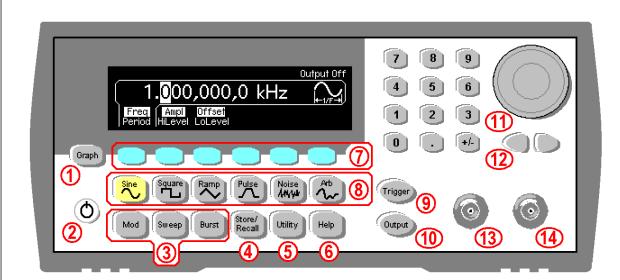
## The Front Panel at a Glance



## The Primary Front Panel Features:

**Lighted keys** indicate active keys and functions (for example Sine above).

- 1 Graph Mode Key
- 2 On/Off Switch
- 3 Modulation/Sweep/Burst Keys
- 4 State Storage Menu Key
- 5 Utility Menu Key
- 6 Help Menu Key
- 7 Menu Operation Softkeys

- 8 Waveform Selection Keys
- **9** Manual Trigger Key (Sweep and Burst only)
- 10 Output Enable/Disable Key
- **11** Knob
- **12** Cursor Keys
- 13 Sync Connector
- **14** Output Connector

#### Get Help on Any Key

Press and hold any function key or softkey to display a help topic for that key or feature.

For example, press and hold the Sine key:

Sine Function
The Keysight 33210A can output a sinusoidal
waveform at frequencies from 1 mHz to 10 MHz.
• For DC, press [Utility] and select "DC On".

Or press Help to display the Help Menu:

1 View the last message displayed
2 View the remote command error queue
3 Get HELP on any key

\$\begin{align\*}
\$\text{SELECT CANCEL}\$

lighlight the desired topic and press SELECT.

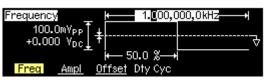
#### **Some Helpful Hints**

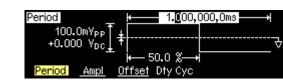
- Lighted keys indicate active keys or functions such as the currently active waveform (for example, Sine). Most keys toggle on (lighted) or off.
- 2. No signal is output unless the Output key is lighted.
- 3. To select dc volts from the front panel, press Utility and select the **DC On** softkey.
- 4. The Graph key toggles between Graph Mode (lighted) and Menu Mode.
- 5. In Menu Mode, the six softkeys allow you to select parameters and functions as shown in the softkey menu at the bottom of the display. Some softkeys toggle between related parameters. For example, the left softkey toggles between **Freq** and **Period** below:





6. In Graph Mode, the softkeys work just as in Menu Mode, except that only one label is displayed for each key. You can still toggle between related parameters such as **Freq** and **Period**:





- 7. You can specify a signal by its amplitude and offset, or by setting its **Hi Level** (maximum) and **Lo Level** (minimum) values. See Chapter 1 in the *User's Guide* for further information.
- 8. The modulation, sweep, or burst feature can be used in conjunction with several waveform types. For example, press Square and Sweep for a swept square wave. Both keys remain lighted, while the last key pressed determines which menu is displayed.
- 9. The Keysight 33210A provides a choice of GPIB, USB, or LAN connection to your PC. See "Remote Interface Configuration" in Chapter 3 of the *User's Guide* for further information.
- 10. If you have Option 002 installed, you can create arbitrary waveforms on your PC and download them to your Keysight 33210A using the Keysight Benchlink software provided with the instrument.

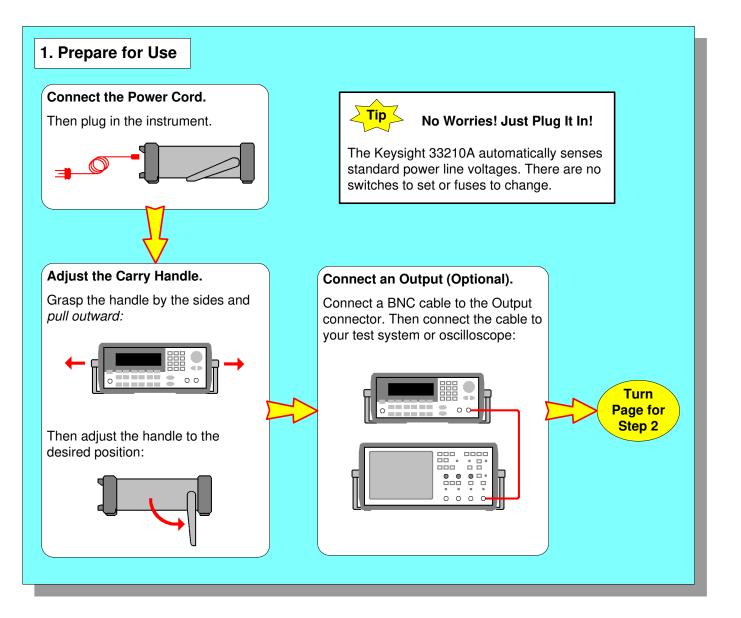
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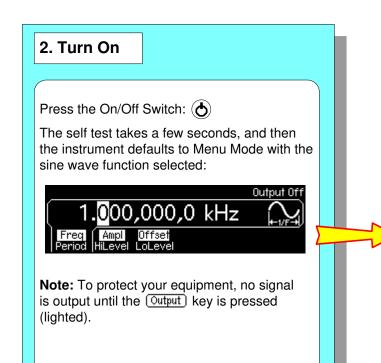
#### 33210-900

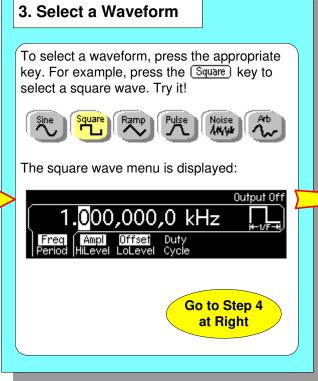
# Keysight 33210A 10 MHz Function/Arbitrary Waveform Generator Quick Start Tutorial

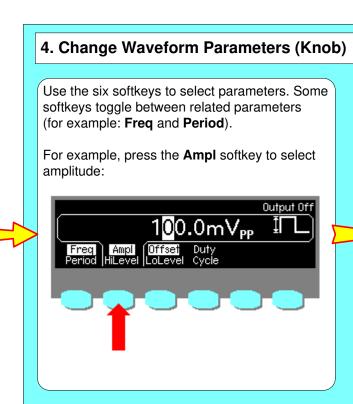
## Eight easy steps to learn the basics!

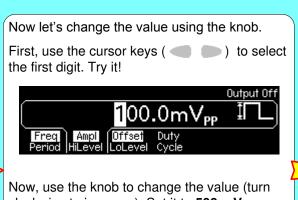






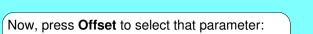






Now, use the knob to change the value (turn clockwise to increase). Set it to **500 mVpp**:





Ampl Offset Duty HiLevel LoLevel Cycle

Use the knob to set the offset to -1.1 Vdc:

■ Turn left past zero for a negative value.

■ Use the cursor keys to select digits.

Tip

#### Another Way to Set Signal Levels

You can also specify a signal by setting its **Hi Level** (maximum) and **Lo Level** (minimum) values. (See Chapter 1 in the *User's Guide*.)

Go to Step 5 at Far Left, Below

## 5. Change Waveform Parameters (Keypad)

Now let's use the numeric keypad to set the **Period**.

Press the left softkey once to select Freq:



Then press it again to select **Period**:



Key in a value on the keypad. The display changes. For example, enter **1.5**. Try it!



Press the softkey for the desired unit (for example, **msec**) to enter the value:



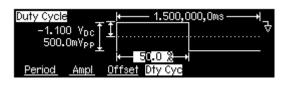
## 6. Select Graph Mode

Press Graph (left side of front panel) to select Graph Mode, which displays the waveform:

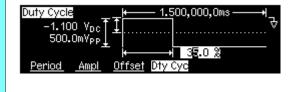


Note: The Graph key toggles between Graph Mode and Menu Mode. The key is lighted in Graph mode.

Now let's change the duty cycle. First press the **Dty Cyc** softkey:

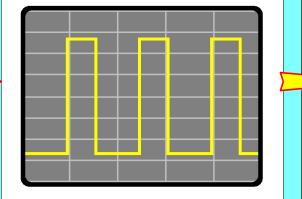


Use either the knob or the keypad to change the value to 35%:



### 7. Output the Waveform

You can view the waveform at any time on an oscilloscope if one is connected. Press Output to activate the Output connector.



Refer to the following for further information:

1. The other side of this card:

8. For Further Information

- "The Front Panel at a Glance"
- "Some Helpful Hints"
- 2. The Keysight 33210A built-in Help:
- Press and hold any key for contextsensitive help on that key.
- Press Help for the Help Menu.
- 3. The Keysight 33210A Function/Arbitrary Waveform Generator User's Guide.