ITECH IT6952A

ITECH IT6952A Programmable DC Power Supply User Manual

Model: IT6952A | Brand: ITECH

1. Introduction

This user manual provides essential information for the safe and effective operation of your ITECH IT6952A Programmable DC Power Supply. Please read this manual thoroughly before using the device to ensure proper functionality and to prevent damage or injury. The IT6952A is a high-performance, programmable DC power supply designed for laboratory and industrial applications, offering precise control over voltage and current output.

2. Safety Information

Always observe the following safety precautions to prevent electric shock, injury, or damage to the instrument:

- Ensure the power supply is connected to a grounded AC outlet.
- Do not operate the device in wet or damp conditions.
- Do not open the casing; there are no user-serviceable parts inside. Refer all servicing to qualified personnel.
- Verify that the input voltage matches the power supply's rating before connecting to the mains.
- Avoid short-circuiting the output terminals, especially at high power settings.
- Ensure proper ventilation around the unit to prevent overheating.

3. Product Overview

The ITECH IT6952A features a clear VFD display and intuitive controls for easy operation.

3.1 Front Panel Layout

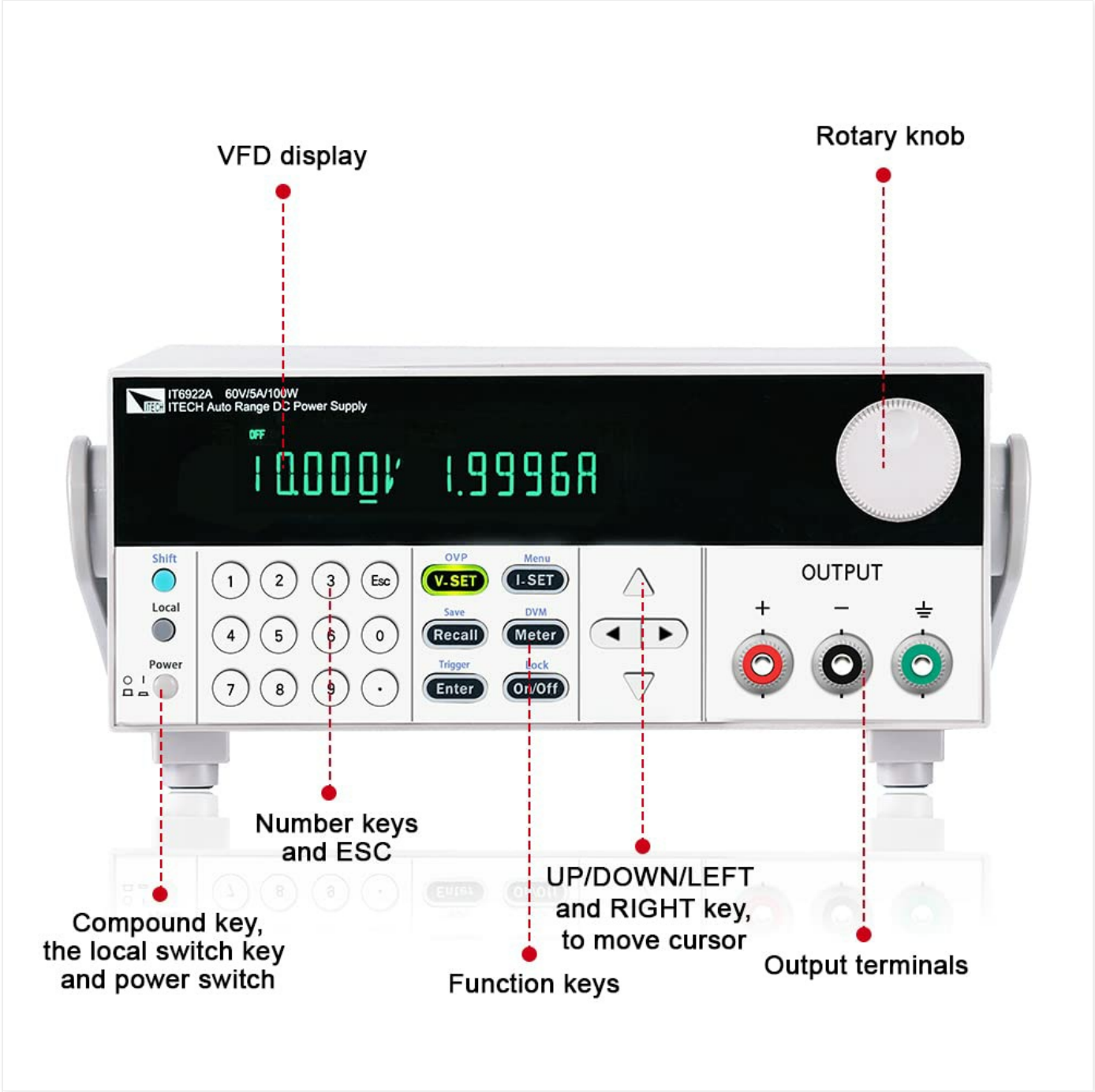


Figure 3.1: Front Panel of IT6952A

The front panel includes the VFD display for voltage and current readings, a rotary knob for precise adjustments, number keys (0-9) and ESC for direct input, function keys (V-SET, I-SET, Save, Recall, Meter, Trigger, Enter, On/Off) for various operations, navigation keys (UP/DOWN/LEFT/RIGHT) for cursor movement, and output terminals for connecting loads. The 'Shift' and 'Local' keys provide additional control options, and the main power switch is integrated.

3.2 Rear Panel Layout

Figure 3.2: Rear Panel of IT6952A

The rear panel features the AC power socket (with integrated fuse), cooling windows for heat dissipation, an RS232 communication cable interface, a USB communication cable interface, and DVM input terminals along with remote measurement terminals and additional output terminals for specific applications.

4. Setup

Follow these steps for initial setup:

1. **Unpacking:** Carefully remove the power supply from its packaging. Inspect for any signs of damage during transit.
2. **Placement:** Place the unit on a stable, level surface with adequate ventilation around all sides. Do not block the cooling vents on the sides and rear.
3. **Power Connection:** Connect the provided AC power cord to the AC power socket on the rear panel of the IT6952A. Plug the other end into a grounded electrical outlet.
4. **Power On:** Press the main power switch on the front panel to turn on the unit. The VFD display should illuminate.
5. **Output Connection:** Connect your load to the output terminals on the front panel using appropriate test leads. Ensure

correct polarity (positive to positive, negative to negative).

5. Operating Instructions

This section covers basic operation of the IT6952A.

5.1 Setting Voltage and Current

1. **Set Voltage:** Press the **V-SET** button. The voltage display will become active. Use the rotary knob to adjust the voltage, or use the number keys for direct input followed by **Enter**.
2. **Set Current:** Press the **I-SET** button. The current display will become active. Use the rotary knob to adjust the current limit, or use the number keys for direct input followed by **Enter**.
3. **Enable Output:** After setting the desired voltage and current, press the **On/Off** button to enable the output. The output indicator will illuminate.
4. **Disable Output:** To disable the output, press the **On/Off** button again.

5.2 Using Memory Functions (Save/Recall)

The IT6952A allows you to save and recall frequently used voltage and current settings.

- **Save Setting:** Set the desired voltage and current. Press the **Save** button. Use the navigation keys or number keys to select a memory location (e.g., 0-9) and press **Enter** to store the settings.
- **Recall Setting:** Press the **Recall** button. Use the navigation keys or number keys to select the desired memory location and press **Enter** to load the stored settings.

6. Maintenance

Proper maintenance ensures the longevity and reliability of your power supply.

- **Cleaning:** Disconnect the power supply from the mains before cleaning. Use a soft, dry cloth to wipe the exterior. For stubborn dirt, a slightly damp cloth with mild detergent can be used, ensuring no liquid enters the unit.
- **Ventilation:** Regularly check that the cooling vents are free from dust and obstructions. Use compressed air to clear dust if necessary.
- **Storage:** When not in use for extended periods, store the power supply in a cool, dry, and dust-free environment.

7. Troubleshooting

If you encounter issues with your IT6952A, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power when switched on	Power cord not connected; Blown fuse; No power from outlet	Check power cord connection; Replace fuse (refer to specifications for type); Test outlet with another device
No output voltage/current	Output disabled; Overload protection activated; Incorrect settings	Press **On/Off** to enable output; Reduce load or increase current limit; Verify voltage/current settings
Display shows 'Error'	Internal fault; Over-temperature	Turn off unit, wait 5 minutes, restart; Ensure proper ventilation, allow unit to cool down. If error persists, contact support.

Problem	Possible Cause	Solution
Inaccurate readings	Poor connection; Calibration needed	Check all connections; Contact ITECH support for calibration information.

8. Specifications

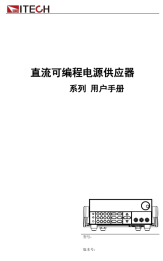
Key technical specifications for the ITECH IT6952A Programmable DC Power Supply:

Specification	Value
Brand	ITECH
Model	IT6952A
Output Voltage	60 Volts
Amperage	25 Amps
Output Wattage	600 Watts
Form Factor	Benchtop
Connector Type	USB
Material	Metal
Color	Red, black

9. Warranty and Support

ITECH products are designed for reliability and performance. For warranty information, technical support, or service inquiries, please refer to the warranty card included with your product or visit the official ITECH website. Keep your purchase receipt as proof of purchase for warranty claims.
For further assistance, you may contact ITECH customer service through their official channels. Always provide your product model (IT6952A) and serial number when seeking support.

Related Documents - IT6952A

	IT6900 - ITECH ITECH IT6900 IT6900

	[ITECH IT-N6900 Programmable DC Power Supply - Features, Applications, and Specifications] Explore the ITECH IT-N6900 series programmable DC power supply, featuring 60V/150V and 850W/1500W output options. This document details its advanced features like CC/CV priority, list programming, data logging, comprehensive protection, and connectivity options. Includes detailed technical specifications and application areas for industrial and R&D use.
	[ITECH IT6720 Digital Control Power Supply User's Guide] Comprehensive user's guide for the ITECH IT6720 Digital Control Power Supply, detailing its features, operation, safety precautions, specifications, and troubleshooting.
	[ITECH IT6300] ITECH IT6300
	[ITECH IT7800 Series Programmable AC/DC Power Supply Programming Guide] This programming guide details the SCPI command set for the ITECH IT7800 Series Programmable AC/DC Power Supply, enabling comprehensive remote control and configuration for advanced power testing applications.
	[ITECH IT-M3900C Bidirectional Programmable DC Power Supply] Discover the ITECH IT-M3900C series, a high-performance, regenerative bidirectional programmable DC power supply. Offering exceptional power density, wide voltage and current ranges, and advanced features for diverse testing applications including automotive, new energy, and battery simulation.