



XGlow Pro



Users Guide

Copyright 2020-2021 XGuard RC. All rights reserved



LIABILITY DISCLAIMER

This device is for use exclusively on a radio controlled (RC) model. RC models are not toys. Moving parts can present a hazard to operators, bystanders and anyone or anything that could be reached by the RC model. Improper operation, maintenance or assembly can potentially cause an RC Model to pose a danger to persons or objects including but not limited to the possibility of causing serious physical injury and even death. After leaving its facilities the manufacturer has no way of maintaining control or supervision over the assembly and/or operation of the RC model or the addition of this device to the RC Model therefore the manufacturer and/or its agents assume no responsibility or liability whatsoever for any damages including but not limited to ones generated by incidental or consequential damages. The operator of the RC Model assumes all responsibility and liability that could result from the correct or incorrect operation of the RC Model.



This product is intended to be used by experienced adult radio control model operators under controlled safety conditions and on locations properly authorized and setup for safe flying and away from other people. This product must not be operated without reasonable personal or commercial Liability Insurance.



Under no circumstance should a minor be allowed to operate any radio controlled model without the approval, supervision and direction of his parent or legal guardian who takes full responsibility and assumes full liability of every kind for the minor's actions.



Do not operate an RC models within the vicinity of homes, trees, electrical lines during inclement weather or rain or near crowds of people.

Contents

PORTS DIAGRAM	4
INSTALLATION MODES	5
A) SIMPLEST INSTALLATION	5
B) SWITCHED ON BY RADIO SWITCH (as above+ Switch)	6
C) WITH ANTI-HOT-START (as above + Throttle Stick)	7
D) WITH ANTI-CHICKEN-DANCE (as above+RPM)	8
MEANING OF THE LIGHTS.....	9
Meaning of lights when driving the plug	9
Meaning of lights when NOT driving the plug	9
PROGRAMMING THE UNIT	10
Entering Programming mode	10
PROGRAMMING	10
1 THROTTLE IDLE POSITION	11
2 GLOWING TIME	11
3 GLOW DRIVING POWER LEVEL	11
4 ANTI CHICKEN DANCE MODE	11
5 NUMBER OF ACTIVE RPM SENSOR MAGNETS	13
RADIO'S SWITCH POSITIONS	14
MUSICAL TONES MEANING	15



←RPM Sensor and Remote Pushbutton cable connector



Multi-Tone Buzzer →

←ON Pushbutton

- +
Signal

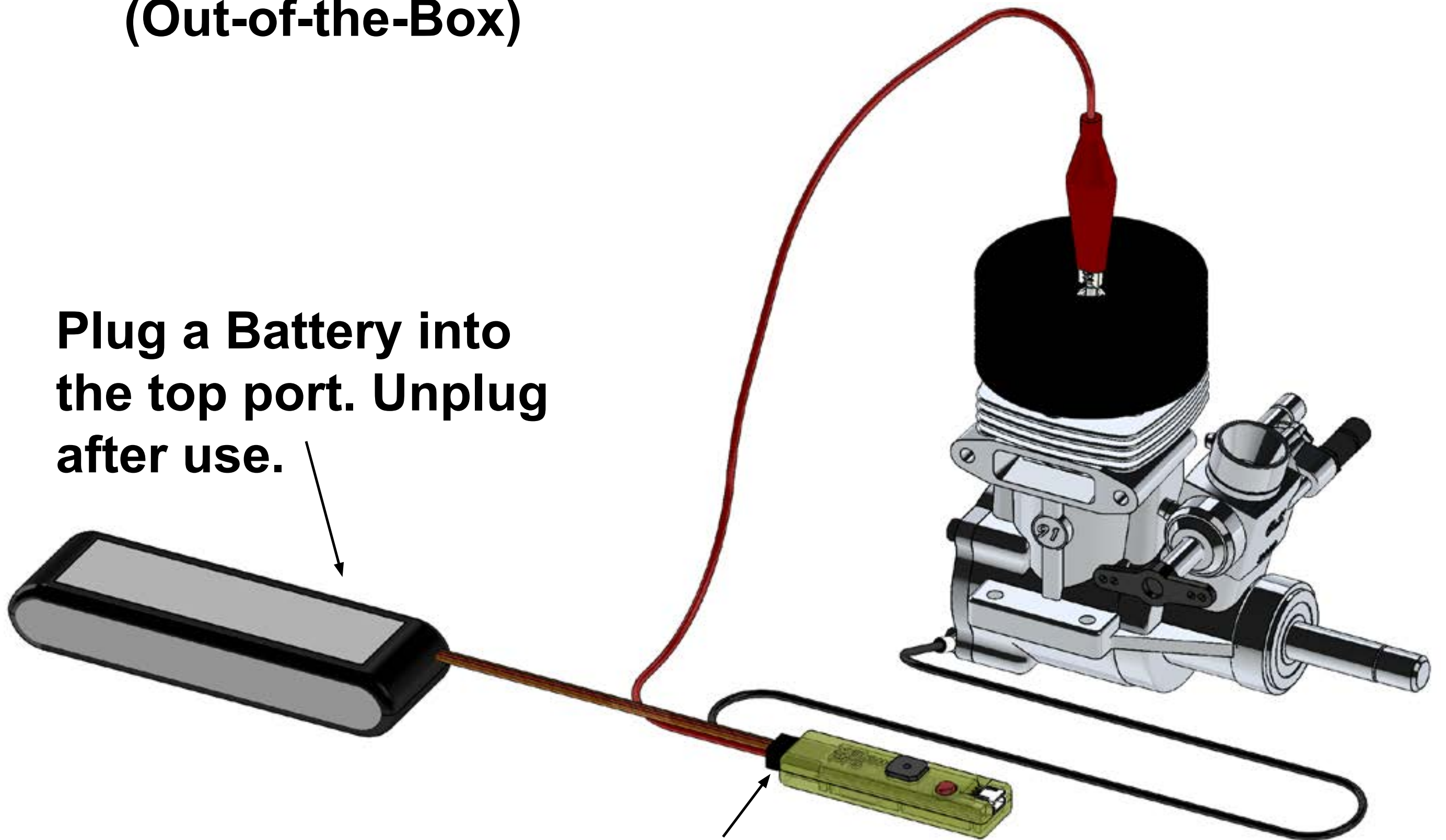
Switch Channel (TOP) →
Glow Plug (BOTTOM) →
& Optional Throttle Channel



INSTALLATION MODES

A) SIMPLEST INSTALLATION (Out-of-the-Box)

**Plug a Battery into
the top port. Unplug
after use.**



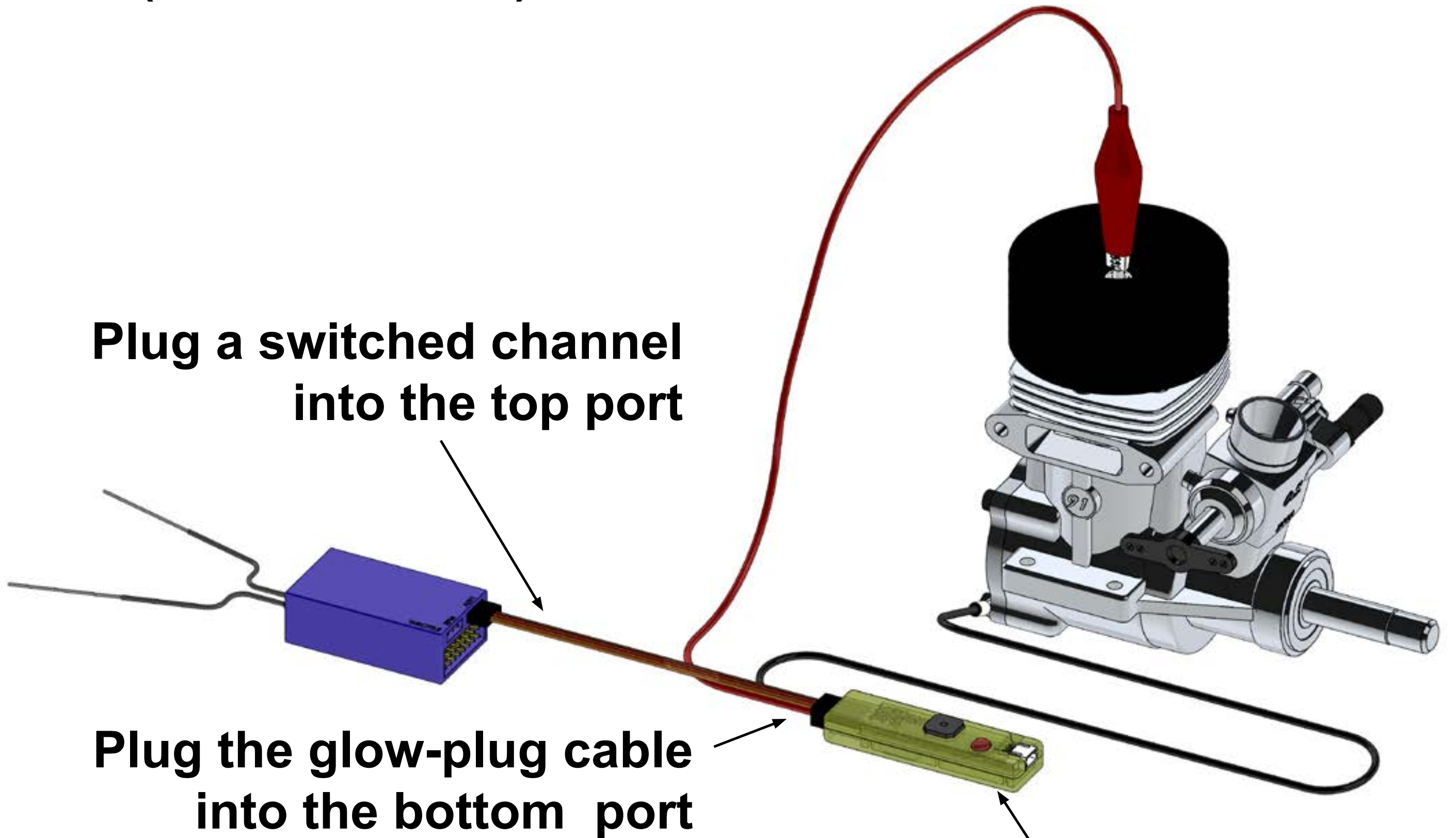
**Plug the glow-plug cable
into the bottom port**

**Turn on by pushing
the red button**

Using this configuration out-of-the-box the unit will use the default Factory settings.

If interested, see programming section for an explanation of the available settings.

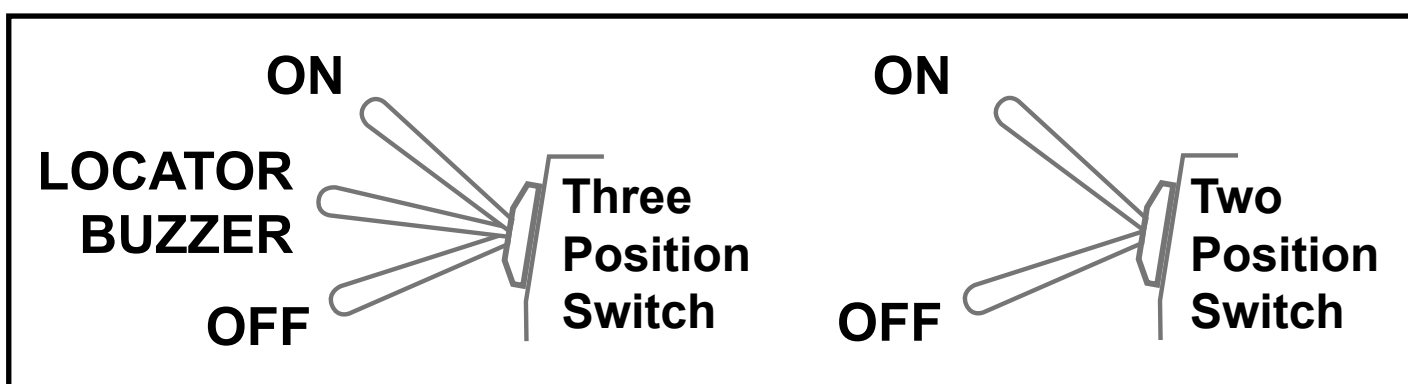
B) SWITCHED ON BY RADIO SWITCH (as above+Switch) (Out-of-the-Box)



Plug a switched channel into the top port

Plug the glow-plug cable into the bottom port

Turn on by either using the radio switch or by pushing the red button



Using this configuration out-of-the-box the unit will use the default Factory settings.

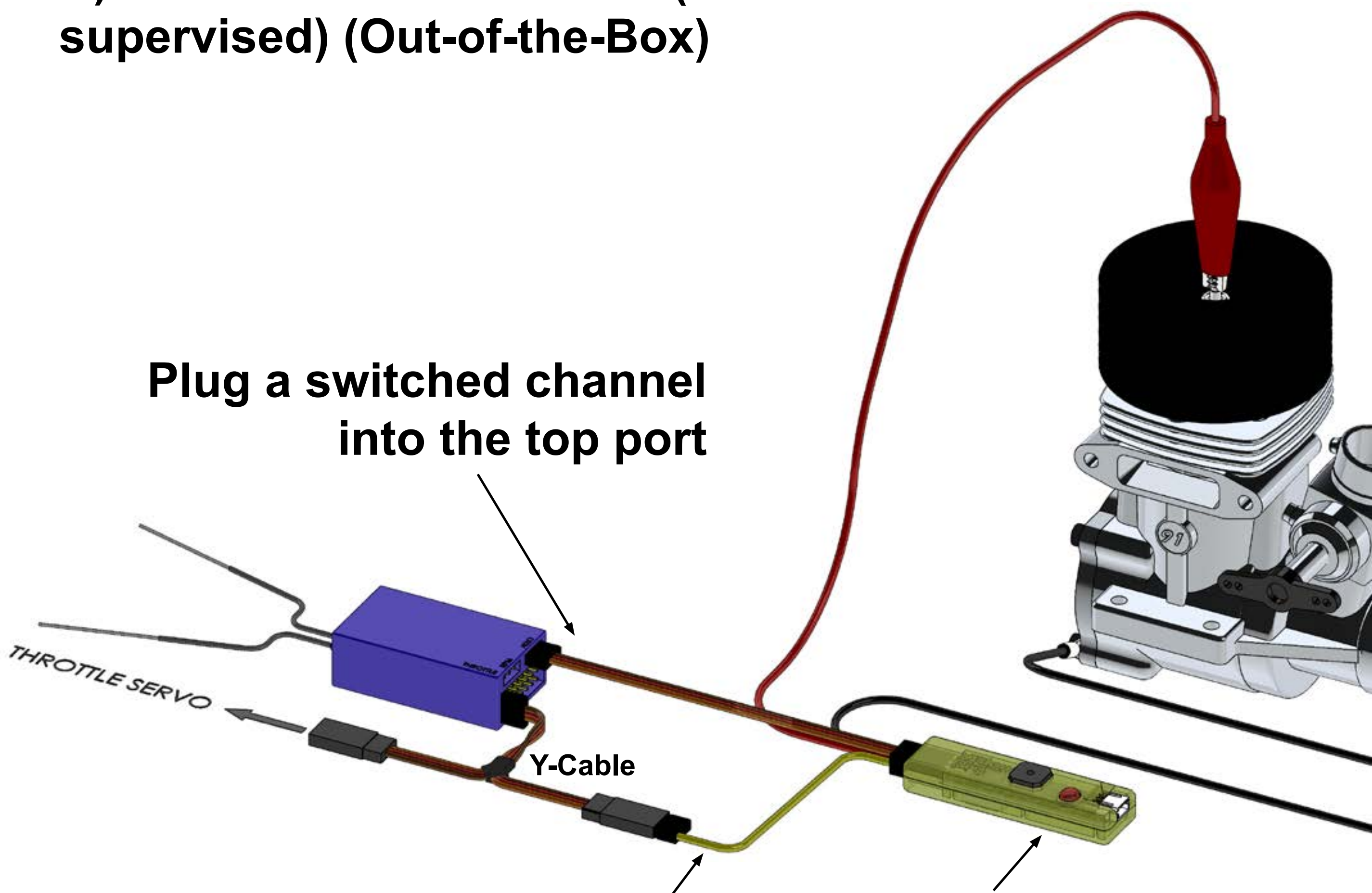
If interested, see programming section for an explanation of the available settings.

C) WITH ANTI-HOT-START (as above +Throttle Stick supervised) (Out-of-the-Box)

Plug a switched channel into the top port

Plug the glow-plug cable into the bottom port and add the throttle pickup wire (SKU: AAVXG0204)

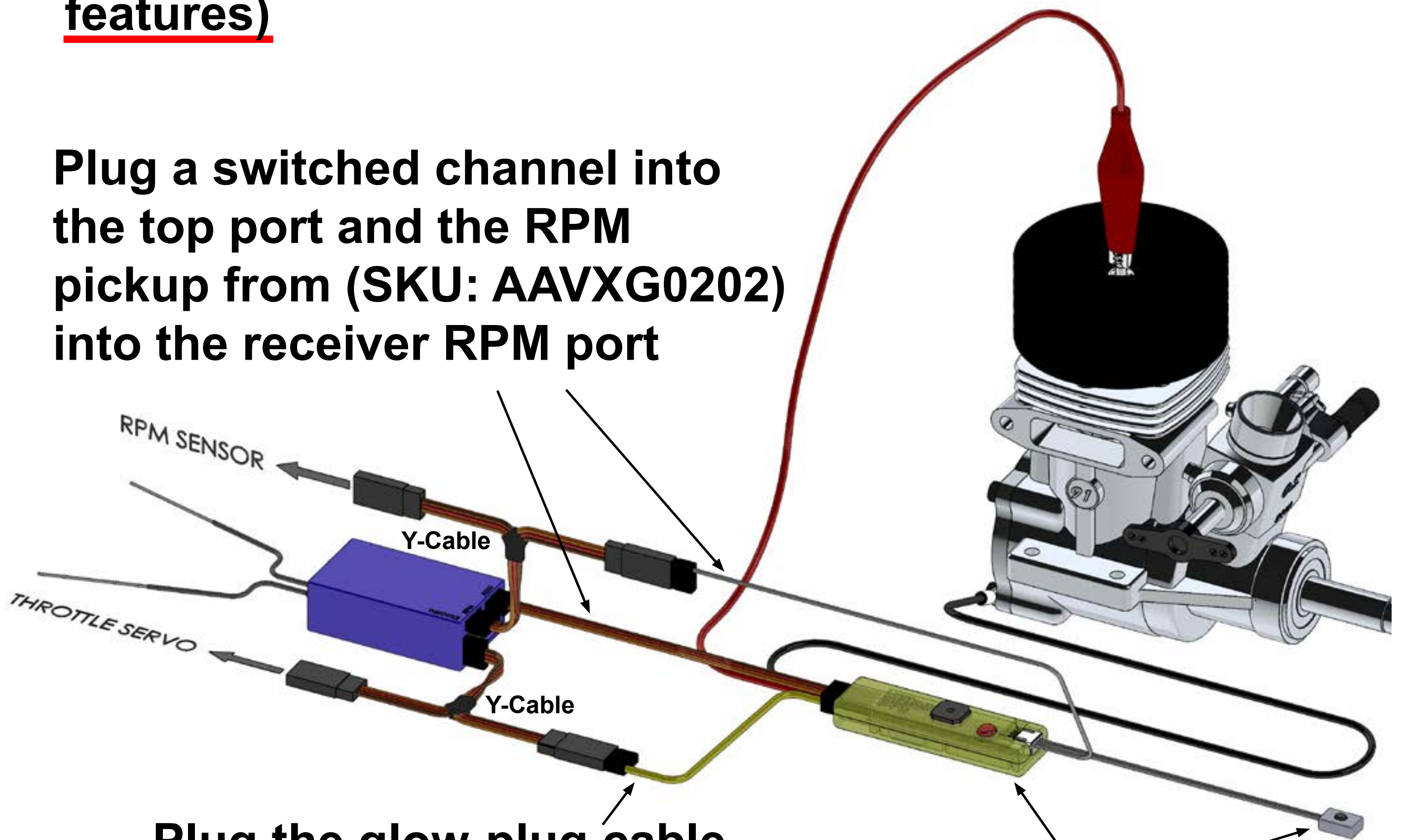
Turn on by either using the radio switch or by pushing the red button



Using this configuration out-of-the-box the unit will use the default Factory settings. It won't turn on unless the throttle is above standard (not reversed) throttle idle. **For reversed throttle idle, see programming section** for an explanation on how to change it.

D) WITH ANTI-CHICKEN-DANCE (as above+RPM supervised) (Out-of-the-Box + Additional programmable features)

Plug a switched channel into the top port and the RPM pickup from (SKU: AAVXG0202) into the receiver RPM port



Plug the glow-plug cable into the bottom port and add the throttle pickup wire (SKU: AAVXG0204)

Turn on by either using the radio switch, pushing the red button or the remote button

Using this configuration out-of-the-box the unit will use the default Factory settings and **won't activate the anti-chicken dance unless programmed to do so**. Please check the programming section to learn how to do it

MEANING OF THE LIGHTS

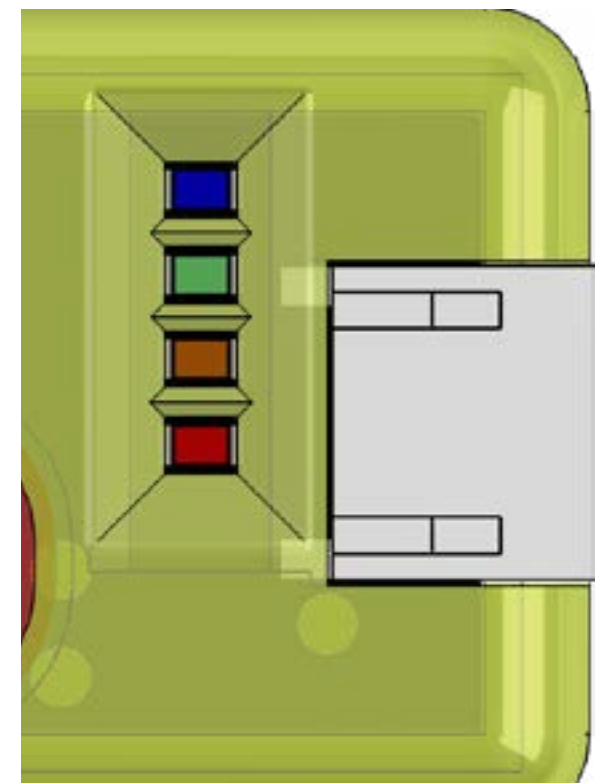
Meaning of lights when driving the plug

BLUE: Blinks indicating it's powered ON

GREEN: Glow plug is glowing normally

YELLOW: Glow plug is pulling too much current. Element is bent and touching the plug's body. Replace the plug.

RED: Glow plug is bad or alligator clip is disconnected.



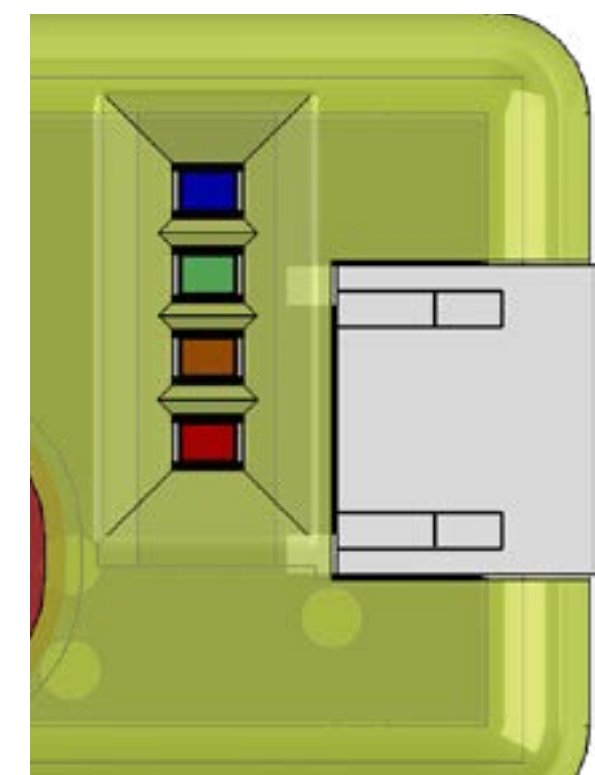
Meaning of lights when NOT driving the plug

BLUE: Blinks indicating it's powered ON

GREEN: RPM sensor signal is present.
(only when engine is running)

YELLOW: THROTTLE signal from the receiver is present.

RED: MODE Switch signal from the receiver is present (OFF/LOCATOR/ON)



PROGRAMMING THE UNIT

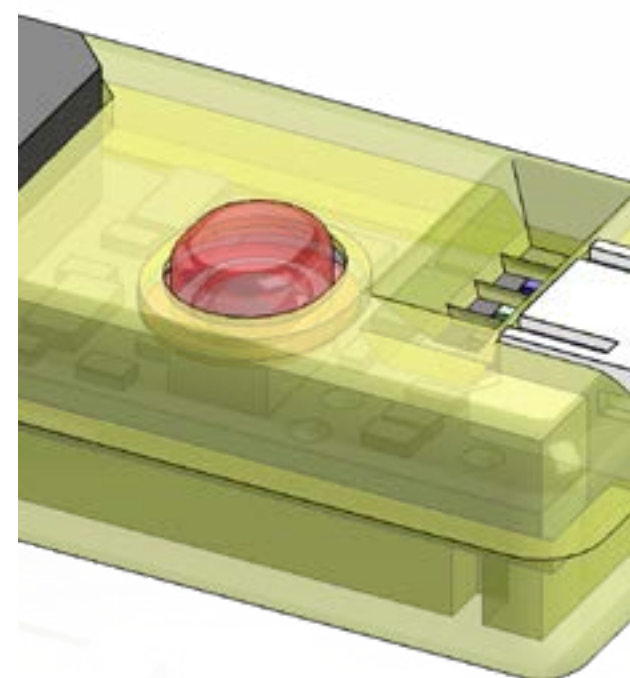
(Engine needs to be off do not attempt when engine running)

The unit has the following programmable settings:

- 1) THROTTLE IDLE POSITION (MOVE STICK TO BOTTOM)
- 2) GLOWING TIME (10, 20 secs or until switched OFF)
- 3) GLOW DRIVING POWER LEVEL (LOW,MID,HIGH)
- 4) ANTI CHICKEN DANCE LEVEL (1, 2 or 3)
- 5) NUMBER OF ACTIVE MAGNETS (1 or 2)
- 6) CURRENT FOR BAD PLUG DETECTION (LOW,MID,HIGH)

Entering Programming mode

***** IMPORTANT ***** Before you enter programming mode make sure your throttle is in normal mode **so that the throttle servo moves from idle to full as you move the throttle stick**. To enter programming mode **PUSH AND HOLD** the red button **WHILE POWERING UP**. As soon as you hear the first beep release the red button.



PROGRAMMING

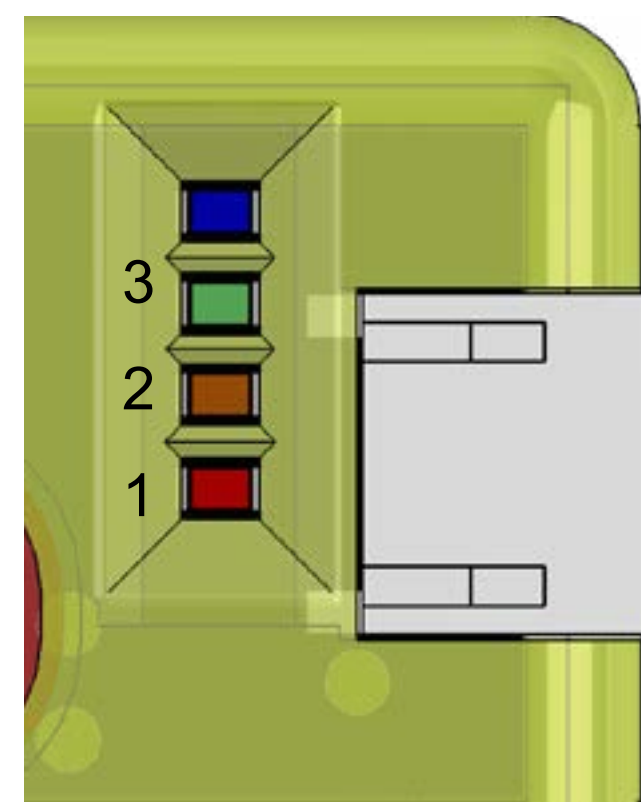
Once in programming mode you can use the throttle or if no throttle connected the three-way channel switch for selecting the red, yellow or green light to select the option's value and then followed by one short push to the red button to memorize that setting value.

BLUE: Blinks to indicate program step #



GREEN: Top setting selection

YELLOW: Middle setting selection

RED: Bottom setting selection



1 THROTTLE IDLE POSITION

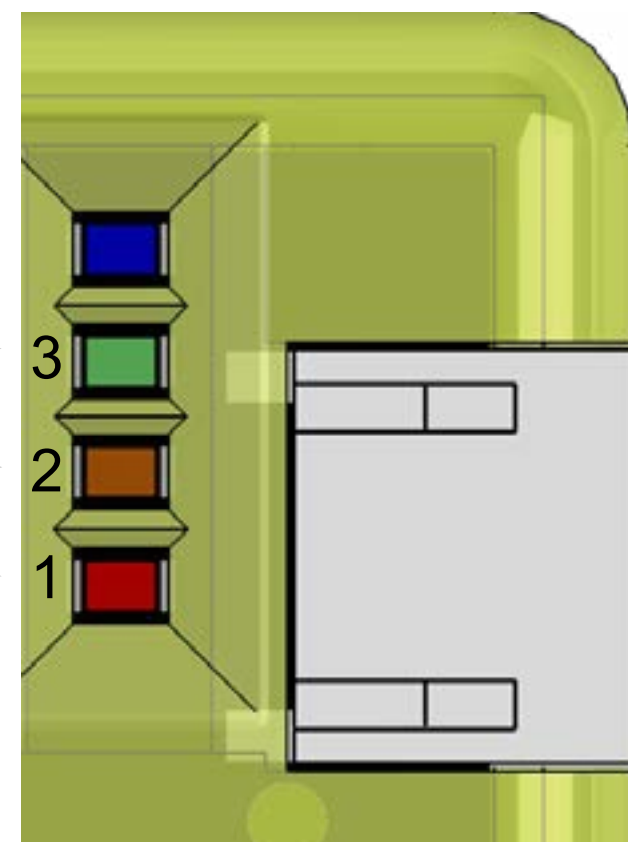
If you're not using a throttle channel skip this step, if you are then after the unit enters programming mode it will beep once indicating step 1. The blue light will also blink once continuously to indicate you're programming the throttle idle stick position. Set the throttle stick to idle and press the red button . The unit will memorize where your throttle minimum is. Push the red button  to memorize and go to next step

2 GLOWING TIME

Set the throttle or three-position switch to:

- GREEN** for unlimited until switched back OFF.
- YELLOW** for 20 seconds glowing time.
- RED** for 10 seconds glowing time (DEFAULT)

Push the red button  to memorize and go to next step

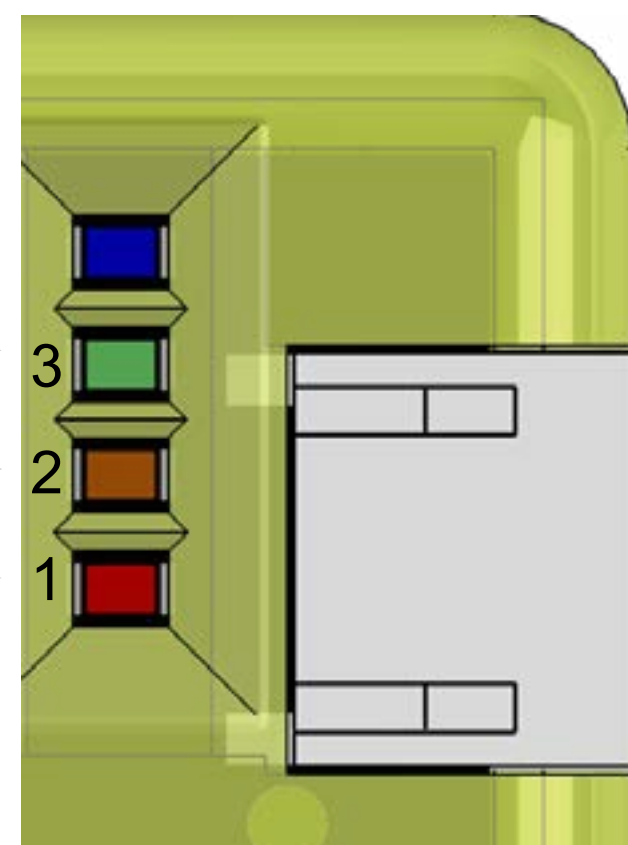


3 GLOW DRIVING POWER LEVEL

Set the throttle or three-position switch to:

- GREEN** for HIGH driving power level (ENYA 3)
- YELLOW** for MID driving power level (DEFAULT)
- RED** for LOW driving power level

Push the red button  to memorize and go to next step



4 ANTI CHICKEN DANCE MODE

If installed with RPM sensor cable (SKU: AAVXG0202). The

XGlow has the exclusive ability to attempt to stop a runaway engine when one of two engine runaway conditions are detected as follows:

The first set of conditions is:

1) ~~The throttle signal disappears such as a disconnected throttle cable from the receiver while at the same time the RPM sensor indicates the engine is in high RPM with no throttle control.~~

In this case the XGlow Pro if programmed to attempt throttle control will first attempt to control the engine by generating the missing throttle stop signal to make the engine stop. It waits about a second and if there is no change in the RPM then, if programmed to do glow plug burn, will resort to burning the plug to force the engine to stop.

The second set of conditions is:

2) The throttle signal goes to idle such as when the pilot tries to stop or idle the engine while at the same time the RPM sensor indicates that the engine is still under high RPM indicating the servo might be disconnected.

In this case the XGlow Pro, if programmed to do glow plug burn, will resort to burning the plug to force the engine to stop.

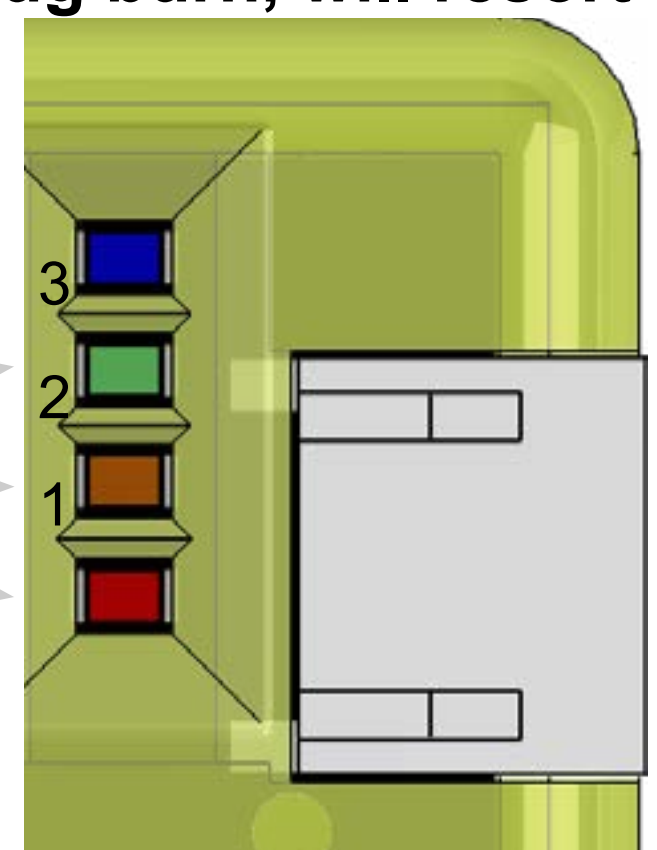
Set the throttle or three-position switch to:

GREEN for THROTTLE SERVO + BURN THE PLUG

YELLOW for THROTTLE SERVO ONLY (DEFAULT)

RED for NO ANTI-CHICKEN-DANCE ATTEMPT

Push the red button  to memorize and go to next step



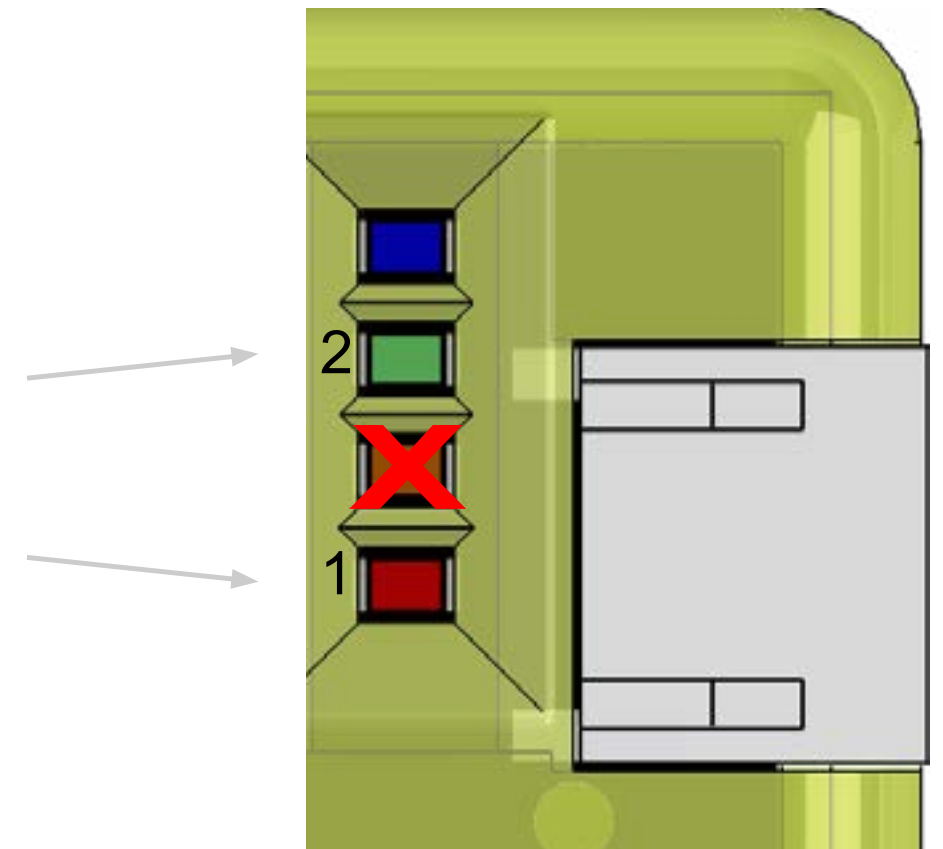
5 NUMBER OF ACTIVE RPM SENSOR MAGNETS

Set the throttle or three-position switch to:

GREEN for 2 active magnets

RED for 1 active magnets (DEFAULT)

Push the red button ● to memorize and finish.



6 CURRENT FOR BAD PLUG DETECTION

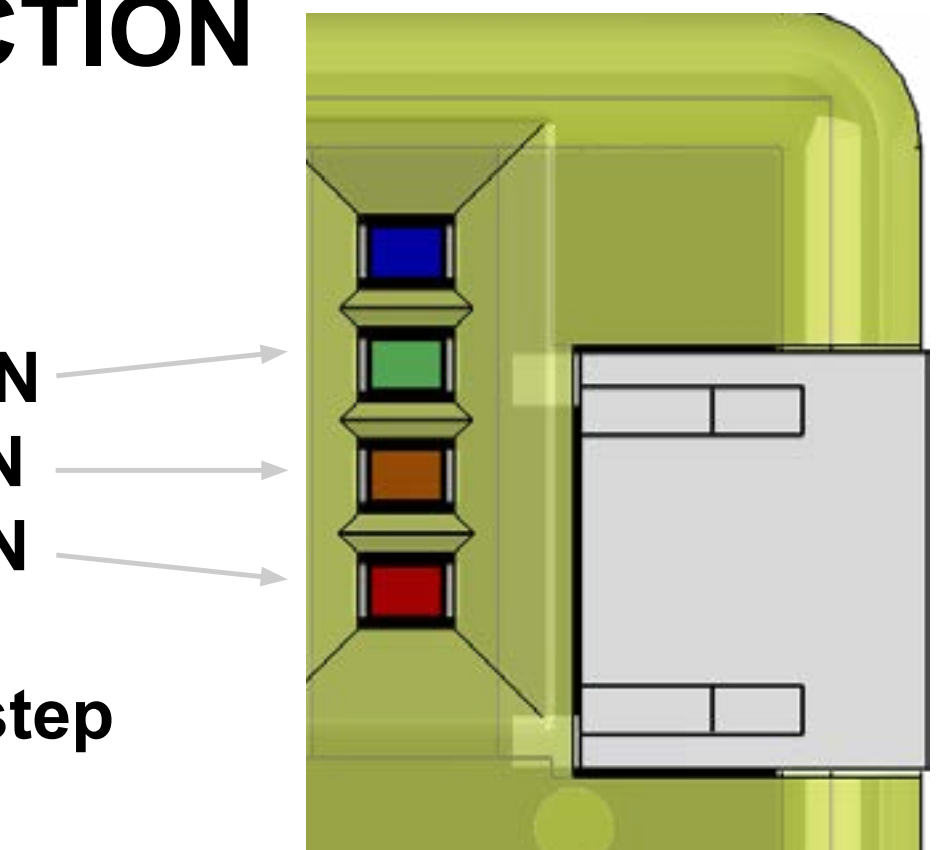
Set the throttle or three-position switch to:

GREEN CURRENT MUST BE HIGH FOR DETECTION

YELLOW CURRENT MUST BE MID FOR DETECTION

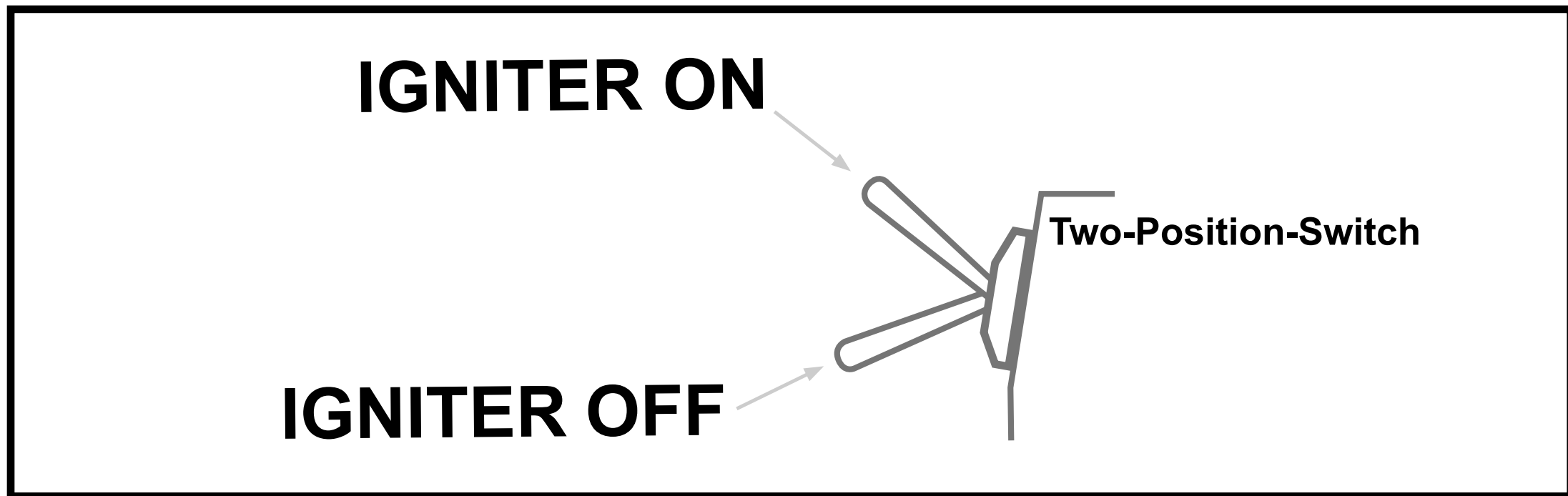
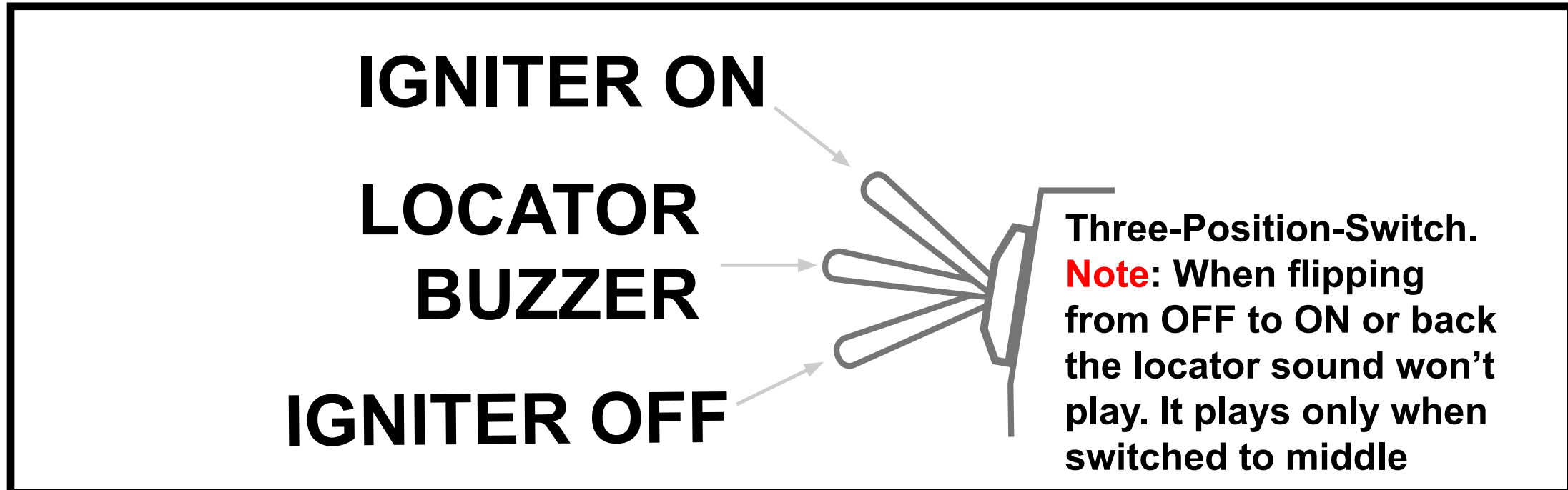
RED CURRENT MUST BE LOW FOR DETECTION

Push the red button ● to memorize and go to next step



RADIO'S SWITCH POSITIONS




RADIO'S SWITCH POSITIONS






Note: If the positions are reversed go to the radio's setting screen and reverse the switch channel.

MUSICAL TONES MEANING












NORMAL OPERATION:

- 1) Power UP tone 
 - 2) Plug being drive by the XGlow Pro 
 - 3) Locator Alarm tone 
-

ERROR TONES:

- 1) Throttle not in idle tone 
 - 2) Bad Plug or Plug Disconnected 
 - 3) Deffective Plug or Alligator clip shorting with engine 
-

DURING PROGRAMMING:

- 1) Enter Programming Section 
- 2) Programing steps:
Enter 1  Enter 2  Enter 3  Enter 4  Enter 5 
Exit 1  Exit 2  Exit 3  Exit 4  Exit 4 
- 3) Exit Programming Section 