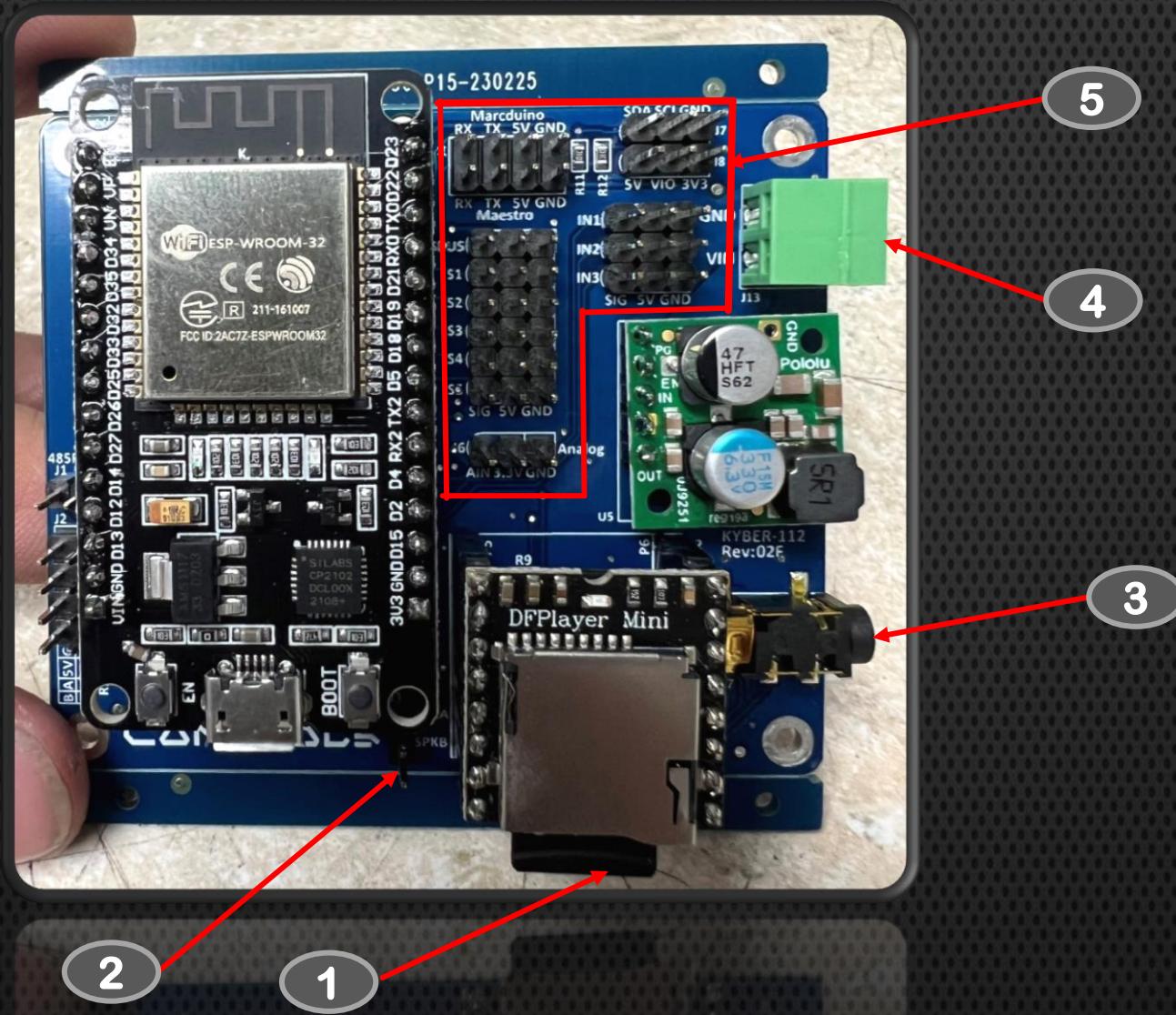




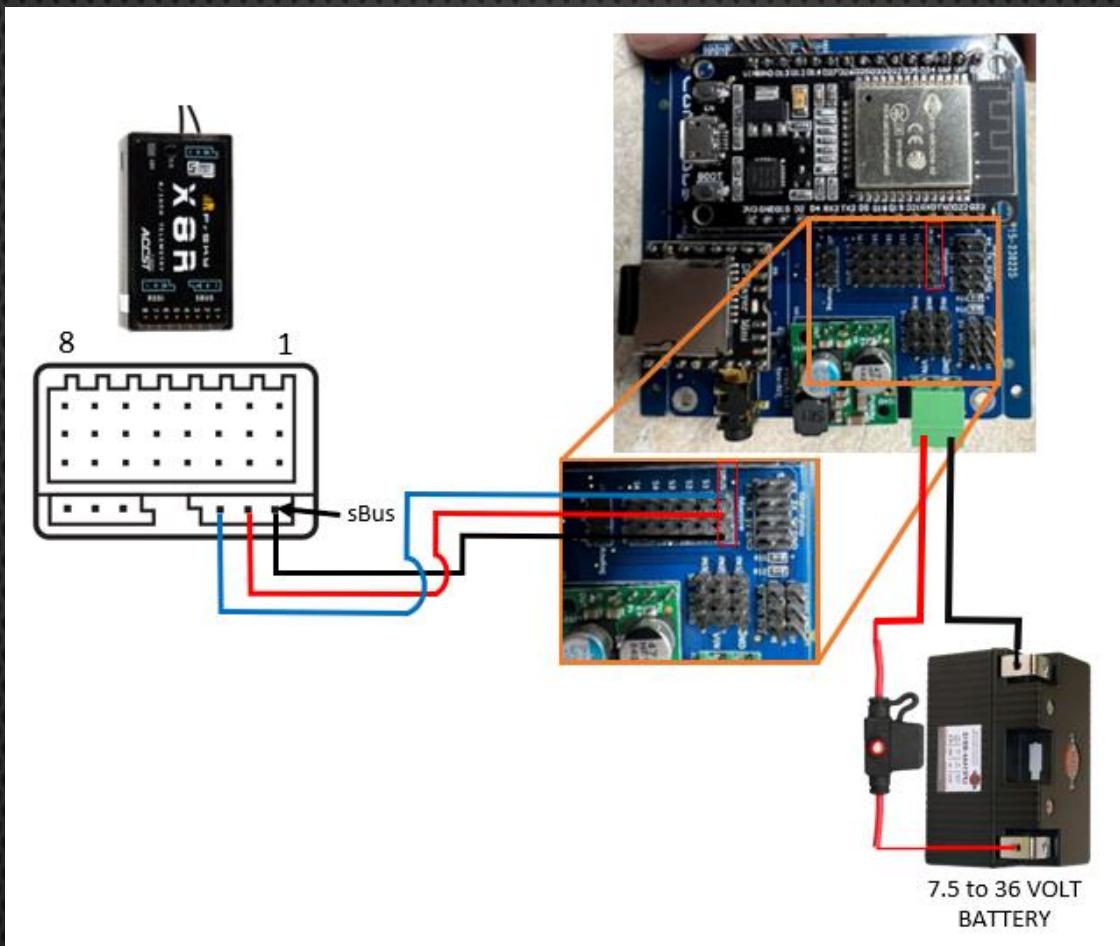
Kyber Controls Manual

Main Board Layout



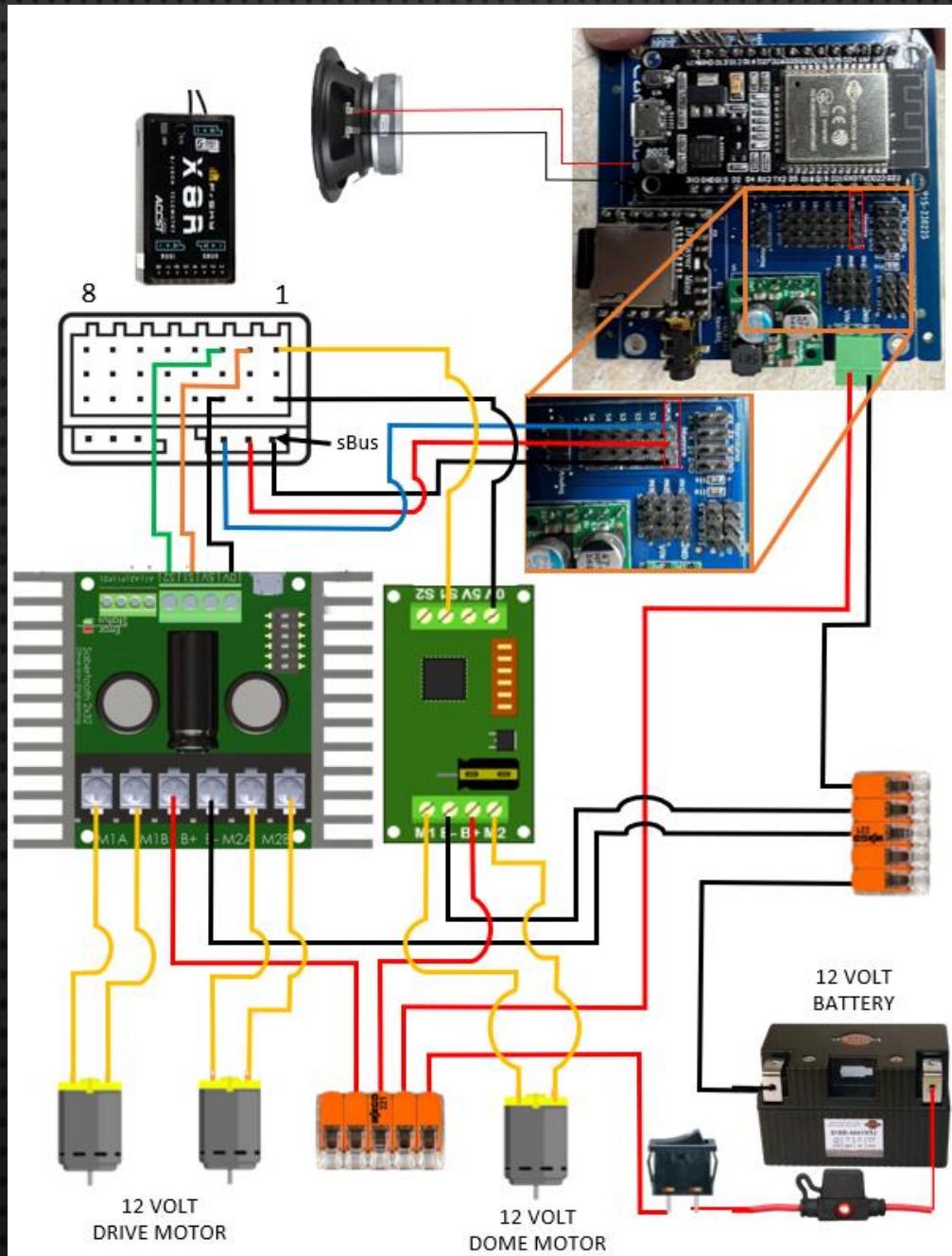
1. SD Card
2. Speaker output **WARNING:** Cannot support more than one 3 Watt speaker
 - Terminal closest to the DF Player is the negative output to the speaker
3. 1/8" audio jack for output to audio amplifier
 - If you experience noise in the system you may need to install a ground loop isolator between the Kyber and the amplifier.
4. Power Input
 - Input voltage: 7.5V to 36V
5. Kyber Inputs and Outputs
 - Output voltage : 5V
 - **WARNING:** 2.5A Max Output Current

Basic Kyber Connection



Use this wiring diagram for basic Sbus
Connection to the Kyber Board

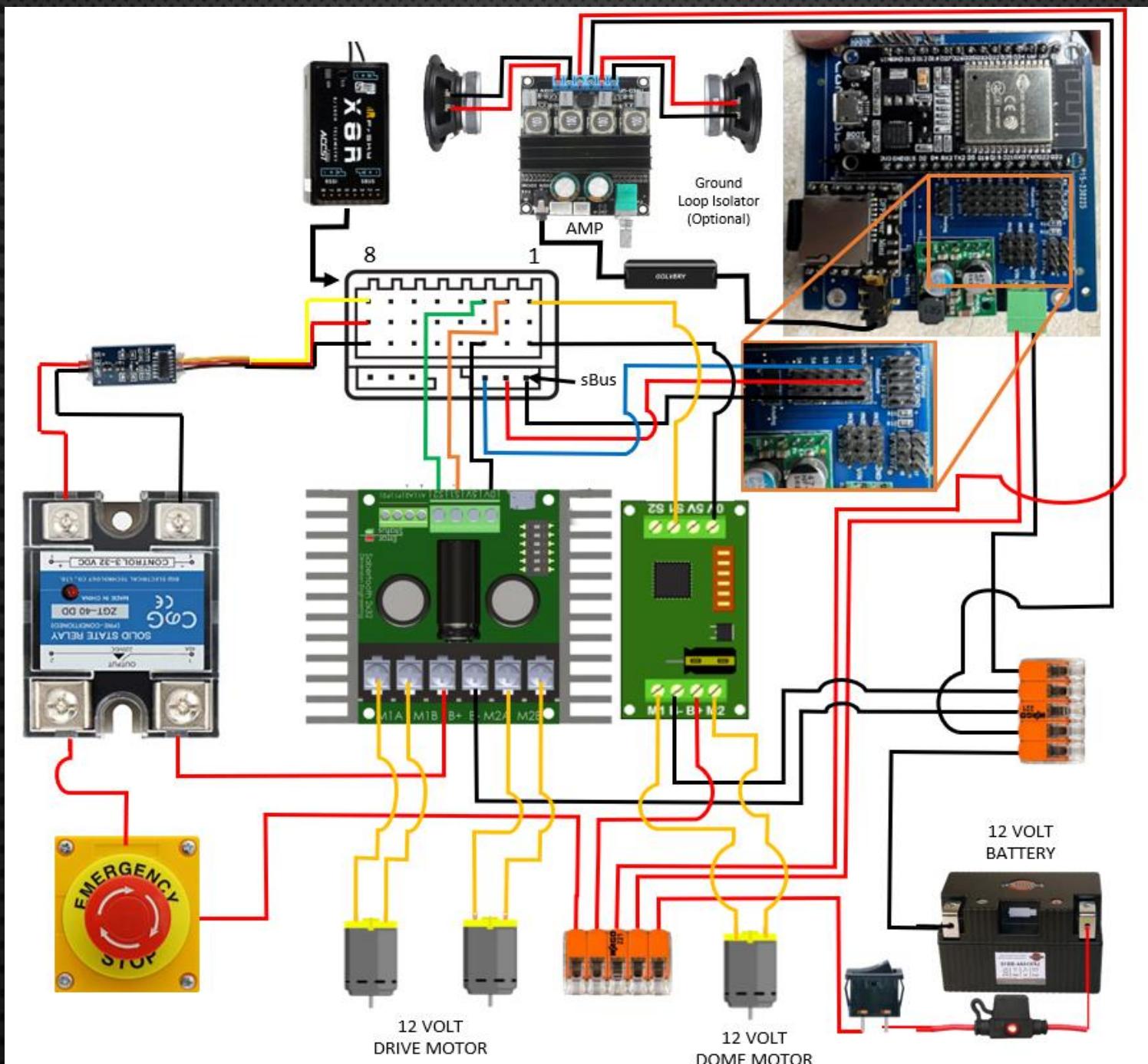
Wiring Guide



Use this wiring diagram for a droid with the following:

- Basic Sbus Wiring
- 12 volt battery
- 12 volt drive motors
- 12 volt dome motor
- 4 ohm 3 watt speaker
- **This Setup has no Drive Motor Safety Cutoff Switch**
- **WARNING: Do not apply any other power sources to the receiver**

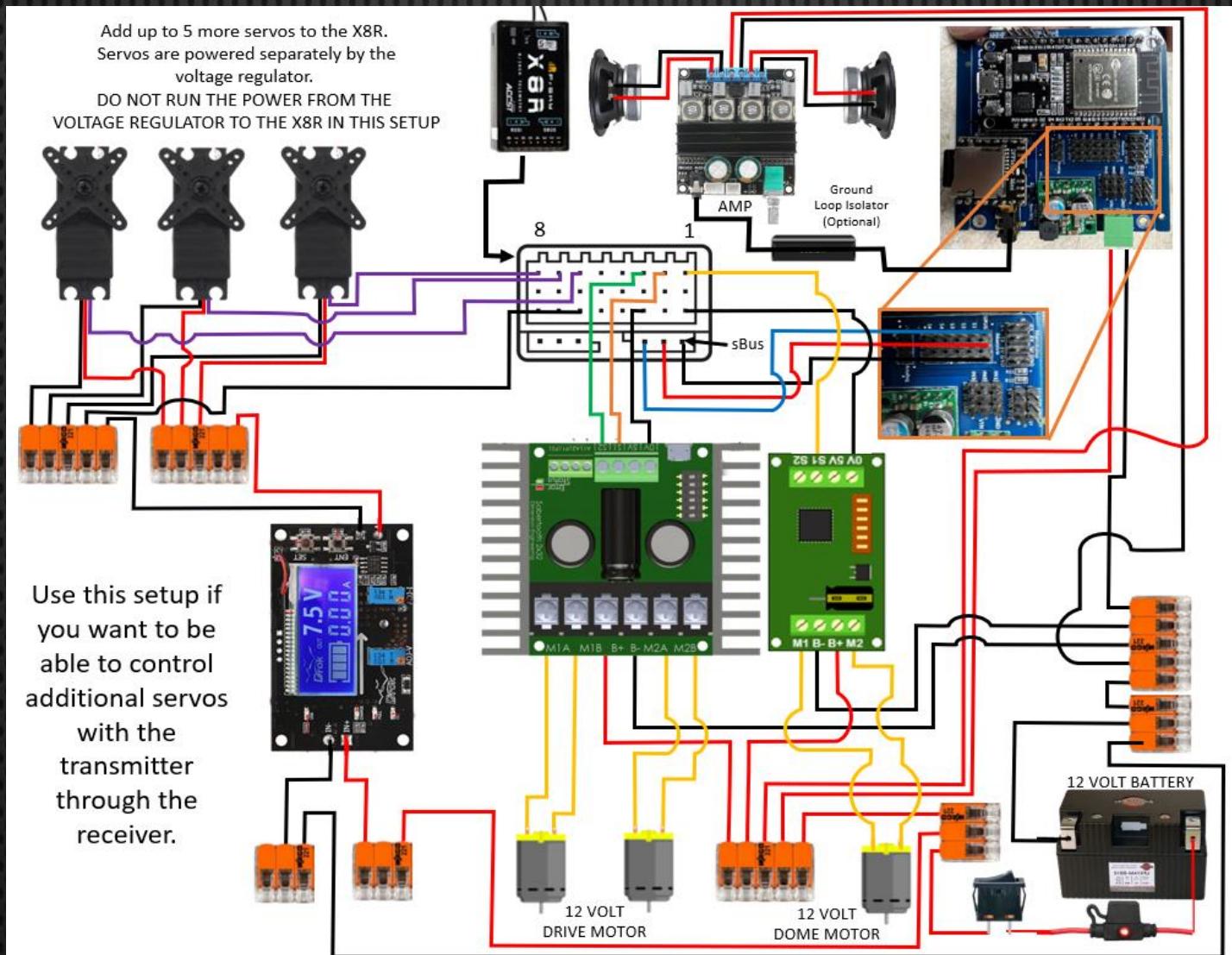
Wiring Guide



Use this wiring diagram for a droid with the following:

- 12 volt battery
- 12 drive volt motors
- 12 volt dome motor
- 12 volt Audio Amplifier and speakers
- **This Setup has a Drive Motor Safety Cutoff Switch**
- **WARNING: Do not apply any other power sources to the receiver**

Wiring Guide



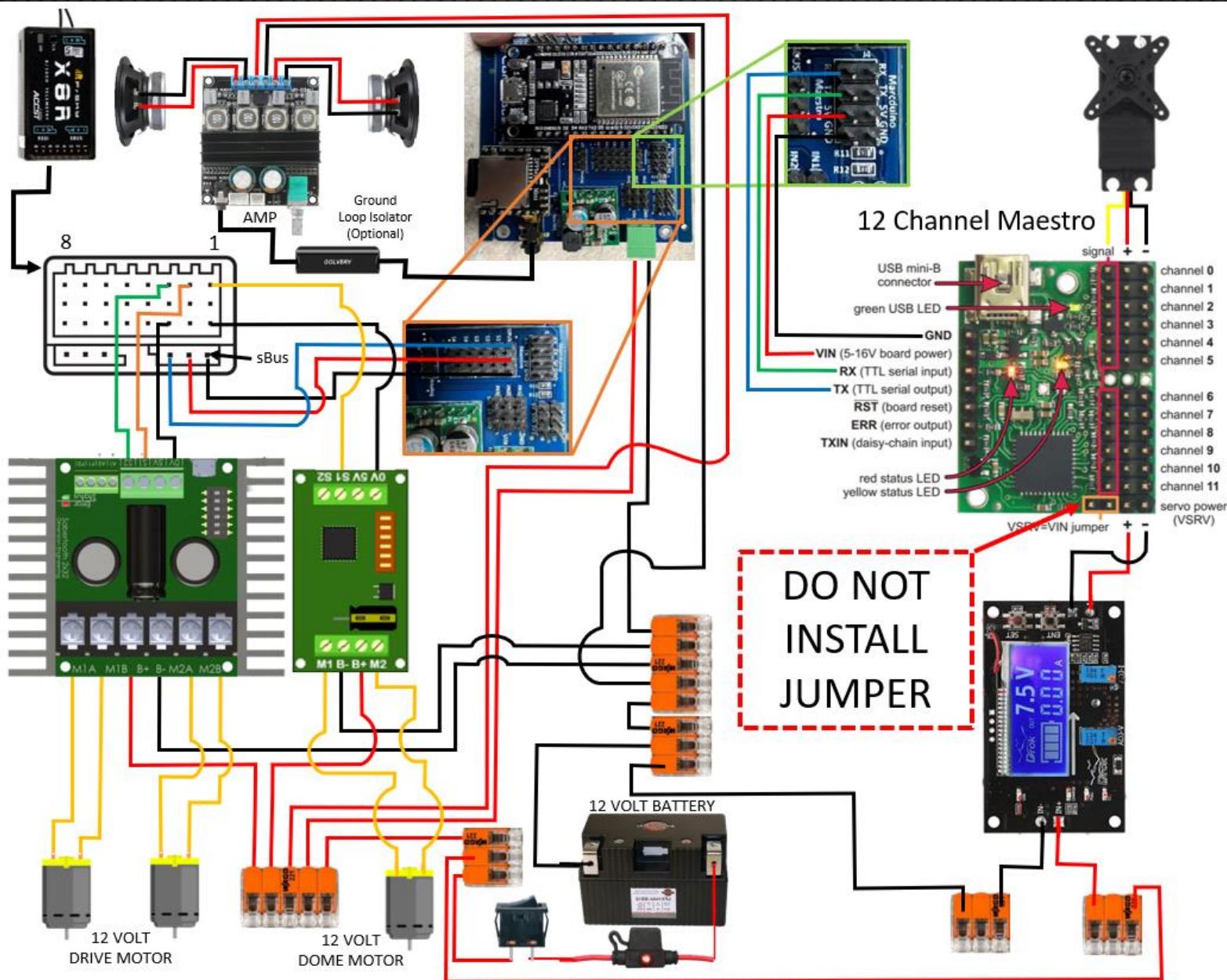
WARNING: Do Not connect the power wire on the sBus of the Kyber to the receiver for this setup.

This will destroy the Kyber.

Use this wiring diagram for a droid with the following:

- 12 volt battery
- 12 drive volt motors
- 12 volt dome motor
- 12 volt Audio Amplifier and speakers
- Additional servos controlled by the transmitter through the receiver
- **This Setup has no Drive Motor Safety Cutoff Switch**
- **WARNING: Do not apply any other power sources to the receiver**

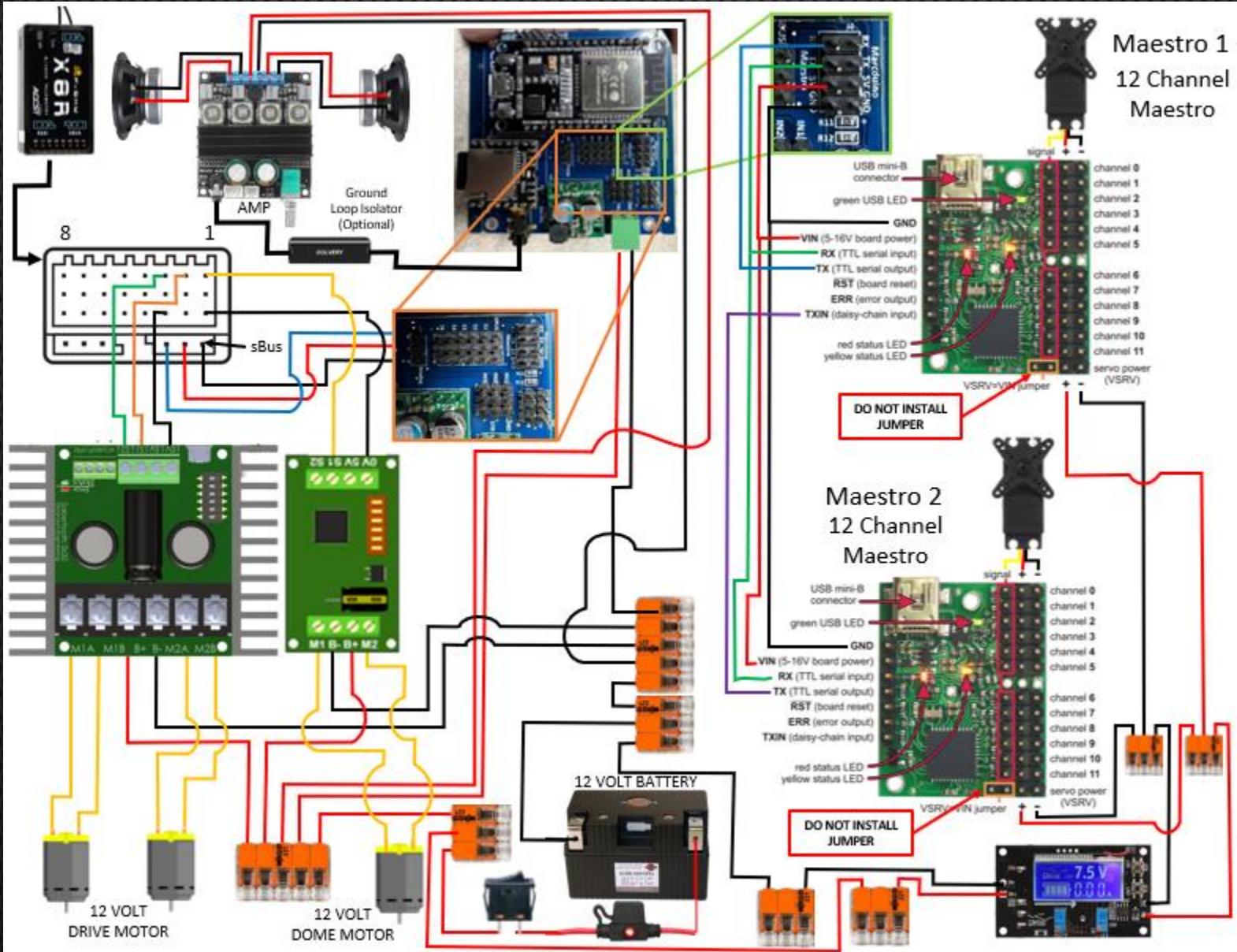
Wiring Guide



Use this wiring diagram for a droid with the following:

- 12 volt battery
- 12 drive volt motors
- 12 volt dome motor
- 12 volt Audio Amplifier and speakers
- (1) 12, 18 or 24 channel Maestro
- Up to 24 servos
- **This Setup has no Drive Motor Safety Cutoff Switch**
- **WARNING: Do not apply any other power sources to the receiver**

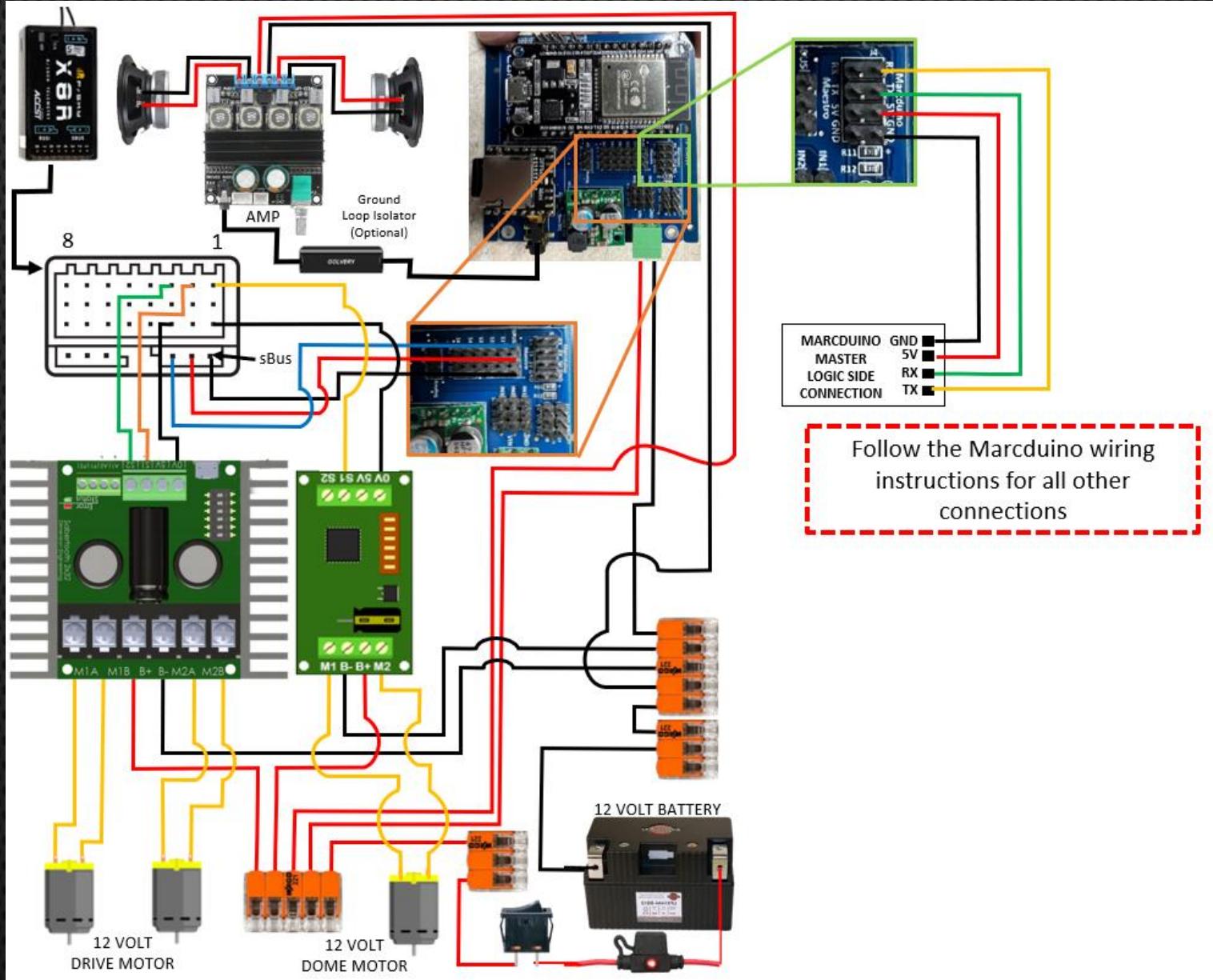
Wiring Guide



Use this wiring diagram for a droid with the following:

- 12 volt battery
- 12 drive volt motors
- 12 volt dome motor
- 12 volt Audio Amplifier and speakers
- (2) 12, 18 or 24 channel Maestro
- Up to 48 servos
- **This Setup has no Drive Motor Safety Cutoff Switch**
- **WARNING: Do not apply any other power sources to the receiver**

Wiring Guide

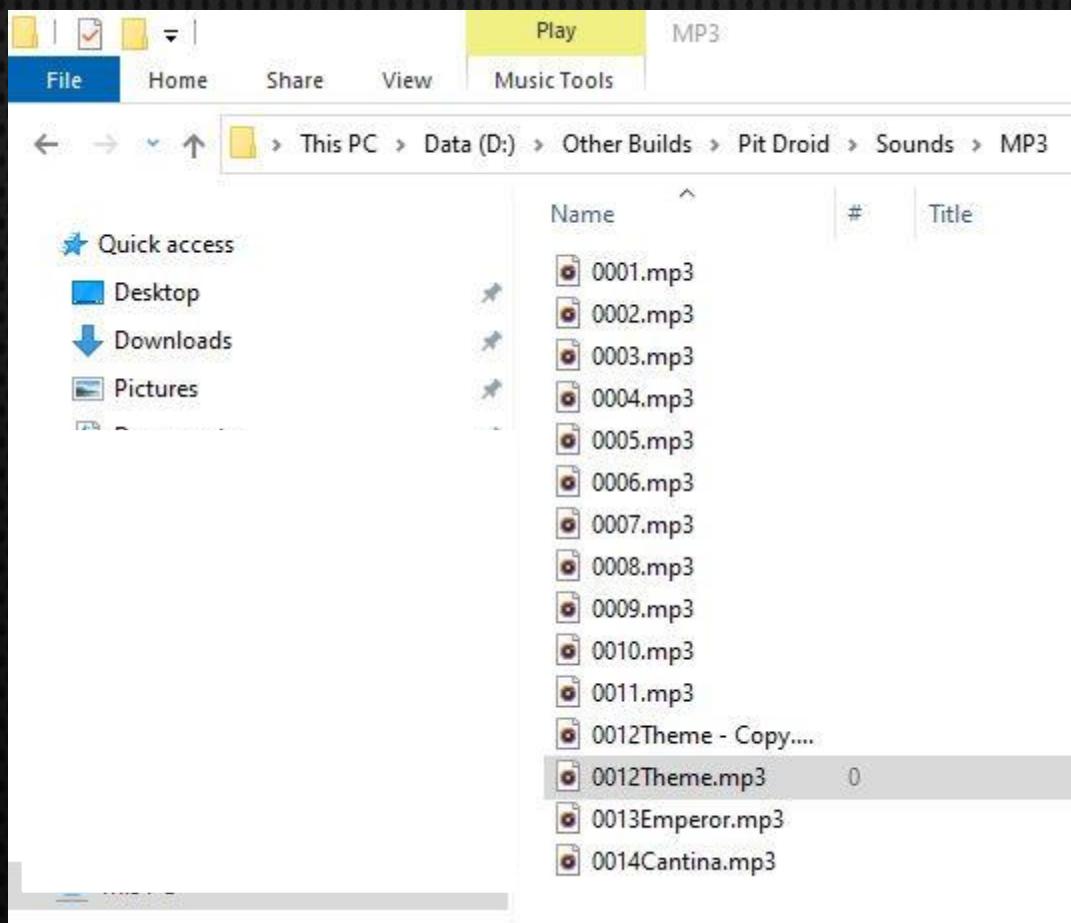
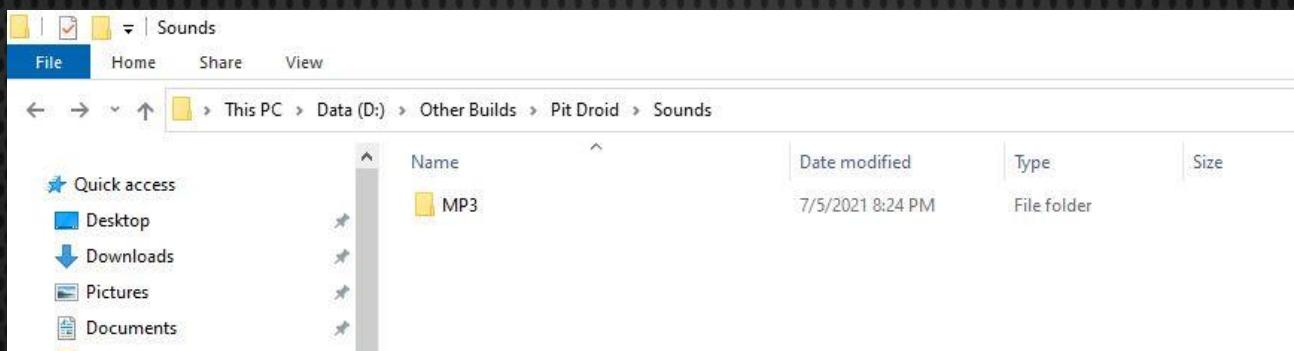


Use this wiring diagram for a droid with the following:

- 12 volt battery
- 12 drive volt motors
- 12 volt dome motor
- 12 volt Audio Amplifier and speakers
- Marcduino Control System
- **This Setup has no Drive Motor Safety Cutoff Switch**
- **WARNING: Do not apply any other power sources to the receiver**

Setup of Sound Files

- Sound files need to be in MP3 format
- Sound files need to names as 0001.mp3 thru 0255.mp3
- Sound files need to be under a folder named MP3
- Sound files can have additional information past the 4 numbers but does not need to be entered into the Kyber controls pages.
- Keep a copy on your computer and save a copy to the SD card for the Kyber System. This will help you when assigning sounds to the Kyber System.



Setup of Maestros

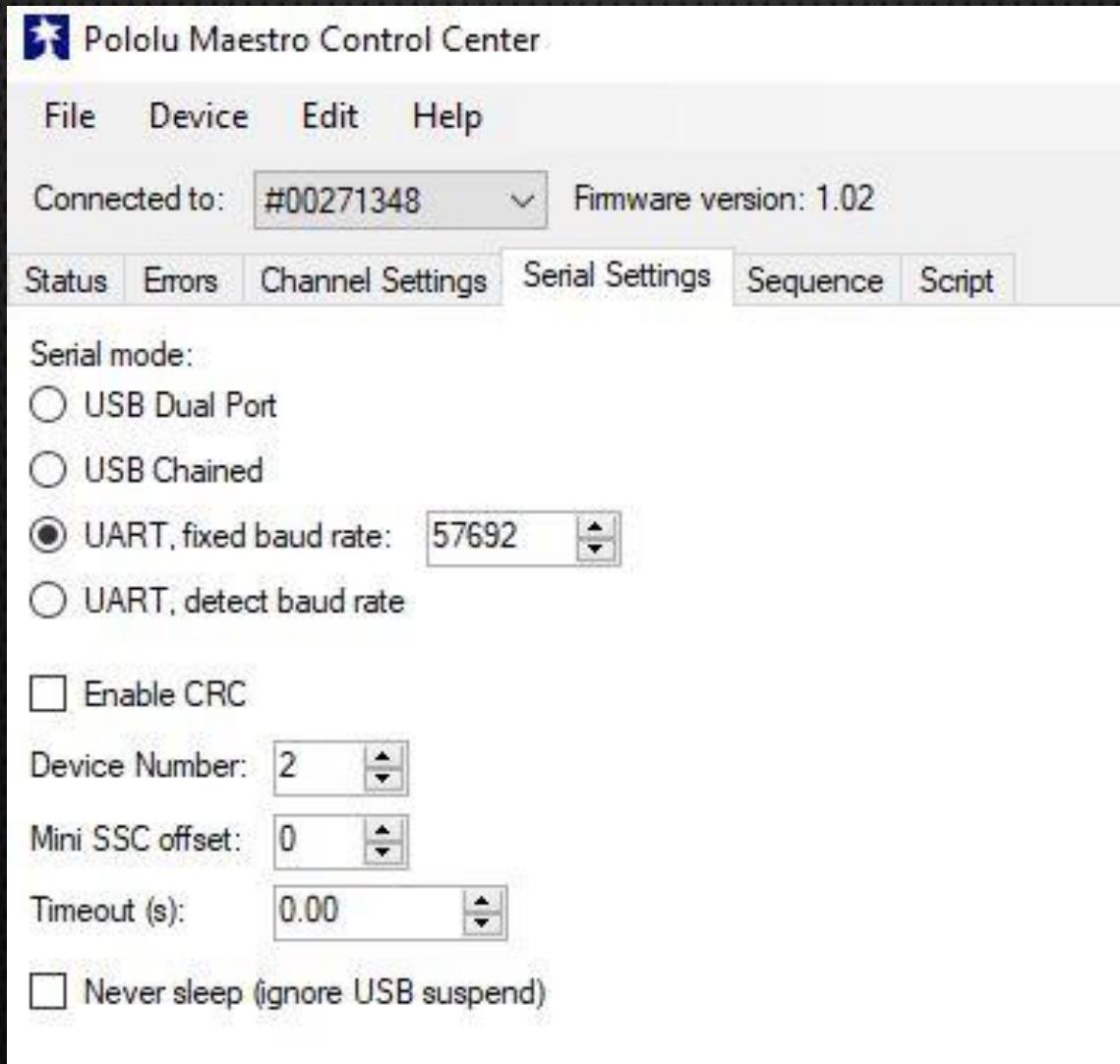
1. Maestro 1 Set-up

1. Plug in the USB of the Maestro you will be setting up
2. Open the Pololu Maestro Control Center
3. Click on the Serial Settings Tab
4. Click on the UART, fixed baud rate and enter 57692
5. Enter 1 in the Device Number box to set this as maestro 1

2. Maestro 2 Set-up

1. Plug in the USB of the Maestro you will be setting up
2. Open the Pololu Maestro Control Center
3. Click on the Serial Settings Tab
4. Click on the UART, fixed baud rate and enter 57692
5. Enter 2 in the Device Number box to set this as maestro 2

NOTE: Uncheck Enable CRC and Never Sleep



Quick Start Guide

There are 2 different ways that the Kyber Control System can be set up on your transmitter. You can use them both at the same time or independently.

- The first way is to have only 6 buttons that you rewire to (3) 3 way switches. This will give you 6 buttons on the transmitter. You will not need to install one of the additional (15) button boards that you purchase with the Kyber system. You will use the Kyber webpage button RC tab to set up these button sounds and maestro movements.
- The second way is to install one of the 15 button boards that you bought with the Kyber Control System. This will give you 15 additional buttons with the option to use a toggle switch to gain another 15 sounds and maestro movements. This gives you a total of 30 sound and maestro movement buttons. You will set these under the Kyber webpage Button 1 and Button 2 tabs.
- You can also use both the first and second option for a total of 36 sound and maestro movement combos.

Quick Start Guide

1. Connect either an amp or a speaker to the Kyber Main Control Board
2. Connect the sBus input of the Kyber Main Control Board to the sBus output of the receiver
3. Connect Maestros (optional)
4. Power on the Kyber Main Control Board
5. Using a PC, Laptop, phone or tablet navigate to your WiFi settings page and select the “KYBER” WiFi network.
 - The password is 12345678
6. Open a web browser and enter <http://192.168.4.1> in the web address bar. This will open up the General Page of the Kyber system.
7. Click on the RC Channel Tab
 1. Enter the channels into the boxes in the Kyber software that you have assigned to each channel on your transmitter.
 2. Click the Save to Memory Button.
8. Click on the General Tab
 1. Enter the number of buttons on the button board installed on the transmitter. If you bought the prepopulated button board enter 15. If you bought the button board with no buttons enter the number of custom buttons you installed. If you did not install a button board on your transmitter enter 0.
 2. If you entered anything other than 0 in step 8.1 then you can choose a button to be the STOP ALL BUTTON. This will assign a button on the button board that will stop all sound and all motion.
 3. Set the number of maestros connected to the Kyber Main Board. This can be 0, 1 or 2.
 4. Click the Save to Memory Button.

Continued on next page

Quick Start Guide

Continued from previous page

If you installed a custom button board (either the button board with buttons or without buttons) Continue here to set up the button pads. If you did not install a custom button board skip to Step 12

9. Click on the Buttons Value Tab.

1. You will not use this page if you did not install a custom button board onto your transmitter.
2. With the transmitter powered on and all channels assigned you will see a gray bar with the sBus Value being shown. This number will change as you push the buttons on the custom installed button board.
3. Without any buttons being pressed you will read the number in the sBus value and enter this number in the released box.
4. Now press button 1, read the value for button 1 and enter this value in the button 1 box.
5. Repeat step 9.5 for all of your button board buttons.
6. Click the Save to Memory Button.

10. Click on the Buttons 1 Tab.

1. Enter the sound you would like assigned to each button. This will be the number you gave the sound when saved to the SD card. Enter this as 0001 thru 0255. Do not enter any text that you may have given the sound name.
2. Enter the Maestro script that you would like assigned to each button. Enter this as 1 thru 100.
3. Enter any delays you would like associated with the sounds or the scripts. Enter this in milliseconds. This can help to better align the sounds to the scripts if needed.
4. Click the Save to Memory Button.

11. Repeat Step 10 for Button 2 Tab.

Continued on next page

Quick Start Guide

Continued from previous page

12. Click on the RC Remote Buttons Tab.

1. Enter the sound you would like assigned to each button. This will be the number you gave the sound when saved to the SD card. Enter this as 0001 thru 0255. Do not enter any text that you may have given the sound name.
2. Enter the Maestro script that you would like assigned to each button. Enter this as 1 thru 100.
3. Enter any delays you would like associated with the sounds or the scripts. Enter this in milliseconds. This can help to better align the sounds to the scripts if needed.
4. Click the Save to Memory Button.

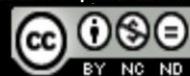
13. This completes the set up of the Kyber Control System.

[Home](#)[General](#)[Buttons RC](#)[Buttons Value](#)[RC Channels](#)[WiFi](#)[Firmware](#)

Kyber Controls System

Version: 1.1.3 - June 2021

This control system is licensed for personal use only under CC BY-NC-ND 4.0.



Layout of Home Page

1. Home Page

- This is the home page. The Kyber will always start on this page.
- You will be able to navigate to all pages from any page
- There is nothing to change on this page
- Please note that this system is licensed for personal use only under CC BY-NC-ND 4.0

Home

General

Buttons RC

Buttons Value

RC Channels

WIFI

Firmware

Maestro

1 → **Quantity** 2
Maestro 1 Maestro 2
Startup Script 0 0
Delay 0 0
Enable Script Check ■ ← 4

3 → 2

Mararduino Support

5 → Enable ■

Buttons

7 → **Quantity** 0
Stop All 0
Debounce 0 ← 6
Debounce 0 ← 8

E-Stop Support

Enable ■ ← 9
Delay 0
Sound
Triggered 0
Untriggered 0

Sound Features

10 → **Volume Level** 0
Start Sound 0 ← 11
Delay 0
Equalizer
Normal
Pop
Rock
Jazz
Classic
Bass
Save to Memory ← 14

12 → 13

13 → 10

1. Maestro Quantity
 - Enter the number of Maestro Units connected to the Kyber system (Max of 2 Maestros).
 - Click save to memory to get additional entry blocks as shown above.
2. Maestro Startup Script
 - You can have a start up script run after the Kyber system boots up.
3. Maestro Delay
 - Use these blocks to set a delay for the motions in the maestro to start to ensure all of your systems have booted up. Enter in milliseconds
4. Enable Script Check
 - Use this to enable or disable the Kyber for checking if a maestro script is running before being able to activate another maestro script
5. Mararduino Support
 - Check mark this box if you have connected a mararduino. This will allow you to control the features of the mararduino with your transmitter.
6. Quantity
 - Enter the number of buttons you have on your button pad. This is the pad that you bought with the Kyber. Either the 15 button with preinstalled buttons or the 15 button custom board. If you choose the custom board and only installed 15 additional buttons then enter 15 here.
7. Stop all sound and motion.
 - Enter the button number that you would like to use to stop all sound and motion functions that are currently playing. Think of this as an emergency stop all.
8. Debounce
 - This is for debouncing buttons that have been added to the transmitter. If you are experiencing a sound double playing when you press a button once you can try and eliminate that with this feature. Start at 1 and increase the number until you no longer have the double played sounds.
9. E-Stop Support
 - Not currently supported
10. Volume Control
 - If you choose to not put the volume control of the Kyber on one of the transmitter channels you can set the volume level here. If you put the volume control on a RC channel you will not use this box.
11. Start up Sound
 - Enter a sound you would like to play at start up. This is optional.
12. Delay
 - You can have the sound start after a certain amount of time. This will allow all of your systems to start before playing the sound. Enter a number in milliseconds
13. Equalizer
 - This is an active equalizer and can be adjusted in real time while you are playing music. This will allow you more options on getting the sounds to be clear on your sound systems. You cannot adjust this from the transmitter. Only in the Kyber webpage.
14. Save to Memory
 - ALWAYS SAVE YOUR CHANGES.
 - You will lose all of the settings you just set if you do not hit this button before changing pages.

RC Remote Buttons

Description	Min	Sound Max	Delay	Maestro 1 Script	Delay	Maestro 2 Script	Delay	Mararduino Command
Button 1	0	0	0	0	0	0	0	
Button 2	0	0	0	0	0	0	0	
Button 3	0	0	0	0	0	0	0	
Button 4	0	0	0	0	0	0	0	
Button 5	0	0	0	0	0	0	0	
Button 6	0	0	0	0	0	0	0	

Save to Memory

2

1. Button 1 Thru Button 6

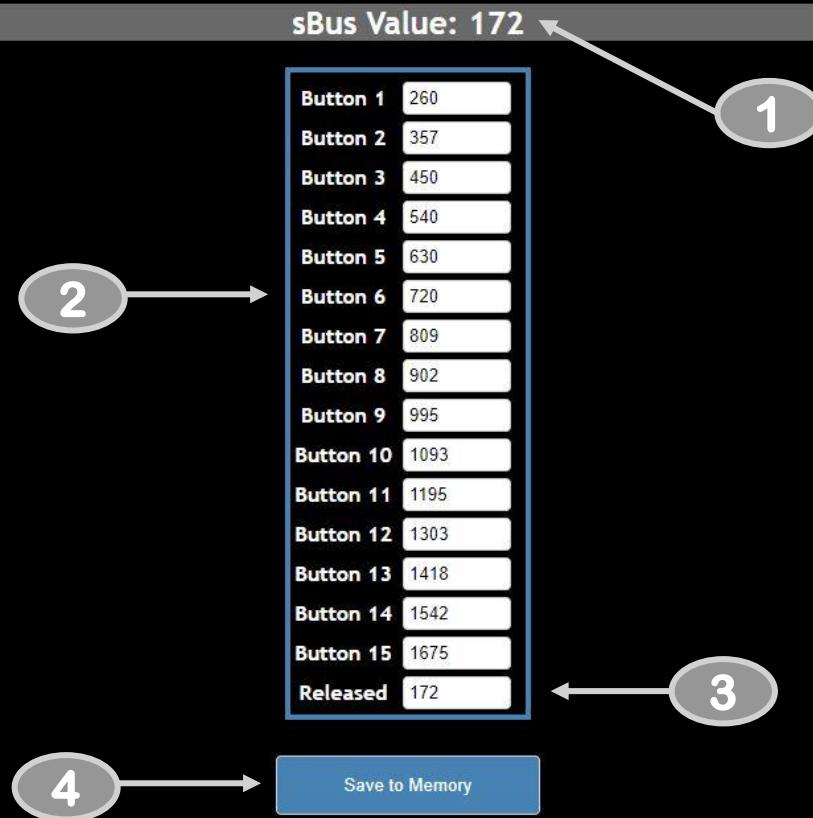
- Description
 - Use this to give your button a description. (Optional)
- Sound Min/Max
 - Put the number of the sound you would like to play.
 - If only playing one sound put the same number in the Min and the Max boxes
 - If playing a range of sounds put the smaller number in the min and the larger number in the Max. When you push this button on the remote it will play the first sound. When you press the button again it will play the next sound.
- Sound Delay
 - Use these block to set a delay for the sounds to start.
- Maestro 1 and 2 Motion
 - Enter the motion that you would like to activate when the button is pressed.
- Maestro 1 and 2 Delay
 - Use this block to set delays. This allows you to line up sounds playing with multiple maestros and ensure everything aligns properly.
- Mararduino
 - Use this block to enter Mararduino commands that you would like to activate when the button is pressed.

2. Save to Memory

- ALWAYS SAVE YOUR CHANGES.
- You will lose all of the setting you just set if you do not hit this button before changing pages.

NOTE: The Maestro 1 and Maestro 2 tabs will only be available if you have listed a quantity of maestros in the Maestro Quantity Box on the General Page.

NOTE: The Mararduino tabs will only be available if you have check marked the Mararduino box on the General Page.



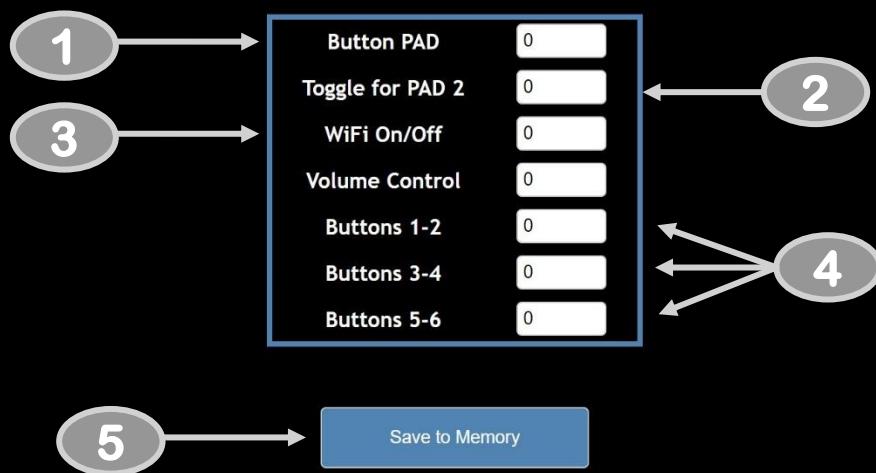
Layout of Button Value Page

NOTES:

- This page is used to read the value output of your transmitter with the installed button pads.
- You will not use this page if you do not have an additional 15 button pad or the KyberPad software installed and configured on your transmitter

1. sBus Value
 - You will have to have a 15 button pad installed on your transmitter and properly working.
 - You will need to have the number of buttons present on your button pad listed on the General page,
 - With these two items complete you will see the sBus Value change when you press a button on your transmitter button pad.
2. Button Values
 - Enter the number you see listed in the sBus value for the button you would like to be referenced for each number listed. This will correspond back to the Button 1 and Button 2 pages
3. Released State of Button Pad
 - Enter the number listed in the sBus Value when no button is pressed. This is the release state of the button pad.
4. Save to Memory
 - ALWAYS SAVE YOUR CHANGES.
 - You will lose all of the setting you just set if you do not hit this button before changing pages.

RC Channels Settings



Layout of RC Channels Page (Part 1)

NOTE: This button tab has been broken apart onto two pages. You will not see the RC channel Pass thru unless you are using Maestros and listed the number of Maestros on the General Tab Page. **See the next page for Layout of RC Channels Page (Part 2).**

NOTE: It is best to use channel 9 thru 16 for all of these functions. This will allow usage of the first 8 channels to be PWM outputs of the receiver.

1. Button Pad
 - You will enter the channel you assigned on your transmitter for the custom installed Button pad. I usually use channel 9 and this is how it will be referenced in all my videos
2. Toggle for PAD 2
 - You will enter the channel of a 2 position switch you assigned on your transmitter.
 - This is used to toggle between Button 1 (sounds and/or motion) Page and Button 2 (sounds and/or motion) Page.
3. WiFi On/Off
 - You will enter the channel of a 2 position switch you assigned on your transmitter.
 - This is highly recommended so that you can turn the WiFi off while in public setting for security purposes
4. Buttons 1-6
 - You will enter up to 3 channels of (3 position switches) that you have removed and installed buttons)
 - This will allow you to have a total of 6 buttons without having to have a custom button pad installed. If you have the button pad installed this will give you a total of 21 buttons you can customize.
5. Save to Memory
 - **ALWAYS SAVE YOUR CHANGES.**
 - You will lose all of the setting you just set if you do not hit this button before changing pages.

RC Channels Settings

Button PAD	9
Toggle for PAD 2	10
WiFi On/Off	11
Volume Control	12
Buttons 1-2	8
Buttons 3-4	7
Buttons 5-6	6
E-Stop #1	0
E-Stop #2	0

RC Channels Pass Through

Description	RC Channel	Maestro ID	Channel	PWM Min	PWM Max	Disable DeadBand
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>
	0	0	0	0	0	<input checked="" type="checkbox"/>

1 → Save to Memory

Layout of RC Channels Page (Part 2)

1. RC Channel Pass Through

- This allows you to use any channel on the transmitter (up to 16 channels) to control servos through the maestro that are connected to the maestros
- This will not appear until you enter the number of maestros you have connected to the system in the General Page.
- The channel of the transmitter you are going to use has to be at the center point to allow the maestro to play a script.
- To use the channel check the enable box and enter the servo channel of the maestro you are wanting to control.
- You can control more than one servo at a time by having two maestros.
- You can disable the Kyber programmed dead band by clicking the disable dead band check box for the affected channel

2. Save to Memory

- ALWAYS SAVE YOUR CHANGES.
- You will lose all of the setting you just set if you do not hit this button before changing pages.

Buttons Pad 1

	Description	Min	Sound Max	Delay	Maestro 1 Script	Delay	Maestro 2 Script	Delay	Marduino Command
Button 1		0	0	0	0	0	0	0	
Button 2		0	0	0	0	0	0	0	
Button 3		0	0	0	0	0	0	0	
Button 4		0	0	0	0	0	0	0	
Button 5		0	0	0	0	0	0	0	
Button 6		0	0	0	0	0	0	0	
Button 7		0	0	0	0	0	0	0	
Button 8		0	0	0	0	0	0	0	
Button 9		0	0	0	0	0	0	0	
Button 10		0	0	0	0	0	0	0	
Button 11		0	0	0	0	0	0	0	
Button 12		0	0	0	0	0	0	0	
Button 13		0	0	0	0	0	0	0	
Button 14		0	0	0	0	0	0	0	
Button 15	** Stop All **								

Save to Memory

2

Buttons 1 Tab

1. Button Pad 1 Buttons 1 thru 15

- This is for setting up the 15 button pad that you add to your transmitter.
- This is for position 1 of the 2 position switch you set for control of Pad 2
- Description
 - Use this to give your button a description. (Optional)
- Sound Min/Max
 - Put the number of the sound you would like to play.
 - If only playing one sound put the same number in the Min and the Max boxes
 - If playing a range of sounds put the smaller number in the min and the larger number in the Max. When you push this button on the remote it will play the first sound. When you press the button again it will play the next sound.
- Sound Delay
 - Use this block to set a delay for the sounds to start.
- Maestro 1 and 2 Motion
 - Enter the motion that you would like to activate when the button is pressed.
- Maestro 1 and 2 Delay
 - Use this block to set delays. This allows you to line up sounds playing with multiple Maestros and ensure everything aligns properly.
- Mararduino
 - Use this block to enter Mararduino commands that you would like to activate when the button is pressed.

2. Save to Memory

- ALWAYS SAVE YOUR CHANGES.
- You will lose all of the setting you just set if you do not hit this button before changing pages.

Buttons Pad 2

Description	Min	Sound Max	Delay	Maestro 1		Maestro 2		Mararduino Command
				Script	Delay	Script	Delay	
Button 1	0	0	0	0	0	0	0	
Button 2	0	0	0	0	0	0	0	
Button 3	0	0	0	0	0	0	0	
Button 4	0	0	0	0	0	0	0	
Button 5	0	0	0	0	0	0	0	
Button 6	0	0	0	0	0	0	0	
Button 7	0	0	0	0	0	0	0	
Button 8	0	0	0	0	0	0	0	
Button 9	0	0	0	0	0	0	0	
Button 10	0	0	0	0	0	0	0	
Button 11	0	0	0	0	0	0	0	
Button 12	0	0	0	0	0	0	0	
Button 13	0	0	0	0	0	0	0	
Button 14	0	0	0	0	0	0	0	
Button 15	** Stop All **							

Save to Memory

2

Buttons 2 Tab

1. Button Pad 2 Buttons 1 thru 15

- This is for setting up the 15 button pad that you add to your transmitter.
- This is for position two of the 2 position switch you set for control of Pad 2
- Description
 - Use this to give your button a description. (Optional)
- Sound Min/Max
 - Put the number of the sound you would like to play.
 - If only playing one sound put the same number in the Min and the Max boxes
 - If playing a range of sounds put the smaller number in the min and the larger number in the Max. When you push this button on the remote it will play the first sound. When you press the button again it will play the next sound.
- Sound Delay
 - Use this block to set a delay for the sounds to start.
- Maestro 1 and 2 Motion
 - Enter the motion that you would like to activate when the button is pressed.
- Maestro 1 and 2 Delay
 - Use this block to set delays. This allows you to line up sounds playing with multiple Maestros and ensure everything aligns properly.
- Mararduino
 - Use this block to enter Mararduino commands that you would like to activate when the button is pressed.

2. Save to Memory

- ALWAYS SAVE YOUR CHANGES.
- You will lose all of the setting you just set if you do not hit this button before changing pages.

[Home](#)[General](#)[Buttons RC](#)[Buttons Value](#)[RC Channels](#)[WiFi](#)[Firmware](#)

WiFi Settings

The screenshot shows a WiFi settings interface. At the top, there are two radio button options: 'AP MODE' (selected) and 'STATION'. Under 'AP MODE', the SSID is 'KYBER' and the Password is '12345678'. Under 'STATION', the SSID is 'YourSSID' and the Password is 'YourKey'. Below the interface, the MAC address is listed as 'Mac: AC:67:B2:39:21:68' and the IP address as 'IP : 192.168.4.1'. A green WiFi signal icon is displayed. At the bottom right is a blue button labeled 'Save WIFI (Reboot needed)'.

1

Mac: AC:67:B2:39:21:68
IP : 192.168.4.1

2

Save WIFI (Reboot needed)

WiFi Settings

1. WiFi Settings

- When you first power on the Kyber system these are the default setting.
 - All of these settings can be changed to fit your system but pay attention to the password requirements that pop up when you hover over the entry fields.
- AP MODE
 - This is the stand alone Kyber WiFi. When you turn on the Kyber the WiFi network will enable and you can then see it in your computers available WiFi network.
 - You can change the SSID to better fit your droid and make it more personal.
 - It is also recommended that you change the password for security reasons.
- STATION
 - You can check this box if you would like the Kyber system to log into your home network.
 - Enter your network name in the SSID field and password into the password field.
 - You are limited on character number so you may want to set up a separate guest network just for the Kyber

2. Save to Memory

- ALWAYS SAVE YOUR CHANGES.
- You will lose all of the setting you just set if you do not hit this button before changing pages.

NOTE: When your home WiFi network is not available the Kyber system will switch back to AP mode and you can access the SSID network through your computer.

Local Firmware Update

1

Select File

2

Update Firmware

Progress:

Online Firmware Update

3

Check Online for Update

Save/Restore Configuration

Config file:

[config.han](#)

Select Config File

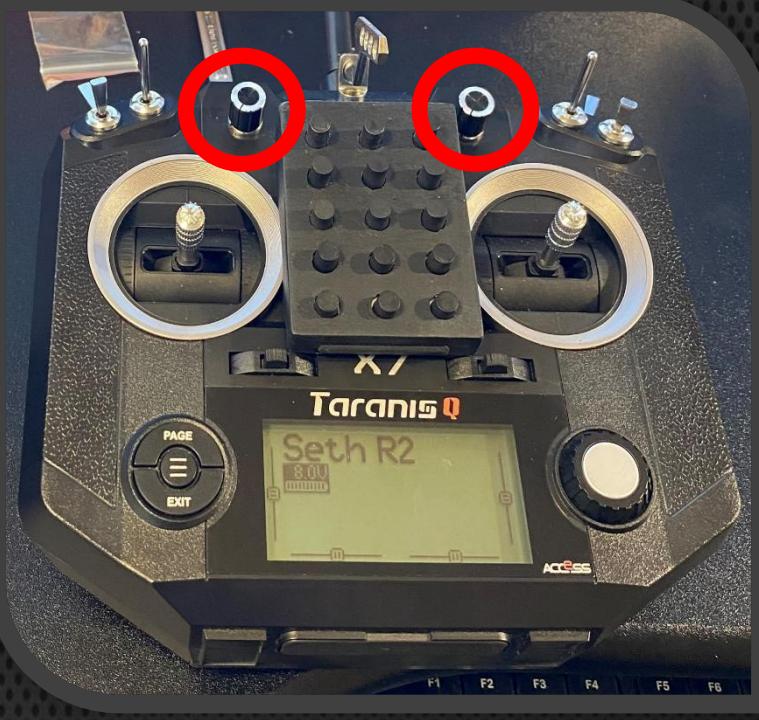
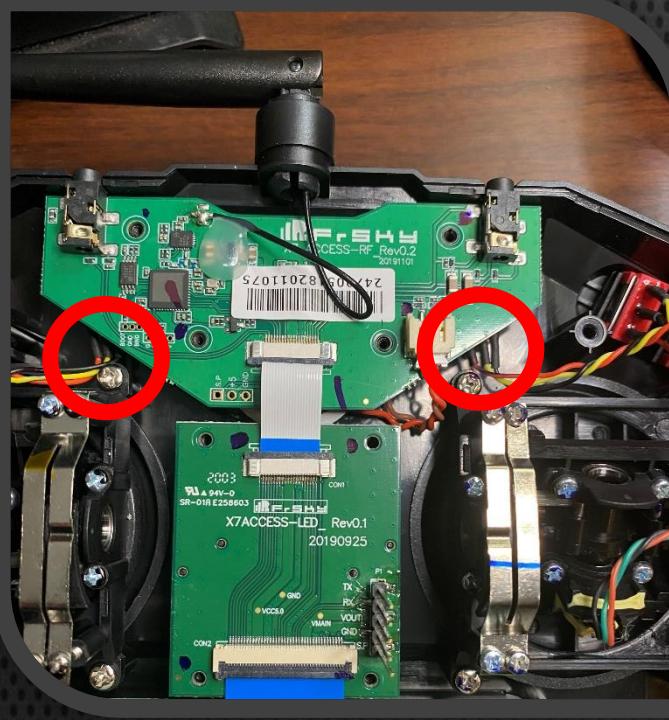
Update Config

Clear Config

Firmware Upgrade

1. This page is for upgrading the firmware of the Kyber system.
 - All updates will be posted on the Kyber Update Facebook page that you will be invited to after purchase of the Kyber system.
 - Click on this field to select the file for upload. This will carry you to an upload page. Navigate to where you saved the file and click open. This will place the file into the upload zone.
 - NOTE: The file name will not appear in the field after opening the file.
2. Upload
 - After loading the update file click the Upload button. On some browsers this will show an upload percentage but not on all. You will know the upload is complete after the Kyber system resets. You will see the led on the Kyber stop blinking while the upload is being preformed. Do not unplug while uploading
 - After the page says complete you will need to relog into the WiFi and reopen the Kyber browser.
3. Online Firmware Update
 - If you have the Kyber connected to your home network and it has internet access, you can use this button to check for online firmware updates
4. Save/Restore Configuration
 - Use this section to save your configuration of the Kyber software to your computer. You can then restore your configuration to a new Kyber if needed
 - You can also clear the config and go back to default

Wiring up the button pad



- These pictures show where to wire in the button pad for a X7 FrSky transmitter.
- You will need to wire in the 3 wires from the button pad into one of the potentiometers of the transmitter.
- There are only two potentiometers available on the X7. I usually choose to use the right one shown on the right picture.
- The inside of the remote is shown on the left with circles around the back side of the potentiometers.

NOTE: You can only attach one button pad. Either the prepopulated button pad or the internal mount button pad that you use to install custom button positions

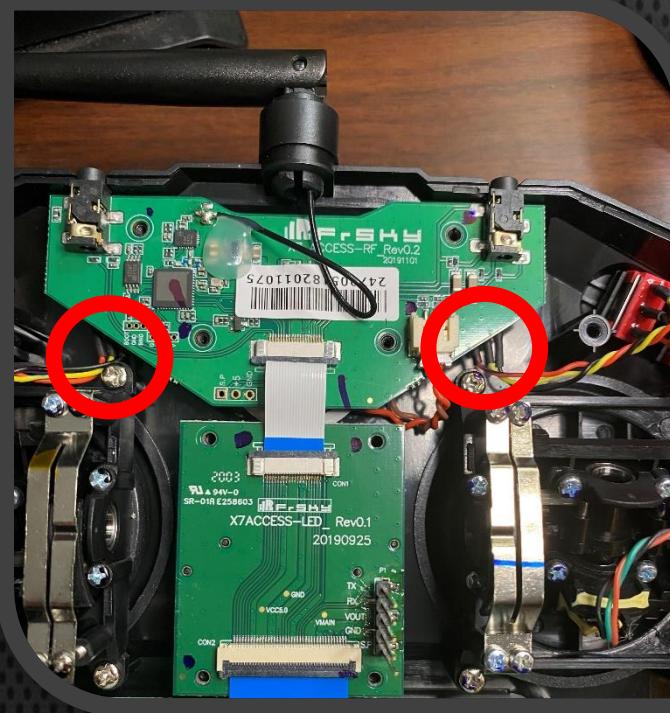
Step 1: Attach your button pad to the outside of the remote if you are using the one pictured above.

Step 2: Decide which potentiometer to use and either de-solder the wires from the POT or cut the wires so they can be spliced back together in case you ever want to remove the button pad.

Step 3: Wire in the button pad by matching the red to red, black to black, and the remaining signal wire of the Kyber connects to the remaining signal wire in the remote. The colors of this wire can vary.

Step 4: Test out the button pad by assigning it to a channel and go into the output viewer to see that the PWM signal is changing when you push the buttons. Check all buttons to make sure you have everything wired before reassembling the transmitter.

Installation of Custom Button Pad



NOTE: You can only attach one button pad. Either the prepopulated button pad or the internal mount button pad shown in the picture on the right.

Step 1: Install your custom buttons onto the transmitter. These can be anywhere you choose.

Step 2: Wire all of your buttons to the custom button board by attaching the two leads from each button to the S1 thru S15 solder pads.

Step 3: Decide which potentiometer to use (shown in the picture on the left for a FrSky X7 transmitter) and either de-solder the wires from the POT or cut the wires so they can be spliced back together in case you ever want to remove the button pad.

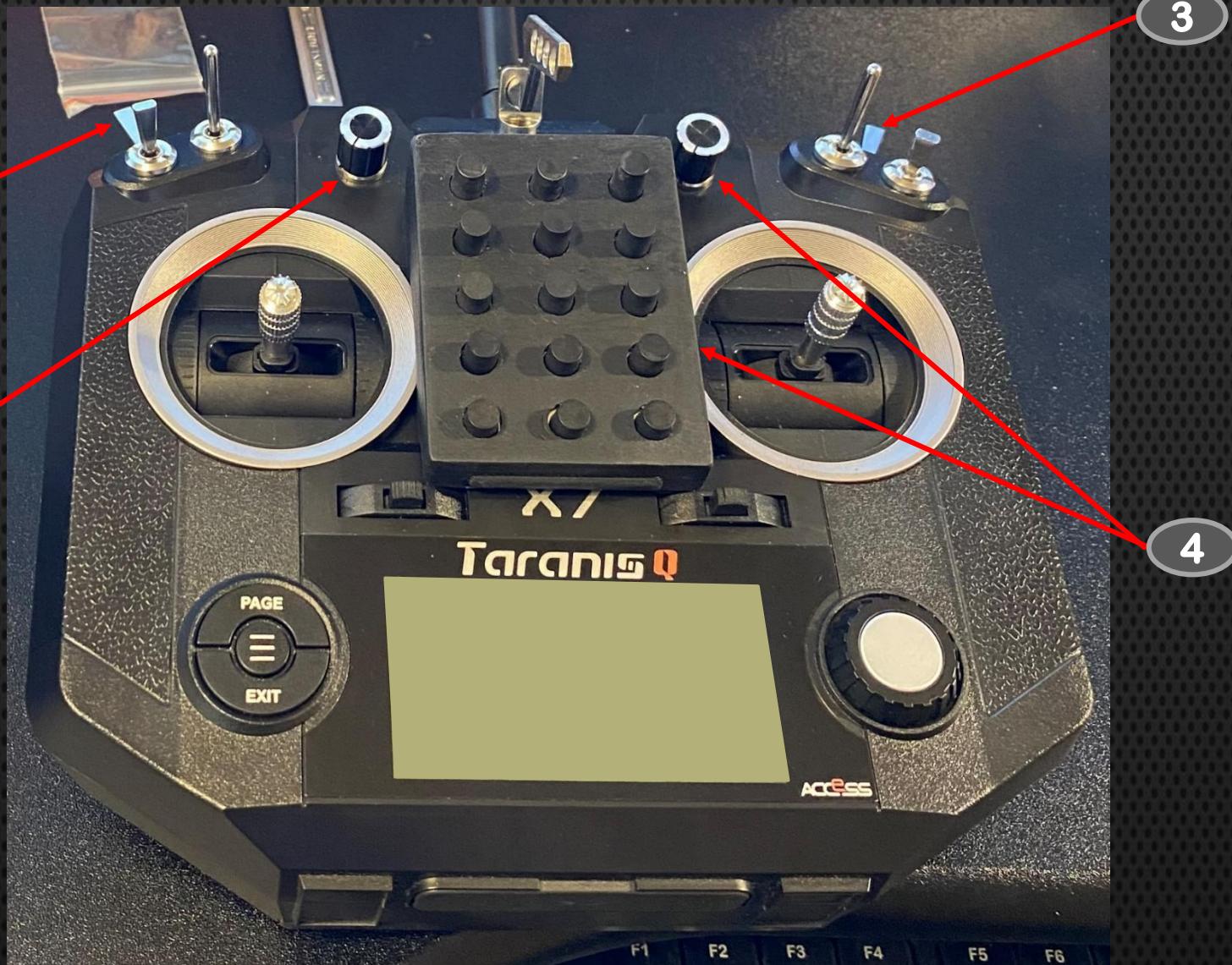
Step 4: Wire in the button pad by wiring the (+ from the button board) to the red POT wire, the (- from the button board) to the black POT wire, and the (S from the button board) to the remaining signal wire of the POT (the colors of this wire can vary).

Step 5: Test out the button pad by assigning it to a channel and go into the output viewer to see that the PWM signal is changing when you push the buttons. Check all buttons to make sure you have everything wired before reassembling the transmitter.

Refer to my YouTube video shown here: <https://youtu.be/-QwgFe8gNZ4>

NOTE: This video shows the install of a 10 button board. The install of the 15 button board is the exact same but offers more buttons in the same footprint.

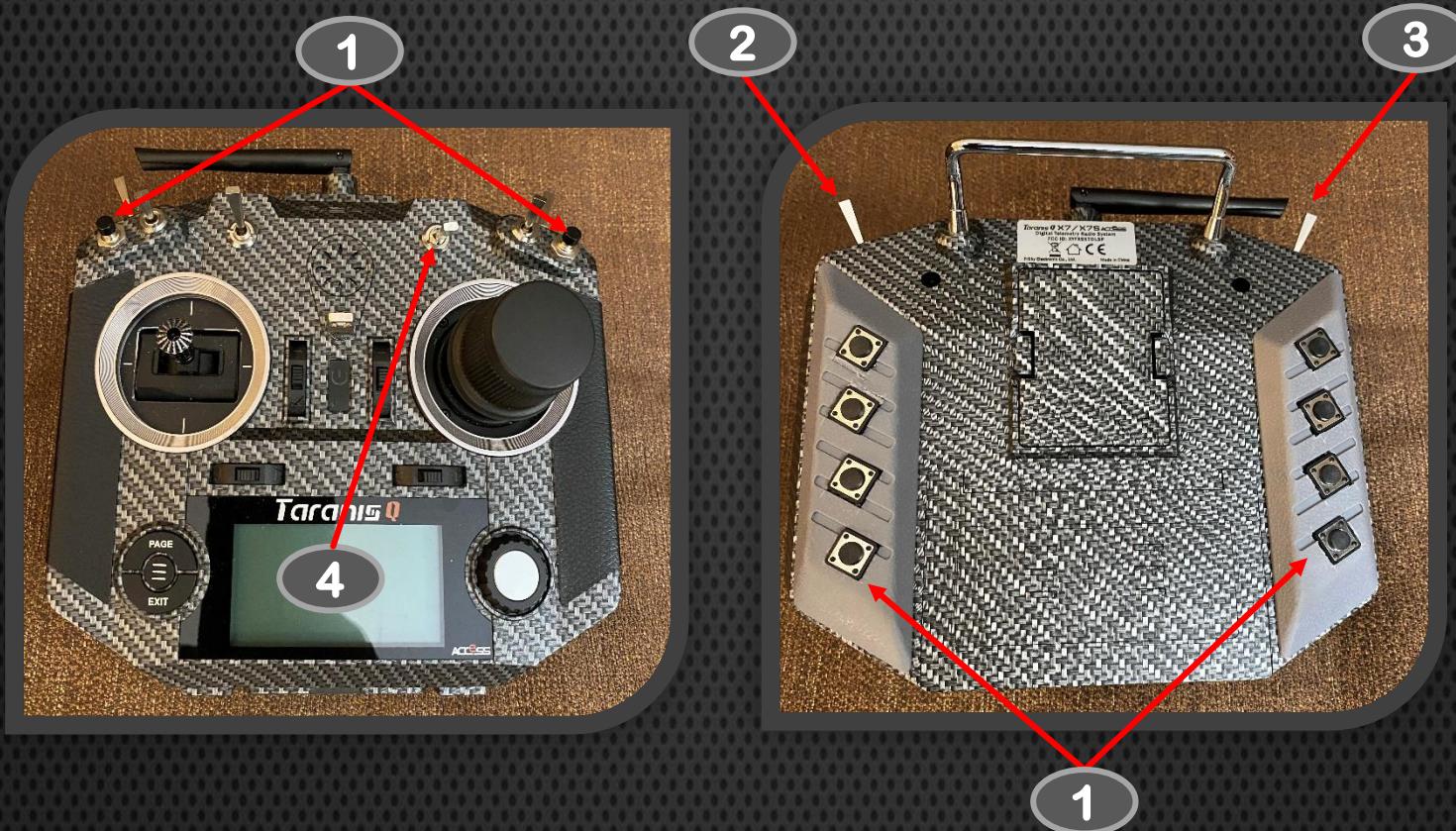
Example Transmitter Setup



Example 1 of transmitter setup

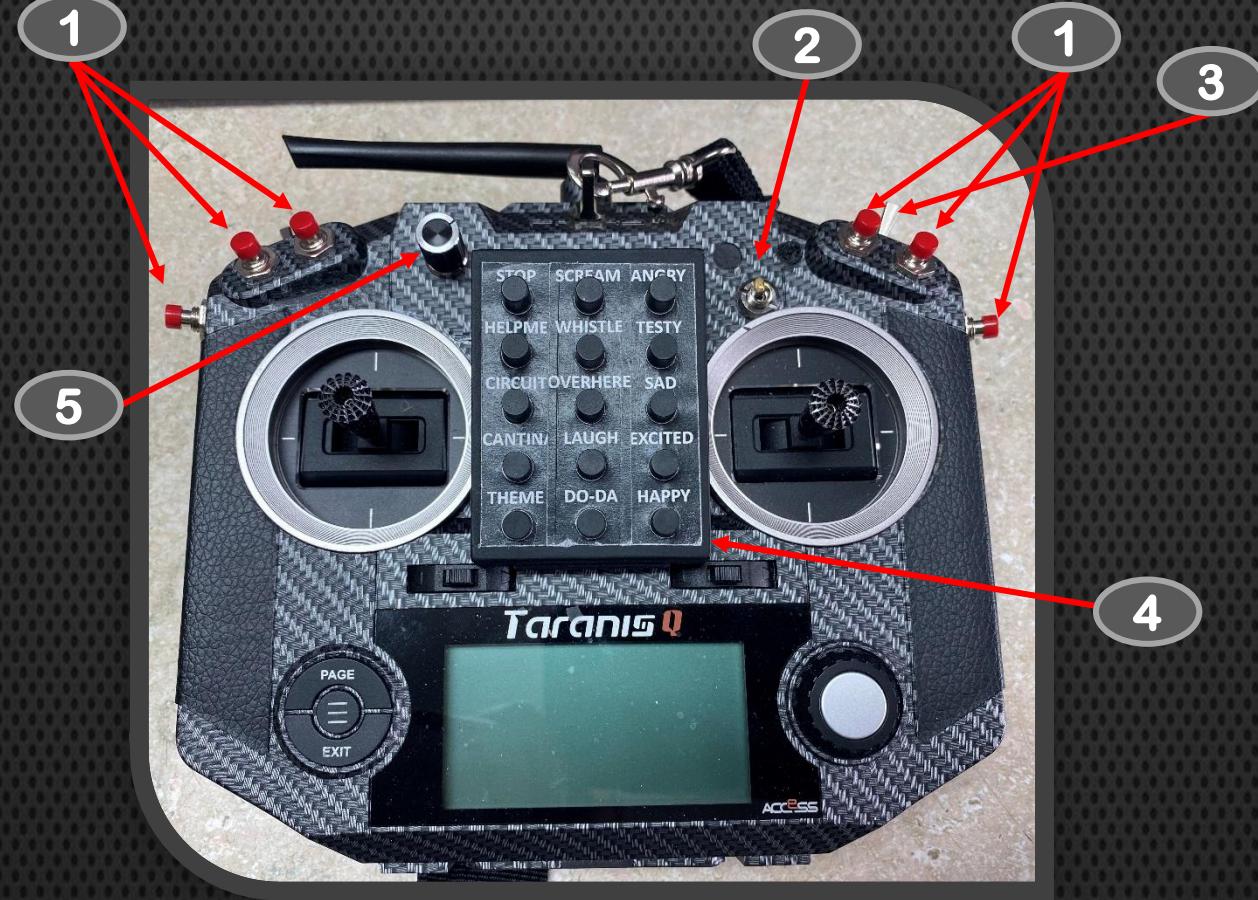
- Example 1 of a X7 setup using the prepopulated button pad
 1. 2-position switch for switching between button pad one setup and button pad two setup.
 2. Potentiometer for volume control
 3. 2-position switch for turning the Kyber WiFi on and off.
 4. Disconnected potentiometer and connected the button pad to the wires that were attached to the potentiometer.

Example Transmitter Setup



- Example 2 of a X7 setup using the custom button pad
 1. 10 added buttons using only 10 positions of the custom 15 button pad
 2. 2-position switch for switching between button pad one setup and button pad two setup.
 3. 2-position switch for turning the Kyber WiFi on and off.
 4. Disconnected potentiometer and connected the button pad to the wires that were attached to the potentiometer.

Example Transmitter Setup



- Example 3 of a X7 setup using the custom button pad
 1. Change (3) 3 position switches into buttons.
 - Set these buttons up under the Button RC tab in the Kyber software
 2. 2-position switch for switching between button pad one setup and button pad two setup.
 3. 2-position switch for turning the Kyber WiFi on and off.
 4. Disconnected potentiometer and connected the button pad to the wires that were attached to the potentiometer.
 5. Volume control

Example Transmitter Setup



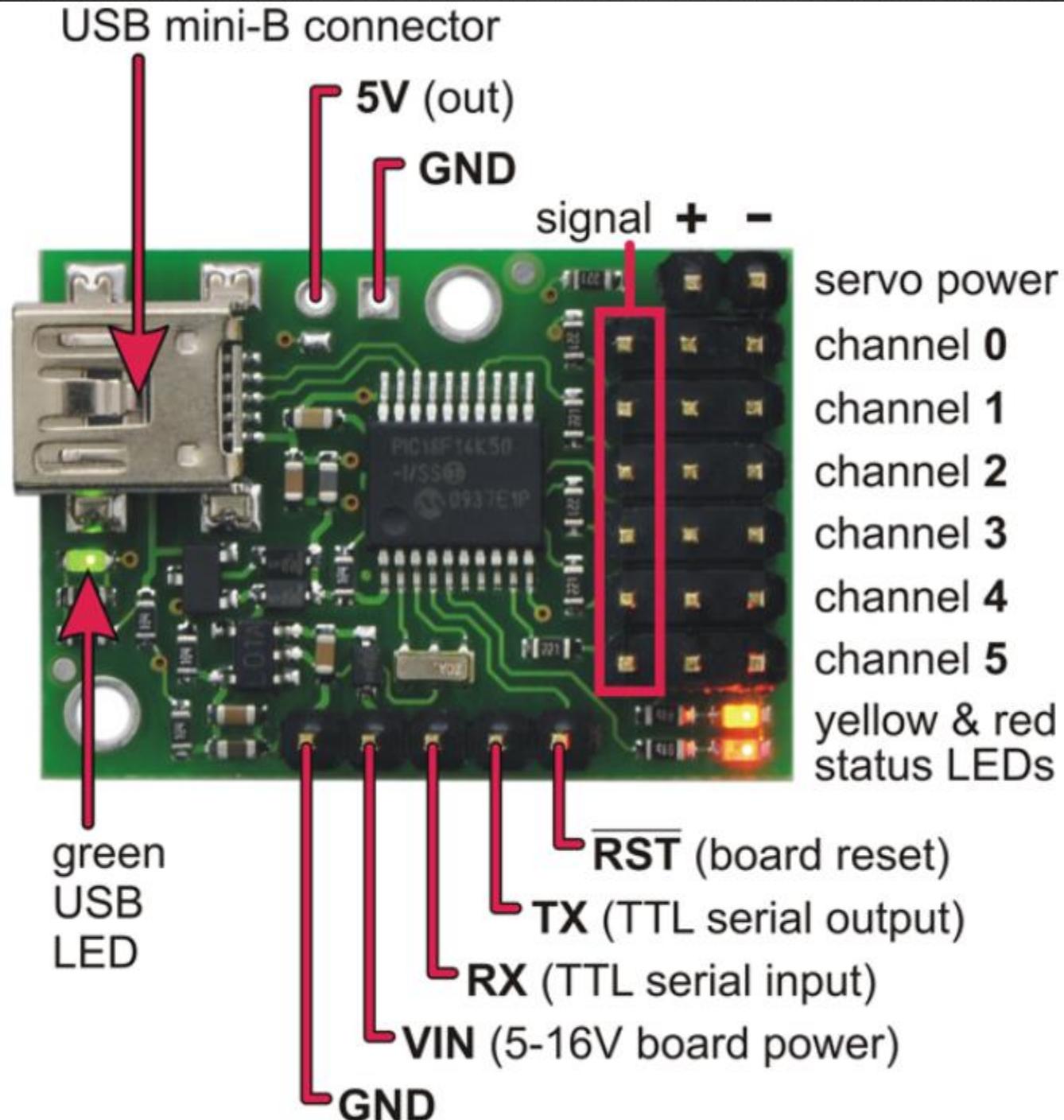
- Example of a DX9 setup using the custom button pad
 1. 10 added buttons using only 10 positions of the custom 15 button pad
 2. 2-position switch for switching between button pad one setup and button pad two setup.
 3. 2-position switch for turning the Kyber WiFi on and off.
 4. Volume control

KyberPad Software



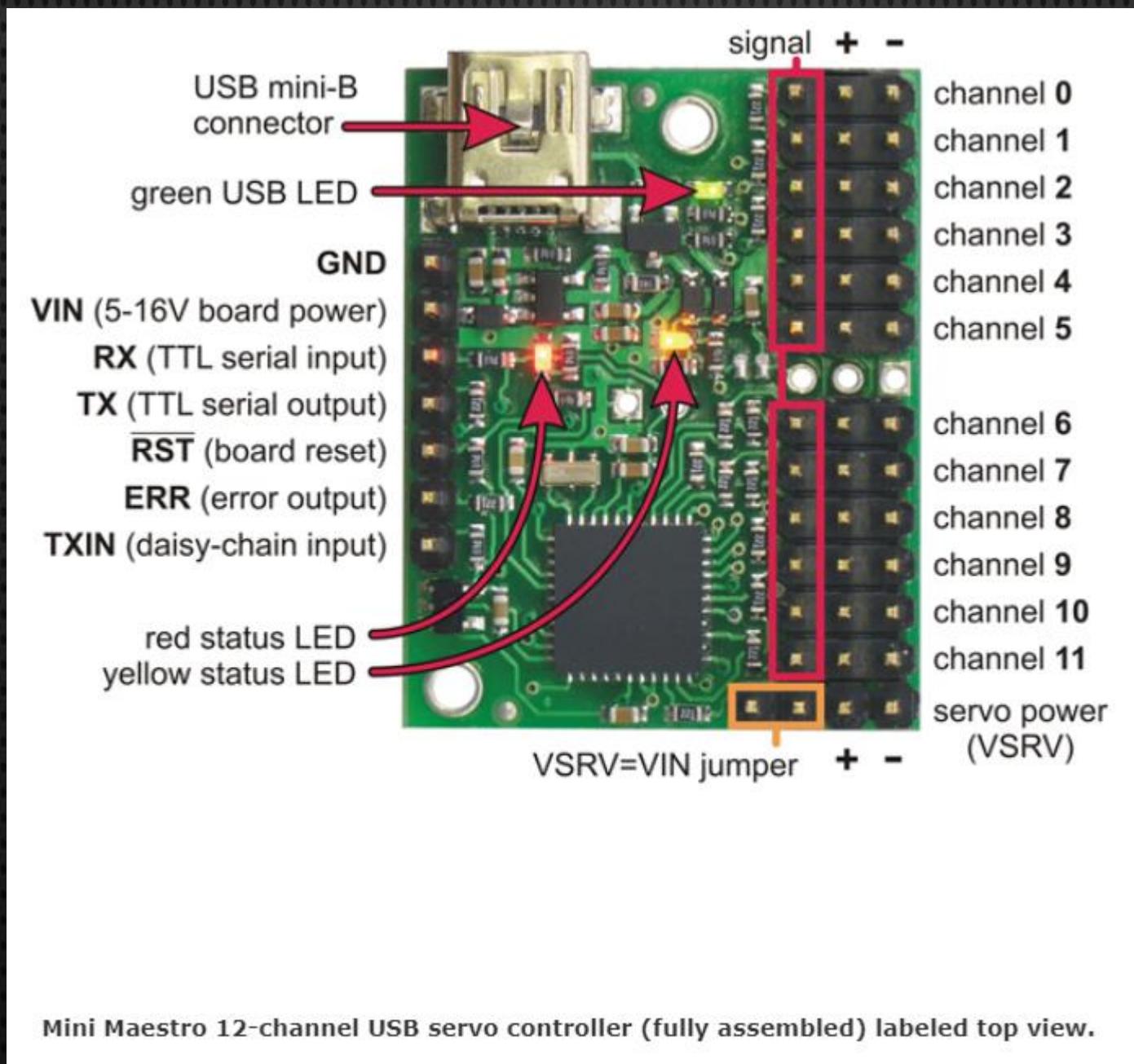
- KyberPad Software
 - 1. The KyberPad Software is a touch screen button system for use with the FrSky X18, X20, and XLite Transmitters
 - 2. The Software upgrade allows for 2 screens of 15 touch buttons. A total of 30 Touch Screen buttons.
 - 3. You will receive a separate instruction manual when purchasing the KyberPad Software.

6-Channel Maestro Wiring Guide

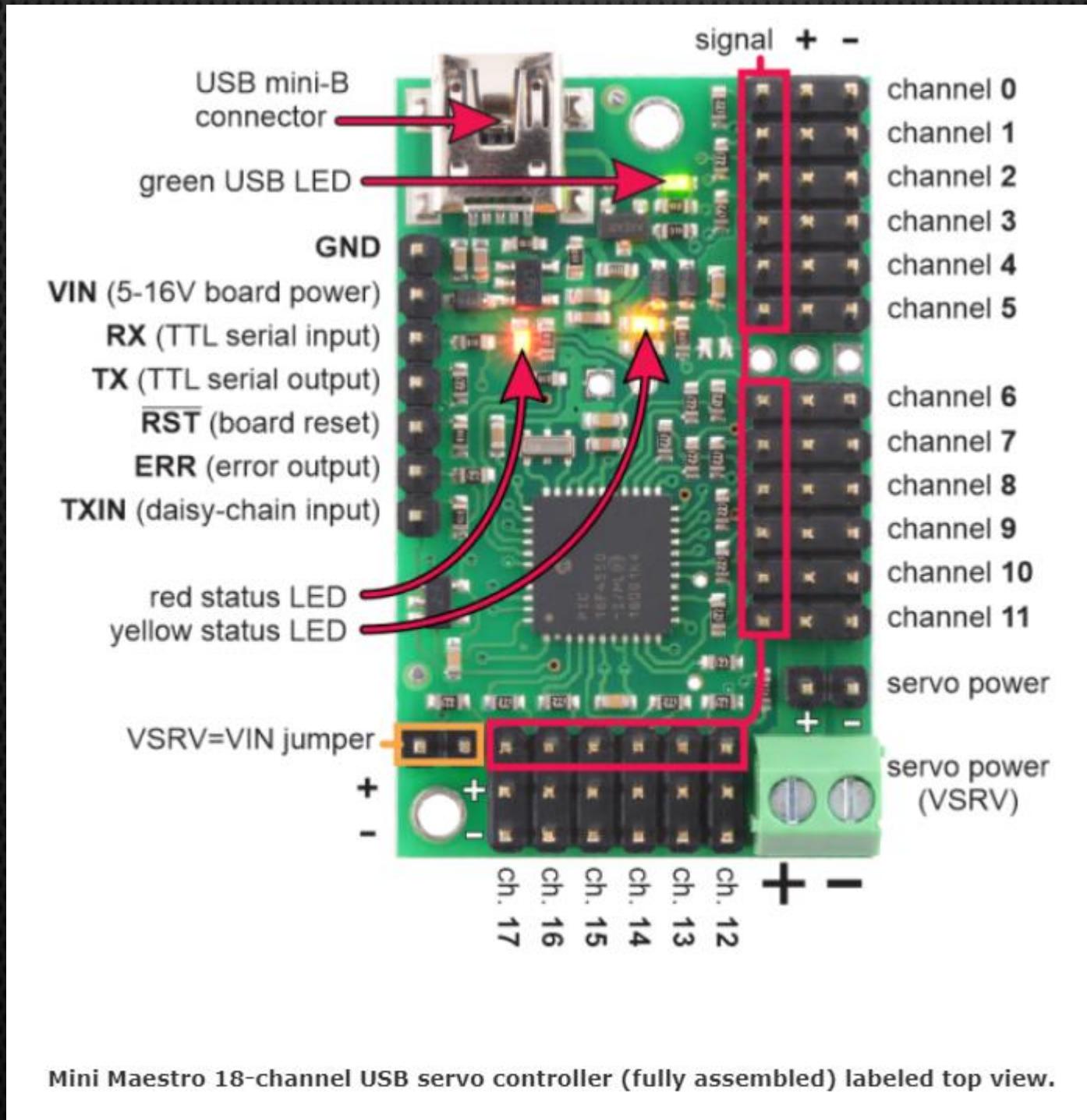


Micro Maestro 6-channel USB servo controller (fully assembled) labeled top view.

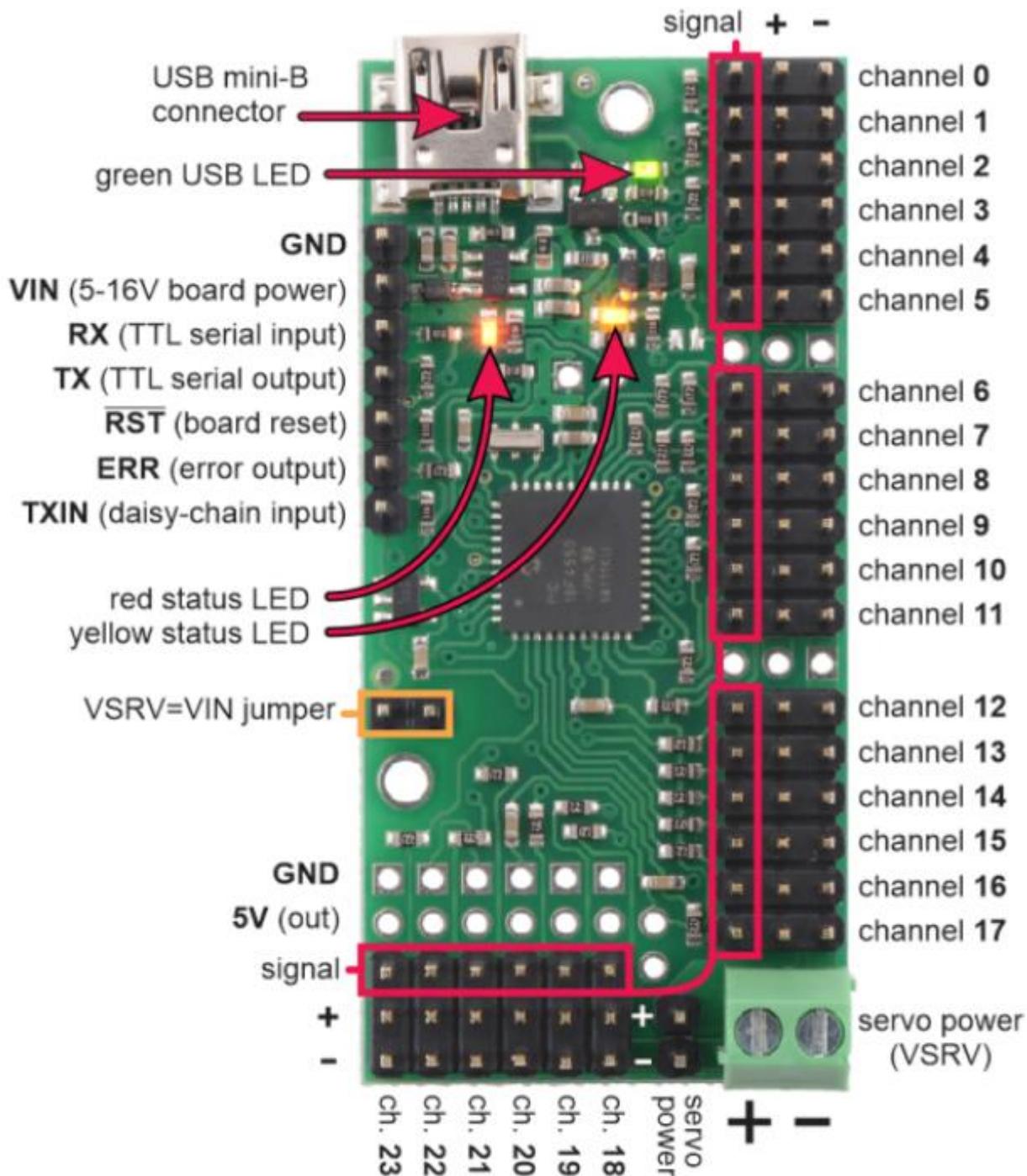
12-Channel Maestro Wiring Guide



18-Channel Maestro Wiring Guide

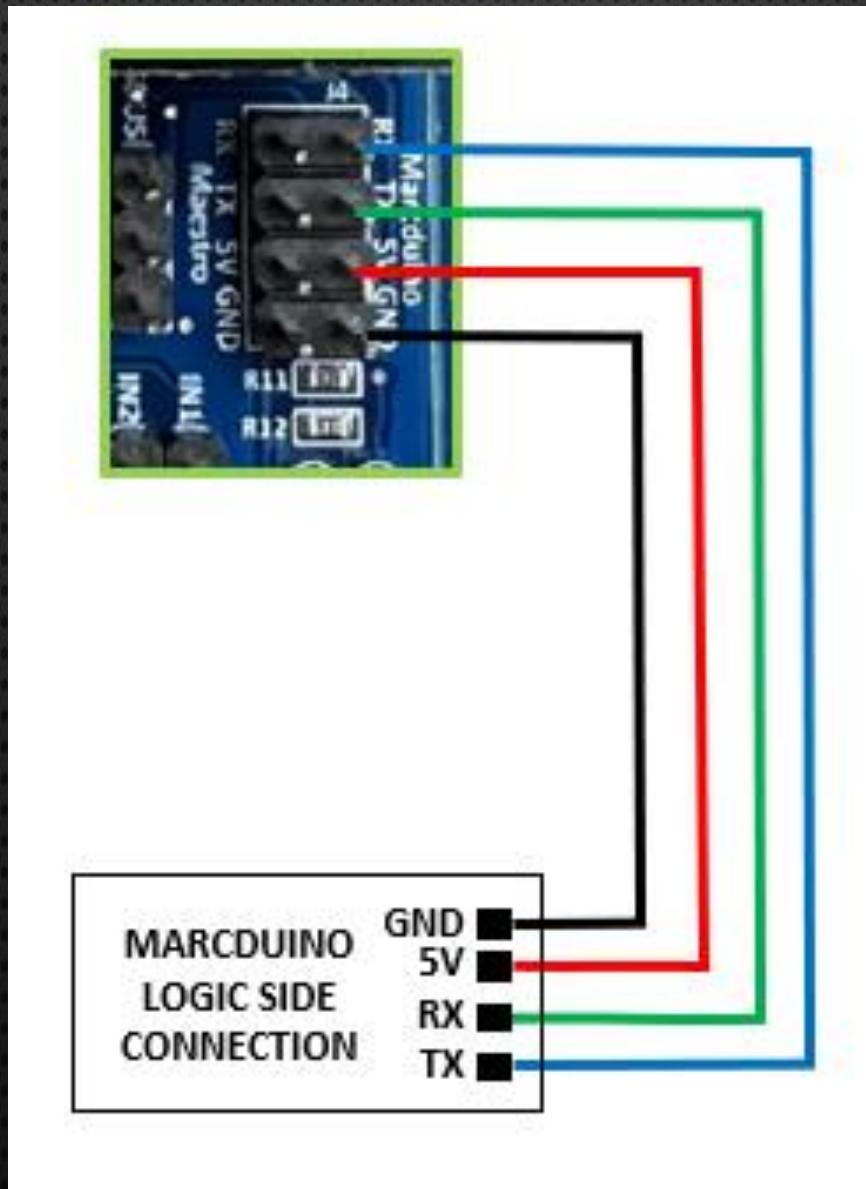


24-Channel Maestro Wiring Guide

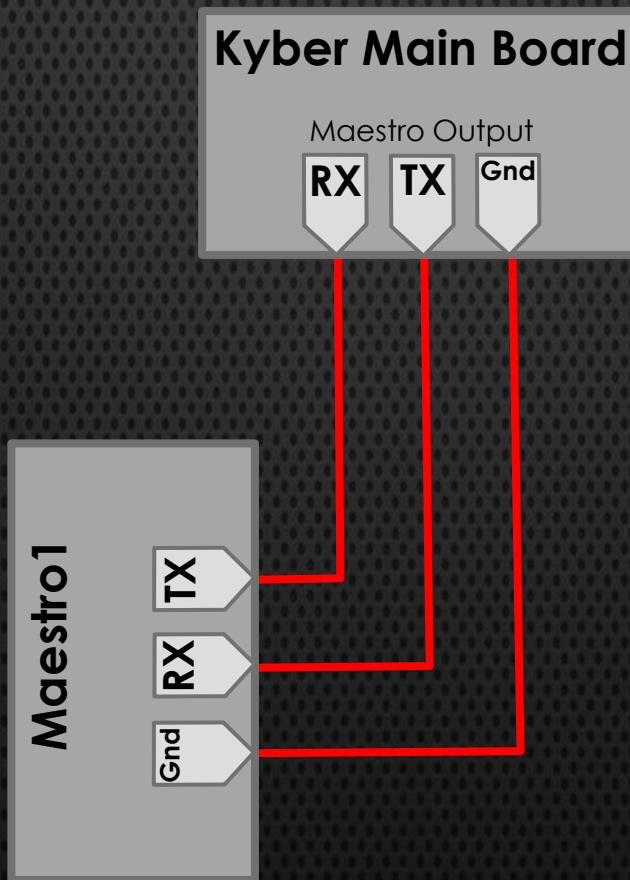


Mini Maestro 24-channel USB servo controller (fully assembled) labeled top view.

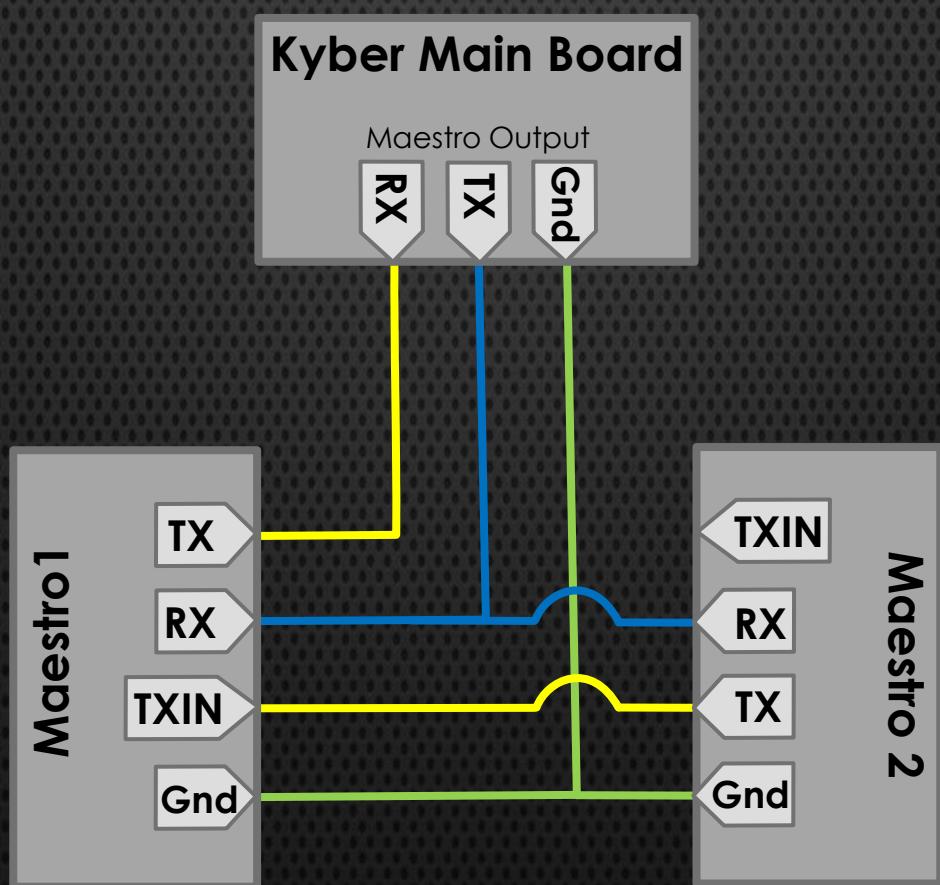
Marcduino Wiring



Connecting 1 Maestro 6, 12, 18, or 24 Channel To the Kyber Main Board



Connecting (2) 12, 18 or 24 Channel Maestros To the Kyber Main Board



Connecting a 6, 12, 18 or 24 Channel Maestro To the Kyber Main Board

