

PRODUCT DATA SHEET



The CDG-4000 Countdown Generator has been designed to provide launch timing information for launch sites.

The CDG-4000 provides a countdown time output in IRIG CS5 IRIG 109-64 and an ASCII data output. The unit operates as a countdown generator synchronized to an IRIG B120 time code signal.

ASCII data output serial stream of timing information reduces the amount of wiring needed to provide launch timing readouts. It also provides flexibility in the type of timing information that is displayed on the readouts.

Display readouts are connected to a single pair of wires. The displays can be daisy chained. The individual time readouts are displayed by selecting an address for the desired time. UTC, T-count, L-count, Functional time, time in hold, time until restart, total hold time, hold time used, hold time remaining, start of window, end of window, first motion and predicted launch time and three programmable text messages can be displayed. Use with AN-216 and AN-816 ASCII Readers.

The operator has complete control over the operation of the generator using the front panel keyboard and LCD display. This is user friendly to allow operation by an inexperienced operator. A menu approach along with HELP screens guide the operator in performing tasks.

The unit can also be operated remotely using a serial port on a computer.

Technical Specifications

Inputs

IRIG-B123 1-9Vpp
2:1 to 4:1 modulation ratio,
10K ohm, transformer isolated.
BNC connector
UTC and lock status displayed on front
panel LCD.

First Motion 0 to 28 VDC, Isolated
Lest than 14 VDC, no FM
Greater than 14 VDC, FM
2 screw terminals
FM indicator displays status of FM input.

Count Inhibit 0 to 28 VDC, Isolated
Lest than 14 VDC, count
Greater than 14 VDC, inhibit count
2 screw terminals

Outputs

Countdown ASCII Data output serial stream of timing
information. Individual time readouts
selected with an address, UTC, T-count, L-
count, Functional time, time in hold, time
until restart, total hold time, hold time used,
hold time remaining, start of window, end of
window, first motion time and three
programmable text messages. Use with
AN-216 and AN-816 ASCII Readers.
4800,9600,19200 Baud 8N1
RS-422 output, Triax (BJ77)
RS-232 output, isolated BNC

IRIG CS5 Countdown Time
RS-422 output, Triax (BJ77)
RS-232 output, isolated BNC

IRIG 109-64 (FSK)
0 to 6 Vpp, adjustable
FSK, 1062.69 Hz Space, 1147.45 Hz Mark
BNC Isolated

Count Hold 0 volts = hold
+28 volts = counting
2 Screw Terminals

Form "C" relay contacts
Activated when counting
.1A @24 VDC
3 Screw Terminals

RS-232 Port RS-232 interface allows operation of all
controls from a remote computer. Optional
software is available for Microsoft Windows
operating systems.

Features

Generation of normally used launch sequence times such as
T-count, L-count, Functional time, time in hold, hold time
used, hold time remaining, predicted launch time.

4 Programmable built-in holds.

Start of window and end of window time entry.

Easy to follow menu system.

Help menus

Front Panel

Countdown .6" High LED digits.
Readout

LCD Display 4 line by 40 characters per line with
backlighting.

Keypad 4 x 4 keypad

Alarm Disable Disables count/hold alarm

FM Insert Protected pushbutton to manually insert
First Motion time.

FM Indicator Red LED, on when First Motion occurs.

Power On/Off Controls AC power to unit.

Power 115 +/- 10% VAC, 50-70 Hz

Size 19" Rack mount, 3.5"H x 12"D

Environmental 0-50 degrees C
10% to 90% non-condensing

Specifications subject to change without notice. 082306