



Datasheet

MK-LIA-3-A

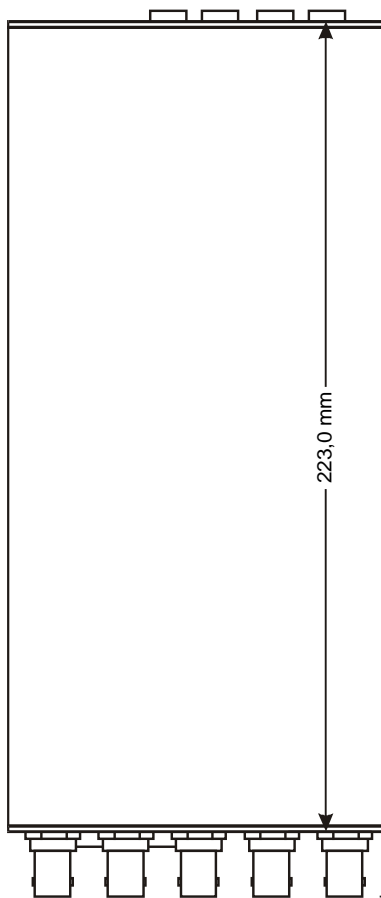
**Housing for Lock-In-Amplifier
Series LIA-BV(D)-150**

Features

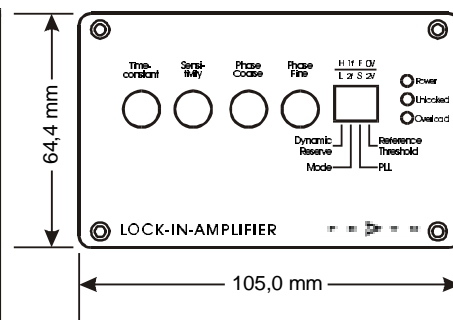
- High-Quality Aluminium Housing
- BNC Connectors for Input and Output Signals
- Standard FEMTO Connectors for Power Supply and Remote Control
- Adaptable Signal-Connector Configuration

Dimensions

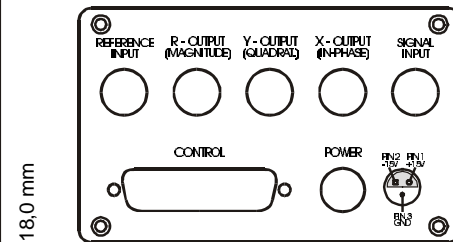
Top View



Front View



Back View



Case Material:
Al, natural anodised

DZ01-4031-10

Specifications


General

If the housing is ordered together with a Lock-In-Amplifier series LIA-BV(D)-150, FEMTO will do the installation, wiring and testing. The Lock-In-Amplifier board can be installed by the user. Insert the Lock-In-Amplifier board into the slot. All connections are made by the internal adapter card. For detailed specifications of the Lock-In-Amplifier please use the LIA-BV-150 Series documentation.

Connector Options

The BNC-connector configuration can be easily changed by setting electrical jumpers at the internal I/O-adapter card. The standard and optional connector configuration is described below.

Housing for Lock-In-Amplifier Series LIA-BV(D)-150

Connectors (Standard Configuration)	<p>Signal Input BNC (differential, shield connected to –Vin)</p> <p>X-Output BNC</p> <p>Y-Output BNC (only for Dual Phase Models LIA-BVD)</p> <p>R-Output BNC (only for Dual Phase Models LIA-BVD)</p> <p>Reference Input BNC</p> <p>Power Supply LEMO Series 1S, 3-pin fixed Socket Pin 1: + 15V Pin 2: - 15V Pin 3: GND</p> <div style="text-align: center;">  </div> <p>Control Port Sub-D 25-pin, female, Qual. Class 2 Pin 1: +12V (Stabilized Power Supply Output) Pin 2: -12V (Stabilized Power Supply Output) Pin 3: AGND (Analog Ground) Pin 4: +5V (Stabilized Power Supply Output) Pin 5: X-Output Pin 6: Overload Status Output Pin 7: Unlocked Status Output Pin 8: Disable Local Switch Control Input Pin 9: DGND (Ground f. Digital Control Pin 8 - 25) Pin 10: Dynamic Mode (DYN0) Pin 11: Sensitivity (SEN0) Pin 12: Sensitivity (SEN1) Pin 13: Sensitivity (SEN2) Pin 14: Time Constant Slope (TCSL) Pin 15: Time Constant (TC0) Pin 16: Time Constant (TC1) Pin 17: Time Constant (TC2) Pin 18: Phase Shift (PH0) Pin 19: Phase Shift (PH1) Pin 20: Phase Shift (PH2) Pin 21: Phase Shift (PH3) Pin 22: Phase Shift (PH4) Pin 23: Phase Shift (PH5) Pin 24: Phase Shift (PH6) Pin 25: Phase Shift (PH7)</p>
Connector Wiring Options	<p>General</p> <p>The BNC-connector configuration can be easily changed by setting electrical jumpers at the internal I/O-adapter card. Disconnect the power supply and open the case by loosening the two upper screws at the case front and rear side. Please pay attention to the ground connection at the backplane. Now open the case by lifting the top. The jumper options and functions are described in the following table.</p>



Electro Optical Components, Inc.

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Housing for Lock-In-Amplifier Series LIA-BV(D)-150

Connector Wiring Options,
Jumpers on internal
Adapter Board

Input Connectors (JP1)

Input wiring

Jumper installed

IN A = Voltage Input (Single Ended, AC)	" +V-IN → IN A" " GND → IN A/SHLD" " -V-IN → IN A/SHLD"
IN A = Voltage Input (Differential, AC)	" +V-IN → IN A" " -V-IN → IN A/SHLD"
IN A / IN B = Voltage Input (2 BNC Differential, AC) (OUT A cannot be used)	" +V-IN → IN A" " GND → IN A/SHLD" " -V-IN → IN B"
IN A = Current Input (Single Ended)	" C-IN → IN A" " GND → IN A/SHLD" " -V-IN → C-OUT"

Output Connectors (JP2)

Output wiring

Jumper installed

OUT A = X-Output	"X → OUT A" (JP1) "USE OUT A/NO IN B"
OUT B = X-Output	"X → OUT B"
OUT A = Y-Output	"Y → OUT A" (JP1) "USE OUT A/NO IN B"
OUT B = Y-Output	"Y → OUT B"
OUT C = Y-Output	"Y → OUT C"
OUT A = R-Output	"R → OUT A" (JP1) "USE OUT A/NO IN B"
OUT B = R-Output	"R → OUT B"
OUT C = R-Output	"R → OUT C"
OUT B = Monitor Output	"MON → OUT B"
OUT C = Monitor Output	"MON → OUT C"
OUT B = Unlocked Output	"UNL → OUT B"
OUT C = Unlocked Output	"UNL → OUT C"
OUT B = Overload Output	"OVL → OUT B"
OUT C = Overload Output	"OVL → OUT C"
OUT C = Reference Output	"REF-OUT → OUT C"

Reference Connector (JP3)

Reference wiring

Jumper installed

(Reference Output only if
optional Oscillator Module
is installed)

REF = Reference Input	"REF-IN → REF" (2 Jumper)
REF = Reference Output (Reference Output connected to Ref. Input)	"REF-OUT → REF-IN" (2 Jp.) "REF-IN → REF" (2 Jumper)
REF = Refer. Sync. Input	"REF-SYNC → REF" (2 Jp.) (use OUT C as Reference Output)



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