

How to install Soft Keyboard

This installation tutorial uses "2016-05-27-raspbian-jessie" version for testing. If use wheezy or earlier image, then the step5 and step6 have different file paths, pls refer to the virtual-keyboard official installation tutorial for specification.

Official reference address (English)

<http://ozzmaker.com/virtual-keyboard-for-the-raspberry-pi/>

1, install the necessary files

```
sudo apt-get update
sudo apt-get install libfakekey-devlibpng-devautoconf libxft-devlibtoolautomake -y
```

2, install the matchbox-keyboard

```
git clone https://github.com/mwilliams03/matchbox-keyboard.git
cd matchbox-keyboard
./autogen.sh
```

(Note: "./ autogen.sh" execution takes a few minutes, and would show as follows after running correctly; if it doesn't show as follows, then need to check to see if there are error Popup Window prompt)

```
Matchbox-keyboard 0.2
=====
prefix:                /usr/local
source code location:  .
compiler:              gcc

Building with Debug:   no
Building with Cairo:   no
Building Gtk widget:   no
Building Examples:    no
Building GTK+ Input Method: no
Building panel applet: no
```

Continue:

```
sudomake
sudo make install
```

3, install the shared data library for matchbox-keyboard

```
sudo apt-get install libmatchbox1 -y
```

As following:

```

pi@raspberrypi:~$ sudo apt-get install libmatchbox1
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following extra packages will be installed:
  libxsettings-client0
The following NEW packages will be installed:
  libmatchbox1 libxsettings-client0
0 upgraded, 2 newly installed, 0 to remove and 55 not upgraded.
Need to get 57.6 kB of archives.
After this operation, 126 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://mirrorsirector.raspbian.org/raspbian/ jessie/main libxsettings-client0 armhf 0.17-6 [11,024 B]
Get:2 http://mirrorsdirector.raspbian.org/raspbian/ jessie/main libmatchbox1 armhf 1.9-oss0-1.1 [46.5 kB]
Fetched 57.6 kB in 1s (34.7 kB/s)
Selecting previously unselected package libxsettings-client0.
(Reading database ... 126276 files and directories currently installed.)
Preparing to unpack .../libxsettings-client0_0.17-6_armhf.deb ...
Unpacking libxsettings-client0 (0.17-6) ...
Selecting previously unselected package libmatchbox1:armhf.
Preparing to unpack .../libmatchbox1_1.9-oss0-1.1_armhf.deb ...
Unpacking libmatchbox1:armhf (1.9-oss0-1.1) ...
Setting up libxsettings-client0 (0.17-6) ...
Setting up libmatchbox1:armhf (1.9-oss0-1.1) ...
Processing triggers for libc-bin (2.12-1B(deb8ud) ...

```

4. Create a virtual keyboard startup script

```
sudo nano /usr/bin/toggle-matchbox-keyboard.sh
```

Paste the following, press ctrl + x and y, to save then exit

```

#!/bin/bash
#This script toggle the virtual keyboard
PID=`pidof matchbox-keyboard`
if [ ! -e $PID ]; then
killall matchbox-keyboard
else
matchbox-keyboard -s 50 extended&
fi

```

Add executable permission for the script above

```
sudo chmod +x /usr/bin/toggle-matchbox-keyboard.sh
```

5, Add script above to Start menu

```
sudo nano /usr/share/applications/toggle-matchbox-keyboard.desktop
```

Paste the following content, press ctrl + x and y, to save then exit

```

[Desktop Entry]
Name=Toggle Matchbox Keyboard
Comment=Toggle Matchbox Keyboard
Exec=toggle-matchbox-keyboard.sh
Type=Application
Icon=matchbox-keyboard.png
Categories=Panel;Utility;MB
X-MB-INPUT-MECHANSIM=True

```

6, create an icon on the taskbar (Note that in this step, must be "pi" user privileges, if you use administrator privileges, will not find the file)

```
nano ~/.config/lxpanel/LXDE-pi/panels/panel
```

7, find the resembles similar to the following command (default content may be different in different Raspberry Pi versions)

```
Plugin {
type=launchbar
Config {
  Button {
    id=/usr/share/applications/lxde-x-www-browser.desktop
  }
  Button {
    id=/usr/share/raspi-ui-overrides/applications/pcmanfm.desktop
  }
  Button {
    id=/usr/share/raspi-ui-overrides/applications/lxterminal.desktop
  }
  Button {
    id=/usr/share/applications/wolfram-mathematica.desktop
  }
  Button {
    id=/usr/share/applications/wolfram-language.desktop
  }
}
}
```

Add the following code to add a icon item

```
Button {
id=toggle-matchbox-keyboard.desktop
}
```

After modifying, would show as below:

```
Plugin {
  type=space
  Config {
    Size=8
  }
}
Plugin {
  type=launcher
  Config {
    Button {
      id=toggle-matchbox-keyboard.desktop
    }
    Button {
      id=/usr/share/applications/lxde-x-www-browser.desktop
    }
    Button {
      id=/usr/share/raspi-ui-overrides/applications/pcmanfm.desktop
    }
    Button {
      id=/usr/share/raspi-ui-overrides/applications/lxterminal.desktop
    }
    Button {
      id=/usr/share/applications/wolfram-mathematica.desktop
    }
    Button {
      id=/usr/share/applications/wolfram-language.desktop
    }
  }
}
Plugin {
  type=space
  Config {
    Size=8
  }
}
```

8, after modifying, run the following command and re-start the system; you will see a virtual keyboard icon in taskbar on the screen normally.

```
sudo reboot
```

P.S. Log into via SSH to see how to change the size of the virtual keyboard

```
DISPLAY=:0.0 matchbox-keyboard -s 50 extended
```

```
DISPLAY=:0.0 matchbox-keyboard -s 100 extended
```