

INSTRUCTION MANUAL

DIGITAL AMMETER

MODEL DOM 152

KIKUSUI ELECTRONICS CORPORATION

862095

The Model DOM152 Digital Ammeter is an optional ammeter for the Model PLZ152W Electronic Load. This manual covers the installation and adjusting procedures of the ammeter.

1. Specifications

Model	DOM152
Maximum Effective Display	1999
Measuring Accuracy	$\pm(0.5\% \text{ of rdg} + 0.1\% \text{ of FS} + 1 \text{ digit})$ *
Auto-range Function	Automatic switchover between HIGH range and LOW range Maximum LOW range display: 19.00 A Maximum HIGH range display: 199.9 A
Input Voltage Ranges	Approx. 0.3 V for display 19.99 Approx. 3.0 V for display 199.9
Ambient Temperature Range	0 to 40°C (32 to 104°F)
Ambient Humidity Range	10 to 90% RH
Allowable Voltage (Common Mode Voltage)	$\pm 5\text{V DC}$ (between input terminal and power supply)
Supply Voltage	10V AC \times 2 (with center tap)
Dimensions	61 W \times 56 H \times 97 D mm (2.40 W \times 2.20 H \times 3.82 D in.)
Weight	Approx. 90 grams (3.2 ounces)
Accessories	Cable with 3P connectors 1 Cable with 2P connectors 1 Nuts, M2.6 2 Washers, M2.6 2 Washers, spring, M2.6SW 2 Screw assembly, M3 \times 0.5 \times 6L ... 1 Instruction manual 1 copy

* 23°C \pm 5°C, RH 85% or less

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2. Removing the Case of the PLZ152W

Remove the three screws from the top and four screws from the sides (see Figure 2.1). Remove the case and set it aside.

Note: Pay attention not to misplace the screws. When installing the case, be sure to use the screws that have been removed. Do not use other screws.

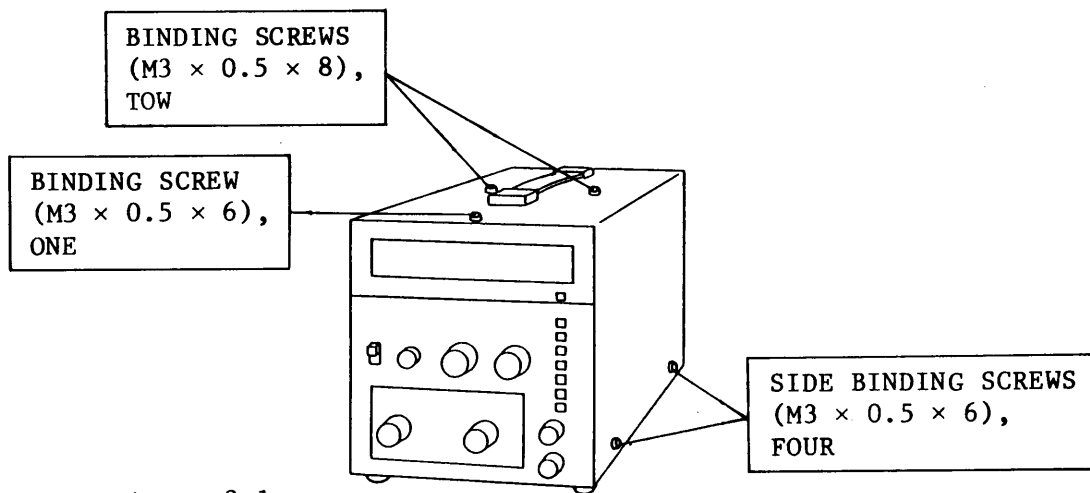


Figure 2.1

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3. Installing the DOM152 Digital Ammeter

When the case of the PLZ152W is removed, the space for the DOM152 and two mounting-screws (M2.6) and a mounting bracket as shown in Figure 3.1 are accessible.

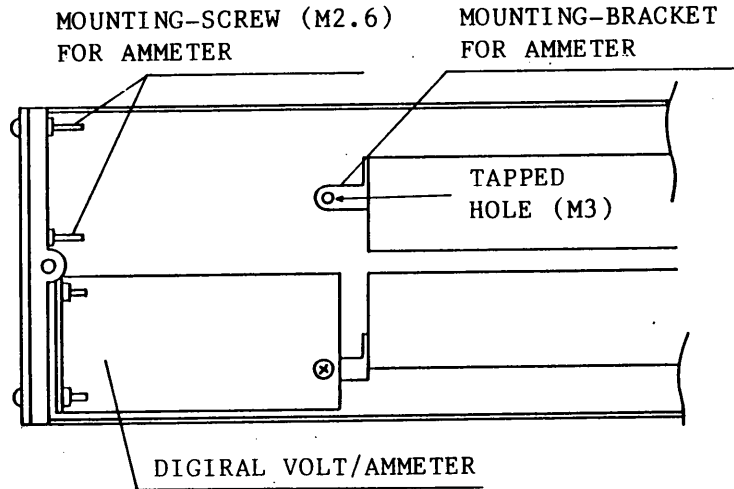


Figure 3.1

Fix the DOM152 to the mounting-screws (M2.6) and bracket using the accessory screws, washers and nuts.

4. Connecting the DOM152 Digital Ammeter

Connect the DOM152 Digital Ammeter to the Digital Volt/Ammeter of the PLZ152W with the accessory cables as shown in Figure 4.1

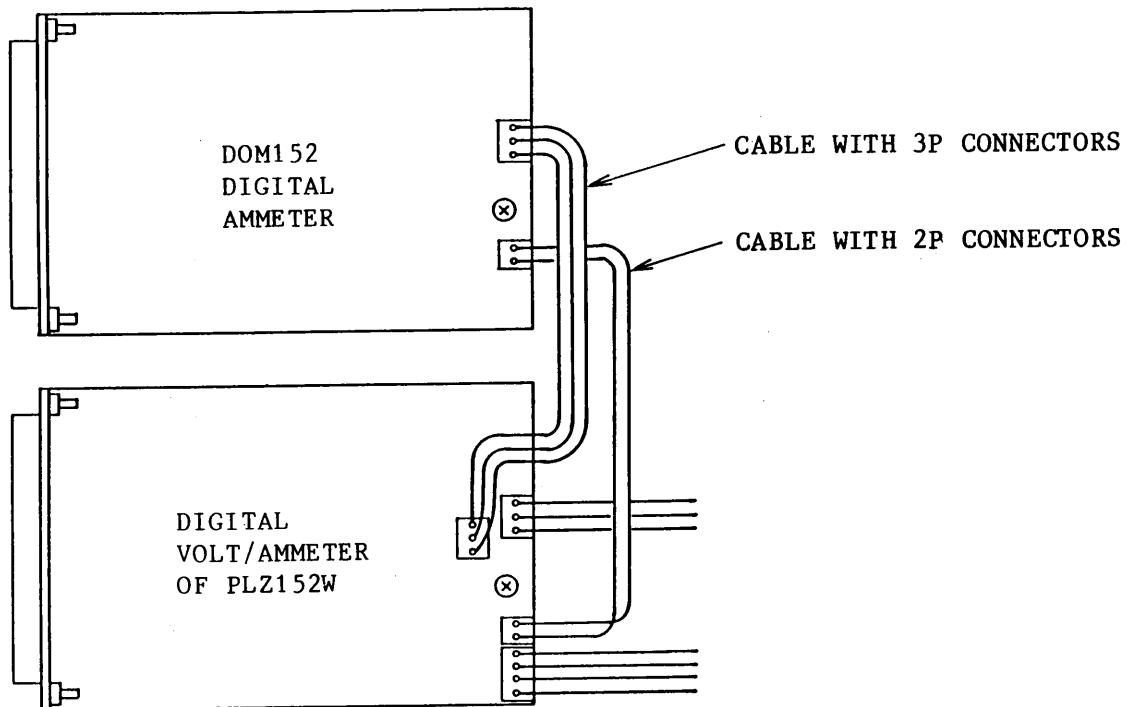


Figure 4.1

5. Adjusting the DOM152 Digital Ammeter

The DOM152 is shipped after adjustment is complete at the factory. However, to meet the performance specification as used for a particular model of electronic load, fine adjustment of the DOM152 is necessary. To adjust the DOM152, proceed as described below.

Turn on power of the PLZ152W and confirm that the DOM152 installed in the PLZ152W reads 0.00A \pm 1dig. (See Figure 5.1)

Set the Volt/Ammeter of the right hand side on the front panel to the Ammeter mode. Adjust the sensitivity of the DOM152 so that it reads the same value as the ammeter of the right hand side does.

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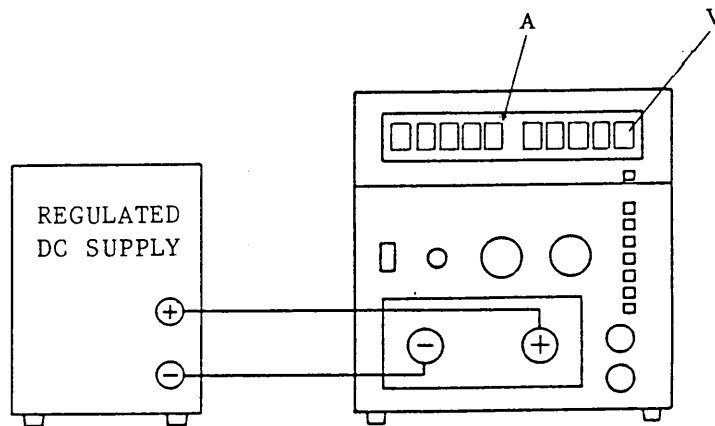


Figure 5.1

First, calibrate the 18.00A point. Prepare a test setup as shown in Figure 5.1 by connecting to the PLZ152W a regulated DC power source which can supply 30 A or more. Feed from the DC current source a current of 18.00 A as read on the meter of the right hand side. Adjust RV3 (see Figure 5.1) so that the DOM152 reads 18.00 A.

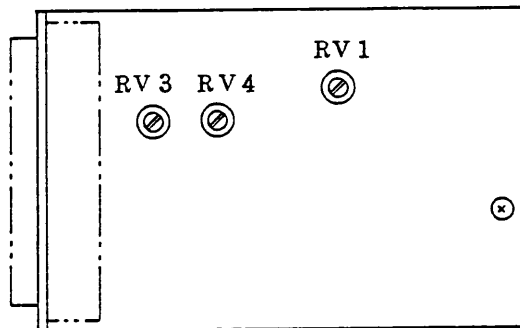


Figure 5.2

Next, calibrate the 30.0A point. Adjust the current to 30.0 A as read on the meter of the right hand side. Adjust RV4 so that the DOM152 reads 30.0 A.

Next, adjust RV1 so that the measuring ranges are switched over at 19.00 - 19.50 A.

By the above procedure the adjustment for the DOM152 is complete. Change the Volt/Ammeter of the right hand side to the voltmeter mode. Now you can read both voltage and current of the PLZ152W at the same time.

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