

Flashlink

FRS-HD-CHO / FRS-HD-CHO-ASI

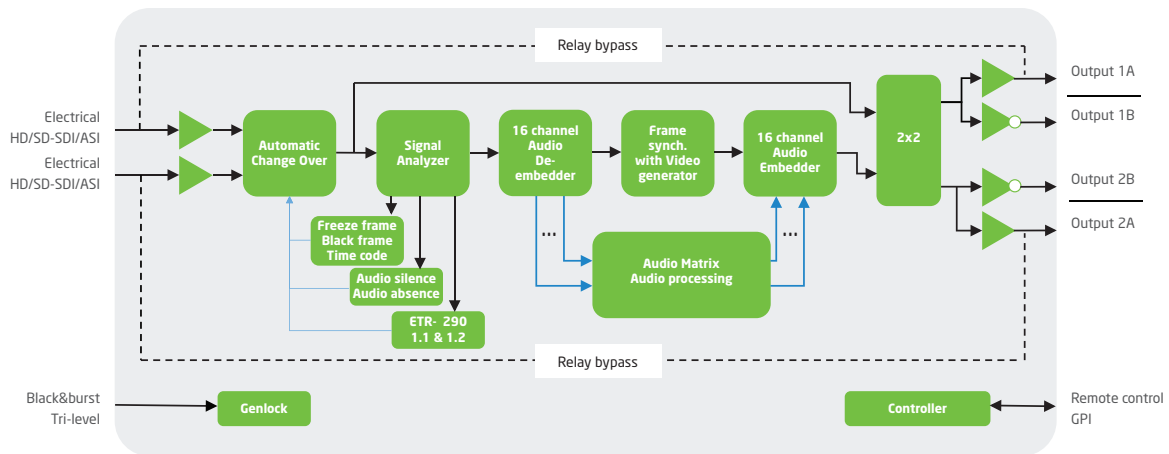
HD/SD frame synchronizer with two electrical inputs and advanced change over

The FRS-HD-CHO is an HD/SD frame synchronizer module for the Flashlink signal processing/optical distribution system that supports error-free synchronous switching between two sources.

The FRS-HD-CHO is ideal for use with ENG and SNG vans where it is mission critical to provide an uninterrupted signal feed to downstream equipment like MPEG-2 encoders. Its space saving design and best-in-class low power consumption adds to an impressive feature set. FRS-HD-CHO can be added to any field-deployed unit and is ideal for on-air applications. The combination of de-glitcher and HD/SD frame synchronizer provides seamless, error-free synchronous switching between two sources.

Key features

- Passive backplane relay loop through of both inputs to outputs at board failure with less than 25m loss of cable length (Belden 1694A)
- HD/SD video support, optional support for DVB-ASI
- De-glitching of input video signal
- Change over functionality with switching selectable on:
 - Loss of lock
 - ETR290 1.1 and 1.2 errors (ASI version only)
 - Video integrity (video CRC, EDH, TRS etc.)
 - Audio integrity (audio CRC, group presence)
 - Video freeze (active or full frame)
 - Black video (with noise floor threshold)
 - Audio silence (with noise floor threshold)
 - Time code freeze



FRS-HD-CHO / FRS-HD-CHO-ASI

Features

- Always latched switching
- Ripple rejection latching with adjustable hold times
- Switching on switching line if Sync is present
- GPI inputs for set and reset of switch
- Individual detection timings for signal integrity (loss of lock, video and audio integrity), video content detection and audio content detection
- Audio de-embedding – processing – re-embedding
- Audio fade out/fade in
- Audio router
- Audio delay
- SDI label insertion
- Sync input, either PAL, NTSC or HD Tri-level
- Frame sync, delay adjustable up to 8 frames
- Frame delay output on GPI connector
- 2 video outputs, either reclocked input or processed
- Video luma, chroma, gain and level adjustment
- EDH processing
- DVB-ASI inputs are not processed, but analyzed. In ASI mode the input change-over logic will use the lack of ETR290 1.1 and 1.2 errors as an indicator of lock

General

Power	5V, +/-15V DC, <5W
Control	DIP switches, GYDA system controller and GPI.
Monitoring	Front panel LEDs, GYDA system controller and GPI.
EDH/CRC processing	Full. Received flags are updated, new CRCs are calculated.

Electrical video inputs

Number of HD/SDI inputs	2, looped
Video data rate	270Mbps or 1,485Gbps; conform to SMPTE 292M-1998, SMPTE 259M-C
Equalization	Automatic up to 35dB (eq. >300m @270Mbps with Belden 8281 / >100m @1485Mbps with Belden 1694A)
Impedance	75 Ohm
Return loss	>15dB up to 742.5MHz >10dB up to 1485MHz
Signal level	nom. 800mV
Connector	BNC

Electrical video outputs

Number of HD/SDI outputs	4 (2 pairs of inverting + non-inverting outputs)
Impedance	75 Ohm
Return loss	>15dB up to 742.5MHz >10dB up to 1485MHz
Signal level	nom. 800mV.
Connector	BNC

Electrical Sync input

Connector	BNC
Format	Black & Burst, Tri-level
Input return loss	>35dB @ < 10MHz 30dB @ < 30MHz

GPI in-/outputs

Input signals	Set and reset (change over switch)
Output signals	Power status good, loss of lock, loss of sync, frame delay
Connector	RJ45

Ordering options

18088 FRS-HD-CHO	HD-SDI 2x1 Change-over with frame synchronizer
19627 FRS-HD-CHO-ASI	HD-SDI 2x1 change-over with frame synchronizer and ASI input mode



CONTACT INFORMATION

The Americas

ussales@nevron.com +1 (805) 247-8560

Asia Pacific

asiasales@nevron.com +65 6872 9361

Europe and Africa

sales@nevron.com +47 33 48 99 99 / +47 22 88 97 50

Middle East

middle-east@nevron.com +971 (0)4 3901018

UK

uksales@nevron.com +44 118 9735831

nevron.com