

Radiance Tech Tip 14- Radiance 3D Setup for DPI Projectors

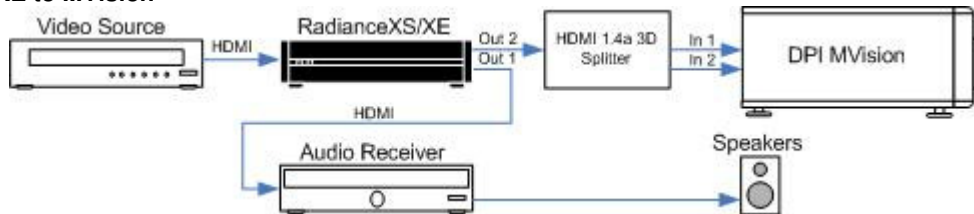
Radiance Video Processor Support for 3D Displays

- All HDMI 1.4a 3D formats converted to formats supported by the display
- PS3 3D games scaled to full screen
- Cable/Satellite 3D converted to supported 3D format
- Report to video sources that display is 3D capable
- 3D test patterns to calibrate screen and 3D glasses
- Vertical scaling for 3D projection with an anamorphic lens
- Two trigger outputs for masking, lens sled, or electric screen (RadianceXE)

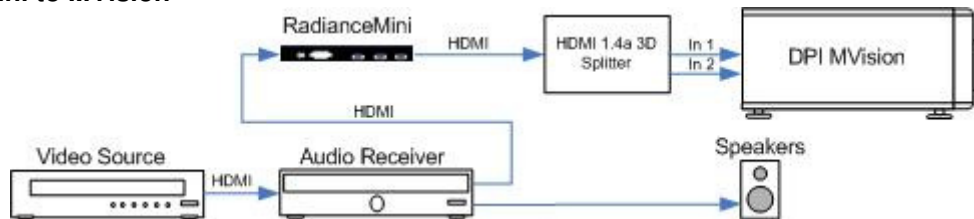
Radiance to MVision

In this setup the Radiance converts all 3D formats to 1080p60 Side-by-Side (SbS) 3D. For the MVision the video signal from the Radiance is split and sent to both HDMI inputs.

RadianceXS/XE to MVision



Radiance Mini to MVision



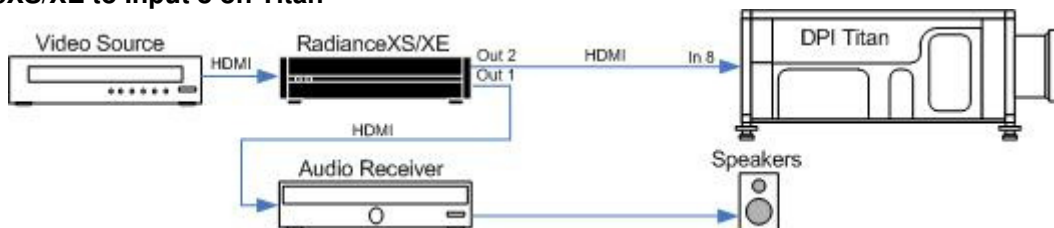
Procedure

1. Verify Radiance has "SW Rev 101711" or later by pressing "Ok" to display info screen.
2. To set the Radiance, to output 3D 1080p60 Side-by-Side, press "Menu 0825".
3. Screen briefly displays message "3D Outputs Set".
4. To save the new Radiance settings, press "Menu, Save, Ok, Ok, Ok".
5. Set the projector to 3D input mode.

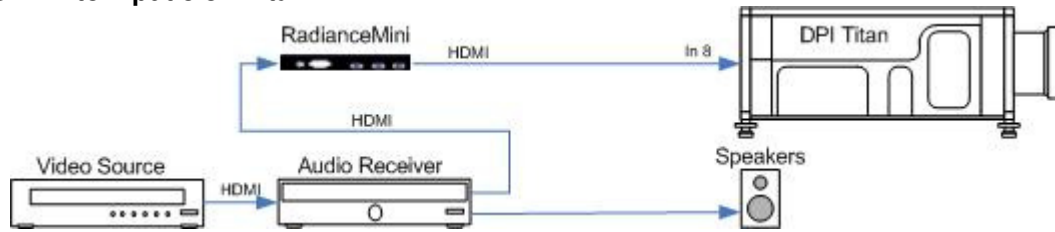
Radiance to One Input on Titan

In this set up the Radiance 3D 1080p24 Frame-Packed (FP) is output as 3D 1080p24 FP, all other 3D formats are converted to 3D 1080p60 SbS. The latest Titan projector supports all of these formats on input 8.

RadianceXS/XE to Input 8 on Titan



Radiance Mini to Input 8 on Titan



Procedure

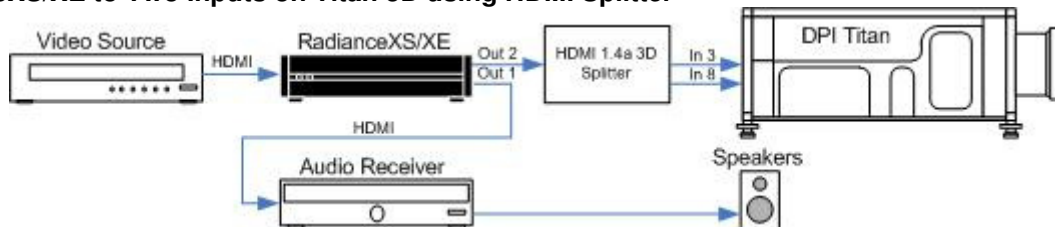
1. Verify Radiance has "SW Rev 101711" or later by pressing "Ok" to display info screen.
2. To set the Radiance, to output 1080p60 SbS or 1080p24 FP, press "Menu 0826".
3. Screen briefly displays message "3D Outputs Set".
4. To save the new Radiance settings, press "Menu, Save, Ok, Ok, Ok".
5. Select projector Input 8.
6. Set the projector to SbS or FP 3D format, as appropriate.

Radiance to Two Inputs on Titan <used for older Titan installations>

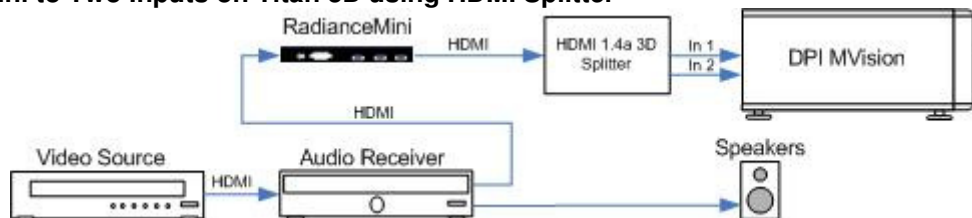
In this set up the Radiance 3D 1080p24 Frame-Packed (FP) is output as 3D 1080p24 FP, all other 3D formats are converted to 3D 1080p60 SbS.

The video signal from the Radiance is split and connected to two inputs on the Titan. Input 3 on the Titan supports 3D 1080p60 SbS and input 8 supports 3D 1080p24 FP format.

RadianceXS/XE to Two Inputs on Titan 3D using HDMI Splitter



Radiance Mini to Two Inputs on Titan 3D using HDMI Splitter



Procedure

1. Verify Radiance has "SW Rev 101711" or later by pressing "Ok" to display info screen.
2. To set the Radiance, to output 1080p60 SbS or 1080p24 FP, press "Menu 0826".
3. Screen briefly displays message "3D Outputs Set".
4. To save the new Radiance settings, press "Menu, Save, Ok, Ok, Ok".
5. Select projector Input 3 for 3D SbS and Input 8 for 3D FP.
6. Set the projector to SbS or FP 3D format, as appropriate.

Installation Notes

Control Systems

The Radiance can report output format changes to a control device, which can then set the input and video mode on the projector. To turn on output mode reporting, press “Menu, Other, I/O Setup, RS-232 Setup, Report mode changes, Output, Ok”. The Radiance output mode changes will be reported using the “ZQO01” format. See “Tech Tip 11” for details.

HDMI Cables

Lumagen has received reports that some high priced name-brand HDMI cables have issues in real world installations. Short 1 meter (3 ft.) HDMI cables have been especially troublesome. Lumagen recommends using good quality generic 2 meters (6 ft.) or longer HDMI cables with 22 or 24 AWG wire.

HDMI to DVI Adaptor

Many HDMI to DVI Adaptors degrade the video signal. We recommend using a good quality generic HDMI to DVI Cable for better signal integrity.

HDMI Splitter

We have received reports that some HDMI Splitters, advertised to support 3D, don't work correctly in real world 3D installations. When a HDMI splitter is required for the installation, Lumagen recommends doing a system test before taking the components to the installation site to insure proper functionality.

Audio Video Receivers and Video Artifacts

Lumagen recommends using the RadianceXS-3D or the RadianceXE-3D for video switching to avoid having to pass video through an Audio Video Receiver (AVR). The issue to be aware of with an AVR in the video path is it can cause artifacts, even if the AVR is in “bypass” mode. Many receivers add “enhancements” to the video signal, which can add artifacts to the video. If using an AVR to switch video to a RadianceMini-3D, when possible, turn off all “scaling” and video “enhancements” in the AVR.

Eliminate Possible Ground Loops

Lumagen recommends that the projector and all equipment be plugged into the same AC power circuit.