CG-10M Master Clock Generator, Black

248065

SRP £1,599.00

The CG-10M is a master clock generator that delivers an extremely accurate clock signal to allow Digital-to-analogue converters (DACs) to perform at their ultimate best.

Colour

Style UK POWER PLUG, **EU POWER PLUG**

PRODUCT DETAILS

Overview
The CG-10M is a master clock generator that delivers an extremely accurate clock signal to allow Digital-to-analogue converters (DACs) to perform at their ultimate best. It is a well-known fact among audiophiles that the clock signal is the foundation for all digital signal processing. For example, digital signals such as PCM are divided extremely finely into tens of thousands of parts per second along the time axis. If that fundamental time axis fluctuates during the process of D/A conversion it is much more difficult to render an analogue audio waveform that is identical to the original. This is all the truer with DSD audio signals that function at MHz speeds in the time axis. For this reason, having as accurate a clock signal as possible is very important for the re-creation of digital audio signals, particularly HiRes files that use ultra high sampling-rates, such as DSD 22.5MHz or PCM 768kHz.

At the heart of the master clock generator is a crystal oscillator, encased in in a temperature-controlled box, the "oven", to maintain the best and stable performance under an ideal temperature condition for crystal oscillation. This oven-controlled crystal oscillator (OCXO, for short) generates an extremely accurate 10MHz clock signal which is within ±3 ppb of frequency temperature characteristics and within ±0.1 ppm of frequency precision.

The elegant analogue gauge on the front panel gives a visual indication of the status of the internal crystal oscillator at all times.

The CG-10M is a master clock generator that brings out the best performance from USB DACs, network players, CD players and any other kind of device that supports a 10MHz clock input.

New Reference OCXO – an Oven-controlled Crystal Oscillator
Since temperature has a huge effect on accuracy of the crystal oscillator, minimising temperature changes and maintaining it at an ideal level are extremely important to generate an accurate clock signal. The CG-10M employs an innovative oven-controlled crystal oscillator, the TEAC Reference OCXO to reduce oscillation frequency fluctuations caused by temperature changes.

A class-leading ultra high-precision clock

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Thanks to the TEAC Reference OCXO, the CG-10M delivers an ultra high-precise 10MHz clock signal – within ±3 ppb of frequency temperature characteristics and within ±0.1 ppm of frequency precision – to USB DACs and digital players. A unique laser-engraved serial number and the TEAC Reference OCXO logo on every OCXC case is proof of the rigorous quality inspection undertaken during the manufacturing process.

Four BNC clock output connectors
Four gold-plated BNC connectors (50 ohms) are provided to deliver clock signals to multiple devices. Up to four devices that support a 10MHz input may be connected simultaneously, including USB DACs, network players and SA-CD players.

Independent and isolated circuit design
Each circuit in the CG-10M – from the power supply section to the buffer-amp at the output stage – is completely isolated to prevent cross-interference when multiple devices are connected to the BNC connectors. By incorporating a buffer-amp into each circuit, no degradation of the signal waveform occurs when the generated clock signal is shared by several devices.

Oven Status Gauge for clock stability monitoring
The OVEN STATUS analogue gauge located in the middle of the unit, a TEAC trademark in recent years, shows the stability of the crystal oscillator when in use. As the temperature of the oven that contains the crystal oscillator reaches the ideal temperature for accurate clock generation, power consumption of the oven decreases and the gauge points to zero, signalling to the user that the digital processing on the connected device is now controlled by an extremely accurate 10MHz clock signal. The gauge is a backlit-type with a dimmer control (including the ability to completely switch the backlight off).

Toroidal-core power transformer
A high-capacity, toroidal-core power transformer constantly supplies a constant, stable current that contributes greatly to the efficacy of the crucial clock generation and its subsequent high-precision output.

Three-position, patented ‘Pin-Point’ feet for perfect stability
The CG-10M employs TEAC's patented ‘Pin-Point’ feet. These ingeniously comprises two separated metal sections in a in an integrated housing. One has a spiked top and is attached to the bottom of the chassis, the other is a basin-shaped base that hangs down from the spiked section with a flange-shaped cup to simply installation. Three ‘Pin-Point’ feet are used for support, two at the front and one at the rear, for excellent stability, even on an uneven floor. As a result, the three ‘Pin-Point’ feet help improve the accuracy of clock oscillation by minimising vibrations and resonance. This, in turn, reduces mid and low frequency muddiness, improves the soundstage and enhances fine sound detail.

A robust full-metal chassis, combined with an A4-size footprint
Designed to match the successful Reference 500 series, the CG-10M features aluminum panels and a robust metal chassis (that also isolates it from electromagnetic noise) with a compact A4-size footprint that will fit anywhere.

Features at-a-glance

- High-precision "TEAC Reference OCXO" – an ‘oven-controlled’ crystal oscillator
- ±3 ppb frequency temperature characteristics
- ±0.1 ppm frequency precision
- 4 x 10MHz clock output connectors (gold-plated BNCs)
- Completely independent and isolated circuit
- High capacity toroidal-core power transformer
- OVEN STATUS gauge for oscillation stability monitor with dimmable backlight
- Patent-registered ‘Pin-Point’ feet to minimise vibrations
- Three feet for the perfect support
- Full-metal body to eliminate incoming electromagnetic noise
- Detachable 3-pole IEC power socket
- Compatible with TEAC UD-503, UD-505, UD-701, NT-503, NT-505, VRDS-701, VRDS-701T and PD-505T (as of August 2023)
- Compliant with RoHS

For more specifications, see the datasheet in the downloads tab.

Included accessories

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- Power cord
- Feet pads
- Owner's manual

Specs

Product Attributes

EAN:	4907034223039
Manufacturer number:	CG-10M-A/B
Product weight:	4.6 kilograms
Pieces per master carton:	28 Piece

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