



Proculus Technologie Limited

**HDMI Display Matchbox-
Keyboard Installation Guide V1.0**

HDMI Display Matchbox-Keyboard Installation Guide

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

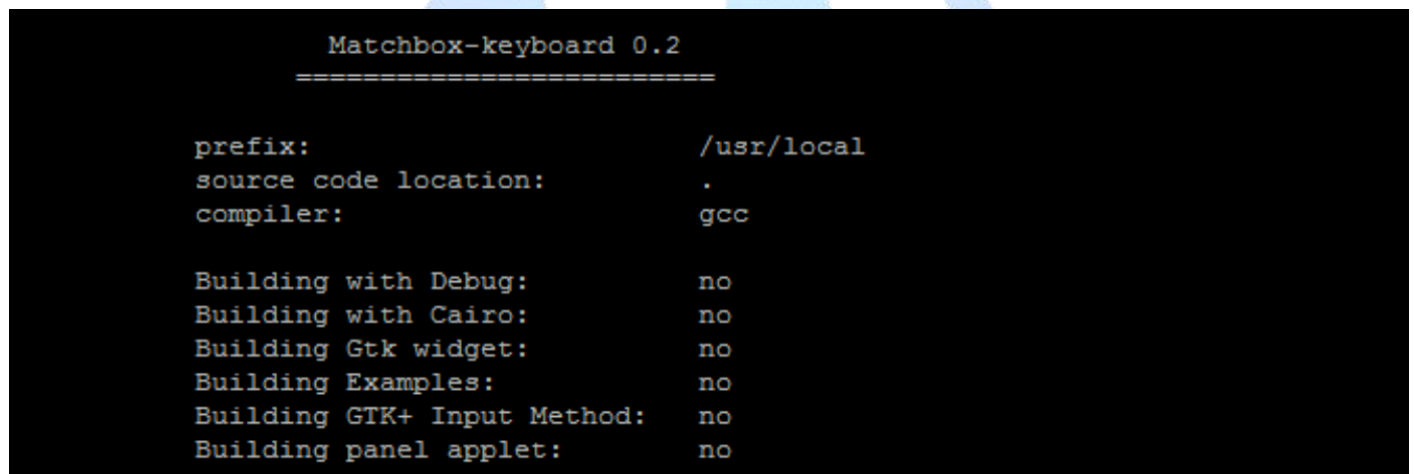
Step 1, install the necessary files

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

Step 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:

```
sudo make
sudo make install
```

Step 3, install the shared data library for matchbox-keyboard

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

Step 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
```

Step 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
```

Step 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
```

Step 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=launchbar
  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/pcmaman.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
  }
}
```

Step 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
```