

CY460

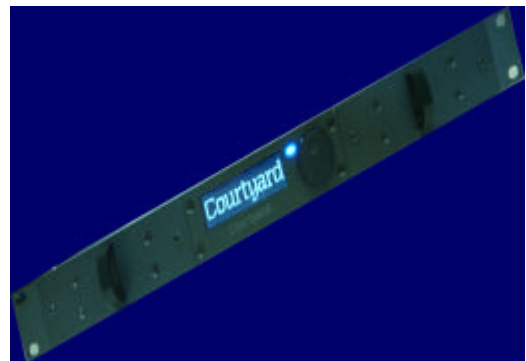
Universal SPG/TPG & Time reference

CY460 UNIVERSAL SPG

The CY460 is the ultimate sync, test pattern & time reference generator designed to satisfy all needs of broadcast serial digital (Standard, High Definition & 3G) and mixed digital/analogue, post-production, OB and other operational environments. It provides all the reference (Colour Black, Tri-Level Sync), timing and test signals, including LTC and VITC, together with analogue audio, AES audio & Wordclock, needed to satisfy any application in PAL, NTSC, SD SDI, HD SDI, & 3G SDI and mixed standard installations.

Optionally the unit is supplied with dual “hot swap” redundant power supplies for maximum security. The power supplies are directly accessible from the front panel.

The CY460 is designed for use either as a master or, when genlocked, as a slave SPG. Where it is critical to have a backup SPG, the CY465 auto changeover unit complements the CY460. This can be user configured to monitor and changeover analogue video, digital video, timecode and AES/EBU digital audio signals.



FEATURES

Outstanding performance, stability and reliability

PAL/NTSC/625/525 switchable

Comprehensive range of test patterns for all analogue and digital applications

± 4 field (PAL) / ± 2 field (NTSC) timing range

Multiple & configurable reference outputs

(PAL/NTSC/Tri-Level Sync in all HD formats)

4 LTC (standard and offset) or pulse outputs (User programmable)

VITC on all SD outputs (User Select)

Analogue stereo tone output with programmable interrupt

Embedded audio

Lock time to VITC on genlock ref input

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User programmable & animated text idents (3) (independent on each test out)
Text idents in any language (bitmap import)

Multiple user configurable and independently adjustable reference outputs (NTSC colour black, PAL Colour Black & Tri-level Sync)

10Mhz reference input

Genlock to Colour Black or Tri-Level Sync

2 pairs independent SD (Std), HD & 3G

SDI colour black and test patterns (with embedded tone/silence)

AES digital tone, Silence, Wordclock

Remote control, NTP Server & Client over Ethernet

GPS receiver option – lock time to UTC

The Granary, 122 Upper Hale Road, Farnham, Surrey, GU9 0JH, United Kingdom

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SPECIFICATION

Conforms to relevant EBU, CCIR or SMPTE specifications.

Video Inputs (BNC)

75 Ohm looping reference

10 MHz terminating reference

Video Outputs (BNC)

Analogue Colour Black (2) Std.

Analogue Composite test (2) Std.

Colour Black/Tri-Level (3 independent Pairs)

SDI (SD (Std)/HD or 3G) Colour Black with embedded silence (2 independent pairs)

SDI (SD (Std)/HD or 3G) Test Pattern with embedded tone (2 independent pairs)

Balanced Audio/AES/LTC Outputs

Molex Microclasp 30 pin Connector

Unbalanced AES Audio

AES (2) Std.

DARS (1) Std.

WordClock (TTL) 2 BNC Std.

Controls and Indicators

LCD Display, Rotary Knob & Switch

Ethernet 100Base T RJ45 Std.

GPI/RS232 Microclasp 10 pin Std.

GPS Antenna Input SMB Jack

Timecode outputs

LTC 4 (user select) Std.

VITC (user select) Std.

Colour black outputs

Fsc stability: ± 1 Hz over temperature range*

SCH phase: 0 degrees ± 5 degrees

Return loss: >35dB to 5 Mhz

Courtyard Electronics reserve the right to alter the specification without prior notice

Sync Pulse Generator

Subcarrier output

Frequency: 4.43361875MHz after warm up (PAL)

Stability: ± 1 Hz over temperature range*

Amplitude: 1Vp-p

Return loss: >35dB to 5 Mhz

Pulse and pattern outputs

Signals: meet or exceed relevant EBU, CCIR and SMPTE specifications

Genlock

H range: ± 4 fields (PAL). Moves all timing relative to the reference input.

Subcarrier: 0 to 360 degrees

Resolution: <0.5 degrees of subcarrier

Mechanical

Height: 1 rack unit

Width: 19" rack mounting

Depth: 405 mm (overall)

Weight: 6 Kg (unpacked)

Voltage: Auto ranging 100 to 240V AC, 50/60Hz

Power: 21 Watts maximum

Ordering information

CY460 : SPG/TPG & Time Ref **Single PSU**

CY460D: SPG/TPG & Time Ref **Dual SPG**

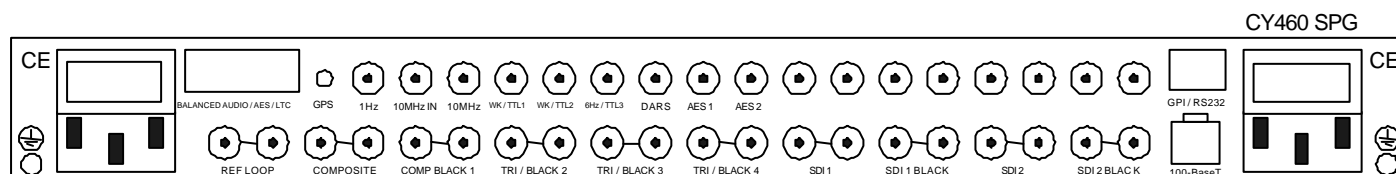
CY460/03 : HD SDI outputs - Option

CY460/04: 3G SDI outputs - Option

CY460/05: NTP - Option

CY460/06: GPS receiver/antenna - Option

*Operational temperature range is 0 to +40°C



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