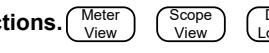
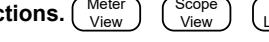
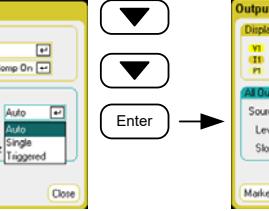
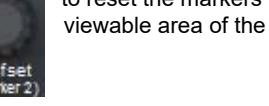
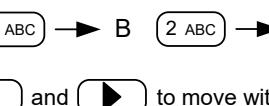


Keysight N6705C DC Power Analyzer

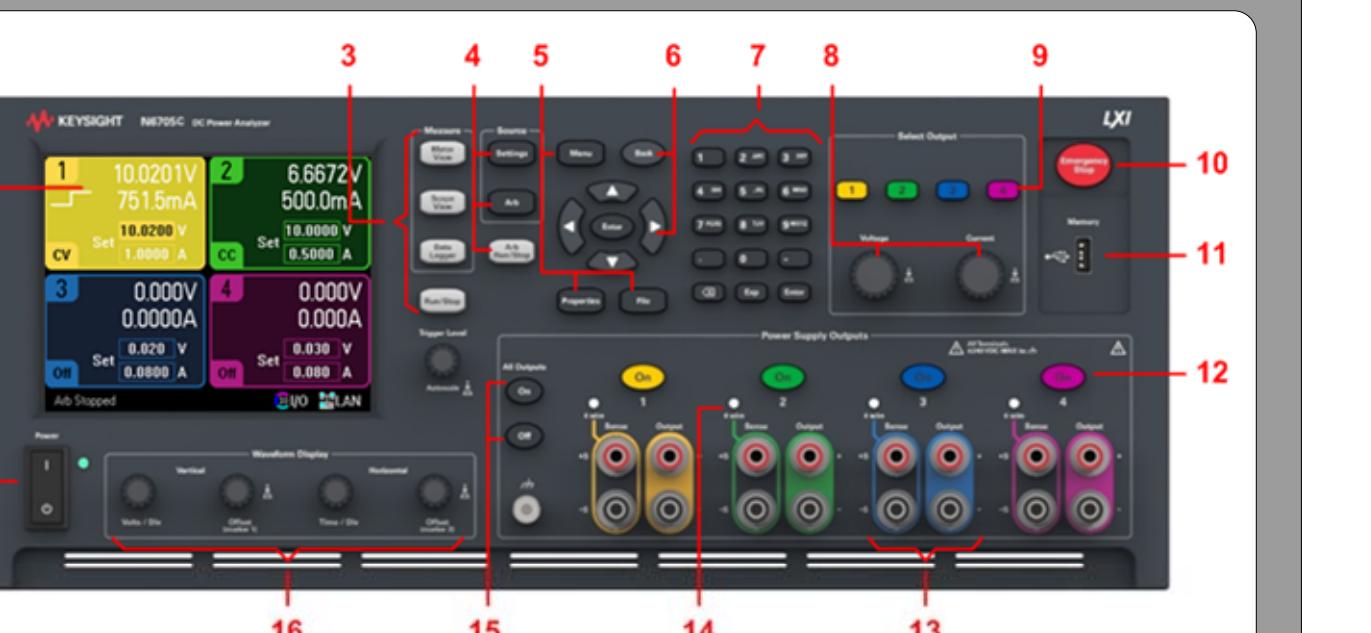
Quick Start Tutorial

Thank you for purchasing the Keysight N6705C DC Power Analyzer.
This tutorial will help you quickly get started installing and using your DC Power Analyzer.

Navigation Tips

- Lighted keys indicate the functions or outputs that are presently active or On. 
- Use the Select Output keys to select an output to control. The lighted key indicates the output that is presently selected. 
- Use the function keys to toggle between two related views or functions. 
For example:
- Use the Properties key as a shortcut to set the properties for functions. 
For example:
- Use the Navigation keys and the Enter key to select an item in a dropdown list. 
- Use the pushbutton knobs to reset the Scope and Data Logger traces and markers. 
Press **Trigger Level** to autoscale the Scope and Data Logger traces. Press **Offset (Marker 1)** or **Offset (Marker 2)** to reset the markers to the viewable area of the display.
- Use the Numeric/Alpha keys to enter data. Numeric keys are active on fields that allow numeric characters. Alpha keys are automatically active on fields that allow alpha-numeric characters. Repeatedly pressing a key in an alpha-numeric field cycles through the list of choices. Pausing enters the value. Similar to text entry on a cell phone. 
Press **Back Space** to back up and remove the current character. Use **◀** and **▶** to move within the field.
- Use the **Menu** key to access all of the programmable functions of the Keysight N6705. The Help menu item provides assistance for some of the most commonly used features and functions of the instrument.

The Front Panel at a Glance



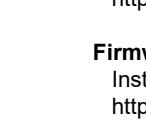
1 - Line Switch turns the instrument on or off.
 2 - Select Output keys select an output to control. The lit key indicates the selected output.
 3 - Measure keys select the measurement function.
 4 - Emergency Stop turns off all outputs immediately.
 5 - Memory Port for connecting a USB Memory device.
 6 - On keys turn individual outputs on or off; outputs are on when the key is lit.
 7 - Menu, Properties, File keys access the indicated function.
 8 - Output terminals + and -- output and sense terminals for all outputs.
 9 - All Outputs On/Off keys turns all outputs on or off according to the specified delays.
 10 - Numeric/Alpha keys enter numeric and alpha characters.
 11 - Waveform Display knobs control the scope and data logger views.
 12 - Power Supply Outputs.
 13 - 4 Wire indicator + and -- sense terminals are active when indicator is lit.
 14 - Navigation keys navigate through the dialog windows. Enter key selects; Back key cancels the selection.
 15 - All Outputs On/Off keys turns all outputs on or off according to the specified delays.
 16 - Scope View.

Additional Information

Built-in instrument help
Press the **Menu** key and scroll to the Help item. Press Enter. Select a Help item from the menu.

Documentation on the Web
Product documentation is available on the Web at <http://www.keysight.com/find/N6705>.

Documentation for mobile devices
A manual for mobile devices is available by scanning the following:



Firmware updates
Install the latest firmware updates from the Web at <http://www.keysight.com/find/N6705firmware>.

Installing the Power Modules

- Remove the top and bottom covers. Loosen the thumbscrews to remove the covers. Turn the unit upside-down to remove the bottom cover.
- Install the power modules in the instrument. Align the module over the pins and push it down onto the connector. Use a slotted or T10 Torx driver to install the screws at each end of the module.
- Connect the output cables. Push the harness connector into the power module. Tighten the locking screws on the small connectors. Place the unused cables in the space between the modules and the front panel.
- Install the top and bottom covers. Push the top and bottom covers into place and tighten the thumbscrews.

Preparing the Instrument for Use

- Connect the power cord. Then plug in the instrument.
- Position the instrument. Lower the extension bar for easier viewing.
- Connect the load. Local sensing 4 wire sensing.

Using the DC Source

1. Press the Line switch to turn on the instrument.

The self test takes a few seconds; the instrument then defaults to Meter View with Output 1 selected. Digits on the display vary according to the installed power module.



2. Press the Select Output keys, or use the navigation keys to select a different output.



The Select Output key will light to indicate the selection.

3. Turn the voltage and current knobs to set the output voltage and current.

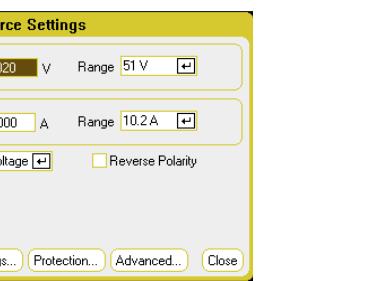


The voltage and current meters display the actual output voltage and current.

The voltage and current meters display the actual output voltage and current.



5. Press **Settings** to program additional functions for the selected output.

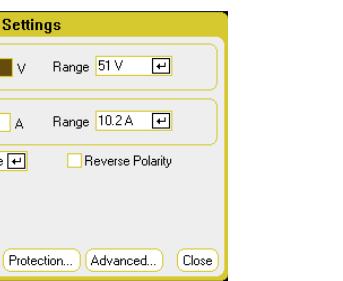


4. Press the **On** key for the selected output.



The output voltage will rise to the voltage setting when the unit is operating in constant voltage (CV) mode. The output current will rise to the current setting when the unit is operating in constant current (CC) mode.

5. Press **Settings** to program additional functions for the selected output.



- * Voltage and current ranges
- * Output turn-on/turn-off delays (select **Delay**)
- * Over-voltage/over-current protection (select **Protection**)
- * Voltage slew rate (select **Advanced**)

Using the Scope to Measure the Output

1. Press the **Scope View** key.



2. Use the navigation keys to select the traces.

Select the current trace for output 1 (I1). The colored rectangle identifies the selected trace. Press the **Enter** key to turn the trace on or off. If the box is checked , the trace is turned on.

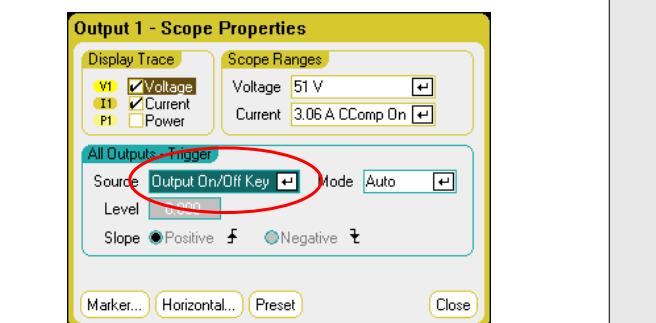


Keysight N676xA power modules can display voltage, current, and power. All other power modules can display either voltage or current, but not both.

3. Use the Volt/Div knob to adjust the amplitude.

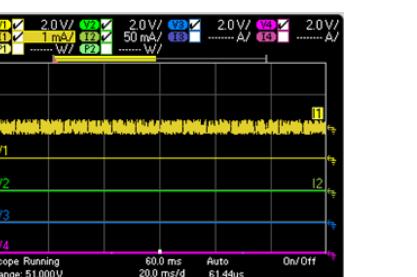


4. Press **Properties** to select the trigger source. Use the navigation keys to select Output On/Off Key.



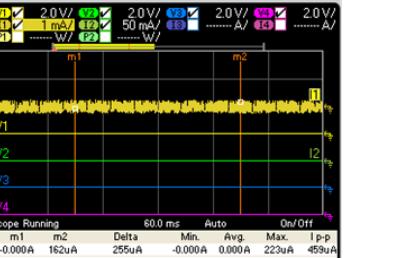
5. Press **Close** or **Scope View** when done.

6. Press the **On** key to trigger a scope measurement.



7. Press **Scope View** to display the markers.

Use the Marker (Offset) knobs to move the markers. Calculations apply to the area between the markers.



Using the Arbitrary Waveform Generator

1. Press the **Arb** (arbitrary waveform) key.

The Arb Preview window displays any waveforms that have been configured.

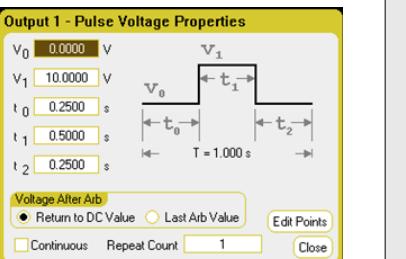


2. Use the navigation keys to select an output. The dark background identifies the selected output. Press the **Enter** key to select the output.



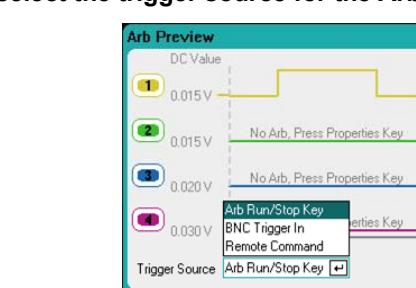
3. Use the navigation keys to select a waveform. Then press **Enter**.

4. Press **Properties**. Use the navigation and number keys to configure the Pulse properties.



5. Press **Close** or **Back**. Use the navigation keys to select the trigger source for the Arb.

5. Press **Close** or **Back**. Use the navigation keys to select the trigger source for the Arb.



6. Press **On** to turn on the selected Arb outputs.

7. Press **Meter View** to view the output voltage and current values when the Arb is generated.

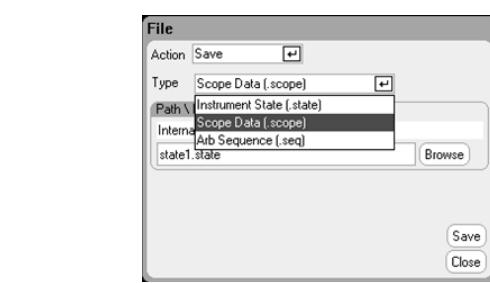
8. If the trigger source is Arb Run/Stop key, press **Arb Run/Stop** to start the Arb.

Saving the Scope Measurement

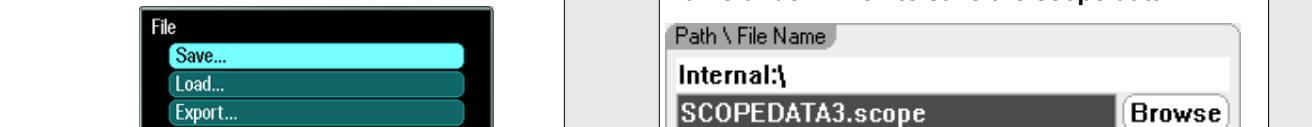
1. Press **File** to save the scope measurement. Select Save.



2. Use the navigation keys to select Scope data.



3. Navigate to the File Name field and enter the name under which to save the scope data.



Alpha keys automatically become active on data fields that allow alpha and numeric characters. Repeatedly pressing a key cycles through the list. This is similar to text messaging on a cell phone.

4. Select the **Save** button to save the data.

Additional File functions:

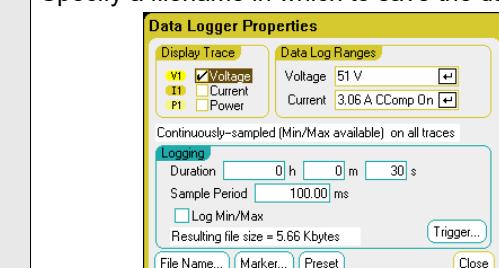
- * Saving and recalling instrument states
- * Managing files and folders
- * Exporting and importing arbitrary waveforms
- * Saving screen captures

Using the Data Logger

The Data Logger is similar to the Scope, but optimized for collecting data over an extended time. Note: Option 055 deletes the data logging function.

1. Press **Data Logger** then **Properties**.

Specify the duration and the sample interval. Specify if you wish to log minimum and maximum values in addition to the average values. Specify a filename in which to save the data.



2. Press **On** to turn on the data logger outputs.

3. Press **Run/Stop** to start the data logger.