

RG58A/U Coax Delay

DB64 — RG58A/U coax delay



DB64 Coax Delay

- **Switch controlled time delays**
- **0 to 63.5 ns delay range**
- **0.5 ns resolution**
- **Low reflections and feed-through**

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 Ω 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.

Specifications

Signal

Maximum voltage	250 Vrms
Maximum current	2 A
Connectors	BNC
Impedance	50 Ω
Signal reflection	<3 %
Switch feed through	<0.8 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

Ordering Information

DB64	Coax delay box
RM1U	1U rack mount kit