

MDT-100B

Screw/BNC MicroDAQ terminal datasheet

MDT-100B

February 2018. Rev 1.0

Embedded
Solutions

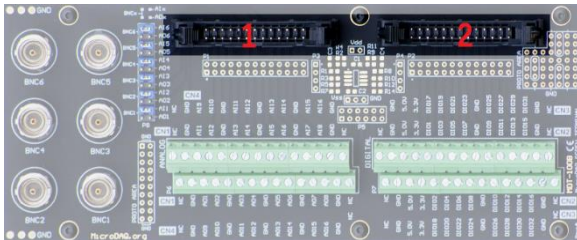
MicroDAQ MDT-100B Screw/BNC terminal

Description

The MDT-100B is ideal for simplifying connections between your MicroDAQ device and another laboratory, test, and production equipment. It is compatible with all MicroDAQ models – E1000, E1100 and E2000. One MDT-100B connector can be used to access up to two MicroDAQ CN connector – one analog and one digital. The MDT-100B connectors can be used to connect signals with BNC and screw connectors. It also provides two prototyping areas which allow a user to add additional circuitry with passive components and dual operational amplifier for signal conditioning.

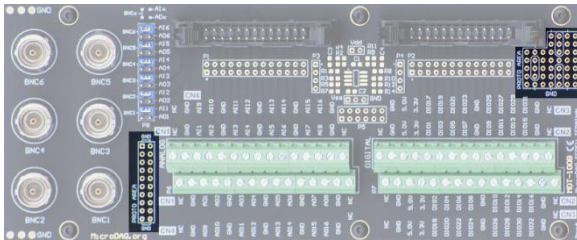
MDT-100B connectors

Flat ribbon cable connectors



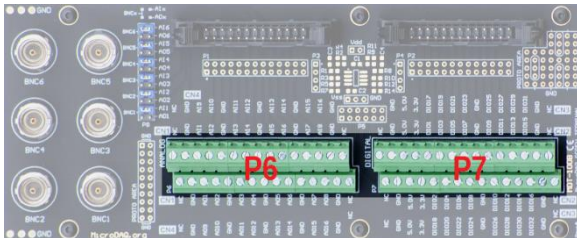
Two 26-pin connectors are used to connect MDT-100B board with MicroDAQ device. The first connector shall be connected to MicroDAQ analog connectors – CN1 or CN4, the second one shall be connected with MicroDAQ digital signals connector CN2 and CN3.

Prototyping area



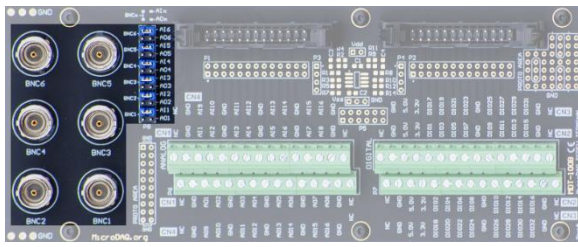
The MDT-100B functionality can be expanded by adding user circuits. A user can use two prototyping areas which allow soldering additional components.

Screw terminal block connectors



The MDT-100B features two 2-row screw terminal blocks with 30 positions each. A 26-16AWG wire can be used to connect external signal/sources. The position marked as an NC is not connected and can be used as a join point for wires. The P6 connector can be used to access CN1 and CN4 MicroDAQ connectors while P7 connector can be used to access digital signals – C2 and C3 MicroDAQ connectors.

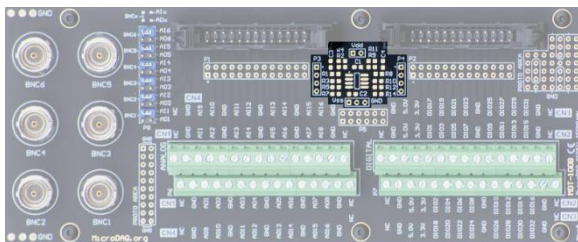
BNC connectors



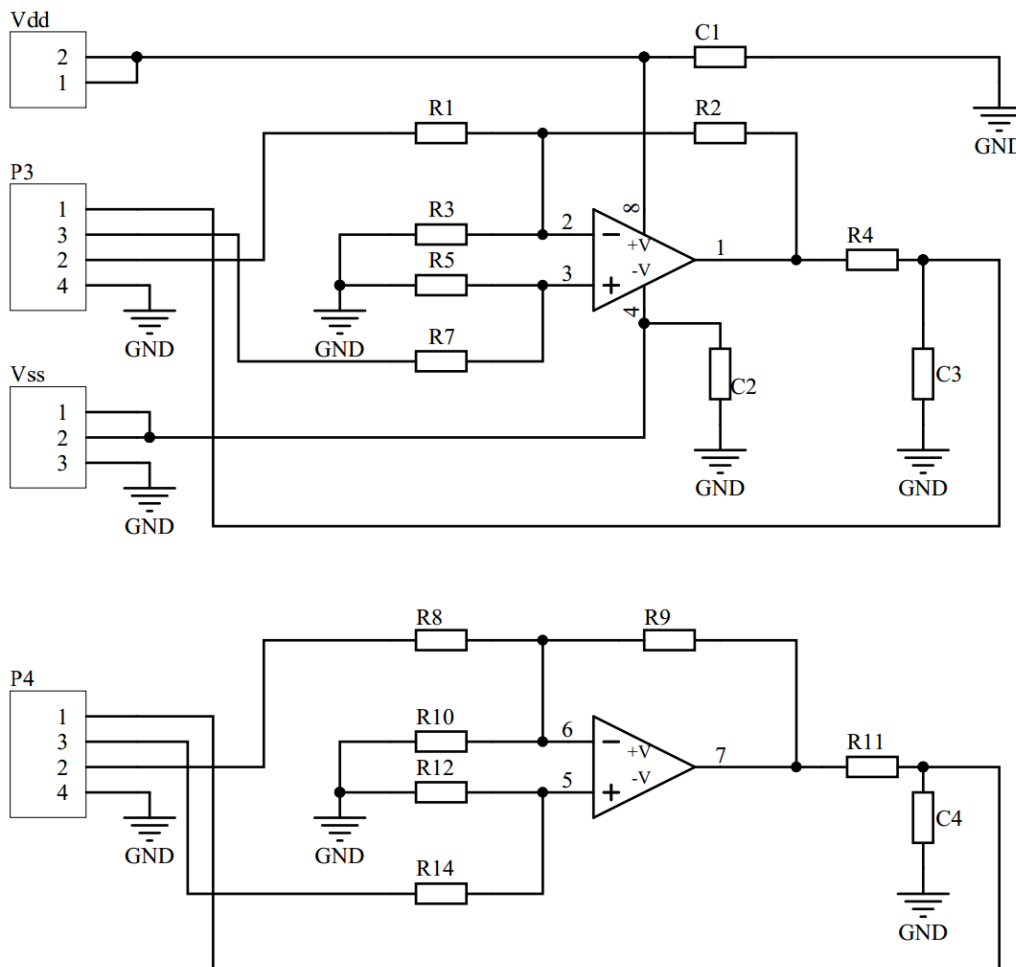
The MDT-100B screw terminal connector is equipped with 6 BNC connector which can be used to access MicroDAQ analog inputs and outputs.

Individual BNC connector can be routed to analog input or output by changing jumper position. BNC connector can also be used for user-defined signals wiring with other MDT-100B board sections.

Operational amplifier prototyping area



The MDT-100B allows adding custom circuitry for signal conditioning. A prototyping area on MDT-100B enables a user to use dual channel operation amplifier in different configurations depending on used passive components.



Schematic 1: Operational amplifier schematic

Dimensions and layout

