

Samsung EX-Link RS232 Integration Note

Manufacturer:	Samsung
Model Number(s):	Most Models 2010 And After
g! Core Module Version:	8.0 Build 286.0 Rel
Driver Developer:	Cinematic, Inc.
Document Revision Date:	6/16/2017

Overview & Supported Features

Samsung EX-Link driver will control a compatible Samsung display via One-Way RS-232. The Samsung EX Link driver will track variables as they are changed but it has no way of knowing, when first powered up, what the current state of the Samsung display is. THIS INCLUDES THE VOLUME COMMANDS!

THE FOLLOWING OPTIONS ARE SUPPORTED BY SAMSUNG EX LINK DRIVER:

- Basic TV tuner functions
- Input selection
- Show as Zone
- Volume Ramping Up and Down
- SmartHub Source will automatically import under Sources in Media (use with external audio system)

THE FOLLOWING OPTIONS ARE NOT SUPPORTED BY SAMSUNG EX DRIVER:

- Feedback from display
- Mute is not tracked in the controller since the only supported Samsung command for Mute is a toggle.
- The use of the SmartHub feature and TV speakers as the mute/volume commands will close the SmartHub app.

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

Driver Revision History:

- 1.0.0 - Initial Rollout
- 1.1.0 - Corrected volume commands
- 1.2.21 - Removed Volume Tracking
- 1.2.23 - Approved Release
- 2.0.0 - Updated and consolidated to a single driver
- 2.0.1 - Added Art Mode for Samsung Frame TVs

Samsung display Configuration



- **SOME MODELS MAY NEED TO HAVE THE EX-LINK PORT ENABLED FOR RS-232 (UART). TO ACCESS THIS MENU;**
 - With supplied display remote, turn TV off
 - Press the following buttons on the TV remote:
 - 'Mute' 182 'Power'
 - Navigate to "Control" or "Hotel" (Actual setting may differ from model to model)
 - Set EX-Link to UART (Actual setting may differ from model to model)
 - Power TV off then on to remove the service menu

g! Configuration

A Standard Serial Port connection will be necessary to use this driver.

Installation Process

With 3rd party drivers, these are not in the driver list from the factory, but are plug-ins. To add the one for Samsung EX-Link RS232:

1. Download the .EDRVC file
2. Place this file in a folder on your PC
3. In the configurator, navigate to the Media tab
4. Select "Video Displays", and select "Add New Video Display..."
5. Select search folder, and navigate to the folder in which the driver is located on your PC.

NOTE: It is good to note that once selected, the configurator will always look to this folder for 3rd party drivers so in best practice you should create a folder in which you keep all of your 3rd party drivers in.

NOTE: If you have already set your folder previously and your driver is in said folder (as it should be if you read the above note then the driver will already be in the populated list for you to select from.)

6. Select 'Samsung EX-Link RS232' from the device type list.
7. The driver should now be loaded into the configurator.
 - A. Add a Communication Device, 'Standard Connection', for RS-232
 - B. Be sure the communication device is associated with the Samsung Display.
8. SmartHub.emv will be installed automatically into the Sources in Media

COMMON MISTAKES

1. Wrong pin-out on custom made cables. I would suggest having a working EX-Link cable handy to test Samsung TV in case of communication issue.
2. 3.5mm plug not inserted completely.
3. Not all commands will function on all models. Only use the commands that will function with your display.
4. 3.5mm port labeled 'Service' will not work. Must be labeled 'EX-Link'.
5. Older models (typically before 2009) may go into 'deep standby' after a day or so and ignore the 'Power On' command. Display will turn on with IR. (I have had only one do this)
6. Incorrect settings in the Samsung Service menu on older models. Newer models need no adjustment in the service menu.
7. Attempting to use the SmartHub feature with the built-in TV speakers. Pressing Volume up/down or Mute will close the application.

ELAN DEVELOPER PARTNER INFORMATION

This ELAN driver was written and supported by:



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