

What Can I Do With An ADVC?

Practical examples of problems solved
with Grass Valley's ADVC products



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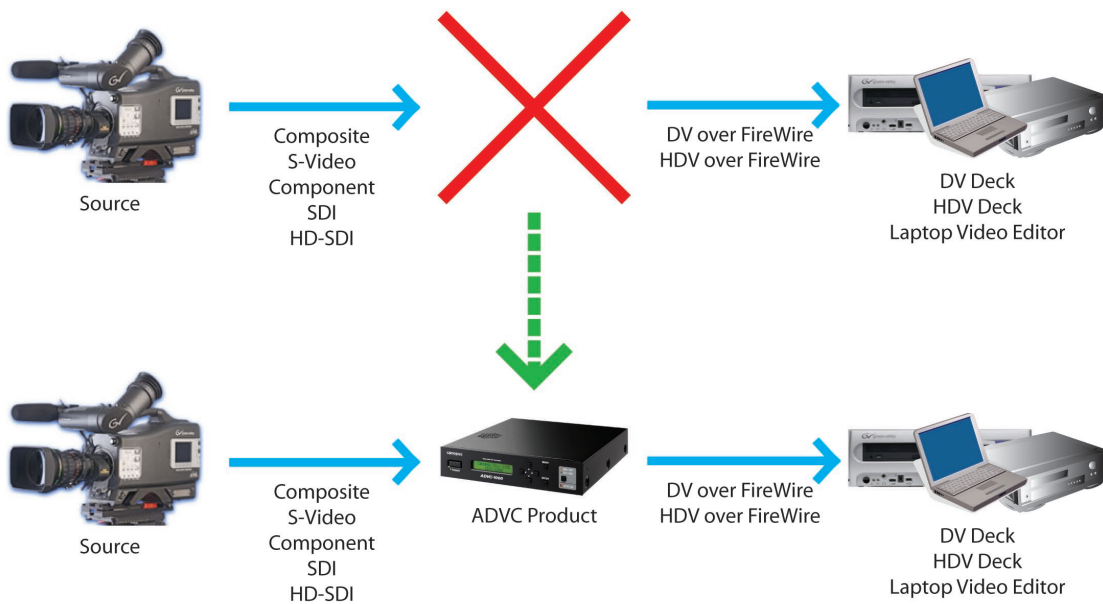
Introduction

Grass Valley's ADVC family of Advanced Digital Video Converter products offers extreme versatility and professional features spanning all markets. However, many people just don't realize how many problems the ADVC and related products can solve.

This guide is intended to provide some real-world examples of what can be done with these products and get your creative juices flowing. Like building blocks and the adjustable wrench, you can always find creative ways to use these converter products to solve problems and streamline workflows for customers.

For detailed technical information on each ADVC product, please visit www.canopus.com.

1. Capture Video Without A Capture Card



Ideal for field applications. Using an ADVC, video can be captured directly to a laptop, mobile deck or other device that accepts DV or HDV input.

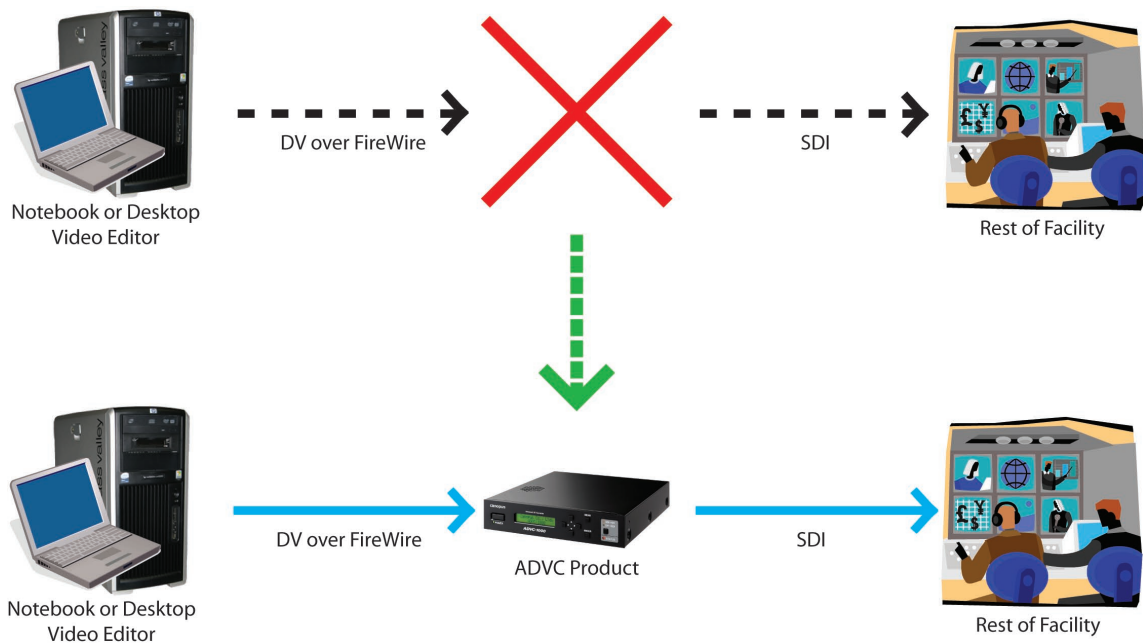
FEATURES

- Capture analog or digital video in the field as DV or HDV
- Use portable DV and HDV decks to record from analog and digital sources

APPLIES TO:

SD Analog: **ADVC55; ADVC110; ADVC300; ADVC700; ADVC3000**
 SD SDI: **ADVC1000; ADVC3000**
 HD-SDI: **ADVC-HDM1**

2. Make A DV Editor/Deck Work In An SDI Environment



Many broadcast suites run SDI connections between rooms and throughout the workflow. But how does a DV-based editing system without SDI - for example, a Final Cut Pro system or a DV deck - get added to the mix? Analog video/audio could be converted to SDI, but timecode and device control would be lost.

A far better solution would be to use the ADVC1000 converter. With the ADVC1000, the editor can export DV as usual, and the ADVC converts it to SDI video with embedded audio and timecode intact. Furthermore, connected SDI decks can be controlled by the DV editor just like they were DV decks, and from the SDI side, DV decks can be controlled and used as if they were standard RS-422 controllable SDI decks.

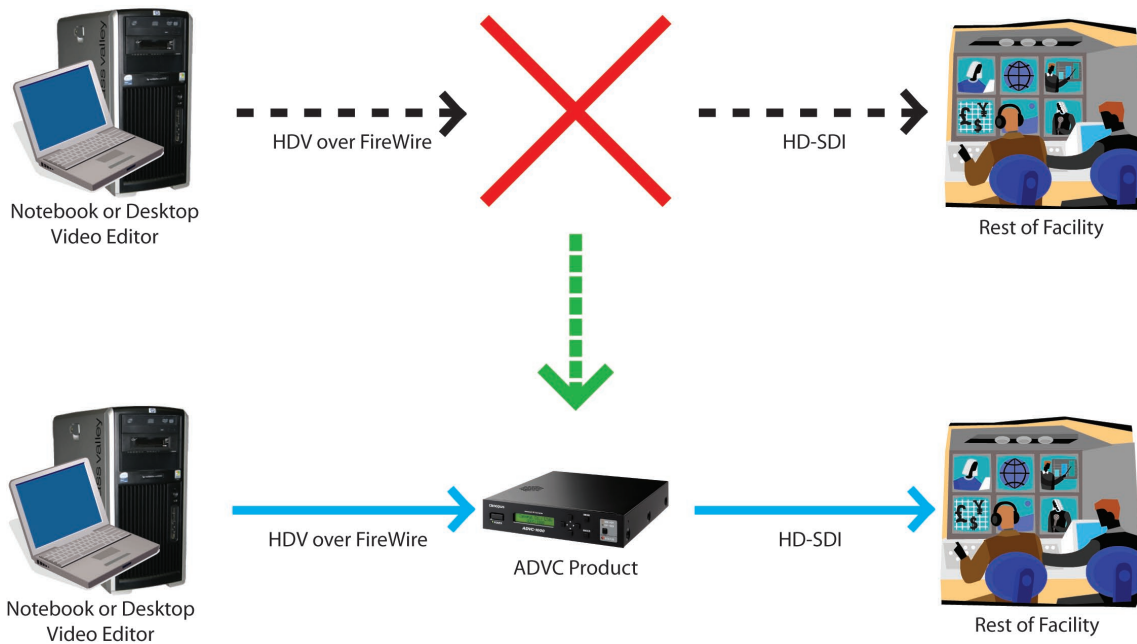
FEATURES

- *Ingest/Output DV with an SDI backbone or deck*
- *Ingest/Output to SDI with a DV editor or deck*
- *Control an SDI device with RS-422 as if it was a DV device*
- *Control a DV device as if it was an SDI device with RS-422*

APPLIES TO:

SD SDI: **ADVC1000; ADVC3000**

3. Make An HDV Editor/Deck Work In An HD-SDI Environment



Just as SDI is used in standard definition broadcast environments, HD-SDI is used in high definition environments, but not all editors or decks have HD-SDI output. The ADVC-HDM1 converts between HD-SDI and HDV, so HDV devices can be controlled like HD-SDI devices, and HD-SDI devices can likewise be controlled like HDV devices, bridging the gap between professional HD-SDI and consumer/prosumer HDV.

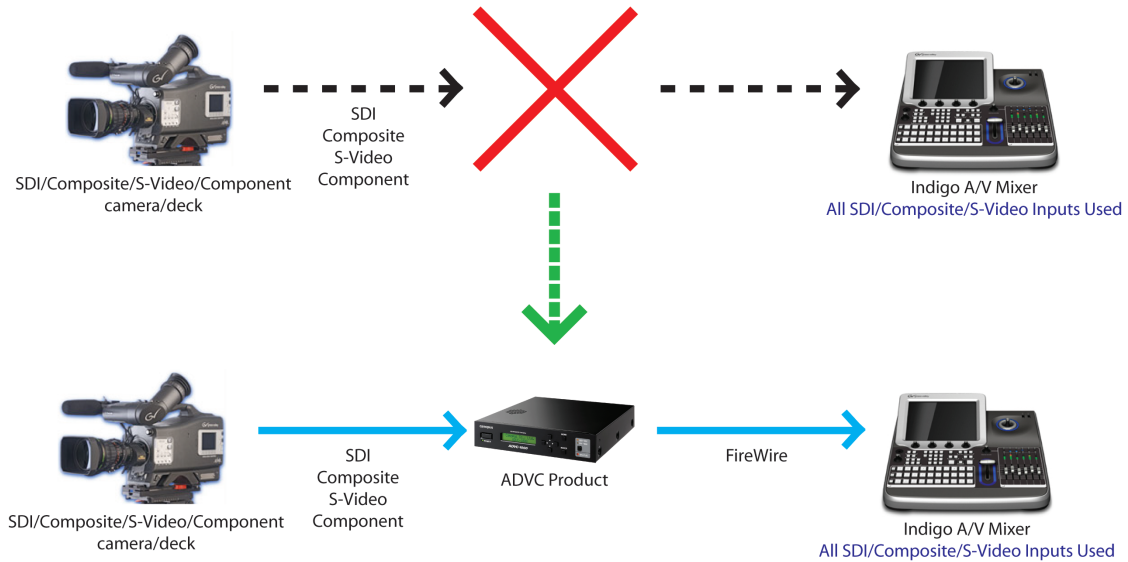
FEATURES

- *Ingest/Output HDV with an HD-SDI backbone or deck*
- *Ingest/Output HD-SDI with an HDV editor or deck*
- *Control an HD-SDI device with RS-422 as if it was an HDV device*
- *Control an HDV device as if it was an HD-SDI device with RS-422*
- *Use D-VHS and HDV equipment in an HD-SDI environment*

APPLIES TO:

HD-SDI: **ADVC-HDM1**

4. Get An Extra Input For Indigo



Need an extra input for Indigo? Convert the output of an analog or SDI camera feed to DV and put it into Indigo's FireWire input! This is also a way to get SD component video signals into Indigo from devices with only Component output.

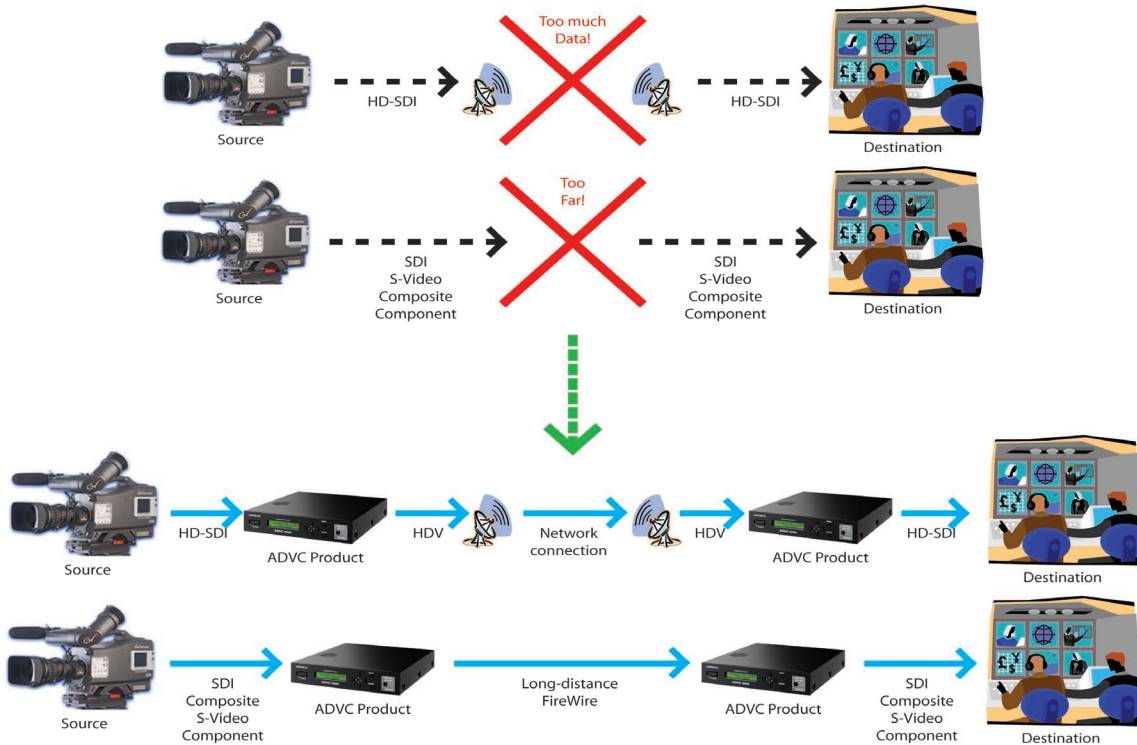
FEATURES

- Convert one of Indigo's FireWire inputs to gain an extra SDI, Composite, S-Video or Component video input
- Convert both of Indigo's FireWire inputs to gain two extra inputs in any combination of SDI, Composite, S-Video, or Component video

APPLIES TO:

SD Analog: **ADVC55; ADVC110; ADVC300; ADVC700; ADVC3000**
 SD SDI: **ADVC1000; ADVC3000**

5. Go The Distance - Analog To Digital, Digital To Analog, Or Lower Bandwidth



In long-distance monitoring and field applications, it is often necessary to convert analog signals to digital for longer-distance runs without loss, or to convert digital signals to analog for wireless transmission. In other situations, it may be necessary to convert high-bandwidth SDI and HD-SDI signals to lower-bandwidth DV and HDV signals. There are ADVC units fit to address each of these conversion needs.

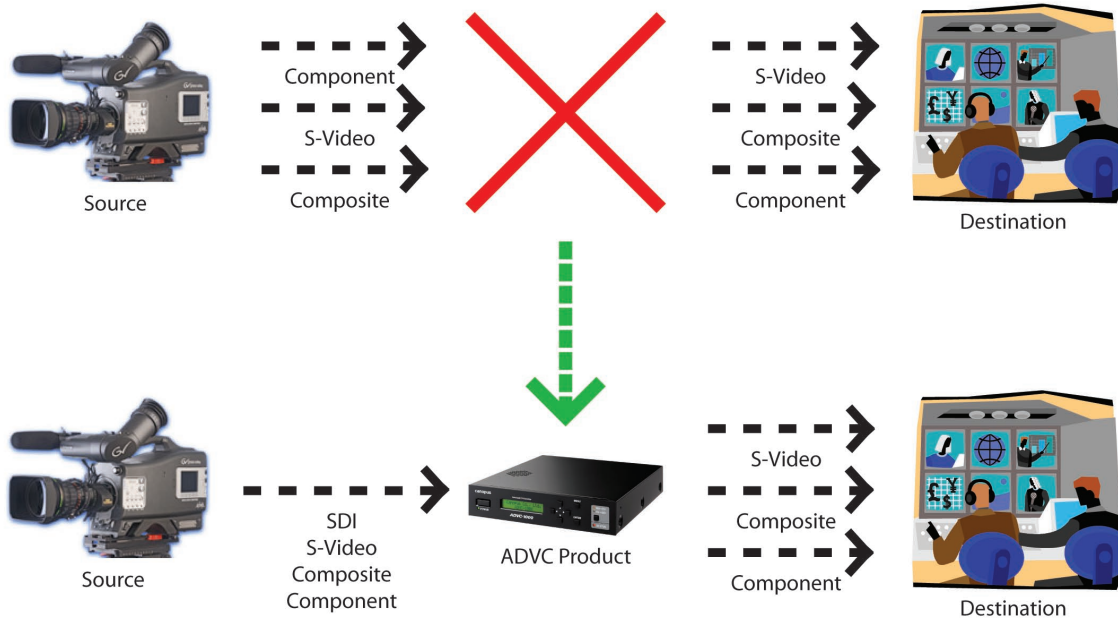
FEATURES

- Convert DV or SDI to analog composite/S-video/composite for transmission over wireless or other long-range technology
- Convert analog to DV for long-distance wired digital transmission without signal loss
- Convert high-bandwidth HD-SDI to lower-bandwidth HDV for limited-bandwidth wired and wireless transmission
- Convert high-bandwidth SDI to lower-bandwidth DV for limited-bandwidth wired and wireless transmission

APPLIES TO:

DV to Analog: **ADVC110; ADVC300; ADVC700; ADVC3000**
 SDI to SD Analog: **ADVC3000; ADVC-HDSC1**
 HD-SDI to HD Analog: **ADVC-HDSC1**
 SDI to DV: **ADVC1000; ADVC3000**
 HD-SDI to HDV: **ADVC-HDM1**

6. Convert Between Analog Signal Types



ADVC products are useful for more than just converting to/from analog and digital - since all applicable outputs are live, you can use them to convert between Composite, S-Video and Component signals as well. Please note that none of the current ADVC units convert between SD and HD signal types - SD converts to SD, and HD converts to HD.

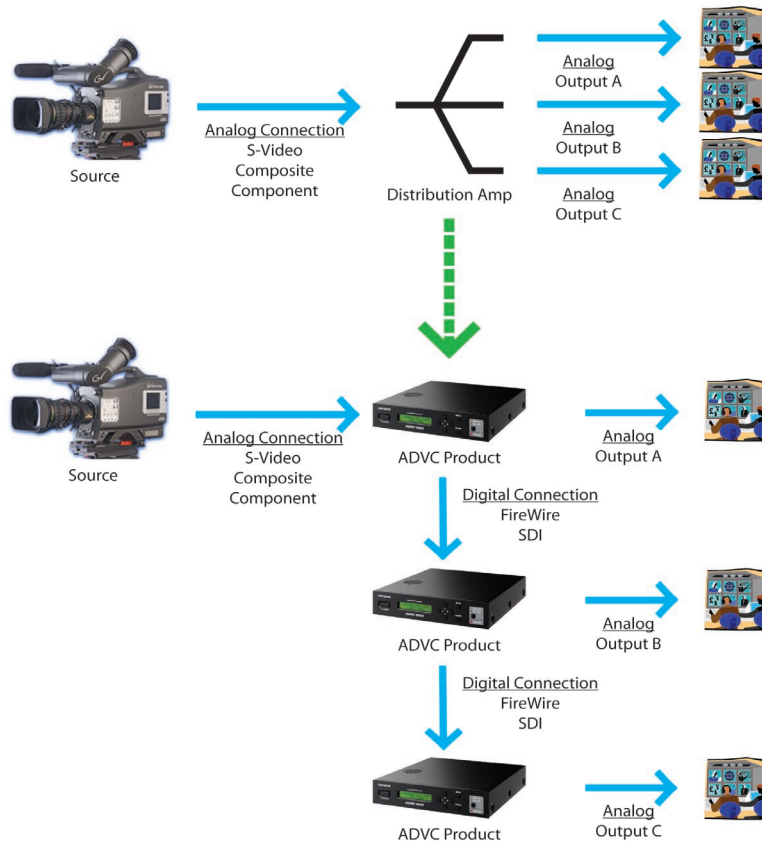
FEATURES

- Convert between Composite, S-Video, Component and SDI signal types

APPLIES TO:

Composite/S-Video: **ADVC110; ADVC300; ADVC700; ADVC3000**
 Composite/S-Video/Component: **ADVC700; ADVC3000**
 SDI to Composite/S-Video (one-way): **ADVC1000**

7. Distribution Amplifier/Decoder Alternative



Multiple outputs are always nice to have, whether you're monitoring locally and remotely, or just running multiple displays. An alternative to setting up an entire network-based video solution, DV, HDV and SDI sources can be fed to multiple ADVCs in a chain, with each ADVC decoding the video back to analog at each display location.

FEATURES

- *Distribute analog video digitally to multiple points without signal degradation via DV, HDV, SDI or HD-SDI, allowing for greater distances between devices*
- *Daisy-chain distribution reduces the amount of cables needed to feed multiple points in close proximity*
- *Digital signal carries both audio and video together to ensure synchronization and reduce cabling requirements*

APPLIES TO:

- DV Distribution: **ADVC110; ADVC300; ADVC700; ADVC3000**
- HDV Distribution: **ADVC-HDM1**
- SDI Distribution: **ADVC1000; ADVC3000**
- HD-SDI Distribution: **ADVC-HDM1**

8. Preview Output On Location



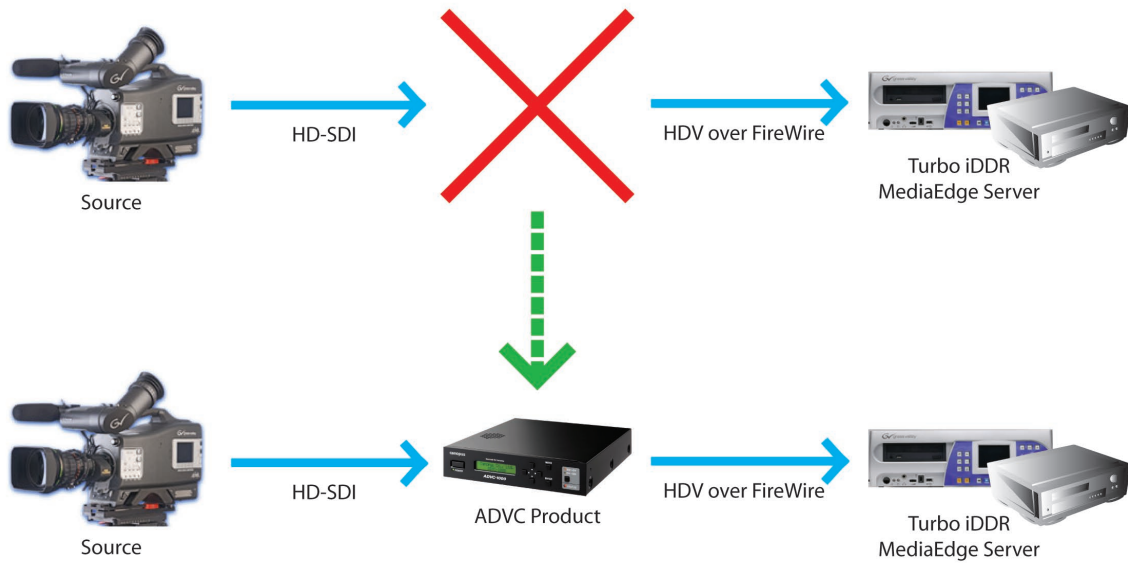
When working with video, there's simply no substitute for previewing work on a true video monitor. However, when editing on location using a laptop, few solutions exist to view the output. By connecting an ADVC to a mobile editing solution, editors gain true output preview capability from their laptop. Furthermore, the same setup can be used to play back finished video for approvals and even analog playout.

FEATURES

- *True video signal output for preview from a laptop or other device with DV or HDV output capability*
- *ADVC110 can be powered by FireWire bus for extreme mobility*

APPLIES TO: **ADVC110; ADVC300; ADVC700; ADVC3000**

9. Add HD-SDI Input To TURBO And MediaEdge



Although TURBO and MediaEdge do not have an HD-SDI input, it's easy to add HD-SDI capability to either system by adding an ADVC unit to convert the HD-SDI input to TURBO- and MediaEdge-friendly HDV.

FEATURES

- *Ingest HD-SDI video to Turbo as HDV over FireWire for recording*
- *Ingest HD-SDI video to MediaEdge as HDV over FireWire for distribution and recording*

APPLIES TO: **ADVC-HDM1**