Synapse
Lite

Compact and exceptionally light

Managed by **Digital Computerized System**

Sense pot

Anti-Brake

Adaptive Brake response with

Anti-Brake integrated

4 best preset curves available:

- ▶■ Curve 1
- ▶■ Curve 2
- ▶■ Curve 3
- ▶■ Curve 4

LEDs

Brake

Sense

Mode

Choke

Synapse Lite

4 3 2 1

Digital Computerized System

firmware update allowed

CPU

Choke pot

Trigger travel Adjust

Trigger travel Adjust

The Synapse Lite Slot Car controller designed for 1/32, and 1/24 scales

SYNAPSE

Ease maintenance with simple power replace frame

Controller protected against faulty hook-ups

Synapse Lite improved the most significative experience of driving slot cars

Synapse
Lite

Main functions

➢ Managed by **Digital Computerized System**

➢ Setup Mode Bottom: 4 best curves choose for your best racings

➢ Automatic Motor Recognition (1/32 and 1/24 scale) with autonomous feedback adjustment system

➢ Adaptive Brake response with Anti-Brake integrated

➢ Sensibility Pot

➢ Choke Pot

➢ Trigger travel adjusts – Make your owner adjust

➢ Compact and very light design

➢ Simply circuit board with High Tec power frame

➢ Pad less trigger system for smooth drive experience

➢ Lowest voltage drop 0.01v

➢ Controller protected against faulty hook-ups

➢ Ease maintenance with simple power replace frame

Slot Car controller designed for 1/32 and 1/24 scale

SYNAPSE Lite

Compact and very light design

Brake Pot: It sets the amount of the brake the controller will apply to the car when the trigger is released. The brake range is set counterclockwise.

Anti-Brake: This adjustment is used for those cars has so much brake even when the brake is set to zero. This function will reduce this immediate stop. Letting the car stops smoothly. The Anti-Brake range is set clockwise. The led start **("█")** when this function is activated.
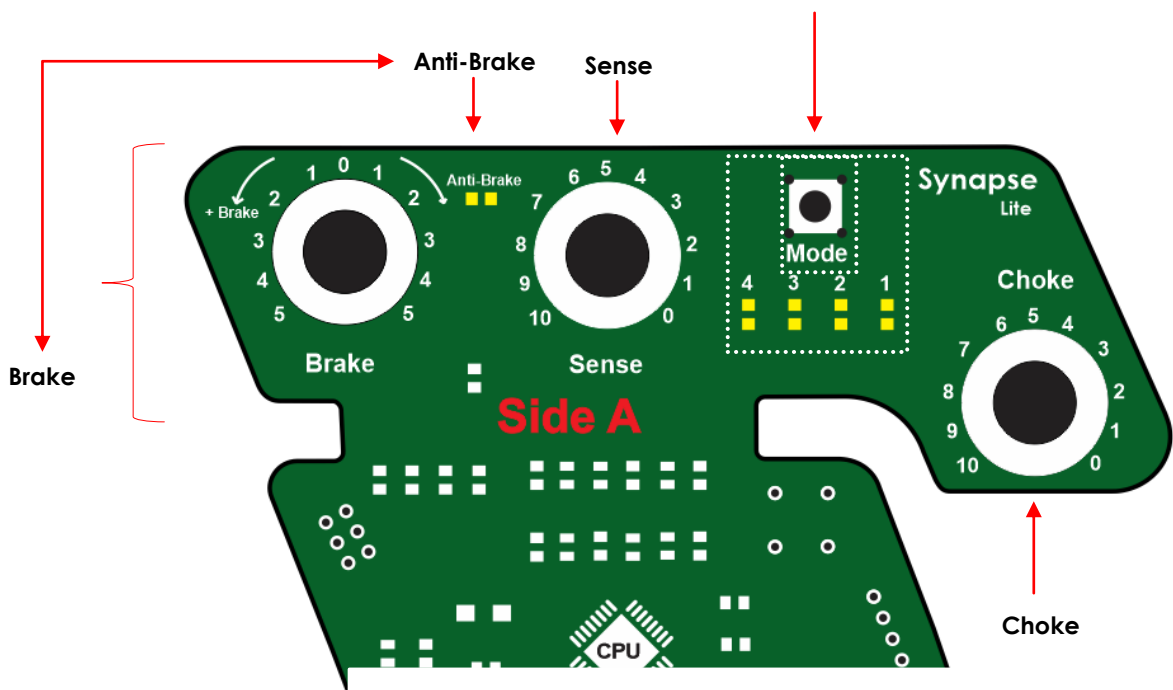
Sensibility pot

Sensibility pot sets the start speed of the car. This adjustment increase the first acceleration points of the acceleration curve.
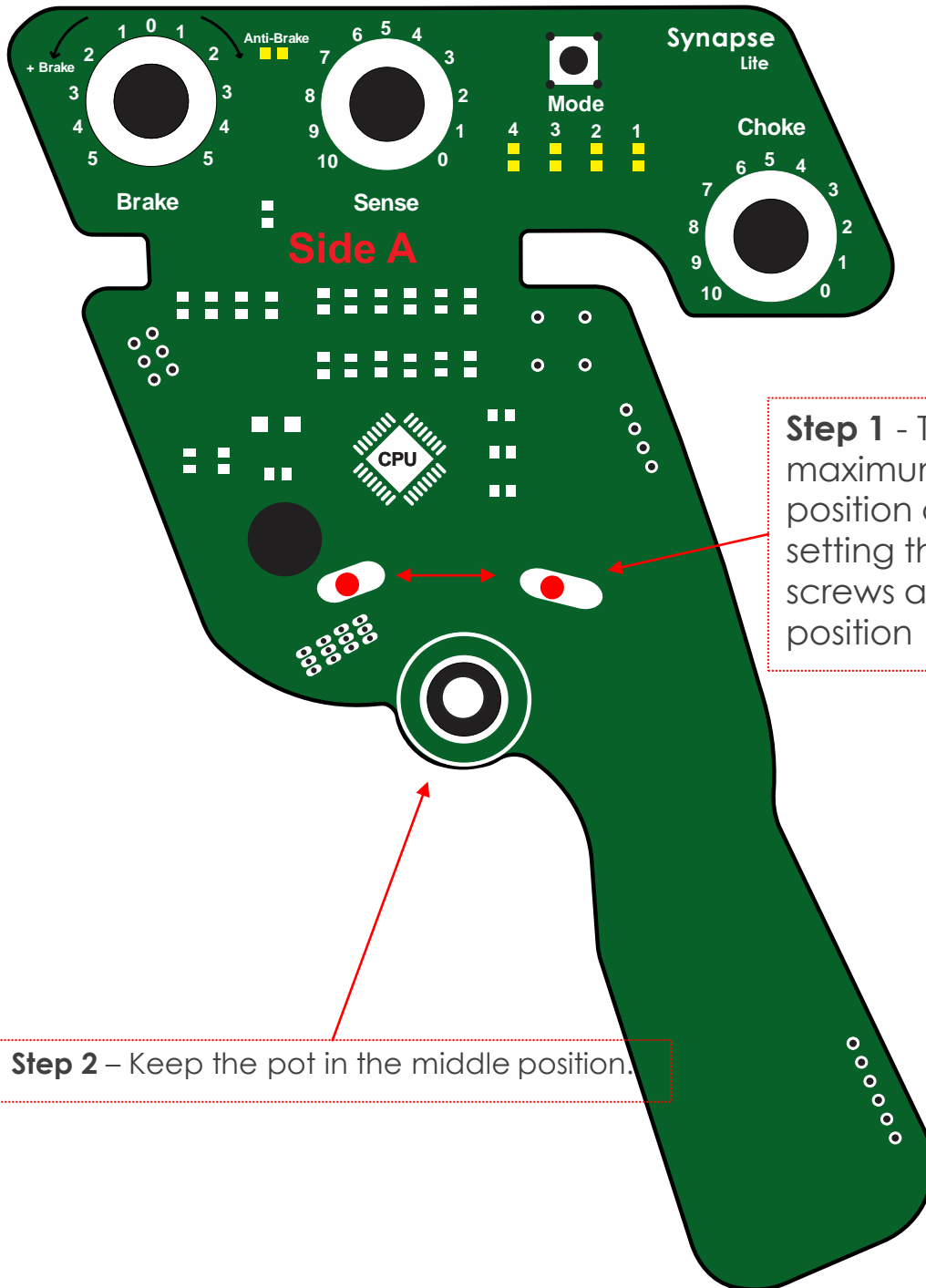
Choke pot

Choke pot reduce the top speed of the car. This function is useful when the car is so aggressive.

Select Curve Mode: The led start ("█") show the curve activated

**1 – Curve | 2 – Curve | 3 – Curve | 4 – Curve 4**

SYNAPSE Lite

Compact and very light design

Synapse Lite

Personalize Trigger travel Adjusts

+ Brake
2 1 0 1 2
3 3
4 4
5 5

Brake

Anti-Brake

6 5 4
7 3
8 2
9 1
10 0

Sense

Side A

Mode

4 3 2 1

Choke

6 5 4
7 3
8 2
9 1
10 0

CPU

Step 1 - The trigger maximum and minimum position can be adjusted by setting the (●) stopper screws at the required position

Step 2 – Keep the pot in the middle position.

Step 3 - Please proceed to **Calibration Trigger Setup** in the next page. This adjustment should be done when the stopper screws were moved.
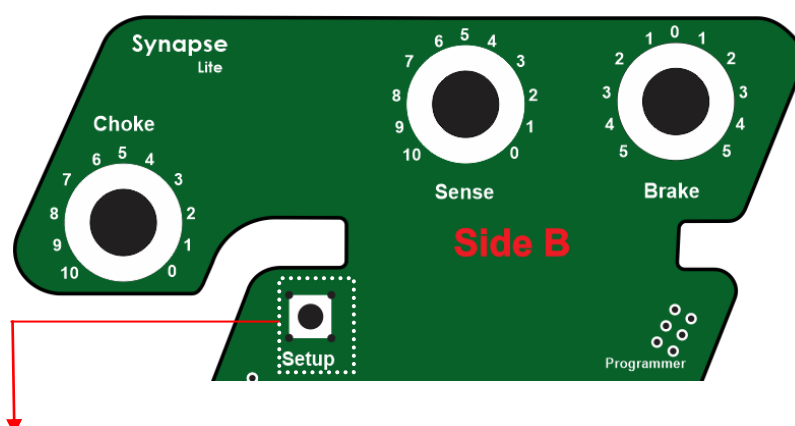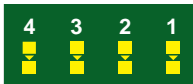
Calibration Setup Bottom

Setup button sets the calibration of the trigger range. This adjustment should be done when the stopper screws were moved.

Press and **hold** the **Setup button** (Side B) for 3 seconds. The Leds (Side A) will start blinking indicating the controller is at the calibration mode. figure 1

Figure 1
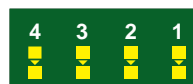
1. After **LED 1** start blinking **alone**. Keep the trigger to released (Initial) position and press setup button.

2. All leds will blink again.

3. The **LED 4** start blinking alone. Set the trigger to **full throttle position** and press setup button.

4. All leds will blink for a second and stops.

5. Calibration concluded.

If the leds continue to blink the calibration failed and the process should be repeated.

See Synapse Lite trigger calibration setup in the link:https://www.youtube.com/watch?v=iGclTRablrk

WARNING

Note: Positive polarity tracks only

+ 1   **Gnd (-)** 2   **Track** 3
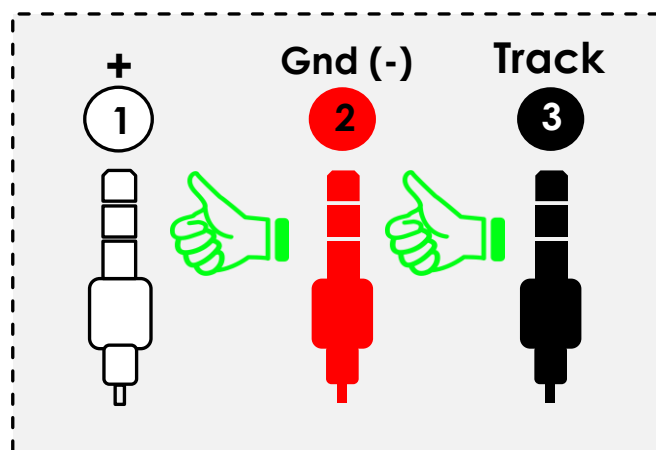
❌ **Pay attention!** Do NOT connect banana plug in the <u>**wrong**</u> color GATES

1   2   3
+   **Gnd (-)**   **Track**
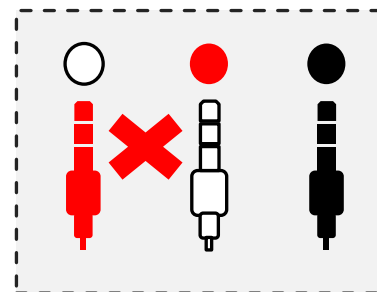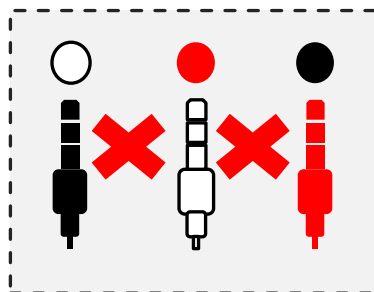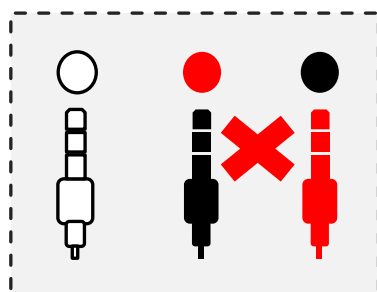
Note: Any wiring wrong connection "may" cause as follow: the motor to full throttle, nothing happens or even in some cases it may blow the fuse.

Circuit protection by 20A Blade Fuse

NOTE: Synapse is not responsible for unauthorized modification, adjustment and replacement of parts of this product.

Technical specifications regarding Synapse Lite device

✓ *Worldwide track pin-out:* **White(+) Red(-) Black(track);**

✓ **12v to 16v** *input voltage range (minimum and maximum);*

✓ *Fast recovery regulated voltage power supply (track);*

✓ *Maximum HF noise* **2vp-p;**

✓ *0 to 50 degrees Celsius temperature range;*

✓ *Humidity 10% to 85% noncondensing;*

✓ *Maximum load Drain 20 Amps constant 120 peak;*

✓ **Track wires** *must handle all power drained by motor and*

   controller;

==Note:== I do not recommend to use Synapse Lite device if the Technical Requirements does not meet all of the specifically expressed.

Synapse Lite

SYNAPSE Lite
Compact and very light design

Handle model available: RedFox

Parma or Koford handles are not available

Enjoy it!!!