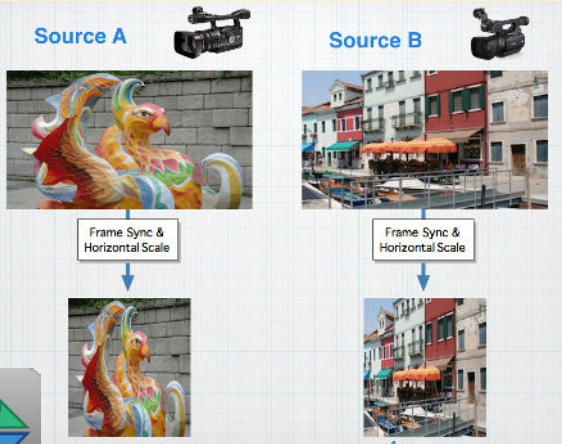# BrightEye™ DualPath - Two Signals in a Single Path

ENSEMBLE DESIGNS



**DualPath Tx**
Combines Two Signals

Each video input is compressed to 50% width.

Source A   Source B

Frame Sync & Horizontal Scale   Frame Sync & Horizontal Scale

The compressed output is still an 'ordinary' baseband video signal.

Enc

IP Connection
**LAN, VPN, Public Internet**

The DualPath signal, carrying two videos and associated audio, travels as a single feed over an ordinary path. DualPath operates only at the end points, with no changes required to the existing link.
This example shows an IP link utilizing MPEG compresion, but DualPath works equally well with baseband SDI and Fiber connections.

The left and right halves of the mulitplexed signal are expanded back to their correct dimensions.

DualPath Input
• 2 Video Signals
• AFV or Breakaway

Frame Sync & Horizontal Scale   Audio Embedding

Audio Dis-Embedder   Audio Selection

Frame Sync & Horizontal Scale   Audio Embedding

Rx Audio Mode
2 Ch: A Mono / B Mono

Set the Audio Receive mode to match transmission.

Dec   **DualPath Rx**

Choose the audio transmission mode to suit the production requirements, and the capacity of the transmission path.

DualPath In A
DualPath In B
✓ 2 Ch: A Mono / B Mono
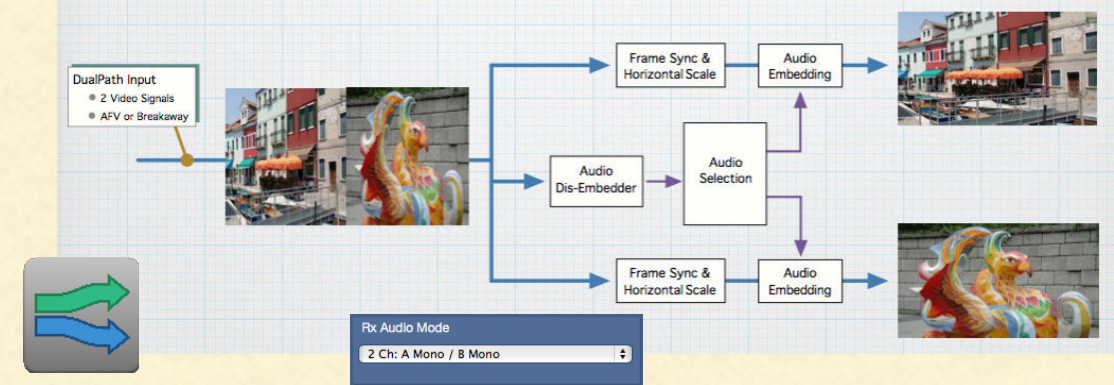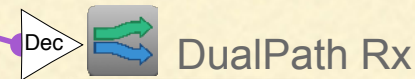4 Ch: A Stereo / B Stereo
16 Ch: A 8 Ch / B 8 Ch
Breakaway

Tx Audio Mode
2 Ch: A Mono / B Mono

Breakaway Source    Breakaway Audio Type
None                Embedded Audio

The two sources recovered by the DualPath Rx process can be routed to any destination.

The incoming DualPath signal is fed to Rx In to be demultiplexed.

DualPathTx Out contains both signals.

News 4 > Router Control
10.0.1.52/#!/router-control/

News 4
Router Control

Camera 1   Camera 2   TSG 1   TSG 2   DualPath Tx Out

Camera 1   Camera 2   DualPath Tx Out   Encoder In

Direct   Gang

Route the Tx signal to the transmission path.

**Signal Routing at Transmit End**

DualPath adds two more destinations for signal routing.

Receive Point A
10.0.1.64/#!/router-control/

Receive Point A
Router Control

Rem 4 - A Path   Rem 4 - B Path   Decoder Out   TSG 1   TSG 2

Rem 4 - A Path   Rem 4 - B Path   Rem 4 - B Path   Decoder Out

Production In 10   Production In 11   News Room In   DualPath Rx In

Direct   Gang

Rem 4 - B Path is Routed to News Room In

**Signal Routing at Receive End**