

Product Spec Sheet

Master Clock Generator

CG-1800



■ Specifications

Inputs and outputs

VIDEO INPUTS

- Connector type: BNC
Input level: 0.5–2.0 V_{p-p}
Input impedance: 75 Ω (can turn ON/OFF in menu)
Input format
- SD video black burst:
 - NTSC (RS-170A)
 - PAL (ITU-R624)
 - SD video composite sync:
 - NTSC B/W (RS-170)
 - HD video tri-level:
 - 720p/50/59.94/60 (SMPTE 296M)
 - 1080p/23.976/24/25/29.97/30/50/59.94/60 (SMPTE 274M)
 - 1080i/23.976/24/25/29.97/30 (SMPTE 274M)
 - 1080PsF/23.976/24/25/29.97/30 (SMPTE RP211)
- Permissible frequency deviation: ±10 ppm

WORD/EXT INPUTS

- Connector type: BNC
Input level: 0.5–5.0 V_{p-p}
Input impedance: 75/50 Ω (can set to 75/50/OFF in menu)
Supported frequencies
- WORD CLOCK: 32/44.1/48/88.2/96/176.4/192 kHz
(–4/–0.1/0.0/+0.1/+4% PULL UP/DOWN supported only when 48/96/192 kHz selected)
 - ATOM: 10.0 MHz
 - GPS: 10.0 MHz
- Permissible frequency deviation: ±10 ppm

AES3/11 INPUT

- Connector type: XLR-3-31 (1: GND, 2: HOT, 3: COLD)
Input level: 0.2–10 V_{p-p}
Input impedance: 110 Ω
Format: AES11-2003, AES3-2003, IEC60958-4
Supported frequencies: 32/44.1/48/88.2/96/176.4/192 kHz
(–4/–0.1/0.0/+0.1/+4% PULL UP/DOWN supported only when 48/96/192 kHz selected)
Permissible frequency deviation: ±10 ppm

CALIBRATION INPUT

Connector type:	BNC
Input level:	0.5–5.0 V _{p-p}
Input impedance:	50 Ω (can turn ON/OFF in menu)
Supported frequencies	
ATOM:	10.0 MHz
GPS:	10.0 MHz, PPS

VIDEO OUTPUTS

Connector type:	BNC
Output impedance:	75 Ω
Output format	
SD video black burst:	
NTSC (RS-170A)	
PAL (ITU-R624)	
SD video composite sync:	
NTSC B/W (RS-170)	
HD video tri-level:	
720p/50/59.94/60 (SMPTE 296M)	
1080p/23.976/24/25/29.97/30/50/59.94/60 (SMPTE 274M)	
1080i/23.976/24/25/29.97/30 (SMPTE 274M)	
1080PsF/23.976/24/25/29.97/30 (SMPTE RP211)	

WORD OUTPUTS

Connector type:	BNC connector
Output level:	1.0–3.5 V _{p-p} (can set by 0.5V steps in menu)
Output impedance:	75 Ω
Supported frequencies:	32/44.1/48/88.2/96/176.4/192 kHz 11.2896/12.288 MHz (Super Clock, only connectors 11/12) (–4/–0.1/0.0/+0.1/+4% PULL UP/DOWN supported only when 48/96/192 kHz selected)

AES3/11 OUTPUTS

Connector type:	XLR-3-32 (1: GND, 2: HOT, 3: COLD)
Output level:	2.5 V _{p-p}
Output impedance:	110 Ω
Format:	AES11-2003, AES3-2003, IEC60958-4
Supported frequencies:	32/44.1/48/88.2/96/176.4/192 kHz (–4/–0.1/0.0/+0.1/+4% PULL UP/DOWN supported only when 48/96/192 kHz selected)

S/PDIF OUTPUTS

Connector type:	RCA pin jack
Output level:	0.5 V _{p-p}
Output impedance:	75 Ω
Format:	IEC60958-3 (S/PDIF)
Supported frequencies:	32/44.1/48/88.2/96/176.4/192 kHz (–4/–0.1/0.0/+0.1/+4% PULL UP/DOWN supported only when 48/96/192 kHz selected)

Performance

Internal oscillator

Type:	OCXO (oven-controlled crystal oscillator)
Permitted frequency deviation:	± 0.01 ppm (Adjusted value when shipped new from the factory)
Frequency temperature characteristics:	± 0.05 ppm (0 to 40°C)
Long-term frequency stability:	± 0.005 ppm (daily) ± 0.5 ppm (annually)

General

Power

AC100 V–240 V, 50/60Hz

Power consumption

11.5 W

External dimensions

483 x 45 x 310mm (width × height × depth)

Weight

3.2 kg (7.1 lb)

Operating temperature range

0–40°C (32–104°F)

