

# How to change screen resolution in Ubuntu

If your screen is too big or too small, you can try setting the resolution manually. Let's take a look at how you can change the resolution in Ubuntu through the following article!

While this is a rare issue, it is also possible that your desktop is experiencing an incorrect resolution issue. This can be caused by a bug in the GPU driver, which causes the monitor to not be recognized correctly. So if your screen is too big or too small, you can try setting the resolution manually. Let's take a look at how you can change the resolution in Ubuntu through the following article!

## Change resolution in Display Settings

The resolution setting is found under **Display Settings** . To access Display Settings, right-click on the screen and select **Display Settings**.

From there, click the **Resolution** option and choose your monitor's native resolution.

## Use XRandR

You can also set your resolution via the xrandr command, which is included with most modern Linux distributions. Try typing **xrandr** into Terminal, press **Enter**, and a bunch of information about the screen and its resolution will appear. The active resolution will have an asterisk next to it.

```
ducklord@vmUbuntu: ~
ducklord@vmUbuntu:~$ xrandr
Screen 0: minimum 1 x 1, current 1669 x 968, maximum 16384 x 16384
Virtual1 connected primary 1669x968+0+0 (normal left inverted right
t x axis y axis) 0mm x 0mm
  1669x968    60.00*+
  2560x1600    59.99
  1920x1440    60.00
  1856x1392    60.00
  1792x1344    60.00
  1920x1200    59.88
  1600x1200    60.00
  1680x1050    59.95
  1400x1050    59.98
  1280x1024    60.02
  1440x900     59.89
  1280x960     60.00
  1360x768     60.02
  1280x800     59.81
  1152x864     75.00
  1280x768     59.87
  1024x768     60.00
  800x600      60.32
  640x480      59.94
Virtual2 disconnected (normal left inverted right x axis y axis)
Virtual3 disconnected (normal left inverted right x axis y axis)
Virtual4 disconnected (normal left inverted right x axis y axis)
Virtual5 disconnected (normal left inverted right x axis y axis)
Virtual6 disconnected (normal left inverted right x axis y axis)
Virtual7 disconnected (normal left inverted right x axis y axis)
Virtual8 disconnected (normal left inverted right x axis y axis)
ducklord@vmUbuntu:~$
```

Note the screen's alias (name) in the information that appears immediately after the command, before the list of resolutions. In this case, since the example used VMware to take a screenshot, the name here is '**Virtual1**'.

To choose a different resolution, you can tell xrandr which monitor to target and which resolution to apply:

```
xrandr --output MONITOR_ALIAS --mode SUPPORTED_RESOLUTION
```

You can choose any supported resolution, even if it's not a monitor-specific resolution. The command looks like this:

```
xrandr --output Virtual1 --mode 1440x900
```

If the exact resolution isn't detected or you want to use a custom resolution for whatever reason, xrandr can help with that too. You should not, however, deviate from VESA standards, although cvt is here to help you with that.

Also available by default in almost every distribution, cvt can compute the VESA Coordinated Video Timing modes. Using it is simple: Enter cvt followed by the desired horizontal and vertical resolution. To calculate the parameters for a resolution of 1500 × 900 (not the standard option), enter:

```
cvt 1500 900
```

Select and copy to clipboard everything from **Modeline** to the end.

```
ducklord@vmUbuntu: ~
ducklord@vmUbuntu:~$ cvt 1500 900
# 1504x900 59.90 Hz (CVT) hsync: 55.95 kHz; pclk: 111.00 MHz
Modeline "1504x900_60.00" 111.00 1504 1592 1744 1984 900 903 91
3 934 -hsync +vsync
ducklord@vmUbuntu:~$
```

Then use it to create a new resolution from scratch with xrandr:

```
xrandr --newmode CLIPBOARD_CONTENTS
```

Note that **1504x900\_60.00** in this case refers to the desired (virtual) screen resolution and refresh rate but is the name automatically generated by cvt. You are free to change it to whatever you want for convenience. Posts used:

```
xrandr --newmode "MyMode" 111.00 1504 1592 1744 1984 900 903 913 934 -hsync +vsync
```

That's not all because you also have to add a new mode as an option for that particular monitor. You can do that with:

```
xrandr --addmode MONITOR_ALIAS "NAME_OF_XRANDR-CREATED_MODE"
```

So, according to everything seen so far, the command should look like this:

```
xrandr --addmode Virtual1 "MyMode"
```

Then the new resolution can be selected from **Display Settings**.

If your desktop continues to get stuck at the incorrect resolution, it may be time to upgrade your GPU driver.

You finished reading the article "**How to change screen resolution in Ubuntu**" edited by the [TipsMake](#) team. We hope this article has provided you with many useful tech tips and tricks. You can search for similar articles on tips and guides. Thank you for reading and for following us regularly.