

REF-1801

Reference Module with Optional Sync Pulse Generator



Space-saving, modular platform for advanced signal processing.

The REF-1801 from Grass Valley[®] is a reference module that distributes a universal reference signal (URS) to all the cards within a Densité[®] frame. It can also optionally generate two selectable reference signals for external use.

The unique URS concept provides significant advantages as it generates a digital reference signal, and also simplifies interformat processing by using a unique reference signal for all video and audio frame rates.

The REF-1801 has the ability to extract timecode from the input as per SMPTE ST 318, which allows for perfect audio/video phasing. Other features include the ability to slave Densité frames, as well as advancing or delaying independently the two reference output signals.

Key Features

- Digitally generated reference for intraframe distribution
- Timecode extraction and embedding
- Supports SMPTE ST 318 for perfect audio/video phasing
- Easy control and monitoring
- URS simplifies interformat processing

Two fully independent sync outputs

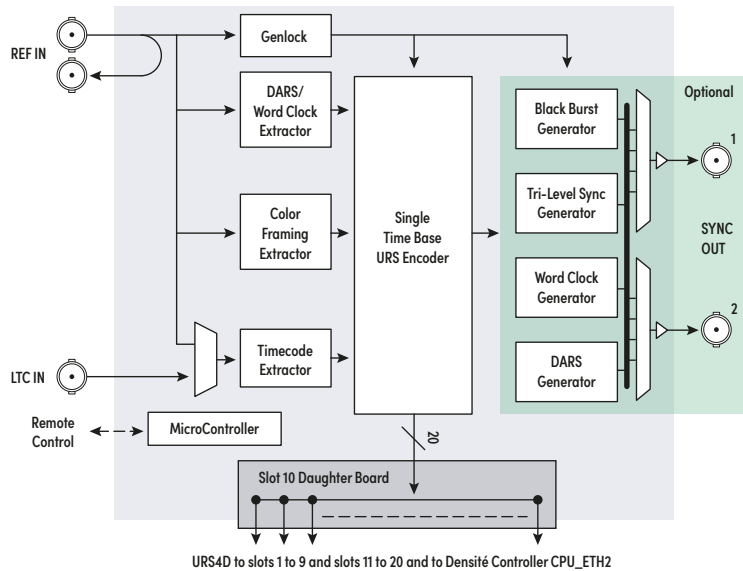
- Audio or video
- Selectable format
- Support for blackburst, tri-level sync, DARS, Word Clock
- Timing adjustment: up to 1 frame, pixel by pixel



All modules identified with this logo are compliant with the REF-1801 Reference Module



REF-1801-SRP



REF-1801 Functional Block Diagram

The REF-1801 has to be installed in slot 10 of the Densité 2 / Densité 3 frame.

Specifications

Reference Input

Load: Passive loop-through
Impedance: 75Ω bridging
Return loss: >30 dB up to 30 MHz
Signal type: Composite NTSC-M, PAL-B blackburst with optional VITC
Standard: SMPTE ST 170, ITU-R BT.1700-1, SMPTE ST 318
Signal level: 1 Vp-p
Signal type: HD tri-level sync
Standard: SMPTE ST 274, SMPTE ST 296
Signal level: 600 mVp-p
Signal type: DARS AES-3id
Standard: SMPTE ST 276

Signal level: 1 Vp-p
Signal type: Word Clock
Standard: AES11-2003
Signal level: 2.3 Vp-p

LTC-IN

Signal type: LTC
Standard: SMPTE ST 12
Signal level: 0.5 Vp-p to 4.5 Vp-p

Analog Reference Output

Signal type: Composite NTSC-M, PAL-B with optional VITC
Standard: SMPTE ST 170, ITU-R BT.1700-1, SMPTE ST 318

Signal level: 1 Vp-p
Signal type: HD tri-level sync
Standard: SMPTE ST 274, SMPTE ST 296
Signal level: 600 mVp-p
Signal type: DARS AES-3id
Standard: SMPTE ST 276
Signal level: 1 Vp-p
Signal type: Word Clock
Standard: AES11-2003
Signal level: 2.3 Vp-p

Electrical

Power: 3.5W

Ordering

| Densité 2 Frame | Densité 3 Frame | Description | Options | Description |
|-----------------|------------------|------------------------------------|-------------------------|-------------------------------------|
| REF-1801 | REF-1801-3RU | Reference module for Densité frame | REF-1801-OPT-SPG | SPG option for REF-1801 |
| REF-1801-SRP | REF-1801-SRP-3RU | Single rear connector panel | Related Products | SPG-1801 |
| | | | Remote Control | GV Orbit®, iControl™, iControl Solo |

This product may be protected by one or more patents. For further information, please visit: www.grassvalley.com/patents

DS-PUB-3-0441A-EN

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