the results of it's effort in the "License Key Status" variable.

Step 4: Testing the Driver

A sample job containing an XP-3 and Virtual Panel has been provided to demonstrate the driver. If you are unfamiliar with the driver, we recommend you use this job and virtual panel to exercise the driver and become familiar with its operation before using it on a real job.

Troubleshooting

Licensing

When starting, the driver will reach out to the Internet to validate its license key. Look at the License Key Status property for the results of this activity.

Control

If the "FireTV / Connected" variable is False, do the following:

- Verify your FireTV leases in your DHCP server.
- Check your FireTV's IP Address.
- Verify the driver has the right IP Address for the FireTV.

If the "FireTV / Controlling" variable is False, do the following:

- Verify "ADB debugging" is turned on in Settings / System / Developer Options.

If the "FireTV / Controlling" variable is True, but you have no control do the following:

- Verify your License Key has been accepted.

Driver Settings

FireTV

IP Address - The IP address where the FireTV can be communicated with.

Polling Interval - This allows you to decide how often the driver should ask the FireTV about it's status. (in minutes)

License

License Key - The software license key purchased to enable the driver.

Driver Variables

Status

On / Off - A boolean indicating the FireTV's power state (Off can be asleep or off).

Power State - A text representation of the FireTV's power state.

Active / Idle - A boolean indicating the FireTV's active state (Idle or Active).

Activity - A text representation of the FireTV's active state.

License

Driver Version - The version of the driver.

Key Status - The status of the key you have entered.

Fire TV

Connected - A boolean indicating whether the driver was able to connect to the FireTV.

Control - A boolean indicating whether the driver is able to control the FireTV.

Driver Commands

Power - Turn the FireTV **On**, **Off** or **Toggle** it's power state

Navigation - Control the FireTV's UI with Cursor Up / Down / Left and Right, Enter and Cancel and Home and Menu commands.

Transport - Play / Pause (toggle), Fast Forward and Rewind the FireTV's playback.

Driver Events

Events are triggered as a result of polling and will not be instantaneous.

Power / On - Triggered when the FireTV is turned on.

Power / Off - Triggered when the FireTV is turned off.

Activity / Idle - Triggered when the FireTV is not being used to do something like watch a movie or play a game.

Activity / Active - Triggered when the FireTV is being used to watch a movie or play a game.

Versions

Version 15.1.30.0 (January 2015) - Initial Release

Version 15.12.29.0 (December 2015) - Fix for 4K compatibility