
**User's
Manual**

**700938
Power Supply**

Introduction

Thank you for purchasing the 700938 Power Supply. This Instruction Manual contains useful information about the instrument's functions and operating procedures as well as precautions that should be observed during use. To ensure proper use of the instrument, please read this manual thoroughly before operating it. Keep the manual in a safe place for quick reference whenever a question arises.

Revisions

1st Edition : May 1999
2nd Edition : January 2001
3rd Edition : November 2005

The following symbol marks are used to attract the operator's attention.



Affixed to the instrument, indicating that for safety, the operator should refer to the User's Manual.

WARNING

Describes precautions that should be observed to prevent the danger of injury or death to the user.

CAUTION

Describes precautions that should be observed to prevent damage to the instrument.

Note

Provides information that is important for proper operation of the instrument.

Checking the Contents of the Package

If the wrong instrument or accessories have been delivered, if some accessories are missing or if they appear abnormal, contact the dealer from which you purchased them.

700937 Current Probe Main Body

Standard Accessories

- Instruction manual 1
- Power cord 1
- Spare fuse (in the fuse holder) 1
- 100 V, 120 V : F1.0 AL/250 V, 20 mm × 5 mm dia.
- 220 V, 240 V : F0.5 AL/250 V, 20 mm × 5 mm dia.

Safety Precautions

This instrument is an IEC safety class I instrument (provided with terminal for protective grounding).

The following general safety precautions must be observed during all phases of operation, service and repair of this instrument. If this instrument is used in a manner not specified in this manual, the protection provided by this instrument may be impaired. Also, YOKOGAWA Electric Corporation assumes no liability for the customer's failure to comply with these requirements.

The following symbols are used on this instrument.



To avoid injury, death of personnel or damage to the instrument, the operator must refer to an explanation in the User's Manual or Service Manual.



Functional grounding terminal (This terminal should not be used as a "Protective grounding terminal".)



Alternating current



ON (power)



OFF (power)

Precautions

In order to ensure safe operation and to obtain maximum performance from the unit, observe the cautions listed below.



WARNING

This unit is designed to be grounded through the three-wire power cord provided. In order to prevent electric shock, etc., connect this power cord to a grounded three-prong power receptacle.



CAUTION

- Do not subject the unit to vibrations or shocks during transport or handling. Be especially careful to avoid dropping the unit.
 - Do not store the unit where it will be exposed to direct sunlight, high temperature, high humidity, or condensation. If exposed to such conditions, the unit may be damaged, the insulation may deteriorate, and the unit may no longer satisfy its specifications.
 - Before using the unit, inspect it and check the operation to make sure that the unit was not damaged due to poor storage or transport conditions. If damage is found, contact your dealer or YOKOGAWA representative.
 - When unplugging the power cord from the power receptacle or from the unit, grasp the plug, not the cord, in order to avoid damaging cable.
 - This unit is not constructed to be waterproof or dustproof, so do not use it in a very dusty environment or in one where it will get wet.
 - Gently wipe dirt from the surface of the unit with a soft cloth moistened with a small amount of water or mild detergent. Do not try to clean the unit using cleaners containing organic solvents such as benzene, alcohol, acetone, ether, ketones, thinners, or gasoline. They may cause discoloration or damage.
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Contents

Introduction	1
Checking the Contents of the Package	2
Safety Precautions	3
Precautions	4
Product Overview	6
Names of Parts	
External view	6
Measurement Procedure	
Preparations	6
Measurement Procedure	6
Description of Parts	
Power Supply Receptacle	8
Fuse Replacement	8
When Switching the Current Voltage	9
When Replacing the Power Fuse	9
Specifications	
Product Specifications	10
Standards Applying	10
Corrective Action to be Taken in the case of an Abnormality	10

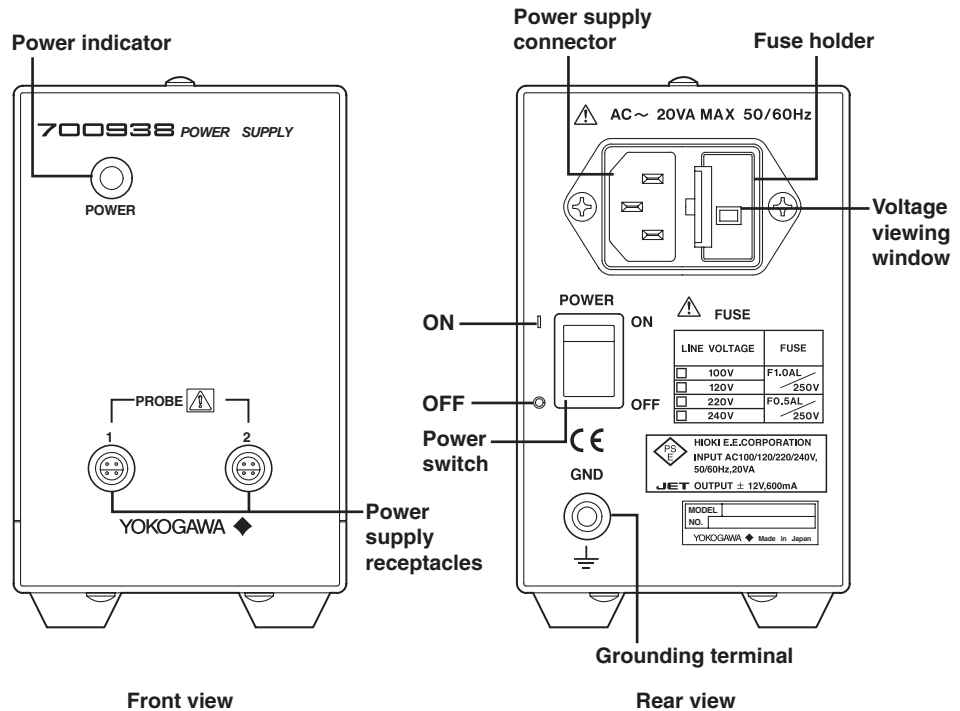
Product Overview

This unit is a special-purpose power supply for the Probe .

Two power supply receptacles are provided on the front panel, and this allows two probes to be used simultaneously.

Names of Parts

External view



Measurement Procedure

Preparations



CAUTION

Before turning on the power, make sure that the voltage of the power supply being used matches the supply voltage indicated on the rear panel of the unit.

- 1 Turn the power switch off and connect the power cord.
- 2 Insert the power supply plug for the DL Series wide band current probe that you are using into the power receptacle on this instrument.
- 3 Turn the power switch ON, and check that the front panel power indicator lights.

Measurement Procedure

See the 700937, 701930, 701931, 701932, or 701933 instruction manual.

Note

- When using the Current Probe (Model 701930, 701931, 701932 or 701933) together with this power supply, you may not be able to use a second current probe simultaneously depending on the value of the current being measured.
- The current consumption of the probe is dependent upon the value of the current being measured. Do not let the total current consumption of the probe exceed the rated output current of the 700938. See figure 1.

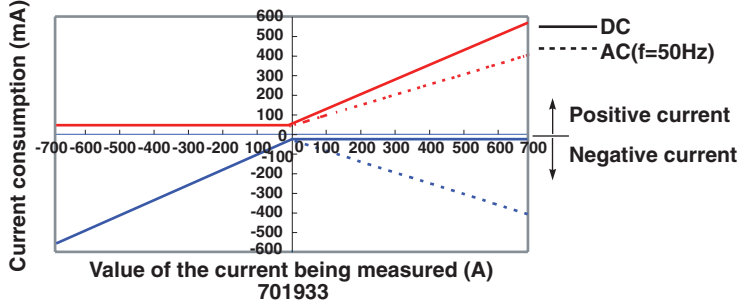
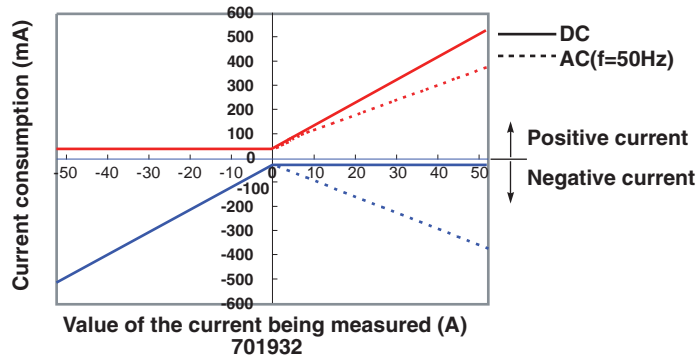
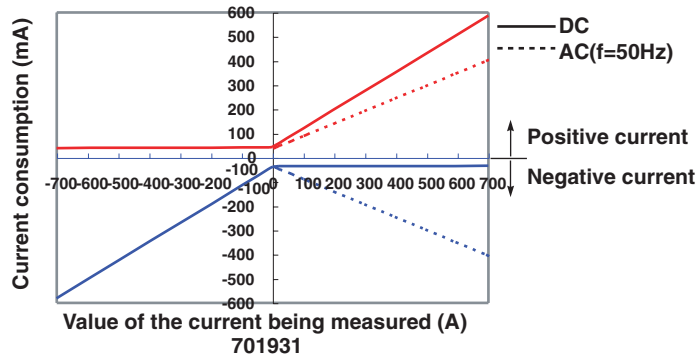
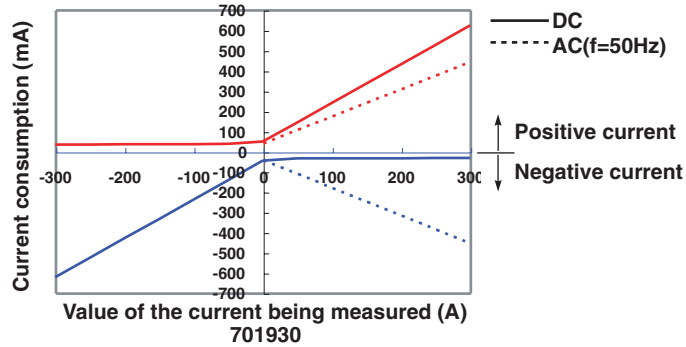
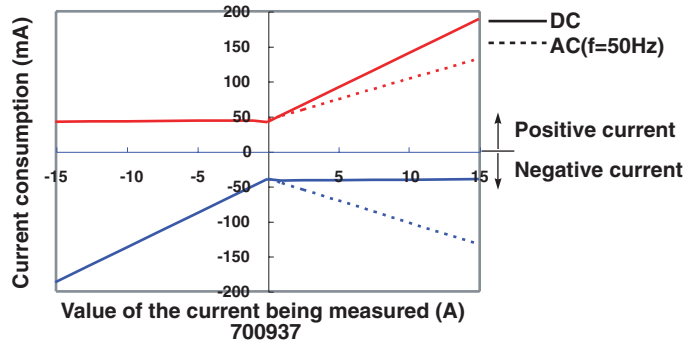
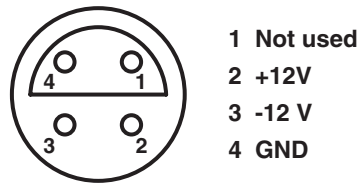


Figure 1 Current consumption* vs. current to be measured (typical)
 *Total of positive and negative power

Description of Parts

Power Supply Receptacle

The pin assignment of the receptacle is shown in the following.



Fuse Replacement

If the fuse blows, replace it as shown in Figure.



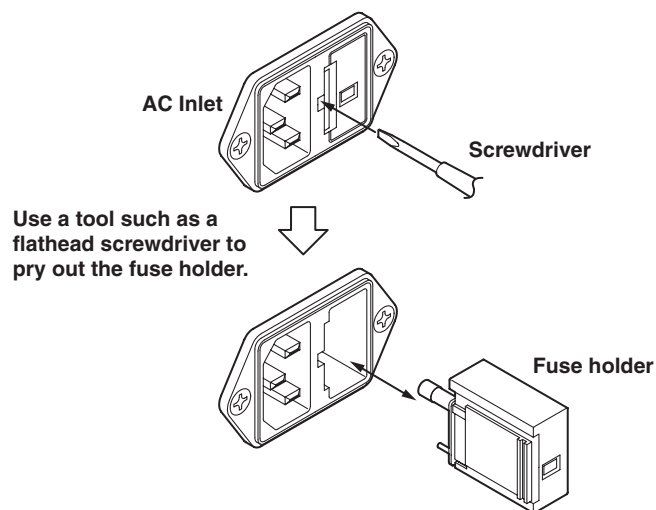
WARNING

- In order to prevent electric shock, always disconnect the power cord from the receptacle before replacing the fuse.
- Always replace the fuse with a new fuse of the specified rating. Never use a fuse of other than the specified rating, and never short circuit the fuse holder to prevent an accident resulting in injury or death.

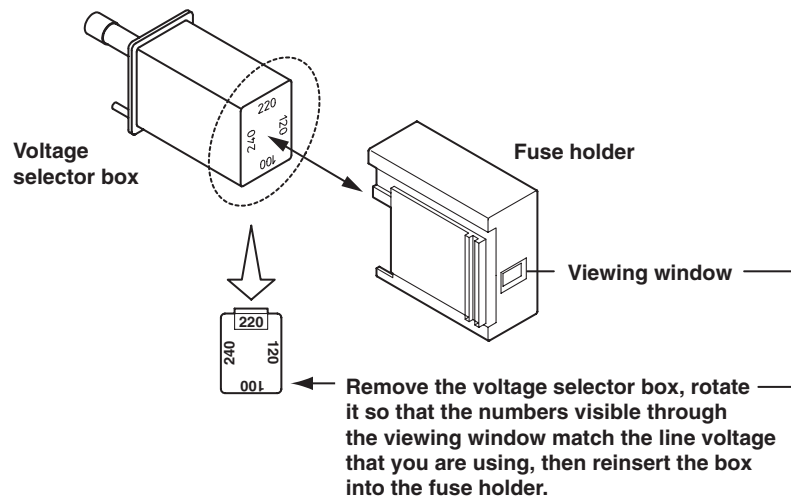
100 V, 120 V : F1.0 AL/250 V 20 mm x 5 mm dia.

220 V, 240 V : F0.5 AL/250 V 20 mm x 5 mm dia.

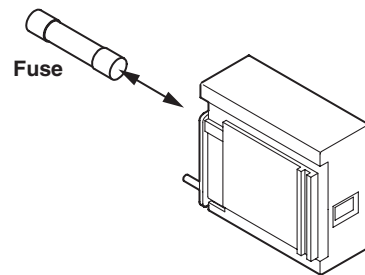
- 1 Turn OFF the power switch and unplug the power cord.
- 2 Insert a tool such as a flathead screwdriver into the fuse holder notch in the power supply inlet, and use it to pry out the fuse holder.
- 3 When Replacing the Power Fuse Replace the power fuse with another fuse of the specified rating. When Switching the Current Voltage
 - (1) Remove the voltage selector box from the fuse holder, rotate the box so that the desired voltage can be seen through the viewing window, then reinsert it into the fuse holder. Confirm that the desired voltage setting appears in the viewing window. (The display will be upside down.)
 - (2) Replace the power fuse with another fuse of the specified rating.
- 4 Reinsert the fuse holder into the power inlet.



When Switching the Current Voltage



When Replacing the Power Fuse



Specifications

Product Specifications

Compatible sensors	700937 Current Probe	700939 FET Probe
	701920 Differential Probe	701930 Current Probe
	701931 Current Probe	701932 Current Probe
	701933 Current Probe	
Number of power supply connectors		
	2	
Output voltage	±12 V ±0.5 V	
Operating temperature and humidity range		
	0 to 40°C (32 to 104°F), 80% RH or less (no condensation)	
Storage temperature and humidity range		
	-10 to 50°C (14 to 122°F), 80% RH or less (no condensation)	
Location for use	Indoor, altitude up to 2000m (6562 feet)	
Rated output current	600 mA (the total value of both outputs)	
Rated supply voltage	100 V AC (120, 220, and 240 V requires specification) (Voltage fluctuation of 10% from the rated supply voltage are taken into account.)	
Ripple supply voltage	3 mVp-p (at the rated output current)	
Rated supply frequency	50/60 Hz	
Maximum rated power	60 VA (at the rated output current)	
External dimensions	Approx. 73(W) × 110(H) × 186(D) mm Approx. 2.87"(W) × 4.33"(H) × 7.32"(D)	
Mass	Approx. 1.1 kg Approx. 38.8 oz.	
Accessories	Power cord, Instruction manual, Spare fuse (in the fuse holder) 100 V, 120 V : F1.0 AL/250 V, 20 mm × 5 mm dia. 220 V, 240 V : F0.5 AL/250 V, 20 mm × 5 mm dia.	

Standards Applying

Safety	EN61010-1 Pollution Degree 2
EMC	EN61326 EN61000-3-2 EN61000-3-3

Corrective Action to be Taken in the case of an Abnormality

- If an message appears on the screen, refer to the following pages.
- If maintenance service is required, or if the instrument still does not operate properly even if the proper corrective action has been taken, contact your nearest YOKOGAWA representatives, listed on the back cover of this manual.

Symptom	Possible Cause	Corrective Action
The power cannot be turned ON.	The fuse is blown.	Replace the fuse.