



# TEAC

## CG-10M-X Master Clock Generator Black

253893



The CG-10M-X is a master clock generator that delivers an extremely accurate clock signal to DACs, network audio players, and CD players, allowing them to perform at their ultimate best. The crystal oscillator at the heart of the CG-10M-X is an OCXO (Oven Controlled Crystal Oscillator), which is equipped with a thermostatic chamber to ensure high oscillation stability. In the new "X" Edition, the output buffer amplifier circuit, power supply circuit, and other details have been refined to achieve even higher sound quality. The chassis construction has also been redesigned with a semi-floating top panel and "Stressless Feet". Available in silver or black to match the Reference 500 Series with which it is paired.

Colour



### PRODUCT DETAILS

#### TEAC Reference OCXO – An Oven-controlled Crystal Oscillator

Since temperature has a huge effect on accuracy of the crystal oscillator, minimizing temperature changes and maintaining it at an ideal level are extremely important in order to generate an accurate clock signal. The CG-10M-X 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

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

ppm= $10^{-6}$  ppb= $10^{-9}$

**Frequency temperature characteristics:** A value of frequency fluctuation caused by temperature change

**Frequency precision:** An actual frequency range.

#### Four BNC Clock Output Connectors

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

### **Independent and Isolated Circuit Design**

Each circuit in the CG-10M-X – 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.

In the “X” edition, the buffer-amp circuit, the power supply circuit have been refined to achieve an even higher level of sound quality.

### **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 to the ideal temperature for accurate clock generation, power consumption of the oven decreases and the gauge points to zero, signaling to the user that the digital processing on the connected device is now controlled by an extremely accurate 10MHz clock signal.

Note: The oscillator is usually stable about 2 minutes after the power is turned on. However, at least 10 minutes are necessary for the clock to reach an ideal condition.

### **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.

### **3-Point Support Stressless Foot**

CG-10M-X newly adopts the original 3-point support “Stressless Foot”. This isolation foot enables stable installation without being affected by even the slightest distortion of the floor surface. Unlike conventional isolation feet, this foot was developed with the concept of creating a gap between the foot and the bottom chassis, allowing the foot to vibrate freely, resulting in a more natural sound. The machined steel foot is suspended from the bottom, providing a more natural and fuller sound in addition to the accurate imaging of the previous pinpoint spike foot design.

### **Semi-Floating Top Panel**

The CG-10M-X’s aluminum top panel features a new semi-floating construction. Instead of being firmly screwed to the chassis, the top is loosely mounted in the slots of the side panels for a superior open sound. With a clean, screwless top panel, the CG-10M-X blends elegantly with the high-end digital players it is paired with.

### **A Robust Full-Metal Chassis, Combined with an A4-Size Footprint**

Designed to match the successful Reference 500 Series, the CG-10M-X 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**

- TEAC Reference OCXO – An Oven-controlled Crystal Oscillator
- A Class-Leading Ultra High-Precision Clock that achieves frequency temperature characteristics within  $\pm 3\text{ppb}$ , and frequency precision within  $\pm 0.1\text{ppm}$
- Four BNC Clock Output Connectors (Gold-plated)
- Independent and Isolated Circuit Design
- Refined Buffer Amplifier Circuit and Power Supply Circuit for higher sound quality
- Toroidal-Core Power Transformer
- Oven Status Gauge for Clock Stability Monitoring
- 3-Point Support Stressless Foot
- A Robust Full-Metal Chassis, Combined with an A4-Size Footprint
- Semi-Floating Top Panel
- Available in Black and Silver to match the Reference 500 Series

## Included Accessories

- Power cord x 1
- Pads x 3
- Owner's Manual (including Warranty Card)

## Specs

### Product Attributes

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|----------------------|---------------|
| EAN:                 | 4907034225279 |
| Manufacturer number: | CG-10M-X/B    |
| Product weight:      | 4.6 kilograms |