

Radio Set Up

 **The Goal:** To set flipper end points on FS-i6 radio (channel 3)

Setting the end points tells the servo **how far to move** when you push the stick up or down — so your flipper moves *just enough*, without stalling the servo, or bending the paperclip.

Step-by-Step:

1. **Turn on the radio.**
2. **Before you turn on the bot**, set the left stick (weapon / flipper / channel 3) about halfway up so the servo doesn't slam too far in either direction when you turn on the bot. (The servo will “jump” to its position when it turns on.)
3. Turn on the bot.
4. On the radio, as long as the backlight is on, **hold [OK]** to open the menu.
5. Use the arrow buttons to move over to → **“FUNCTION SETUP”** Press **[OK]** to enter.
6. Arrow down to → **“END POINTS”** → Press **[OK]** again.
7. Press **[OK]** 3 more times to move the arrow down to **CH3** (the flipper channel).

Set the Bottom (Flipper Down)

8. Slowly move the left stick down until the plow lifts the front armor or the servo starts audibly whining.
9. The arrow should be on the **left number** (this is the “low” endpoint).
10. Use the **UP** and **DOWN** buttons to adjust the value **as you continue to lower the stick** (you will slightly raise and lower the stick a number of times):
 - With the stick all the way down, the flipper should go down far enough to just barely lift the front armor — not more.
 - Watch for the front corner of the front armor to move up relative to the plow.



Step 10

Radio Set Up

▲ Set the Top (Flipper Up)

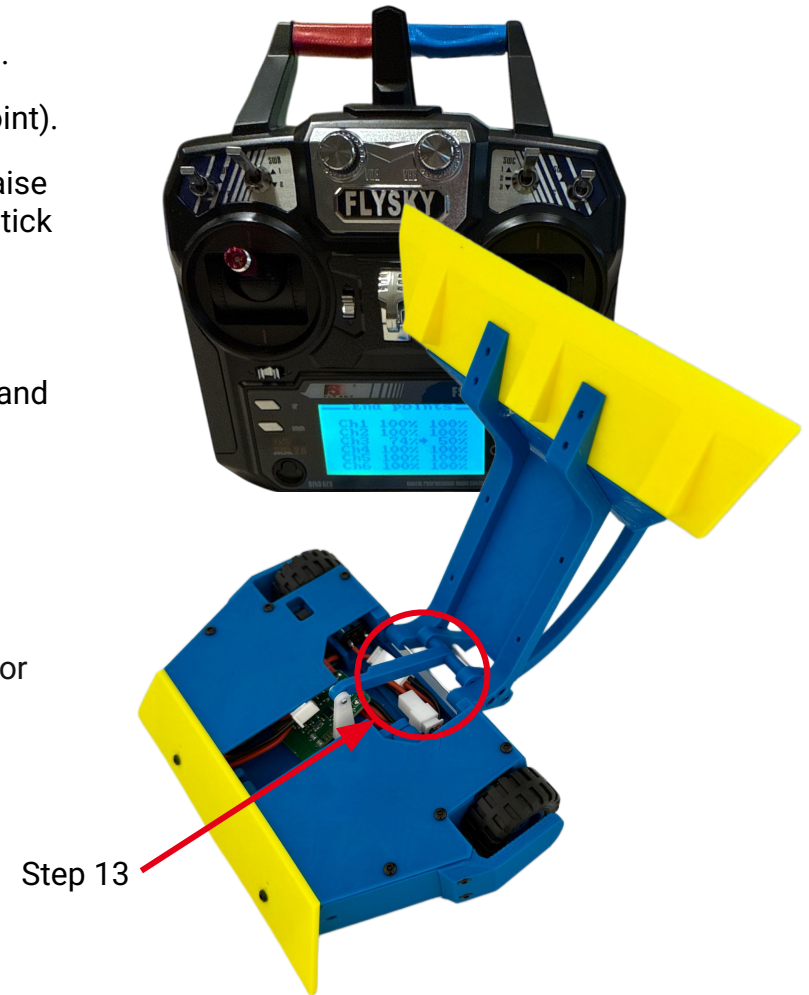
11. Move the left stick up until the link almost touches the paperclip.
12. The arrow will move to the right number (this is the “high” endpoint).
13. Use the down button to lower the top value as you continue to raise the stick, keeping the link from bending the paperclip. With the stick all the way up, the **servo link should almost touch the paperclip**.

Save Your Settings

14. When you're happy with both endpoints, **hold [CANCEL]** to save and exit.

🏆 Generally the end points will be between 30–90.

✅ **Final Check:** If you flip the bot over on a hard surface, it should self-right when the left stick is quickly moved up and down. Get ready for your first **laughsplosion!**



Radio Set Up

 **The Goal:** To set up the radio so that the bot drives and actuates the weapon properly.

Check Driving Direction

1. Move the **right stick up** — the bot should go **forward**.
2. If it goes backward, go to the “**Reverse a Channel...**” section and reverse Ch2.
3. If it **turns**, go to the “**Invert a Drive Side...**” section to invert only one side.
4. If it goes forward, push the **right stick to the right** — the bot should turn **right**.
5. If it goes left, go to the “**Reverse a Channel...**” section and reverse Ch1.



Radio Set Up

 **The Goal:** To reverse a channel... on the FS-i6 radio

Use this when your robot **turns the wrong way**, or when the **flipper opens instead of closes**.

Step-by-Step:

1. Turn on the radio → Hold the **[OK]** button to open the menu.
2. Use the arrow buttons to move over to → **"FUNCTION SETUP"**
3. Press **[OK]** to enter.
4. The first item on the list is **"REVERSE"**
Press **[OK]** again.
5. You'll now see a list of channels (1–6).
6. Press **[OK]** to highlight the channel you want to reverse:
 - **CH1** = Steering (left/right)
 - **CH2** = Throttle (forward/backward)
 - **CH3** = Weapon / Flipper
7. Press the **up or down arrow** to reverse it.
You'll see it switch from **"NOR"** (normal) to **"REV"** (reverse).
8. Hold **[CANCEL]** to save and exit.

 **Final Check:** Test that your bot now moves and flips properly.



Radio Set Up

 **The Goal:** To invert a drive side... use configuration mode

Configuration mode lets you change the Malenki's internal settings — like motor direction, drive mixing, and braking. These settings are saved even when the bot is turned off. Use this when your robot **turns when moving the stick forward or backward**.

Step-by-Step:

1. Note which side of the bot moves **backward** when you pushed the stick forward.
2. Turn off the radio and the bot.
3. Turn the bot back on, **wait 5 seconds**, then turn the radio on.
You are now in **configuration mode** (**blue LED flickers**).
4. On the radio, as long as the backlight is on, hold **[OK]** to open the menu.
5. Use the **DOWN** button to move over to → **"FUNCTION SETUP"** Press **[OK]** to enter.
6. Press the **DOWN** button 3 times → **Aux Channels**. Press **[OK]**.
7. Press the **UP** button until **Channel 5 = Switch D (SWD)**.
8. Hold **[CANCEL]** to save and exit.
9. Back out and go to **Display** to verify that Ch5 is **Low**.
10. Flip **Switch D up and down to send the correct number of High-Low pulses**:
 - a. If the **Left** side of the bot moves backward then invert the Left drive side by sending **2** pulses.
 - b. If the **Right** side of the bot moves backward then invert the Right drive side by sending **3** pulses.
11. The blue LED on the Malenki will **flicker back the same number** to confirm.

 **Final Check:** Test it again — forward should now be forward. If **left/right** is still reversed go back to the **"Reverse a Channel..."** section and reverse Ch1.

