RG58A/U Coax Delay

DB64 — RG58A/U coax delay

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” × 1.5” × 8.0” (WHL)
- Weight: 2 lbs.
- Warranty: One year parts and labor on defects in materials & workmanship

Ordering Information

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>DB64</td>
<td>Coax delay box</td>
<td>$695</td>
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<tr>
<td>RM1U</td>
<td>1U rack mount kit</td>
<td>$100</td>
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*DB64 ... $695 (U.S. list)*