trilogy
A CLEAR-COM COMPANY

Key Features

- Precision Time Protocol IEEE-1588 PTP grandmaster
- Compact 1RU rack mount format
- Multiple video and audio formats in one box
- Provides Gigabit Time Code Signaling for Network Devices Simultaneous 525/625 and HD Tri-Level Sync outputs
- Highly accurate GPS reference for synchronization and timecode
- Vector web-browser setup and monitoring tool
- Redundant PSU option
- Add upgrades and options without return to factory
- Generates synchronized audio and video
- Redundant units with changeover
- Dual Ethernet 1Gb Ports for Control/Management and PTP

Trilogy's Mentor™ RG generates synchronized video, audio and timecode for broadcast purposes from an extremely accurate reference, often provided by a GPS system.

Description
The Mentor RG is a 1RU signal sync, test and clock generator for SDI and IP-based mixed environments. It provides IEEE-1588 PTP references alongside more traditional Black Burst and Tri-Level sync signals. The signal reference generator references a GPS antenna system to establish timecode, which is then passed on to the mission-critical automation system. Two Mentor RG generators and a changeover are used for redundancy to assure accurate reference signals.

System Features
The base model Mentor RG includes Black Burst and Tri-Level sync outputs, SD-SDI black signals, word clock, and AES silence feeds. Optional software keycodes enable test pattern features and audio test signals, as well as NTP and IEEE-1588 PTP reference signals over Ethernet. Other options include LTC in and out with VITC and DVITC timecode, which can be displayed on the test pattern. Option cards add additional Tri-Level sync outputs, HD-SDI outputs including 3G signals, GPS antenna connections and unbalanced AES out.

Configuration and control
The Mentor RG can be configured from the front panel, which features an alarm bar, or from the built-in Vector web browser application. Vector makes it easier to adjust and save every parameter and setting for all of the individual signals, including the extensive GPS and PTP controls. Multiple configurations can be created, saved and copied between Mentor RG's to save time during setup and operations.

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Technical Specifications

Mentor RG Features (some features require optional items):

- Vector management software
- 5 x Black Burst or 3 x Black Burst and 2 x Tri-Level Sync
- 10/27MHz /Wordclock out
- 10MHz ref in
- Genlock with loopthrough
- LTC and Tri-Level Sync reference input
- 3 x SDI Black with 4 channels of embedded AES silence
- 2 x AES-3 (DARS)
- SD and HD-SDI test patterns
- Analog and AES test tones
- Dual LTC
- VITC and DVITC embedded timecode

- NTP & PTP server
- SNMP monitoring
- General Purpose Input/Output (GPI/O)
- 4 x O/P Tri-Level Sync module
- 4 x O/P HD/3G module
- Redundant Power Supply
- Smart GPS antenna system
- Dual Ethernet 1Gb Ports for Control/Management and PTP

Power
Mains input x 2:
100 - 240V AC, 50 - 60Hz, auto select

Power consumption: 60VA max. (depending on number of option boards fitted)

Internal Fuse: 3.15A

Environmental
Operating temperature range:
32° to 122°F (0 to 50°C)

Storage temperature range:
-4° to 140°F (-20° to 60°C)

Operating humidity: 20 to 90% at 104°F/40°C non-condensing

Dimensions
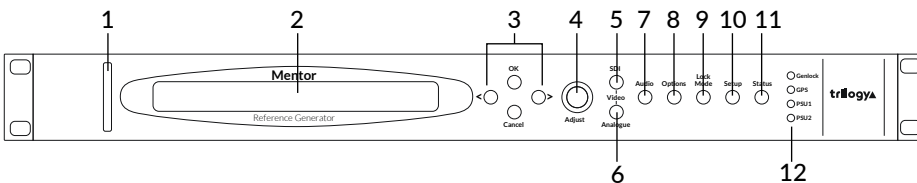19 x 1.75 x 17in (WxHxD)
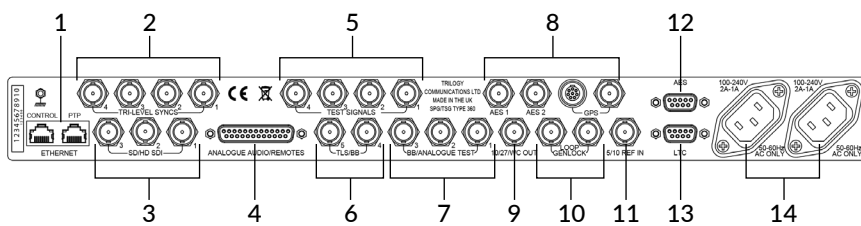(483 x 44 x 433mm)

Weight
No option boards: 8.8lbs (4kg)
With option boards: 11lbs (5kg) max

Front Panel

Back Panel

Legend

Front Panel
1. LED Status Bar
2. LCD Display
3. Menu Navigation Keys
4. Adjust Rotary Encoder
5. SDI Video
6. Analog Video
7. Audio
8. Options
9. Lock Mode
10. Setup Mode
11. Check Status
12. Status LEDs

Back Panel
1. 2 x RJ45 Ethernet Ports (Control and PTP) both 1Gb
2. Tri-Level Sync Outputs (Optional)
3. SD Outputs (Standard)
4. Analog Audio/Remote Connector
5. HD/3G Outputs (Optional)
6. Tri-Level Sync/BB Outputs (Standard)
7. Analog Test/Black Burst Outputs (Standard)
8. GPS Antenna AES unbalanced Outs (Optional)
9. Clock Output
10. Genlock Loop Input
11. 5/10 MHz Reference Input
12. AES Out
13. LTC Out/IN
14. Power Connectors (Second Power Connector Optional)

Order Codes

360-00-07: Mentor RG Signal Reference and Test Signal Generator (Base Model)

NOTE: Base Model is configurable. See price list for options and pre-set packages.