

USER'S GUIDE

±15-V Current-Limited Power Supply

Model 0901



NEW FOCUS[®]
Smart Optics for Networks[™]

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Warranty

New Focus, Inc. guarantees its products to be free of defects for one year from the date of shipment. This is in lieu of all other guarantees, expressed or implied, and does not cover incidental or consequential loss.

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Contents

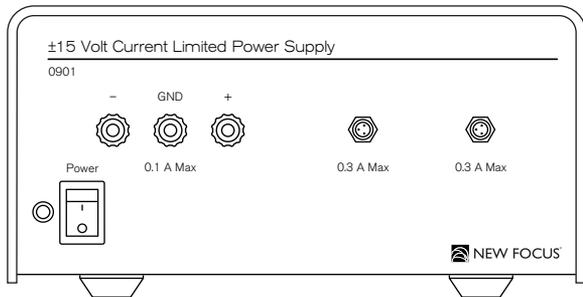
Operation	5
Introduction	5
Getting Started	5
Characteristics	7
Customer Service	8
Technical Support	8
Service	8
Appendices	9
Appendix I: Changing the AC Voltage Selection	9
Appendix II: Fuses	11
Appendix III: Pin-Outs	11
Appendix IV: Cables	12

Operation

Introduction

The New Focus Model 0901 Power Supply is a triple-output, ± 15 -V DC power supply. Each of the outputs is current limited: the banana-jack output to 100 mA and the two micro-connector outputs to 300 mA. While the supply can be used as a general-purpose supply, it is primarily intended for use with those New Focus products that require a ± 15 -V power supply.

Figure 1:
Model 0901
front panel



Getting Started

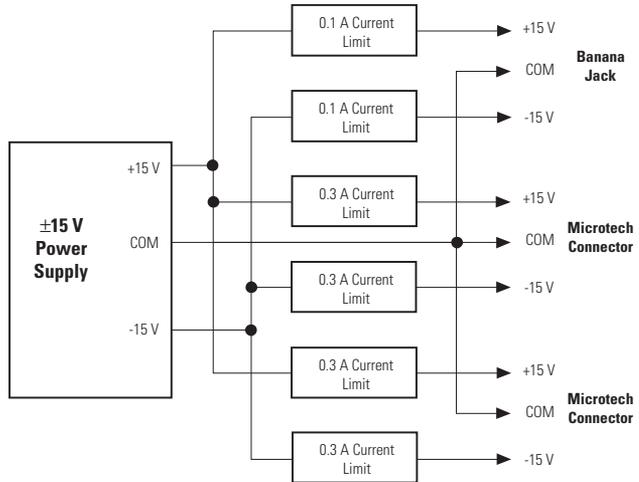
The three ± 15 -V outputs of the Model 0901 are all derived from a common, 0.8-A linear supply, but are independently current limited, as shown in Figure 2.

Since each output is independently limited, the voltage on each output differs slightly. All three $\pm 15\text{-V}$ outputs will, however, be within $\pm 3\%$ of $\pm 15\text{ V}$.

Note:

Please refer to "Appendix IV: Cables" on page 12 for instructions in connecting the Model 0901 to other New Focus products.

Figure 2:
Block diagram
of the Model
0901 power
supply



Characteristics

Model #	0901
Output Voltages	$\pm 15\text{ V}$ ($\pm 3\%$)
Outputs (3 total)	Microtech Connector (2) Banana Jack (1)
Typical Current Limit (Microtech connector)	300 mA
Typical Current Limit (banana-jack connector)	100 mA
Output Impedance	$< 6\ \Omega$

Customer Service

Technical Support

Information and advice about the operation of any New Focus product is available from our applications engineers. For quickest response, ask for “Technical Support” and know the model and serial numbers for your product.

Hours: 8:00–5:00 PST, Monday through Friday (excluding holidays).

Toll Free: 1–866–NUFOCUS (1–866–683–6287)
(from the USA & Canada only)

Phone: (408) 284–6808

Support is also available by fax and email:

Fax: (408) 980–8883

Email: techsupport@newfocus.com

We typically respond to faxes and email within one business day.

Service

In the event that your New Focus product malfunctions or becomes damaged, please contact New Focus for a return authorization number and instructions on shipping the unit back for evaluation and repair.

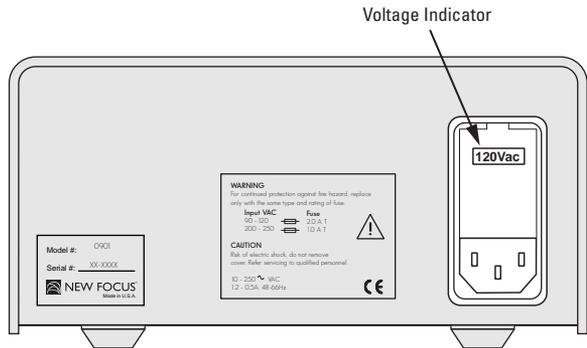
Appendices

Appendix I: Changing the AC Voltage Selection

The Model 0901 can operate at 100, 120, 220, or 240 V AC with AC frequencies of 47–63 Hz. The unit is configured at the factory for the standard AC voltage in the purchaser's country.

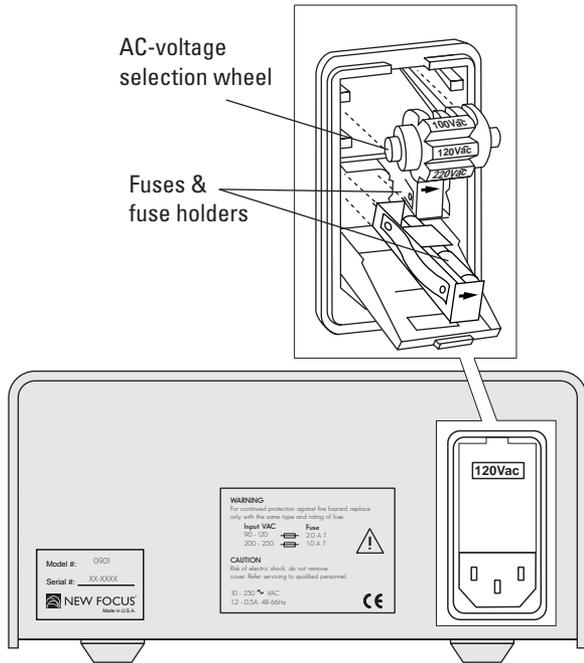
To check the voltage setting, look at the voltage indicator on the AC power module on the back of the power supply.

Figure 3:
AC power
module &
voltage
indicator



1. Make sure the power supply is turned off.
2. Disconnect the AC power cord.
3. Open the cover of the power module using a small blade screwdriver or similar tool.

Figure 4:
Power module
with the cover
open



4. Remove the AC-voltage selection wheel from the unit.
Do not attempt to rotate the wheel while it is still in the power module; the wheel must be removed, turned, and then reinserted for proper operation.
5. Reinsert the wheel in the module so the desired Ac voltage can be viewed in the power-module window.
6. Ensure the proper fuses for the new AC voltage are installed (see “Appendix II: Fuses”).
7. Close the power-module cover.
8. Verify the proper voltage is showing through the module window.
9. Reconnect the AC power cord.

Appendix II: Fuses

The AC power module requires two 5x20-mm, 250-V, fast fuses. The current ratings of the fuses should be as follows:

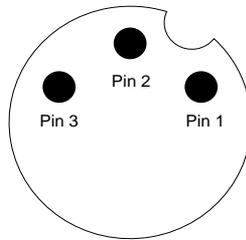
AC Voltage	Fuse Rating
100 V	0.5 A
120 V	0.5 A
220 V	0.25 A
240 V	0.25 A

Appendix III: Pin-Outs

The front-panel connector pin-outs are as follows:

Line	Banana Jack	Microtech Connector
+15 V	Red	Pin 1
COM	Green	Pin 2
-15 V	Black	Pin 3

Figure 5:
Pin-out of
Microtech
connector (as
viewed from
front panel)



Appendix IV: Cables

New Focus offers two types of cables for use with the Model 0901:

Model #	Description
0921	Cable, 3 banana plugs (male) to Microtech connector female, 1 meter
0922	Cable, Microtech connector female to Microtech connector female, 1 meter

Connect a Model 0921 cable to one of the 0.3-A outputs to provide banana-jack outputs for general laboratory use. This cable should *not* be used to drive a New Focus photoreceiver or amplifier from the Model 0901's 0.1-A banana-jack output since it provides insufficient current for New Focus products.

The colored male-banana plugs on the Model 0921 cable follow the color-coding convention listed on page 11 for the Model 0901 banana jacks: red is +15 V, green is common, and black is -15 V. This cable can also be used with a power supply other than the Model 0901 to power a New Focus product.

When powering a New Focus product with the Model 0901, use a Model 0922 cable on one of the supply's 0.3-A Microtech connector outputs.