AJA and TeleStream Applications

Quick Start Guide

Introduction

This Quick Start Guide provides a basic overview of the AJA Wirecast Plug-in and its AJA Multi-Channel Configuration panel for use with Telestream's Wirecast Prostreaming production application.

Figure 1. AJA Multi-Channel Configuration Panel



Live streaming has increased in popularity and complexity. Live streams now routinely must deal with switching between multiple input sources as well as being more mobile.

AJA hardware solutions allow streaming software like Wirecast to take in multiple inputs using a single, compact hardware device without compromising quality, speed or portability and allowing users to adapt to the needs of any project.

Telestream Wirecast is supported through the AJA Desktop Software for the following AJA devices:

- Io 4K Plus, Io 4K, Io IP, Io XT, Io Express
- KONA 4, KONA HDMI, KONA IP, KONA 1, KONA 3G, KONA LHI, KONA LHE Plus
- T-TAP
- · CORVID HB-R

Telestream Wirecast is also supported through the AJA Desktop Software for the following Avid devices:

- Avid Artist | DNxIV
- Avid Artist | DNxIP



Telestream Wirecast is also supported through UVA / UVC OS drivers for the following AJA devices:

- U-TAP SDI
- U-TAP HDMI

Getting Started

NOTE: Do not open Wirecast until you have finished configuring your devices following this installation procedure.

- 1. Install Wirecast.
- 2. Install the AJA Driver Package. This will install both the AJA plug-in and, in the AJA Utilities folder, the AJA Multi-Channel Config panel. You will use this panel to configure your AJA devices for Wirecast.
- 3. Launch the AJA Multi-Channel Config panel
- 4. Configure your AJA device, mapping the inputs. This may involve selecting HDMI or SDI inputs depending on the AJA KONA/Io product you use. See below for specific details on the AJA Multi-Channel Config panel.
- 5. Save your settings by clicking on the Save button in the lower right-hand corner of the Config panel. This saves a configuration file that Wirecast references upon startup.
- 6. Run Wirecast.

If you have multiple AJA devices available in your system, they are displayed and can be selected from the list in the left-side pane of the Config panel.

AJA Multi-Channel Config Panel

AJA devices used with Wirecast, are configured using the AJA Multi-Channel Config panel rather than the AJA Control Panel used with other retail applications.

Configuring Inputs

Input pulldown menus allows you to select from the specific input options available on the AJA hardware you are using with Wirecast. Number and type of I/O channels vary across AJA devices and firmware mode selected.

NOTE: Firmware update and mode selection for the AJA device is performed using the AJA Control Panel.

Audio Enable

Individual audio on/off selections are available for each channel.

Figure 2. Input Selection Menus



Configuring Outputs

Channel 4 (or last Channel of your AJA device) can be designated as Program Out. Select output from the Channel 4 pulldown menu and choose the desired format from the output format pulldown (see *Figure 2*).

NOTE: When not using Ch 4 as an output, it can be used as a fourth simultaneous input.

This is not applicable however, when using KONA HDMI since it is a multi-channel capture card.

Figure 3. UltraHD/4K Output Format Selection



4K Mode Options

Choose from input SDI, input HDMI, or output.

When not using 4K set to **disable** (when enabled all four of the SDI inputs are combined for a quad link).

AJA Device Capabilities

lo 4K Plus

Up to 1080 p60 can support up to four channels as a mix of HDMI and SDI. Each channel can be a different raster size and framerate, as long as they are in the same clock family.

If choosing to enable "4K Options", then the choices are:

- Input SDI (4 x 3G-SDI)
- Input HDMI (2.0)
- Output SDI (4 x 3G-SDI) or HDMI (2.0)

To use the HDMI input, it must always be set as Input 1.

KONA HDMI

Up to 1080 p60 can support up to four channels of HDMI. Each channel can be a different raster size and framerate, as long as they are in the same clock family.

If choosing to enable "4K Options", then the choices are:

- disable
- · input HDMI

To capture 4K/UHD, you must use either HDMI 1 or HDMI 2.

lo 4K

Up to 1080 p60 can support up to four channels as a mix of HDMI and SDI. Each channel can be a different raster size and framerate, as long as they are in the same clock family. With the UFC firmware loaded, only two input channels are available. To use the HDMI input, it must always be set as Input 1.

KONA 4

Up to 1080 p60 can support up to four channels. Each channel can be a different raster size and framerate, as long as they are in the same clock family. With the UFC firmware loaded, only two input channels are available.

KONA 1

Up to 1080 p60 can support one input and one output simultaneously.

lo XT

Up to 1080 p60 can support two video inputs, however both input signals must be identical in raster and framerate. To use the HDMI input, it must always be set as Input 1.

KONA 3G

Up to 1080 p60 can support up to four inputs (when using the 4K firmware), however all four input signals must be identical in raster and framerate. The standard KONA 3G UFC firmware (non-4K support) will allow two input channels but both must be identical in raster and framerate.

KONA IP

Supports two IP inputs and Output on Channel 4.

Corvid HB-R

Supports one HDbaseT source. HDMI output is pass through.