

## Integration Note for the RokuTV SE (Single Edition) Driver

Manufacturer:	Toshiba, JVC, Hisense, Onn., Sharp, Philips, RCA, Hitachi, Magnavox, Westinghouse, Element, Sanyo
<b>Model Number(s):</b>	<b>RokuTV OS 9.0 or higher</b>
<b>Driver Version</b>	RokuTV_SE 2.1.0
<b>Core Module Version:</b>	8.4 Build 16.0 Rel
<b>Driver Developer:</b>	Innovo
Document Revision Date:	03/25/2020

### Overview & Supported Features

The driver will automatically discover one Roku TV on the network. It will then install it under Display Drivers in Elan.

This is a two-way driver to control Roku TV's from Elan with dynamic loading of Roku Channels and Favorites, TV Display, TV Source Control and Volume Control with HR10 / HR30 Support.

The Elan controller is capable of querying Roku, returning Channels with Icons, and transport control over Roku.

This is the SE (Single Edition) Version with the following super enhanced feature

1. Auto Discovery of a single Roku TV's
2. Auto Installation of a single Video Display Drivers
3. Easy Activation
4. Global Search feature (The user no longer has to be in the search page on the Roku Home Screen, Search can happen from any screen)
5. Elan Integrated Driver State
6. Instant Replay
7. Dealer configured Favorite Channels
8. Enhanced Driver / Installation status
9. Faster Transport
10. On Screen Keyboard
11. Viewer Keyboard for faster entry of username / passwords.
12. Channel Icons on / off option for faster Viewer Loading
13. Better layout for small screens
14. Push and Hold for up/down/left/right/FWD/Rewind keys
15. Source switching including the Built-In Roku player, Tuner, HDMI, and AV sources.
16. Zone Volume Control
17. Power On / Off including Wake-On-LAN of Roku TV's
18. Single Page Layout

**The following options are supported by [this driver]:**

Roku 2, 3, 4, Express, Express +, Stick, Stick+, Ultra, RokuTV

**The following playback options are not supported by [this driver]:**

**Any feature not specifically noted as supported should be assumed to be unsupported.**

## Device Configuration

The Driver uses a static IP address for the Roku TV. Although Roku does not allow for Static IP Addresses. Please assign an IP address using DHCP Static Reservation from the router to guarantee that the Roku Device will always have the same IP Address.

### Important Note:

Verify the following settings on your Roku TV before discover and operation

Settings —> System —> Power —> Fast TV Start —> 'Enable Fast TV Start' (Checked)

Settings —> System —> Advanced System Settings —> Control by mobile Apps —> Permissive

## Driver Configuration

The Elan Controller must be on the same subnet as the server and player.

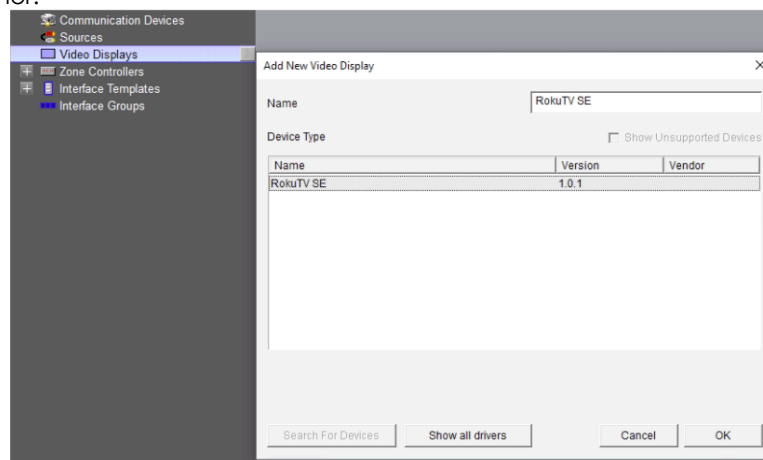
**Important Note: Always Backup the controller before installing any new Device Drivers.**

Each Roku TV is setup for 7 Sources, 1 – Built-In Roku, 2 – Built-In Tuner, 3,4,5,6 – HDMI (1- 4), 7 – AV1 Input. Not all TV's will have 4 HDMI's or an AV input.

## Installation Process

Please follow the below installation process in order to ensure proper operation

1. Unzip the driver downloaded into the driver installation library.
2. Open Media, Sources, Add New Generic Media Source. Choose RokuTV\_SE (the picture below might show a different version number than the driver actually installed.). Tap OK and Agree to the Disclaimer.



3. Once the Driver is installed it will automatically go into a 7-day trial mode after 10 seconds.

Video Display : RokuTV SE

Name: RokuTV SE

System #: 80662

Status Color Coding: Enabled

Status: Trial will expire in 7 days

Driver Version: 1.0.1

Driver Vendor: innovo

Installed: 2/25/2020 14:51

Device Type: RokuTV SE

Dealer Favorite Apps:

Activation KEY:

UUID: YN00M5211247

Wake On Lan MAC Address: 1c1e:e3:f8:7a:eb

Channel Icons: On

IP Address: 192 . 168 . 0 . 0

Port: 8060

Provide Local Sources: No

Provide Audio Return: No

ELAN UltraMatrix ARP: No

Show as Zone: No

Video Display : RokuTV SE

Name: RokuTV SE

System #: 80662

Status Color Coding: Enabled

Status: Licensed & Connected

Driver Version: 1.0.1

Driver Vendor: innovo

Installed: 2/25/2020 14:51

Device Type: RokuTV SE

Dealer Favorite Apps:

Activation KEY: ce23353dfa3

UUID: YN00M5211247

Wake On Lan MAC Address: 1c1e:e3:f8:7a:eb

Channel Icons: On

IP Address: 192 . 168 . 0 . 83

Port: 8060

Provide Local Sources: Yes

Provide Audio Return: No

ELAN UltraMatrix ARP: No

Show as Zone: Yes

Apply Discover Update Driver

- Enter the Activation code received in the confirmation email. Activation codes are also kept in the online account. Tap Apply.
- Wait about 10 seconds and tap Discover

Video Display : RokuTV SE

Name: RokuTV SE

System #: 80933

Status Color Coding: Enabled

Status: Discover or Set IP Address

Driver Version: 1.0.1

Driver Vendor: innovo

Installed: 2/25/2020 15:00

Device Type: RokuTV SE

Dealer Favorite Apps:

Activation KEY:

UUID: YN00M5211247

Wake On Lan MAC Address: 1c1e:e3:f8:7a:eb

Channel Icons: On

IP Address: 192 . 168 . 0 . 0

Port: 8060

Provide Local Sources: No

Provide Audio Return: No

ELAN UltraMatrix ARP: No

Show as Zone: No

Video Display : RokuTV SE

Name: RokuTV SE

System #: 80933

Status Color Coding: Enabled

Status: IP Address Set

Driver Version: 1.0.1

Driver Vendor: innovo

Installed: 2/25/2020 15:00

Device Type: RokuTV SE

Dealer Favorite Apps:

Activation KEY:

UUID: YN00M5211247

Wake On Lan MAC Address: 1c1e:e3:f8:7a:eb

Channel Icons: On

IP Address: 192 . 168 . 0 . 83

Port: 8060

Provide Local Sources: No

Provide Audio Return: No

ELAN UltraMatrix ARP: No

Show as Zone: No

The Roku TV will be discovered and its data populated automatically including IP address, UUID and WOL MAC address.

**Important Node:** This driver will discover the first RokuTV device on the network, if you have more than one Roku TV on, use our Pro driver or manually populate the necessary information for each device

- At this point, the dealer has an option to enter favorite apps in the Dealer Favorite Apps field.  
**Important Node:** Unlike the Roku Streamer, users cannot set favorites in the Viewer Device Settings. Favorite Apps must be set by dealer in the configurator.

- To Get a list of all the Apps installed on the Roku Player go to <http://RokuIPAddress:8060/query/apps>

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml version="1.0"?>
<apps>
  <app id="31012" type="menu" version="1.6.8">Movie Store and TV Store</app>
  <app id="31863" type="menu" version="1.2.6">Roku Home News</app>
  <app id="12" type="appl" version="4.2.72248021">Netflix</app>
  <app id="2285" type="appl" version="4.7.1">Hulu</app>
  <app id="13" type="appl" version="6.1.0">Amazon Video</app>
  <app id="8378" type="appl" version="3.0.94">HBO GO</app>
  <app id="34376" type="appl" version="1.12.11">WatchESPN</app>
  <app id="837" type="appl" version="2.0.70100049">YouTube</app>
  <app id="8838" type="appl" version="1.6.1944">Showtime</app>
  <app id="50025" type="appl" version="1.6.47">Play Movies</app>
  <app id="13842" type="appl" version="1.3.72200024">VUDU</app>
  <app id="6119" type="appl" version="1.8.0">Popcornflix</app>
  <app id="14272" type="appl" version="1.0.1">DISHWorld</app>
  <app id="28" type="appl" version="3.2.35">Pandora</app>
  <app id="3423" type="appl" version="3.1.2">Rdio</app>
  <app id="20445" type="appl" version="5.1.10">VEVO</app>
  <app id="44856" type="appl" version="1.5.4">NFL</app>
  <app id="8629" type="appl" version="1.2.3">WSJ Live</app>
  <app id="38820" type="appl" version="1.7.1924">Showtime Anytime</app>
  <app id="35059" type="appl" version="1.14.1">HISTORY</app>
  <app id="35442" type="appl" version="1.14.1">AETV</app>
  <app id="35058" type="appl" version="1.14.1">Lifetime</app>
  <app id="25725" type="appl" version="1.0.9">Chucky talks to God...</app>
  <app id="27181" type="appl" version="2.2.210">Sky News</app>
  <app id="34637" type="appl" version="1.5.1">BBQ Pit Lords by iFood.tv</app>
  <app id="8795" type="appl" version="1.0.1">Newgrounds</app>
  <app id="10828" type="appl" version="1.0.7">Allrecipes.com</app>
  <app id="11055" type="appl" version="2.3.40003">Newsy</app>
  <app id="14362" type="appl" version="1.1.0">Amazon Music</app>
  <app id="19977" type="appl" version="1.0.80000021">Spotify</app>
  <app id="20197" type="appl" version="1.0.130">iHeartRoku</app>
  <app id="2251" type="appl" version="1.5.2">CNET</app>
  <app id="6578" type="appl" version="1.4.0">Russia Today Europe</app>
  <app id="2595" type="appl" version="3.0.300000">Crunchyroll.com</app>
  <app id="4070" type="appl" version="4.1.6">TED</app>
  <app id="45" type="appl" version="1.13.0">Revision3</app>
  <app id="199" type="appl" version="2.50.11">Twitter</app>
  <app id="1453" type="appl" version="1.2.10">TuneIn Radio</app>
</apps>
```

7. Enter up to 4 app ids separated by commas, no spaces ( E.g. 12,13,199,45) and no other characters.
8. New Feature: The driver will pick up the “Friendly Name” of the RokuTV device. This is the name of the device that is assigned when the Roku is first configured.
  - a. This name can be changed in the online Roku Account.
  - b. Make sure all the Roku devices are named appropriately before discover.
  - c. If the name of the device changes, manually edit this field. It is not recommended to re-discover.
9. Rename the devices as desired. If the IP address of the Roku Device changes, edit it manually in the IP Address field. Don’t discover and install again.
  - a. The Channel Icons Feature will turn off / on the channel Icons on the Viewer Menu. This is to address slow loading of some Channel Icons.

**Important Note:** If the customer is experiencing slow button loading or a “hanging” effect, turn this option to Off. This will not show the icons on the Viewer and the loading will be faster

Video Display : RokuTV SE

Name	RokuTV SE
System #	80662
Status Color Coding	Enabled
Status	Trial will expire in 7 days
Driver Version	1.0.1
Driver Vendor	Innovo
Installed	2/25/2020 14:51
Device Type	RokuTV SE
Dealer Favorite Apps	
Activation KEY	
UUID	YN00M5211247
Wake On Lan MAC Address	1c1e a3f8 7a eb
Channel Icons	On
IP Address	192 . 168 . 0 . 83
Port	8060
Provide Local Sources	No
Provide Audio Return	No
ELAN UltraMatrix ARP	No
Show as Zone	No

10. The driver will also automatically install controls and an EMV file for the built in Roku and built in Tuner.
11. Configure the Display Driver as desired.
  - a. The Wake On LAN MAC and the IP addresses are automatically populated on discovery
  - b. Each Roku TV is configured for up to 4 HDMI Inputs
  - c. See Step 16 below Regarding PowerOn / PowerOff operations.

**Video Display : Roku TV**

Name	Roku TV
System #	79957
Status Color Coding	Enabled
Status	<span style="color: green;">■</span> Trial will expire in 7 days
Driver Version	2.0.0
Driver Vendor	innovo
Installed	2/25/2020 13:08
Device Type	RokuTV
Dealer Favorite Apps	
Activation KEY	
UUID	YN00M5211247
Wake On Lan MAC Address	1c:1e:e3:f8:7a:eb
Channel Icons	On
IP Address	192 . 168 . 0 . 83
Port	8060
Provide Local Sources	Yes
Provide Audio Return	No
ELAN UltraMatrix ARP	No
Show as Zone	Yes

12. Under Zone Controllers Rename the display and set the Display to the Renamed device.
13. To Enable Volume Control on the TV, Set the Volume control to the Roku Display

**Audio Zone: Zone 1**

Name	Zone 1
Location	
System #	22561
Universal Receiver	< NONE >
Display 1	Roku TV1
Display 2	< NONE >
Slave Zone 1	< NONE >
Slave Zone 2	< NONE >
Turn On Source	< SELECT >
Hide Volume	No
Matrix Only	No
Audio Return Input	< NONE >

**Source Configuration**

Source Display Name	From Zone	Show	Display On/Off	Display 1 Input	Audio Volume	Volume Control
Built-In Roku	Display 1 ( Zone )	Show	-	-	Mute Off	<< THIS ZONE >>
TV Tuner	Display 1 ( Zone )	Show	-	-	Mute Off	<< THIS ZONE >>

*Note: A dropdown menu for 'Volume Control' is shown with 'Roku TV1' selected.*

14. The Recommended Default Turn On Source is the Built-In Roku unless the installation calls for a different source.

Audio Zone: Zone 1

Name: Zone 1

Location: [Dropdown]

System #: 22561

Universal Receiver: < NONE >

Display 1: Roku TV1

Display 2: < NONE >

Slave Zone 1: < NONE >

Slave Zone 2: < NONE >

Turn On Source: Built-In Roku

Hide Volume: No

Matrix Only: No

Audio Return Input: < NONE >

Source Configuration	From Zone	Show	Display On/Off	Display 1 Input	Audio Volume	Volume Control
Built-In Roku	Display 1 ( Zone)	Show	-	-	Mute Off	Roku TV1
TV Tuner	Display 1 ( Zone)	Show	-	-	Mute Off	Roku TV1

15. Under the Zone Controller, the recommended Setting for On Off Control is Discrete Verify (Always Send)

Zone Controller : Generic Single Zone Controller

Name: Generic Single Zone Controller

System #: 22560

Status Color Coding: Enabled

Status: Ok

Driver Version: 8.4 Build 16.0 Rel

Driver Vendor: ELAN

Installed: 2/5/2020 17:21

Device Type: Generic Single Zone Controller

On Off Control Type: Discrete Verify (Always Send)

Source Control Type: Discrete Verify (Always Send)

Delay After On/Off: 100 msec

Delay After Source: 100 msec

Volume Control: Yes

### 16. PowerOn / PowerOff.

- a. If the Show as Zone setting is set to Yes, then Power On and Power Off must be manually linked to the proper function.

Video Display : Roku TV1

Name: Roku TV1

System #: 41578

Status Color Coding: Enabled

Status: Trial will expire in 7 days

Driver Version: 1.0.1

Driver Vendor: innovo

Installed: 2/10/2020 18:10

Device Type: RokuTV

Favorite Apps: [Empty]

Dealer Favorite Apps: [Empty]

Activation KEY: [Empty]

UUID: YN00M5211247

Wake On Lan MAC Address: 1c:1e:e3:f8:7a:eb

Channel Icons: Off

IP Address: 192 . 168 . 0 . 83

Port: 8060

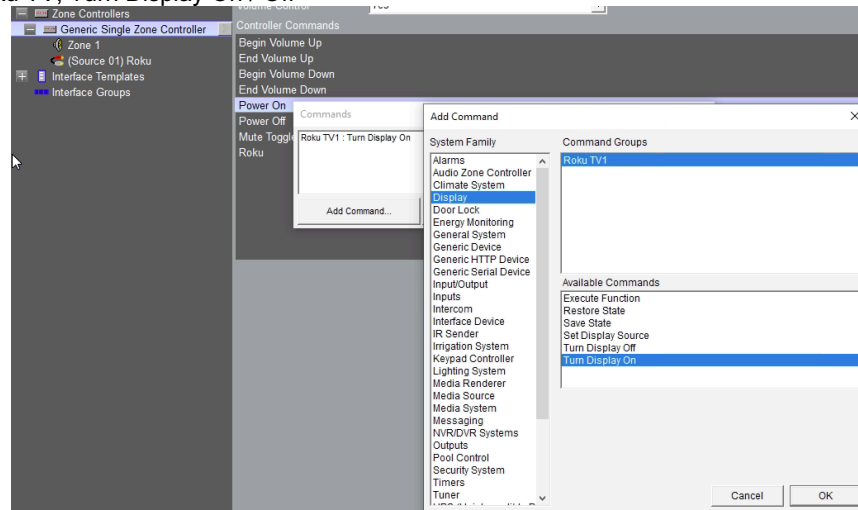
Provide Local Sources: Yes

Provide Audio Return: No

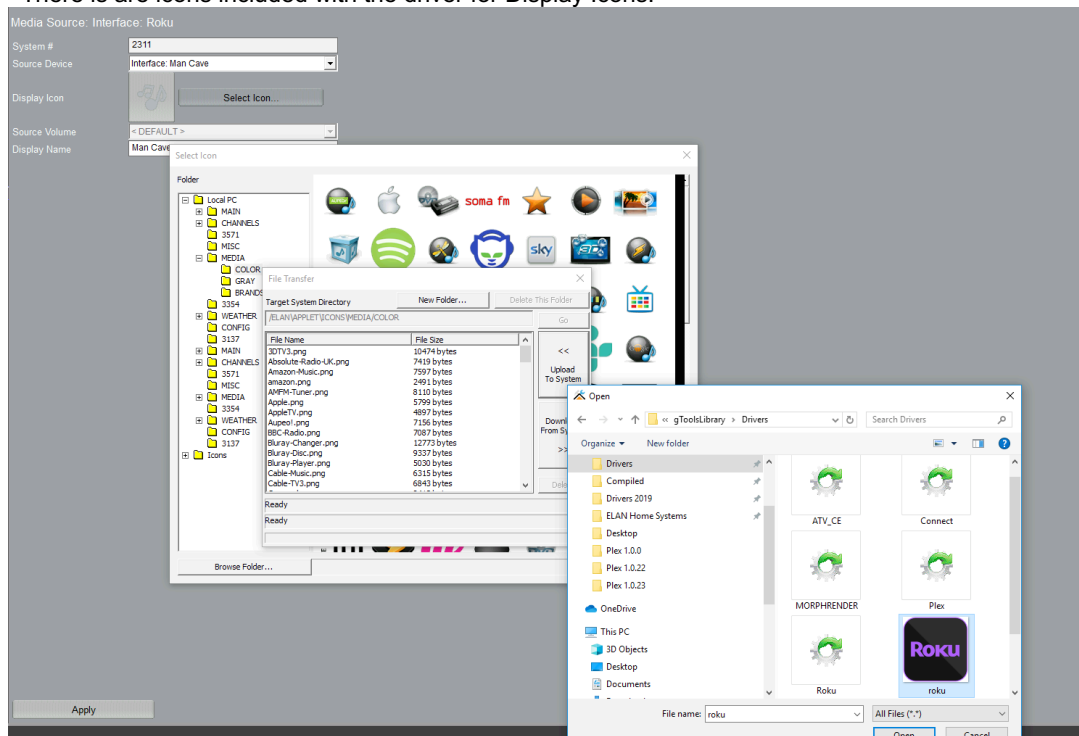
ELAN UltraMatrix ARP: No

Show as Zone: Yes

- b. Under the Zone in the Zone Controllers, Choose Power On or Off, Add Command, Display, Name of Roku TV, Turn Display On / Off



17. Add any extra sources to Display Zones or Zone Controller. Change the name Icons to desired values. There is are icons included with the driver for Display Icons.



## SETTING FAVORITES:

**Important Note:** Users cannot set favorites for Display Devices. This is an Elan limitation. Those are set by dealer in the Configurator only.

Open the Driver in the Viewer. If Dealer favorites are set, they will be displayed in the first column. If not the standard Roku Apps will be displayed.





## Using the Driver

The Main screen is the transport screen along with 4 dedicated Roku Favorites and the rest for the installed Apps.

The Main Screen all the Roku Channels automatically. Launch any Channel on the Roku by tapping the icon or manually using the hat control to scroll through the Channels up or down and tapping OK to launch the channel.

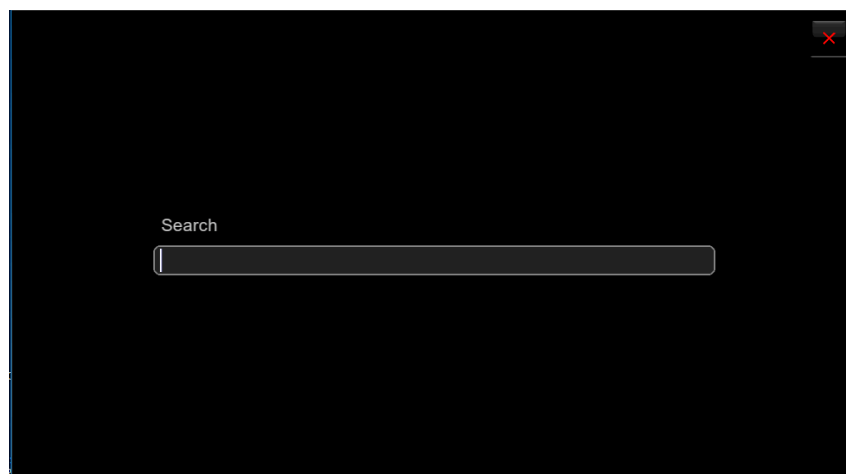
Instant Replay

Star (\*) Button



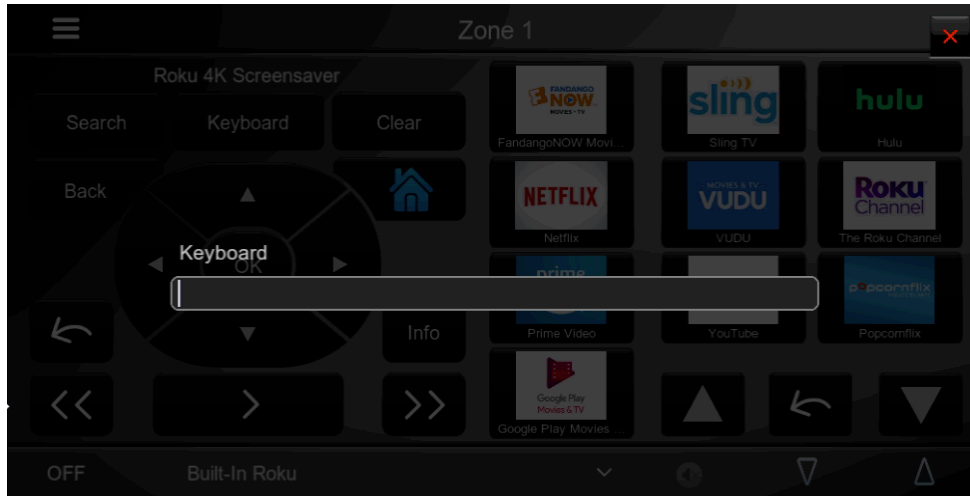
If another Channel is added to the Roku, please tap the reload Arrow key to reload the Channels or start navigating from the start.

The user can run a search from any screen. Just tap on the Search button and enter the search string. The Roku will automatically switch to the Search Screen and return the results.



**Special Note about Search Function:** The search Button on search enabled Roku remotes will activate the voice activation feature and that can only be used from the physical remote.

Keyboard Button.



The Keyboard button brings up the device's (iOS, Android, or PC) keyboard. Type the desired string and press enter. The user must be in a highlighted text field on the Roku Channel such as a username or password field.

**Known issues with the keyboard.** Every Channel implements their keyboard key entry slightly different. For Example: Disney+ will allow the sending of upper case and lower case. However, it doesn't respond to push and hold Clear. Vudu will allow the push and hold to Clear, however it will only send UPPER or lower case depending on the screen menu. In cases where the Keyboard entry is not producing the desired result, please advise the customer to use the on-screen keyboard associated with the channel.

Hand Held Remote Mapping



## g! CONFIGURATION DETAILS

The following table provides settings used in Configurator ...Please refer to the Configurator Reference Guide for more details.

In the table below:

- "<User Defined>", etc.                      Type in the desired name for the item.
- "<Auto Detect>", etc.                      The system will auto detect this variable.

Devices	Variable Name	Settings	Comments
Media	Name	User Defined (Default: RokuTV SE)	
	System #	<Auto Detect>	
	Device Type	Ethernet	
	Driver Name	RokuTV_SE	
	Driver Version	<Auto Detect>	
	Driver Vendor	Innovo	
	IP Address	<User Defined><Auto Discovered>	
	Port	1900, 8060	
	Default Apps	<User Defined> Comma delimited app id numeric value with no spaces.	
Zone Controller	Display Name	<User Defined> (Default: Player Name)	
	System #	<Auto Detect>	
	Source Device	<User Defined> (Default: Player Name)	

## COMMON ISSUES

1. Driver not reading Roku. Assign Static IP Address
2. Auto Discover not working: On the Roku TV change Settings —> System —> Advanced System Settings —> Control by mobile Apps —> Permissive
3. Icons not loading or slow loading. Turn off App Icons.
4. Known issues with the keyboard button. Every Channel implements their keyboard key entry slightly different. For Example: Disney+ will allow the sending of upper case and lower case. However, it doesn't respond to push and hold Clear. Vudu will allow the push and hold to Clear, however it will only send UPPER or lower case depending on the screen menu. In cases where the Keyboard entry is not producing the desired result, please advise the customer to use the on-screen keyboard associated with the channel
5. HHR, HR10 and HR30 do not support channel or custom icons. Only Elan embedded icons are supported
6. RokuTV is not being discovered. Make sure the TV is awake and on

## ELAN DEVELOPER PARTNER INFORMATION

This ELAN driver is written and supported by:

Innovo

[www.innovo.net](http://www.innovo.net)

support: support@innovo.net