# irusb Installation and Usage Guide

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Date: Thursday, April 13, 2023
Authors: Richard Mullins

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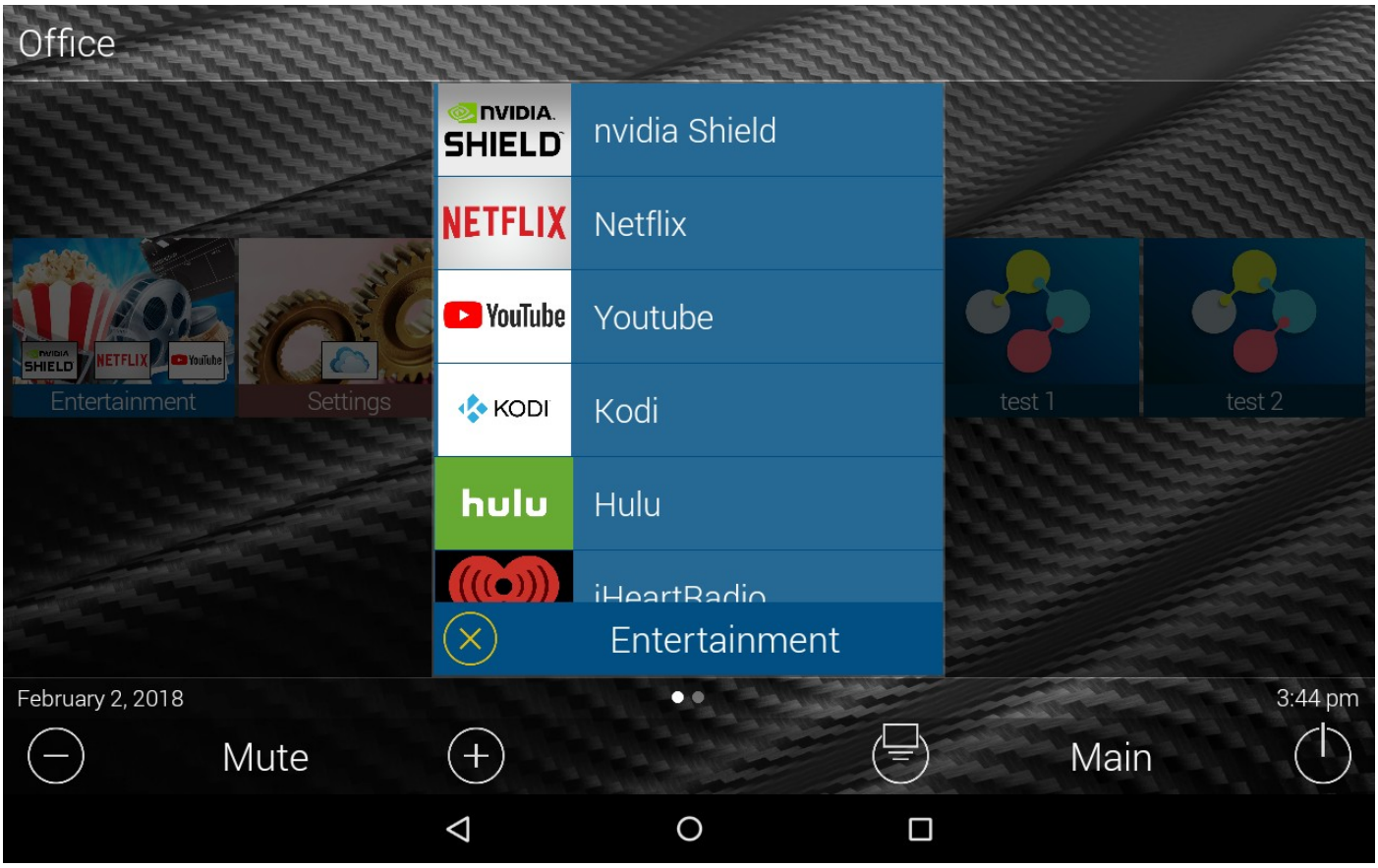
# Overview

The irUSB URC module allows for control of Android TV boxes like the nvidia Shield, FoxtelNow and a variety of other Android TV devices (several Sony TV models for example ). It does so by using the irUSB device (available from Videostorm) to inject keystrokes into the device avoiding issues with ADB. Any Android TV device with access to the Play store can work with this module.

In addition to control of the device the module allows for directly launching of apps, either using the built in TwoWay commands or by entering a custom Android intent.

**PLEASE NOTE:** this module requires the irUSB to function, it does not directly control the Shield, or any other Android TV box, but instead uses the Videostorm app for control. This device also will not work correctly on a non Android TV device (a lot of the inexpensive Android set top boxes are not running Android TV).



# Features

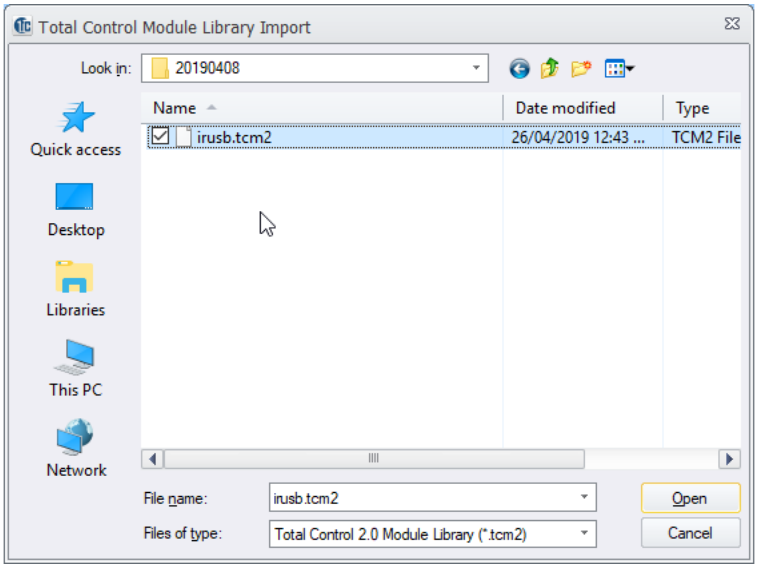
- Full IP control over nvidia Shield and Amazon Fire TV
- Control over the new Foxtel Now set top box
- Control over generic Android TV's
- Direct app launching via a Two Way command
- IR pass-through (available in your macros)
- All modules included in one package

# Installation

To install the module, you will need to do the following

## Import TCM

From the file menu, Import TCM Files



## Add the module to your project

In Step 4. Add Other Drivers. You will need to the add module, once for each Android TV in your project that has a connected irusb. If you have three irusb's then you will need to add the module three times. The brands may vary, below is an example adding an NVIDIA Sheild.

### Install Core Module

Step 1 - select a shared room for the module

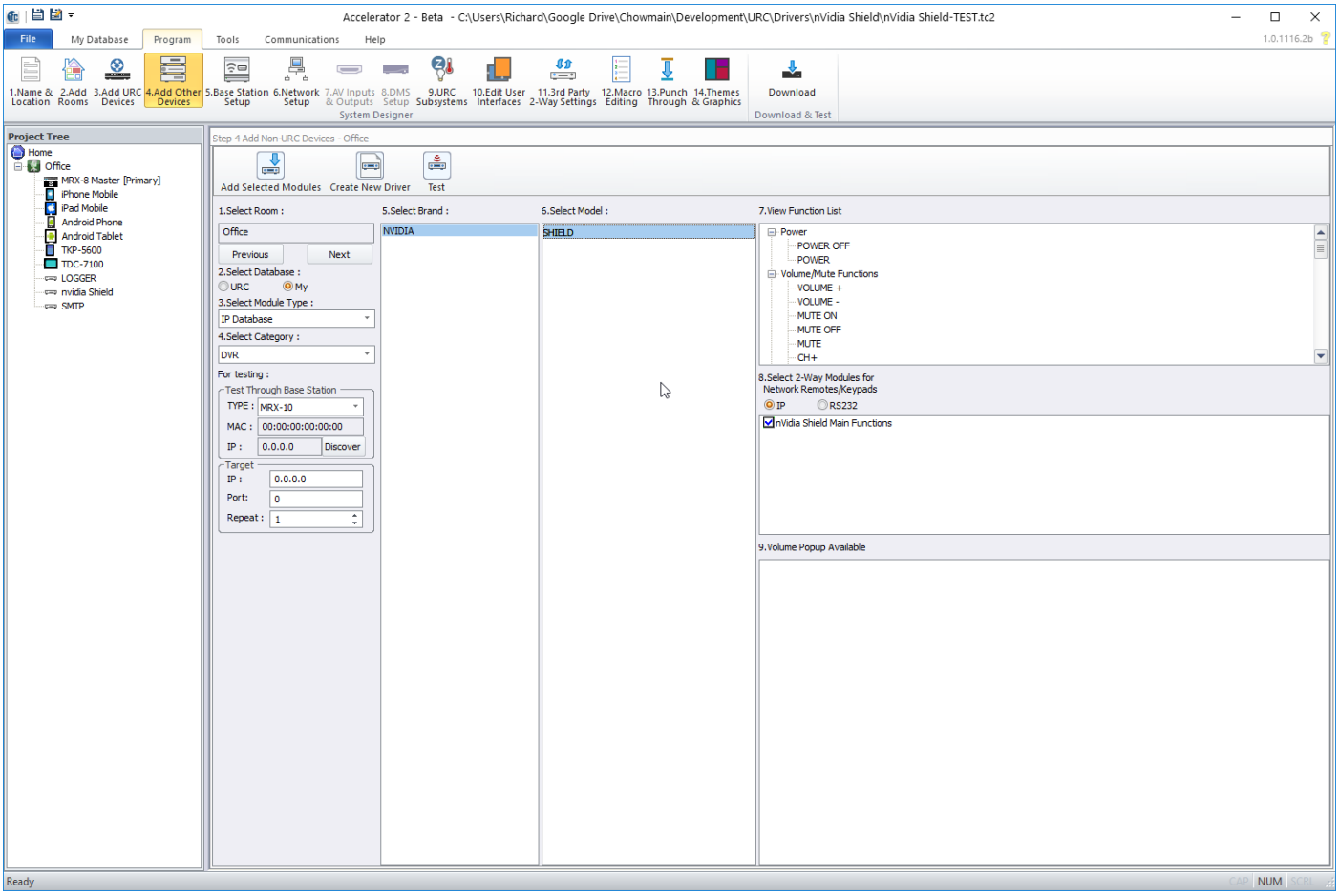
Step 2 - select My

Step 3 - select IP Database

Step 4 - select DVR

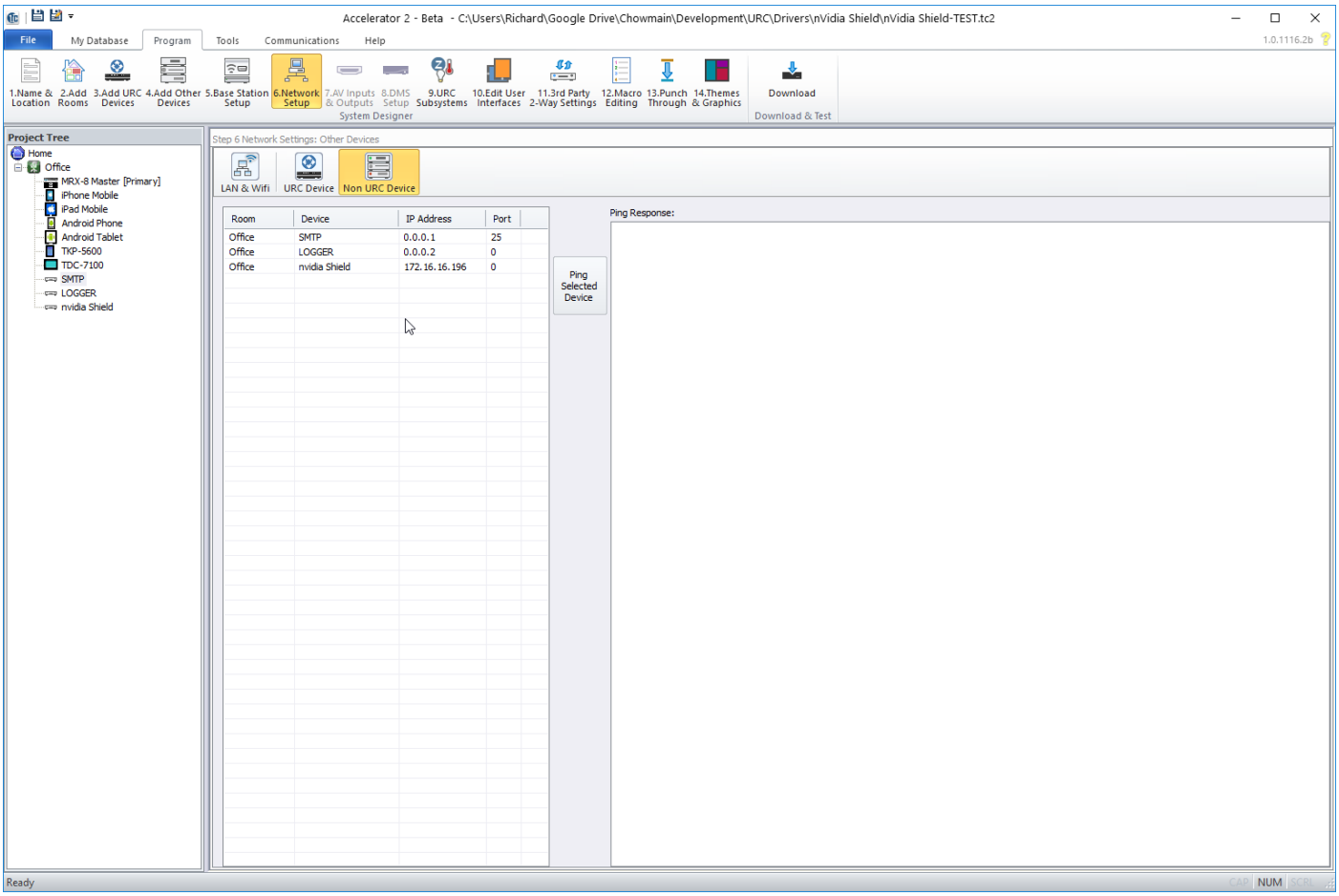
Step 5 - Your brand, eg NVIDIA

Step 6 - Your model, eg SHIELD



## Network Settings

Finally go to Step 6. Network Settings and Choose Non URC Devices. In the IP Address field enter the IP address for each Android TV with a connected irusb in your project. Optionally you can enter a value for the port (if you've changed it) or just leave it on the default - 9093.



# System Parameters

The irUSB module only requires one parameter but there are some optional ones that havebeen detailed below.

All system parameters are entered in the following format

KEY=VALUE

The following table details the system parameters that work with this module.

| Key | Description |
|---|---|
| LICENCE | The licence code from driver Central |
| MODEL | Lets you set what type of device is being controlled |
| CHECK | This is used for tuning the connection test timing. |
| DEBUG | Puts the module into it's debug mode |

## LICENCE

The module requires a licence to run. The licence can be obtained from driverCentral and will be provided on the invoice when you make a purchase. This also works with the FREE Chowmain showroom licence. Once you have a licence code it has to be added to the system parameters in the following format

LICENCE=

## MODEL

The Model parameter can be used for setting the type of device you are using. If you don't use anything it will default to android. Valid choice as FireTV or Android.

Eg: MODEL=FireTV

## CHECK

The module will continually check for a valid IP connection to the irUSB app and if it can't connect it will keep retrying until it gets a new connection. The Check parameter sets the time in between tests for connectivity to the irUSB in seconds. If you omit this parameter the default of 120 seconds will be used.

Eg: CHECK=30

**NOTE:** The URC processor can take up to 4 minutes to detect a dropped connection sosetting this to a lower number will not necessarily result in a quicker reconnect. If you are getting regular IP dropouts though 30 seconds it a good value to get the best reconnect speed.

## DEBUG

If the DEBUG parameter is present and set to ON (DEBUG=ON) then detailed log files will be written to the base station. The log files can be fetched by connecting to the base station with FTP and looking in the /data/UrcDebugging/LOG/irusb/ folder. This will cause additional load on the processor so it should be left off unless you are asked to turn it on.

## Driver Commands

The irUSB Module can be controlled through a mix of Two Way Commands (detailed below) and driver commands. Most common functions are available in the driver and will auto populate your screens. Alternate control codes can be found here

https://source.android.com/devices/input/keyboard-devices#hid-keyboard-and-keypad-page-0x07

The Two Way commands allow you to directly launch an app, either by using the supplied commands, or by providing the app launching intent yourself.

# Two Way Commands

The irUSB module provides three Two Way Commands. Each code is detailed below with its purpose and usage.

## Launch App

The Launch App command allows you to directly launch an installed app, Netflix, for example by simply running the command. The command will only work if the app is installed and ready on the device, so do that before trying to use this command. The command requires the name of the app to be entered exactly, so please refer to the list at the end of the document titled, Android App Names or FireTV App Names.

**NOTE:** These commands only work for Android TV devices, if you have a set top box that uses the standard Android build these will not work (although control will still work).

## Send IR

The Send IR command can be used to send pronto formatted Hex codes to the irUSB for local device control. Just enter the hex code into the parameter.

## Send Intent

The Launch App commands are a quick way to launch one of the common apps but if the intent required to launch the app changes or if you want to launch an app that is not in the supported list then you can use this code to send a custom intent to your device. You can learn how to find these intents here

http://www.video-storm.com/downloads/irusb_faq.htm

# Android App Names

Netflix
SplashTiles
YouTube
Plex
ABC iView
7Plus
10Play
Stan
SBS On Demand
9Now
Amazon
Disney
HBO Go
HDHomeRun
Hulu
iHeartRadio
Pandora
Playstation Vue
Showtime
Showtime Anytime
Sling
Spotify
TuneIn
Vevo
Vimeo
ESPN
KODI
Kodi
YouTube TV
dPlay
Viaplay
Viafree
TV2Sumo
HBO Nordic
NRK
CinemaHD
Tubi
Kayo
DisneyPlus
Photo Gallery and Screensaver

# Fire TV App Names

Kodi
Netflix
HdHomeRun
Hulu
Amazon
YouTube
Pandora
TuneIn
Vevo
Plex
Vimeo
Spotify
HBO
Showtime
Disney
PBS
ESPN
Crackle
iHeartRadio
Sling
DirecTV

# CHANGELOG

## Version 20180130

- Initial release

## Version 20180202

- Added direct app launch events for ABC iView, 7Plus, 10Play and Stan
- Fixed Select code (its now Enter)

## Version 20180212

- Fixed issue with CSD files having the incorrect name
- Added icons for Amazon FireTV, Android TV and Foxtel Now for use in your touchscreen designs.

## Version 20180212

- Fixed issue with FireTV module failing to start correctly if its init took too long
- Updated Intents for nvidia Shield for Youtube and Amazon

## Version 20190408

- Combined all non-FireTV modules into one (now called irusb).
- Fixed enter command
- Rebuilt the documentation for the new irusb module.

## Version 20190801

- Added automatic intent updates
- Keyboard is now functional

## Version 20200103

- Added reconnect code that uses the Wake command
- Added CHECK parameter to tune the time between conection checks
- Changed the App launching Two Way command to use a string instead of the drop down (so new intents can be used)
- Added a list of current intents to the documentation for the new Two Way command

# 2.0.0

- rebuild for Accelerator 3

## 2.0.1

- test build

## 2.0.2

- test build

## 2.0.3

- test build

## 2.1.0

- added cloud logging code

## 2.2.0

- added the option to disable cloud logging

## 2.2.1

- internal release

## 2.2.2

- fixed default port issue

## 2.2.3

- properly handled cleanup after failed https request
- added port reporting to the logging