# RG58A/U Coax Delay

DB64 — RG58A/U coax delay



- · Switch controlled time delays
- · 0 to 63.5 ns delay range
- · 0.5 ns resolution
- · Low reflections and feed-through
- · DB64 ... \$695 (U.S. list)

The DB64 Coax Delay Box provides switch-controlled delays from 0 to 63.5 ns with 0.5 ns resolution. Applications include the timing of photomultiplier coincidences, set-up of time-to-amplitude converters, adjustment of signal phase, or any application which requires high-bandwidth analog delays.

The interchangeable inputs/outputs are on BNC connectors. Internally, the delay line segments consist of accurate lengths of RG58A/U coax cable with 50  $\Omega$  characteristic impedance. DPDT switches are used to insert or remove delay segments. Careful component selection, mechanical design, and PCB layout ensure low reflections and low switch feed-through.

Two DB64s can be mounted side-by-side in a 19" rack using the RM1U rack mount accessory. A chassis lug is provided on the rear panel as a safety ground.

## **DB64 Coax Delay**

## **Specifications**

### Signal

 Maximum voltage
  $250 \, \text{Vrms}$  

 Maximum current
  $2 \, \text{A}$  

 Connectors
 BNC

 Impedance
  $50 \, \Omega$  

 Signal reflection
  $<3 \, \%$  

 Switch feed through
  $<0.8 \, \text{pF}$ 

#### **Delay**

Delay line cable RG58A/U (Belden 8259)

Insertion delay 2.5 ns
Delay range 0 to 63.5 ns
Delay resolution 0.5 ns

Delay error <100 ps + 0.5 % of delay

#### General

Dimensions  $8.3" \times 1.5" \times 8.0"$  (WHL)

Weight 2 lbs.

Warranty One year parts and labor on defects

in materials & workmanship

