CORDIN
SCIENTIFIC IMAGING

PROPORTIONAL TIME DELAY GENERATOR

Model 463

- **Dual Input Channels**
- **Four Output Channels**
- **Individual Channel Display**
- **Accurate:** 5 ns Time Interval Measured Accuracy
- **High Reliability**

The **Cordin Model 463** Dual Channel Proportional Time Delay Generator was developed by Cordin as an aid to synchronizing high speed photographic equipment to rapidly moving objects. It can automatically adjust the delay time for the speed of a moving object and maintain a fixed compensating pre-trigger time to offset inherent delays in devices to be triggered. Uses of the Model 463 extend beyond photography to any event requiring synchronization to moving objects in the microsecond to millisecond range.

The Model 463 measures a time interval, either between two trigger inputs, or between successive triggers on a single input. It calculates a *time zero* based on this measured interval, multiplied by a user-supplied ratio. It then generates four independent outputs at a fixed time ahead of the calculated *time zero*, based on the user input for each channel.

Applications include the triggering of lights and camera exposures which have a known delay time, exactly at the right instant to synchronize with a selected position of a projectile or rotating mechanism, even when the speed of the object is unknown. It can also be used to trigger strobes, oscilloscopes, or other measurement instruments at a precise point in the travel of a repeating mechanism with a non-constant speed. With the Model 463, capture of high speed events with a single-frame camera is made simple. With Cordin's multi-frame cameras, the Model 463 allows accurate initiation of a sequence of high-speed frames at a chosen point.

 | 2460 South Main, Salt Lake City, Utah 84115 USA | +1.801.972.5272

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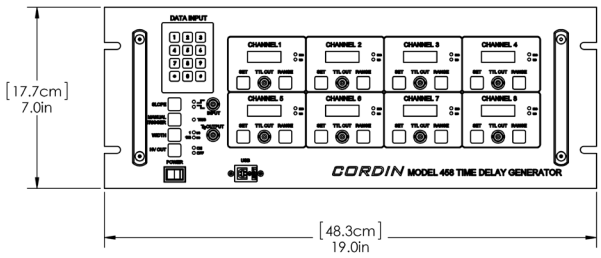
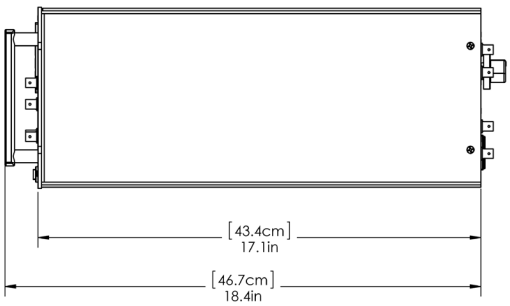
SPECIFICATIONS

Input Channels	Two
Output Channels	Four
Range	1 to 999,999 microseconds
Proportional Delay Ratio	0.1 to 99.9
Pretrigger Delay Range	0.1 to 999,999 µsec
Internal Clock	200 MHz
Display Accuracy	0.1 µsec
Interval Meas. Accuracy	5 ns
Proport. Delay Accuracy	0.1 µs x Ratio Value, 0.1 µs min.

Trigger Input	+5.5V max, 100 ns min., +2.0V threshold rising edge, +0.8V threshold falling edge
Output	100 µs duration, +4.9V into high-Z input, 32 mA max current
Power Input	110-240 VAC 50-60Hz, 25 Watts
Dimensions	7.0" (H) x 19.0" (W) x 17.0" (D)
Weight	5 kg (11 lbs.)





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