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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

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 timeto-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.

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Specifications

Signal

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

Delay

RG58A/U (Belden 8259) Delay line cable

Insertion delay $2.5\,\mathrm{ns}$ Delay range 0 to 63.5 ns Delay resolution $0.5\,\mathrm{ns}$

Delay error <100 ps + 0.5 % of delay

General

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

Weight 21bs.

Warranty One year parts and labor on defects

in materials & workmanship

