

Now it is time to connect PS4 controller to it.

Enable PS4 controller into pairing mode by pressing PS button+SHARE for a 10 seconds.



Now get back to the Ubuntu Terminal and pair Raspberry with PS4 controller.

Run command to open *bluetoothctl* utility.

```
$ bluetoothctl
```

After that run

```
$ power on
```

And turn on scan

```
$ scan on
```

Find your PS4 controller in the list. It should be detected as "Wireless Controller"

```
mikrik@mxlfrbt: ~  
+  
NEW] Device 6D:56:53:E5:AE:16 6D-56-53-E5-AE-16  
NEW] Device 55:A4:1C:94:3F:DE 55-A4-1C-94-3F-DE  
NEW] Device 58:11:03:34:CB:6B 58-11-03-34-CB-6B  
NEW] Device A4:C1:38:36:DD:FD LYWSD03MMC  
NEW] Device 50:A6:F5:D7:8A:38 50-A6-F5-D7-8A-38  
NEW] Device 75:59:B6:27:92:FC 75-59-B6-27-92-FC  
NEW] Device 53:EA:18:C8:79:02 53-EA-18-C8-79-02  
NEW] Device CC:B1:1A:E2:59:C1 CC-B1-1A-E2-59-C1  
NEW] Device A4:AE:12:A0:C6:EF Wireless Controller  
NEW] Device 64:CB:E9:09:FC:E3 maxxlife-tv  
NEW] Device 3C:06:30:10:CD:5F macbook-maxxlife  
CHG] Device 41:8A:83:52:C6:90 ManufacturerData Key: 0x004c  
CHG] Device 41:8A:83:52:C6:90 ManufacturerData Value:
```

Copy its address name.

Now run command to trust PS4 controller.

```
$ trust A4:AE:12:A0:C6:EF
```

```
[bluetooth]# trust A4:AE:12:A0:C6:EF
[CHG] Device A4:AE:12:A0:C6:EF Trusted: yes
Changing A4:AE:12:A0:C6:EF trust succeeded
[CHG] Device A4:AE:12:A0:C6:EF RSSI: -62
```

Then pair device

```
$ pair A4:AE:12:A0:C6:EF
```

```
mikrik@mxlfrbt: ~
[CHG] Device 56:50:33:A9:C4:4A RSSI: -35
[bluetooth]# trust A4:AE:12:A0:C6:EF
[CHG] Device A4:AE:12:A0:C6:EF Trusted: yes
Changing A4:AE:12:A0:C6:EF trust succeeded
[CHG] Device A4:AE:12:A0:C6:EF RSSI: -62
[CHG] Device 67:CA:B8:7E:82:F7 RSSI: -47
[CHG] Device 75:59:B6:27:92:FC RSSI: -83
[bluetooth]# pair A4:AE:12:A0:C6:EF
Attempting to pair with A4:AE:12:A0:C6:EF
[CHG] Device A4:AE:12:A0:C6:EF Connected: yes
[CHG] Device A4:AE:12:A0:C6:EF UUIIDs: 00001124-0000-1000-8000-00805f9b34fb
[CHG] Device A4:AE:12:A0:C6:EF UUIIDs: 00001200-0000-1000-8000-00805f9b34fb
[CHG] Device A4:AE:12:A0:C6:EF ServicesResolved: yes
[CHG] Device A4:AE:12:A0:C6:EF Paired: yes
Pairing successful
```

After that finally connect PS4 controller to Raspberry

```
$ connect A4:AE:12:A0:C6:EF
```

```
[Wireless Controller]# connect A4:AE:12:A0:C6:EF
Attempting to connect to A4:AE:12:A0:C6:EF
Connection successful
[CHG] Device 75:59:B6:27:92:FC RSSI: -75
[Wireless Controller]#
```

Congratulations! You connected your PS4 controller to the Raspberry. Check that status LED on the PS4 controller became a solid blue.



To test that gamepad can control robot and it works correctly, please run ROS1 nodes, following steps below.