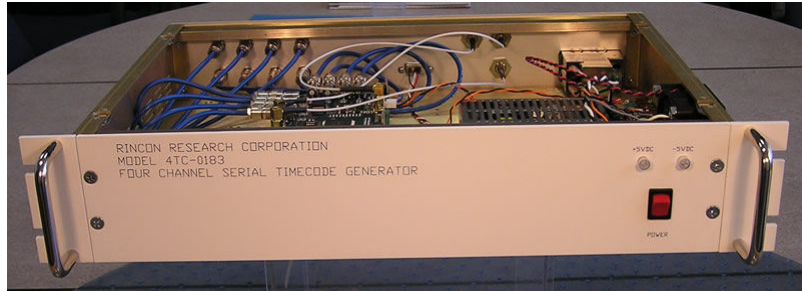


*The Rincon Research Corporation Model 4TC-0183 is a time code extractor that provides four serial time code outputs and four system clock outputs.*



## Features

- Standard 70-MHz IF inputs
- Band-limiting filters on each input channel reduce spurious responses
- 30-dB gain with <5-dB noise figure (36-MHz input bandwidth)
- 2V p-p output into 50-ohm impedance drives A/D inputs directly
- Provides up to four output ports for each input channel

## Description

It receives ASCII time code from a serial data output on a global positioning system (GPS) receiver, reformats the data into binary coded decimal (BCD), and stores the data for clock-synchronous output. Time code output is triggered by the falling edge of the 1 pulse-per-second (1 PPS) input provided by the GPS receiver. The formatter may be clocked at frequencies up to 100 MHz. The Barker code, found at the beginning of the output time code sentence, lags the falling edge of the 1 PPS input by 23 clock cycles.

The 4TC-0183 provides four serial time code outputs and four system clock outputs. A 1-PPS output signal is provided for testing and calibration purposes. The unit requires a National Marine Electronics Association (NMEA) –0183 serial time code input and a 1-PPS input, both from a GPS receiver. The 4TC-0183 also requires a sinusoidal input clock from an external signal generator.

## Specifications

### Input:

Maximum System Clock Frequency	100 MHz
System Clock Amplitude	50–250 mV p-p
1 PPS Level	LVTTTL or TTL
Serial Time Code Input Level	RS232 (RS-422 levels will damage the 4TC-0183)
Serial Time Code Input Format	NMEA-0183 standard ZDA sentence

### Output:

Number of Time Code Outputs	4
Number of System Clock Outputs	4
Time Code Output Levels	Negative ECL: -950 mV high; -1745 mV low
1-PPS Output Level	LVTTTL

### Physical Properties:

1-PPS Input/Output Connectors	BNC
Time Code Connectors	Trompeter TRS series
System Clock Input Connector	BNC
System Clock Output Connector	Trompeter TRS series
Dimensions	17.07"W x 3.47"H x 12.27"D 19-inch rack mount compatible
Weight	10 pounds (4.5 Kg)
Temperature, Operating	0–50C
Power (Standard Configuration)	85–132 Vac; 47–63 Hz; 60W

