

Botball

Connecting to Your Wombat

Professional Development Workshop KISS Institute for Practical Robotics © 1993 – 2025 KIPR



Botball

Slide Topic

- 2-3 <u>Connect the Wombat to your Computer, Smartphone or</u> <u>Tablet at School (Wi-Fi)</u>
- 4 <u>Connection to Controller</u>
- 5-6 <u>Switching Wombat to Client Mode</u>
 - 7 Loading the Starting Web Page (Wi-Fi)
 - 8 <u>Connect the Wombat to your Computer, Smartphone or</u> Tablet at School (Ethernet)

Connect the Wombat to Your Computer Smartphone or Tablet at School (Wi-Fi)



Botball



2. Select "About"

(2)

3. Note the SSID and Password

. Ak	oout	Shut Down 📋	Reboot
	Ţ	Programs	
		File Manager	
	🗢 Mot	ors and Sens	ors
	عر	Settings	•
			LiFe 🛄 📀

. Home		
Wombat-a Copyright © 2012 - Wombat v31.1.0 - Raspbe KISS Institute for Pract	a01 ²⁰²⁴ rry Pi: 3B ical Robotics	
Developers	Network	
Event Mode Disabled Enabled Enabled	SSID: aa01-wombat Password: 9e50c700 WiFi: 192.168.125.1 LAN: 0.0.0.0	3)
	LiFe 💼 🗢	



Botball



- 2. If you see "Enter the PIN from the router label", click "Connect using a security key instead"
- 3. Enter the password from the About page (previous slide)

← Wi-Fi	← Wi-Fi	← Wi-Fi
🛜 KIPR GFi	Connected	KIPR GFi
	6 0008-wombat	6008-wombat
0008-wombat	aa01-wombat	
aa01-wombat	Enter the PIN from the router label	Secured
1	(usually 8 digits)	Enter the network security key
	Connect using a security key instead	Next Cancel
	Next Cancel	3
	More Wi-Fi settings	More Wi-Fi settings

Connection to Controller



Botball

●●●○○ AT&T LTE	1:58 PM	1 ∦ 78% ■)
Settings	Wi-Fi	
Wi-Fi		
 1500-walla No Internet Con 	aby	a 🕂 🚺
CHOOSE A NETWOR	К	
ATT2h5c5	Т4	a ? (i)
ATT3jLU4F	₹y	a 🗟 🚺
CoxWiFi		₹ (i)
DF995C		a 🗟 🚺
HCS		₽ ╤ ()
HCS - 5G		a 🗢 🚺
KIPR		a 🗢 🚺
KIPR Guest	t	? (Ì)
Other		

When you are connected to your Wombat, your device may give various errors;"*no internet connection*" or "*connected with limited*"

<u>This is normal.</u> Proceed with opening a browser and connecting to the KISS IDE.



3

For more advanced users, you can put your Wombat in client mode:

- 1. Select "Settings"
- 2. Select "Advanced"
- 3. Select "Network"



Switching Wombat to Client Mode



- 4. Select drop down box that says "AP Mode"
- 5. Change selection to "Client Mode"
- 6. Select "Connect to ... "
- 7. Select desired network, then select "Connect"
- 8. Enter password for given network, then select



Professional Development Workshop KISS Institute for Practical Robotics © 1993 – 2025 KIPR

Loading the Starting Web Page (Wi-Fi)



- Launch a web browser such as Chrome or Firefox (Internet Explorer will not work).
- 2. Copy this IP address into your browser's address bar followed by ":" and port number 8888; e.g.,

192.168.125.1:8888

IP address Port #

- 3. The user interface for the package will now come up in your browser.
- 4. You may use a computer, tablet or even a smart phone through Wi-Fi.
 - a. Optionally you may use an ethernet cable (instead of Wi-Fi).

Connecting to Your Wombat Using an Ethernet Cable



Botball

Connecting over Ethernet with a Device with an Ethernet port or a Chromebook with a USB port and Dongle

Professional Development Workshop KISS Institute for Practical Robotics © 1993 – 2025 KIPR

Connecting to Your Wombat Using a Ethernet Cable





- Connect your device that has an Ethernet port to the Wombat with an ethernet cable
- If you have no Ethernet port you need a dongle to convert USB to Ethernet and an Ethernet cable (refer to next slide)



Connecting to Your Wombat Using a Dongle to Ethernet Cable



Botball

Resource 8.2

 If your device does not have an ethernet cable you will need a dongle that converts Ethernet to USB (make sure you get one compatible with Windows, OS or Chrome depending on the device you are using.



Connecting to Your Wombat Using an Ethernet Cable





- Make sure you have everything plugged into your wombat (Ethernet or Ethernet + Dongle)
- This will allow only one person at a time to program the robot but it will ensure that you can connect if there is a lot of WI-FI Interference
- 3. FIRST you must use the UI on your robot by going to the ABOUT screen select-Toggle to Event Mode Enabled

Home		
Wombat-aa Copyright © 2012 - 2 Wombat v31.0.0 - Raspber KISS Institute for Practi	a01 2024 Ty Pi: 3B	HINT if the LAN simply has 0.0.0.0 then go back to HOME and select ABOUT again
Developers	Network	Network
See All Developers Event Mode Disabled Enabled	SSID: Password: WiFi: LAN: 192.168.124.1	SSID: Password: WiFi:
Event Mode Enabl	ed LiFe 💼 🤝	LAN: 0.0.0.0

Connecting to Your Wombat Using a Ethernet Cable





Once Plugged into the wombat, Event Mode ENABLED and you see the LAN address in the lower right corner open Chrome or similar browser and type in the LAN number (It is the same number for all robots using an Ethernet cable



KISS Institute for Practical Robotics © 1993 – 2025 KIPR

Connect the Wombat to Your Computer Smartphone or Tablet at School (Ethernet)



- If you have trouble connecting your Wombat via Wi-fi, try ethernet:
- 1. Plug ethernet cord from Wombat to your device

Ethernet port	
Wombat-aa01 Copyright © 2012 - 2024 Wombat v31.1.0 - Raspberry Pi: 3B KISS Institute for Practical Robotics Developers Network SSID: aa01-wombat Password: 9e50c700 WiFi: 192.168.125.1 LAN: 192.168.124.1	192.168.124.1:8888 LAN Port # address

2. Copy this LAN address into your browser's address bar followed by ":" and port number 8888

Connecting to Your Wombat Using a Ethernet Cable





You will also know your are in event mode because when you go back to the HOME screen the background indicates Event Mode



Accessing KIPR Software Suite PRACTICAL Bothall





u.				About
Programs				
	Dupper			
4	Runs a user program			
2				
evelopmen	t Tools			
	KISS IDE			
42	Edit and compile programs for the	e device		
ettings				
~	About			Settings
0	Display the About page	-	Modify the system	's settings, such as network, time, and more.
	User Preferences			
& Set	t owner information, enable accessib more.	oility tools, and		
System Tools	8			
	Shutdows			Terminal
Ċ	Shuts down the System	>.	- Opens	a terminal to the target
0	Host Filesystem			
	Host filesystem manager			

KISS Institute for Practical Robotics © 1993 – 2025 KIPR