



Avolites Ltd
 184 Park Avenue
 London
 NW10 7XL
 England

Switchboard +44 (0) 208 965 8522
 Sales Direct +44 (0) 208 955 9220
 Service Direct +44 (0) 208 955 9230
 Support Direct +44 (0) 208 965 8522
 Fax +44 (0) 208 965 0290

Circuit Board Modification – Encoder Filter

Overview: Spurious glitches output by the Bourns encoder (08-03-0250) require additional filters to be added. Affected encoders have a date code of 2144 and later.

Components: 6 x Capacitor – 10nF 06-03-0147 (1206)
 3 x Resistor – 10k 06-01-1311 (1206)

<p>Product(s):</p>	<p>Titan Mobile & Quartz MMB 1201-5015CA & MMB 1201-5015CB</p>
<p>Existing Circuit:</p>	<p>The diagram illustrates the existing circuit for three Bourns encoders (WH1, WH2, WH3). Each encoder has five pins: VCC (pin 2), GND (pin 4), and three signal pins (A, B, E). The signal lines are labeled WH-CLK1, WH-DAT1, WH-CLK2, WH-DAT2, WH-CLK3, and WH-DAT3. The circuit includes pull-up resistors (R20, R26, R23, R33, R36, R37) and capacitors (C26, C27, C33, C34, C36, C37) connected to the signal lines. A 22uF SMD capacitor (C32, C35, C38) is connected to the VCC pin of each encoder. The diagram also indicates the locations of components that are not fitted (R19, R24, R21, R22, R34, R35, C26, C33, C36).</p>
<p>Circuit Replacement Location:</p>	<p>Encoder A: 10nF Capacitor replacement at location R20 and R26. 10k Resistor replacement at location C26.</p> <p>Encoder B: 10nF Capacitor replacement at location R23 and R33. 10k Resistor replacement at location C33.</p> <p>Encoder C: 10nF Capacitor replacement at location R36 and R37. 10k Resistor replacement at location C36.</p>

