

Aivon Oy

Manual

BoBoX 3

BreakOutBoX with grounding

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BoBoX 3



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BoBoX 3

BreakOutBoX with grounding

A ivon BoBox 3 is a versatile breakout box for separating and filtering signals from a multipin Fischer connector to BNC connectors. Each line can be separately grounded and optional filtering can be added inside the unit.

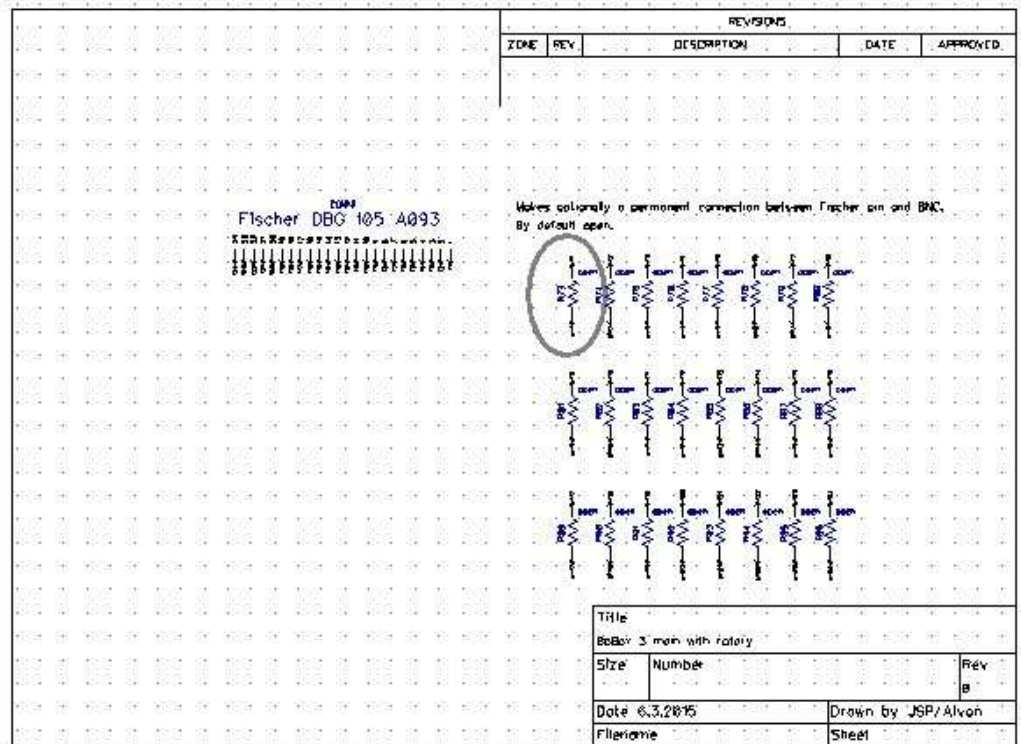
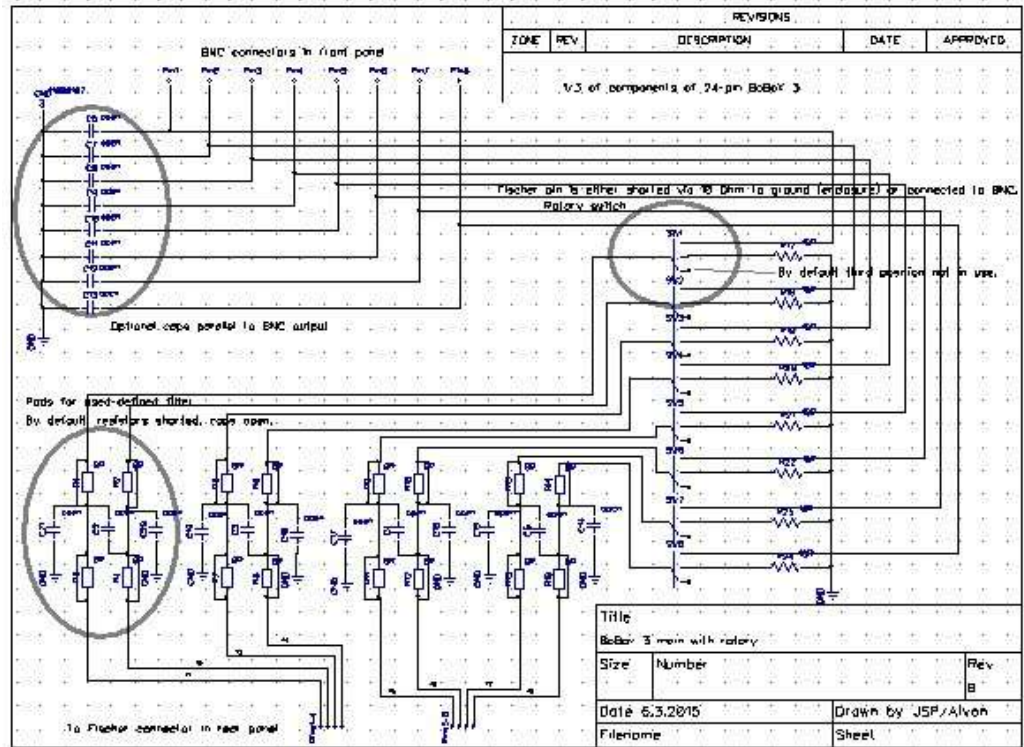


Main features

- User selectable grounding for each line. Either:
 - Fischer-end of the line is connected to BNC *or*
 - Fischer-end of the line is connected to ground = enclosure.
 - by default the grounded line is not simultaneously connected to BNC
 - optionally, BNC can be permanently fixed to line regardless of state of grounding
- On-board RC-filter pads for user-defined components
 - by default no filtering i.e. $R = 0$ Ohms, $C = \text{open}$.
 - R and C surface-mount size 0603
- Output connector Fischer DGP 105 A093 or a custom one.
 - mates with S 105 A 093, output cable available
- 19" rack mountable.

Note: this is a low-frequency RC-filtering unit. User should filter out higher frequencies for example with ferrite beads in the output cable if low noise operation is required.

Basic schematic



Output connection

In rear panel of BoBoX 3 there are engravings to mark pin numbering and a Fischer DGP 105 A093 connector for signals out.



Installation of filter components

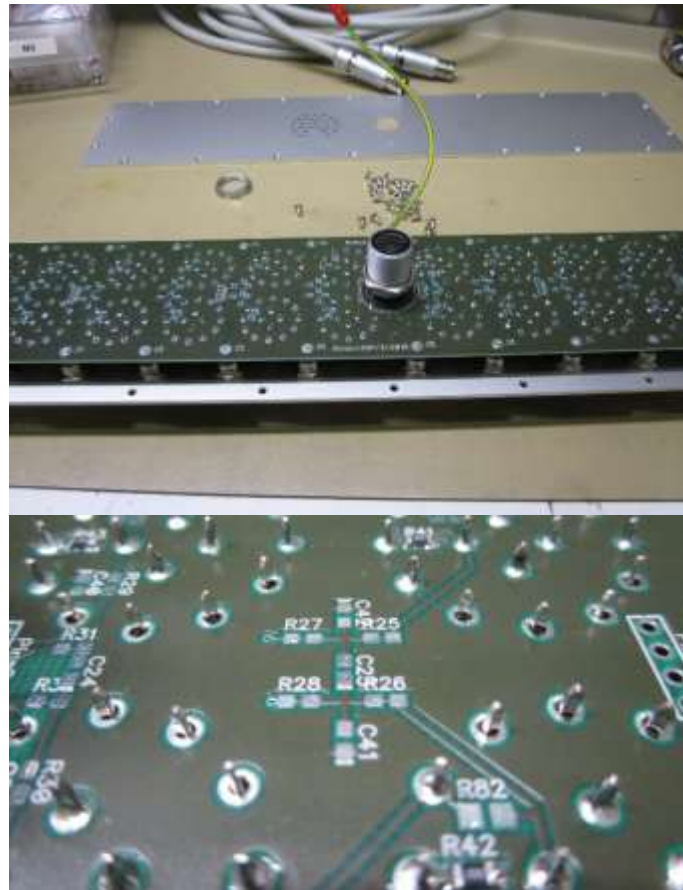
- 1) Remove all M3 screws from the rear panel and the decorated nut



- 2) Open rear panel and undo the grounding cord from the rear panel



- 3) You can also remove the metallic center piece by removing all its screws from the front panel size. This is not necessary for soldering the filter components.



- 4) Locate the pads for filter components. See separate schematic for components names. Resistor sites are shorted between its pads on pcb and the user has to **cut the short** using a sharp blade **prior to soldering** a desired resistor. Use size 0603 SMD components.

Specifications

Absolute maximum ratings

Voltage	± 25 V
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Connectors

Input	BNC
Output	Fischer DGP 105 A093 or custom

Enclosure

Material	Anodized aluminum.
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Physical dimensions

Enclosure dimensions (Width x height x depth)	483 mm x 90 mm x 65 mm
Weight	1.55 kg

Document revision history

Date	Version	Description	Author
8.5.2015	0.1	Initial draft	JSP