TECHNICAL CHEAT SHEET

SNAKEBYTE 45 46 — GET BIT BY THE BYTE

START

Are both phones on and the correct app open? — **Yes** → Is the Wi-Fi direct connected? — **Yes** → Are the phones charged enough? — **Yes** → Are the motor controllers being recognized?

- Are both phones on and the correct app open? — **No** → **Do that** ✓
- Is the Wi-Fi direct connected? — **No** → Make sure Wi-Fi direct is enabled on both devices, and driver station is paired correctly in its settings. (Tap 3 dots, setting, Wi-Fi pairing) ✓
- Are the phones charged enough? — **No** → **Charge them** ✓

Are the motor controllers being recognized?
- **No** → Is the phone connected to robot?
- **Yes** → Have you started your op mode? Gamepads Connected?

Is the phone connected to robot?
- **Yes** → Is robot powered on?
- **No** → **Connect It** ✓

Is robot powered on?
- **Yes** → Is battery fuse or power module fuse burnt out?
- **No** → **Power it on** ✓

Is battery fuse or power module fuse burnt out?
- **Yes** → **Replace it** ✓
- **No** → Is battery charged enough? (Works best above 12v)

Is battery charged enough? (Works best above 12v)
- **No** → **Charge it** ✓
- **Yes** → Unplug cable from robot controller, make sure power is on, then plug cable back into robot controller and Restart Robot from app

Have you started your op mode? Gamepads Connected?
- **No** → Select it from driver station and hit play. Make sure both remotes are connected to phone, "Mode" button is not pressed, and the switch on back is set to X mode. ✓ → Then press Start+A for Gamepad 1 and Start+B for Gamepad 2
- **Yes** → Then press Start+A for Gamepad 1 and Start+B for Gamepad 2 ✓

Then press Start+A for Gamepad 1 and Start+B for Gamepad 2 ✓ → This is a software issue then. Make sure the app is downloaded to the robot controller and is correct and referencing right motors. → **If still not working, power cycle robot (Unplug from phone, turn off and back on) and restart both phones**

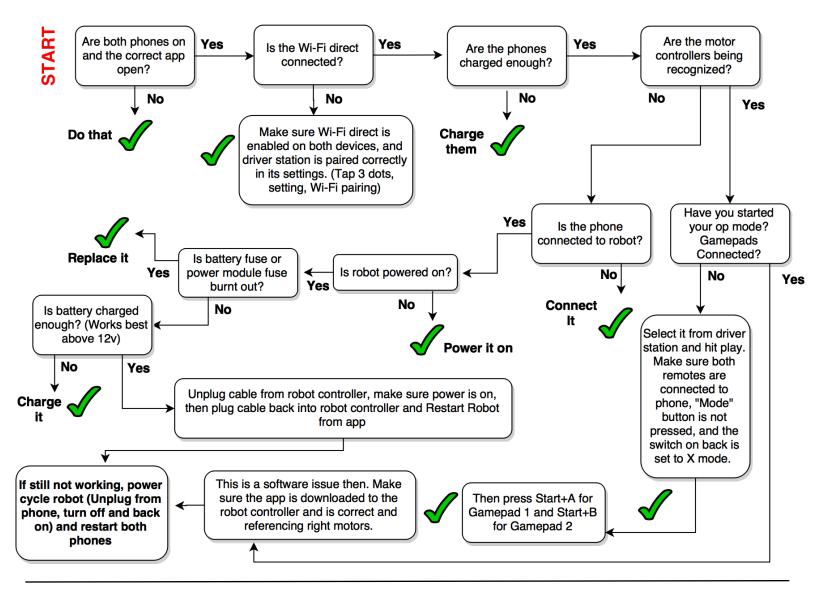## HOW TO WORK THE NEW CONTROL SYSTEM

1. The control system consists of two Android Phones, one on the robot as the Robot Controller, and one as the Driver Station to which the remotes are connected.

2. Enable Wi-Fi Direct in Wi-Fi settings. Name your device what it is. (i.e. 4546 Robot Controller or 4546 Driver Station)

3. Download the driver station app from Google Play Store to the Driver station Phone

4. Write all your code as a new OpMode in the app provided on Github. (More info on programming can be found on the FTC website) Make sure to add the new OpMode name to the OpModeRegistry.java!

5. Power up the robot and then plug in the phone to the Power Distribution module. For best results, do it in this order!

6. Tap the three dots in the top right corner of the app and go to settings. Create a robot configuration file that senses the devices and allows them to be named.

7. Once configured, tap dots again and Restart Robot.

8. Connect controllers to the Driver station. Make sure the Mode button is not pressed and the switch on back is set to X. Then press start+A for Gamepad 1 and Start+B for Gamepad 2.

9. Make sure the driver station is connected to the robot (Settings > Wi-Fi pairing settings > Select device) and then select your OpMode and press start.