Multi-channel Signal Processor
FA-1010 "THE Processor"

Dimensions
Up to 10 inputs/18 outputs in a sleek, 1U form factor. A multi-function, multi-format, 4K ready frame synchronizer.

The FA-1010 offers up to 10 outputs and 18 outputs for convenient, centralized multi-channel video routing. In addition, this all-in-one frame synchronizer offers many essential video production tools. Inputs and output standards include, 3G/HD/SD-SDI in a variety of frame rates and 4K compatibility. We have included all the typical features of a frame synchronizer as well as a FOR-A’s ‘industry standard’ color correction on every input. For audio signal processing, it offers delay adjustment, remapping functions and a sampling rate converter on over 160 channels of audio. A single unit can provide the functionality that used to require a full rack of equipment. The perfect solution for almost any professional video environment plus: reduced cost, space, heat and electrical consumption.

Comprehensive & More Compact

A full rack of signal processing in a 1U box.
Full-Featured

10 3G/HD/SD-SDI inputs and outputs standard, expandable to 18 outputs

This 10 input frame synchronizer also offers a 10 by 10 audio/video clean switch router on synchronized or un-synchronized inputs. The built-in clean switch function enables advanced audio processing for quiet audio transitions. An I/O bypass function has also been provided in case power is cut.

Digital Audio I/O

For embedded audio, there are 16 channels per 3G/HD-SDI synchronous/asynchronous input, and there are 16 channels per synchronous input in SD-SDI. That means support for up to 160 channels over the 10 inputs. Audio processing includes, delay adjustment, level adjustment, down-mixing and remapping. By adding optional digital or analog cards, the unit provides D-A or A-D conversion with embed and de-embed capability. Users needn’t worry about ancillary data being erased such as closed captions and time code due to signal processing.

GUI/Web Control

The frame synchronizer comes with dedicated GUI software for direct IP control from a PC. In addition, it offers web-based control from almost any browser. The web browser offers the ability to control from a PC, tablet or smartphone.

Color Corrector

The FA-1010 provides 10 channels of FOR-A’s legendary real-time color correction. Color controls include Proc Amp and White/Black/Gamma in R/G/B. White/Black/Gamma controls can be done in 3 modes: Balance, Differential and Sepia.

Powerful Frame Synchronizer

FOR-A’s frame synchronizers are designed for superior performance when processing video with poor quality signals. Synchronizer modes can be selected among Frame, Line, and AVDL. Adjustment range in AVDL mode is 5 H in HD and 1 H in SD. Additionally, in every mode both H and V’ ancillary data can be passed through.

Other Features

- Video/audio delay
- Monitoring and control from a Web browser (partial)
- SNMP monitoring
- Redundant power supply

Options

FA-10RU Remote Control Unit
Remote with LED menu display for full control of multiple units.

FA-10DCCRU Remote Control Unit for Color Correction
A dedicated remote panel for intuitive color correction.

FA-AUX30 AUX Extension Panel
Offers one-touch assignment and activation of common functions and perfect for routing operations.

FA-10PS Redundant power supply

Expansion Cards

4 slots in the rear panel can be used to expand inputs and outputs.

- FA-10AES-BL Digital Audio balanced I/O option
- FA-10AES-UBL Digital Audio unbalanced I/O option
- FA-10AES-UBL Digital Audio unbalanced output expansion cable
- FA-10GPI Analog Audio I/O option
- FA-10GPI GPI 10 each input/output option
Specifications

Video Formats
- 3G-SDI: 1080/59.94p, 50p (Level-A/B)
- 2 x 1080/59.94i, 50i, 29.97p, 25p (Level-B)
- Dual link 3G-SDI: 2 x 1080/29.97p, 25p (Level-B) *3
- Quad link 3G-SDI: 1080/59.94p, 50p (Level-A/B) *
- HD-SDI: 1080/59.4i, 50i, 23.98Pf, 24Pf, 720/59.94i, 50p
- SD-SDI: 525/60, 625/50
- *1 Video inputs unsynchronized with the reference are not supported.
- *2 Process Amp and Color Corrector cannot be used for SDI signals and should be set to factory default settings for SDI signals.

Video inputs
- 3G-SDI: 3 Gbps (Level-A/B), HD-SDI: 1.5 Gbps or SD-SDI: 720 Mbps, 75Ω
- Balanced or unbalanced, 2 channels (1 pair of Balanced or unbalanced, 4 channels (2 pairs of
- YPbPr, RGB
- 3G-SDI: 16 channels (Group 1 to 4), 48 kHz, 16/20/24-bit
- HD-SDI: 1080/59.94i, 50i, 23.98PsF, 24PsF, 48kHz, 16/20/24-bit
- SD-SDI: 525/60, 625/50
- AVDL: 10 each input/output option
- SD: 16 channels (Group 1 to 4), 48 kHz, 16/20/24-bit
- HD: 16 channels (Group 1 to 4), 48 kHz, 16/20/24-bit
- Black burst: NTSC 0.429 Vp-p/PAL 0.45 Vp-p
- Frame Sync, Line Sync, AVDL, Line (minimum)
- Maximum 8 frames (in Frame Sync mode)
- Color correction
- Balance, Differential, Sepia
- Proc. Amp.
- Video level: 0.0% to 200.0%
- Black level: -20.0% to 100.0%
- HUE: -179.8° to +180°

Audio input
- Balanced, 0.2 Vp-p to 7 Vp-p, 110Ω, 25-pin D-sub (female) x1 (input/output), 4 pairs of stereo channels, 32/44.1/48 kHz, 16-bit to 24-bit

Audio output
- Balanced or unbalanced, 4 channels (2 pairs of stereo channels)
- 25-pin D-sub (female) x1 (shared with analog output), 600 Ω/high impedance, 48 kHz, 24-bit, input level: -10 dBu to +8 dBu

Audio processing
- Sampling rate converter (SRC), Gain control, Down mix, Channel re-mapping, Channel mute
- Interface
- Ethernet (100BASE-TX/1000BASE-T); RJ-45 x 1

Interface (optional)
- FA-10GPI
- 25-pin D-sub (female) x1 (shared with analog audio input)
- Balanced or unbalanced, 4 channels (2 pairs of stereo channels)
- Black Level: 100 Ω or lower impedance, 48 kHz, 24-bit, output level: -10 dBu to +8 dBu

Audio delay
- 5 ms to 1000 ms (adjustable in 1 ms steps)

Options
- FA-10RU: Remote control unit
- FA-10DCCRU: Remote control unit for color correction
- FA-AUX30: AUX extension panel (with a connection cord, Rack mount brackets)

Consumables
- Power supply unit (to be replaced within 3 years), Cooling fan P-1439-2 (FAN-14) (to be replaced within 5 years)

Accessories
- CD-ROM (Windows GUI, Operation Manuals), AC cord, Rack mount brackets

Dimensions
- Unit: mm

FA-10ANA-AUD (Audio analog)
- Line input
  - Balanced or unbalanced, 4 channels (2 pairs of stereo channels)
  - 25-pin D-sub (female) x1 (shared with analog output), 600 Ω/high impedance, 48 kHz, 24-bit, input level: -10 dBu to +8 dBu
- Mic input
  - Balanced or unbalanced, 2 channels (1 pair of stereo channels)
  - (shared with the analog audio input CH1/CH2 connector), 600 Ω/high impedance, 48 kHz, 24-bit, input level: -55 dBu to -30 dBu

Audio output
- Embedded audio
  - 3G/HD: 16 channels (Group 1 to 4), 48 kHz, 16/20/24-bit, synchronous/asynchronous, 3G Level-B: Embedded Link-A only
  - SD: 12 channels (Group 1 to 3), 48 kHz, 16/20/24-bit, synchronous only
- Audio output (optional)
  - FA-10AES-UBL (AES/EBU)
    - Unbalanced, 1.0 Vp-p, 75Ω, BNC x4, Max. 4 pairs of stereo channels, 48 kHz, 16/20/24-bit
  - FA-10AES-UBL-BL (AES/EBU)
    - Unbalanced, 1.0 Vp-p, 75Ω, BNC x4, 4 pairs of stereo channels, 48 kHz, 16/20/24-bit
  - FA-10AES-UBL (AES/EBU)
    - Balanced, 3.3 Vp-p, 110Ω, 25-pin D-sub (female) x1, input/output, 4 pairs of stereo channels, 48 kHz, 16/20/24-bit
  - FA-10AES-UBL (AES/EBU)
    - Balanced, 1.0 Vp-p, 75Ω, BNC x4, 4 pairs of stereo channels, 48 kHz, 16/20/24-bit
  - FA-10AES-UBL (AES/EBU)
    - Balanced, 1.0 Vp-p, 75Ω, BNC x4, 4 pairs of stereo channels, 48 kHz, 16/20/24-bit

Audio processing
- FA-AUX30: AUX extension panel (with a connection capability with the FA-10RU, FA-10GPI)
- FA-10AES-UBL: Digital audio unbalanced I/O option
- FA-10AES-UBL: Digital audio unbalanced output expansion cable
- FA-10A-AUD: Analog Audio I/O option
- FA-10PS: Redundant power supply unit

Consumables
- Power supply unit (to be replaced within 3 years), Cooling fan P-1439-2 (FAN-14) (to be replaced within 5 years)

Accessories
- CD-ROM (Windows GUI, Operation Manuals), AC cord, Rack mount brackets

Options
- FA-10RU: Remote control unit
- FA-10DCR: Remote control unit for color correction
- FA-AUX30: AUX extension panel (with a connection capability with the FA-10RU, FA-10GPI)
- FA-10AES-UBL: Digital audio unbalanced I/O option
- FA-10AES-UBL: Digital audio unbalanced output expansion cable
- FA-10A-AUD: Analog Audio I/O option
- FA-10PS: Redundant power supply unit