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AN IKONIX BRAND

400XAC
Quick Start Guide

3 Phase AC Power Source

MODELS **430XAC, 460XAC**

POWER CHECKLIST

Power down output while connections are made.
Output & input cabling have unique AWG carrying capacity.
(Be sure to use the appropriate gauge for your application)
Work in a safe and orderly manner, your test station should always be neat.
Educate unqualified personnel of test area dangers.
Refrain from touching test connections and product while testing.

Cal Power

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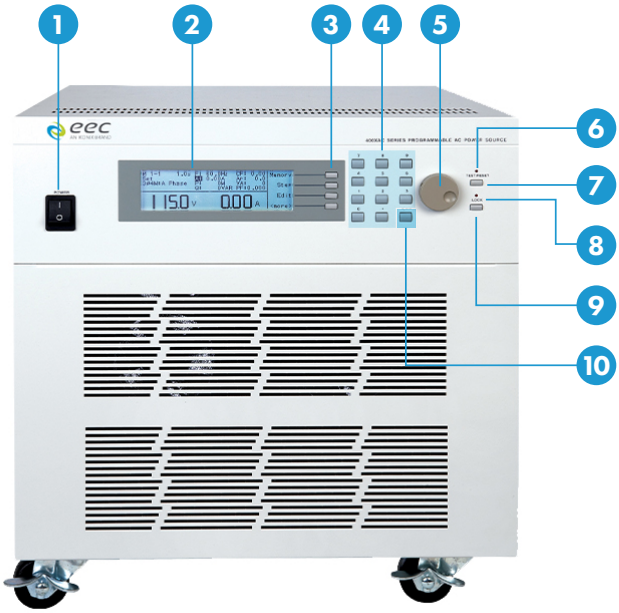
WARNING: An AC Power Source produces voltages and currents that can cause harmful or fatal electrical shock. This guide was created for operators who have some familiarity with high voltage/current testing applications. To prevent accidental injury or death, strictly follow all warnings within this guide.

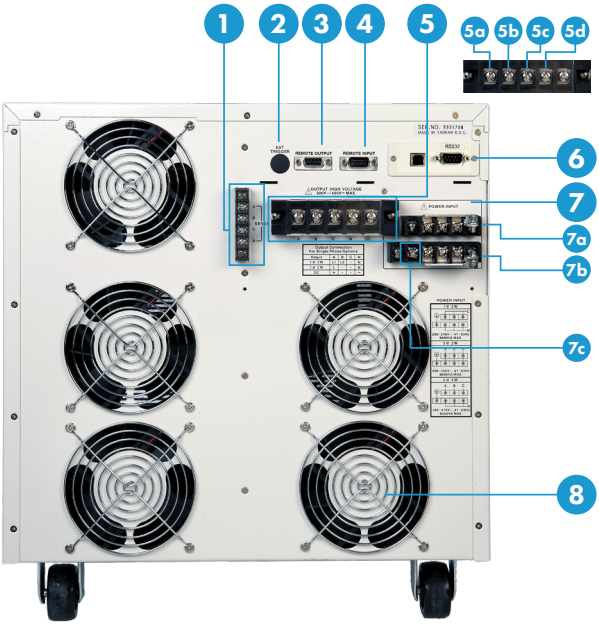
FRONT PANEL CONTROLS



430XAC/460XAC Front Panel

1. **Power Switch** - Rocker style power switch with international ON (|) and OFF (O) markings.
2. **Graphic LCD** - 240 x 64 monographic LCD.
3. **Soft Keys** - Multi-functional selection keys used to select parameters, select screens, and edit parameters.
4. **Numeric Keypad** - Keys used to enter numerical values.
5. **Rotary Knob** - Used to adjust the voltage/frequency output in MANUAL Mode or DC Mode.
6. **Test/Reset LED** - When lit, this LED indicates output is active or when blinking indicates the instrument is in a failure condition.
7. **Test/Reset Key** - Used to turn ON/OFF output voltage, or used to reset the instrument in the event of a failure condition.
8. **Lock LED** - When lit, this LED indicates the instrument's front panel is locked.
9. **Lock Key** - Used to lock out the front panel.
10. **Delete Key** - Used to delete text characters and numerical data.

BACK PANEL CONTROLS



460XAC Back Panel

1 **External Sense Output Terminal Block** - Provides screw terminals for external voltage sense leads.

2 **External Trigger Connector** - Provides the capability to monitor a 5 VDC output signal.

3 **Remote Output Connector** - Provides output to monitor PASS, FAIL, TEST-IN-PROCESS via relay contact closures.

4 **Remote Input Connector** - Enables instrument to receive Test, Reset, Interlock, and memory select signals.

5 **Output Terminal Power Block** - Provides output power to the DUT.
- 5a Phase A for 3Ø4W output mode
- 5b Phase B for 3Ø4W output mode*
- 5c Phase C for 3Ø4W output mode
- 5d Neutral terminal

6 **USB/RS-232/GPIB Interface Card** - Interface card used to control, program, and capture data.

7 **Input Terminal Power Block** - Provides input power to the instrument.*
- 7a L: Line input screw terminal.
- 7b N: Neutral input screw terminal.
- 7c G: Earth ground (chassis) connection.

8 **Thermal Fan** - Used to cool the instrument.

*Model 430XAC requires 200-240 VAC, 1Ø, 47-63 Hz. Model 460XAC requires 1Ø: 200~240 VAC, 3Ø3W: 200~240 VAC, 3Ø4W: 346~416 VAC.

SELECT A TEST MODE

WARNING: LOCATE A SUITABLE TEST AREA WITH A THREE-PRONG, GROUNDED OUTLET. TEST YOUR THREE PRONG OUTLET FOR PROPER WIRING AND READ THE POWER CHECKLIST BEFORE USING YOUR INSTRUMENT.

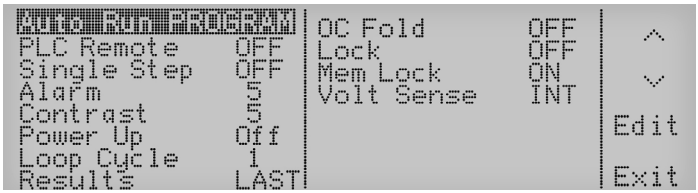
The 400XAC includes **TWO TEST MODES** which change the way your AC Power Source operates.

PROGRAM MODE - Allows you to use test steps and memory locations within the AC Power Source menu. Designed for advanced testing applications.

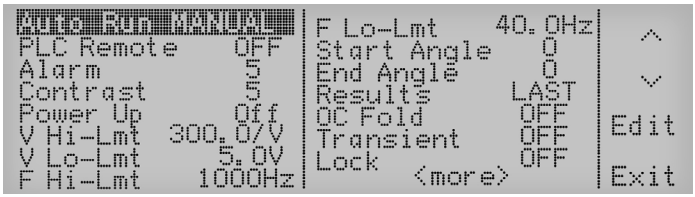
MANUAL MODE - Allows you to run a test quickly using basic test parameters. Does not use preprogrammed test steps.

1. **Turn the power switch ON.**
2. **From the Set screen, press the MORE soft key. In the next window press the SYSTEM soft key.**
3. **In the System Parameters Menu, use the (↑,↓) arrow keys to highlight AUTO RUN parameter. Press EDIT to change the parameter.**
4. **Press CHANGE to toggle the parameter between PROGRAM and MANUAL mode.**
5. **Press ENTER to save change.**
6. **Continue to adjust parameters according to testing needs.**
7. **Press EXIT from System Parameters Menu to return to Set screen.**

When the AUTO RUN parameter is set to PROGRAM mode, the Set screen will be displayed as follows:



(System Parameters Menu)



(System Parameters Menu)

CONSTANT CURRENT MODE

1. Turn ON the OC FOLD parameter

From the Set screen, press the MORE soft key. In the next window press the SYSTEM soft key.

In the System Parameters Menu, use the (↑,↓) arrow keys to highlight the "OC FOLD" parameter. Press EDIT to change the parameter.

Press CHANGE to set the highlighted parameter to ON. Press ENTER to save changes. Press EXIT twice to return to the Set screen.

2. Program a current Hi-Limit, which represents the constant current you will provide to the load

Press EDIT from the Set screen.

Use the (↑,↓) arrow soft keys to highlight the "A Hi-Lmt" parameter. Press EDIT to change the parameter.

Use the Numeric Keypad to enter the desired current limit. Press ENTER to save changes and then press EXIT to return to the Edit Parameters Menu. The limit set will be the constant current output.

3. Program the voltage

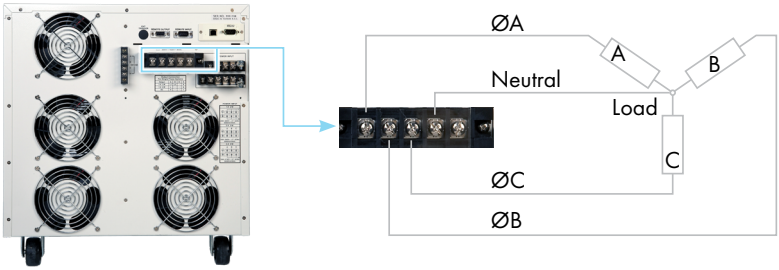
From the Edit Parameters Menu, use the (↑,↓) arrow soft keys to highlight the "Voltage" parameter. Press EDIT to change the parameter.

Using the Numeric Keypad enter the voltage which should be set higher than the nominal load voltage. This allows the current to adjust to the Hi-Limit value.

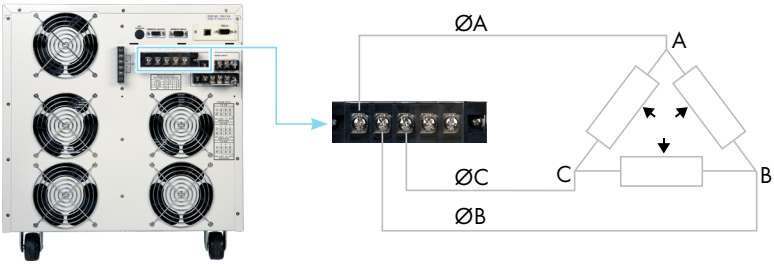
Press ENTER after you enter the voltage and press EXIT twice to return to the Set screen.

APPLICATION CONFIGURATIONS

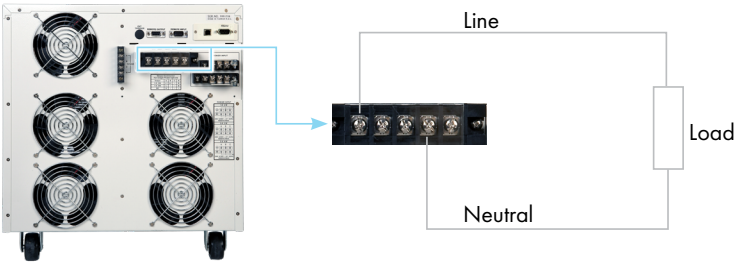
The figures below illustrate how the 400XAC can be fully configured for an automated test setup.



(Figure 1: 3Ø4W Configuration)

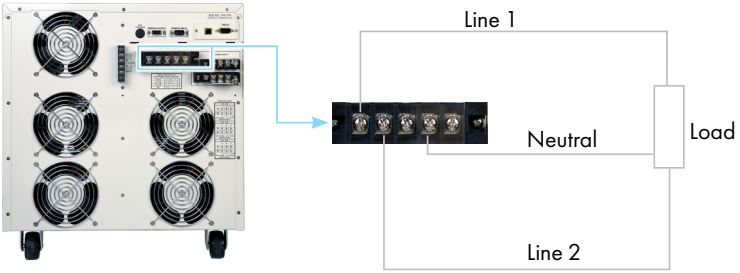


(Figure 2: 3Ø3W Configuration)

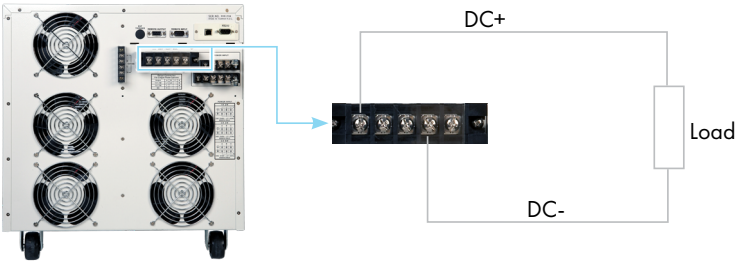


(Figure 3: 1Ø2W Configuration)

APPLICATION CONFIGURATIONS



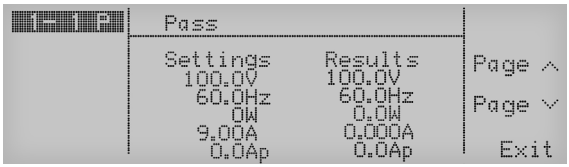
(Figure 4: 1Ø3W Configuration)



(Figure 5: DC Output Configuration)

VIEW TEST RESULTS

From the Set screen, press the MORE soft key. Then press the Results key to view your test results.



(Pass/Fail Indication screen)

If you have multiple steps linked together, use the (↑,↓) arrow keys to toggle though each step to view test results.

Press EXIT to return the Set screen.

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