

SSD Wireless system

MANUAL

Covered products:

- SSD Wireless Receiver DW-SSD-R-2 Version 5.x
- SSD Wireless Receiver DW-SSD-R-4 Version 5.x
- SSD Wireless Receiver DW-SSD-R-6 Version 5.x
- SSD Wireless Transmitter DW-SSD-T-1 Version 5.x

Table of Contents

1	THANK YOU	3
2	INSTALLATION	3
2.1	SETTING UP THE SCS TRANSMITTER.....	3
2.2	CONNECTION OF SCS RECEIVER.....	4
2.3	CONNECTION OF SCS TRANSMITTER	5
2.4	BATTERY INSTALLATION/REPLACEMENT.....	5
3	OPERATION	6
3.1	CHILD MODE.....	6
3.2	GHOST CAR	6
4	FINE TUNING.....	7
4.1	TUNING INSIDE THE SCS TRANSMITTER	7
4.2	TUNING ON THE POWER BASE.....	7
4.3	FREQUENCY SHIFT	7
5	LED INDICATORS	7
5.1	TRANSMITTER.....	8
5.2	RECEIVER.....	8
6	TROUBLE SHOOTING	8
7	WIRELESS INTERFERENCE	8

1 Thank you

Thank you for buying SCS products. We hope it will enhance your slot car experience.

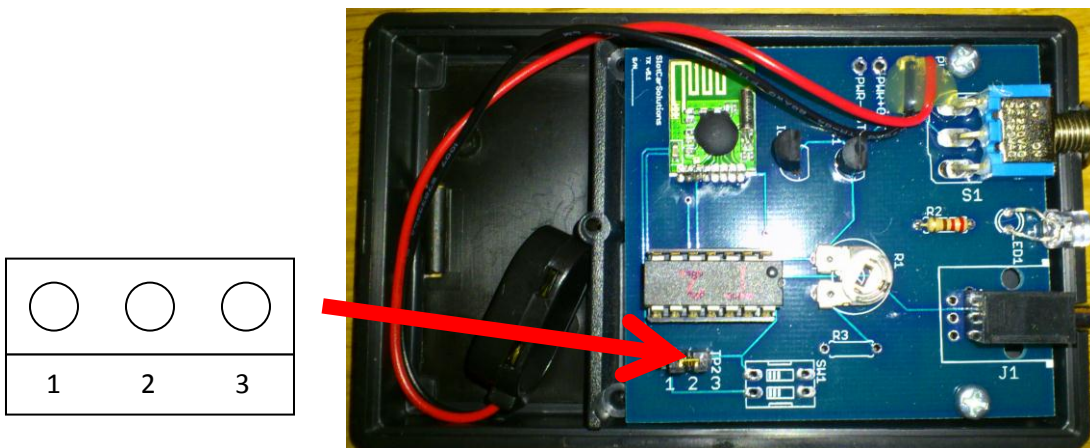
2 Installation

2.1 Setting up the SCS transmitter

The SCS system must be configured according to your Power base and controllers. If not setup correctly you will get either too much or not sufficient throttle on your cars.

SCS is compatible with Slot.it voltage out controllers and resistive controllers such as the Scalextric standard and Truspeed. It can also handle all Scalextric Power bases. For proper operation you must setup each transmitter to match the corresponding controller and Power base you are using.

Please set it up by setting the jumper to 1-2, 2-3 or not connected. The jumper is located in the transmitter box. Note that you need to set up all transmitter boxes.



Jumper Settings:

No Jumper used for:

- PB6 (C 7030) or PB4 with resistive controller (Scalextric standard, Truspeed etc.) or Slot.it 5V controller.
- Advanced Power Base (C 7042) with slot.it 3,3V controller.

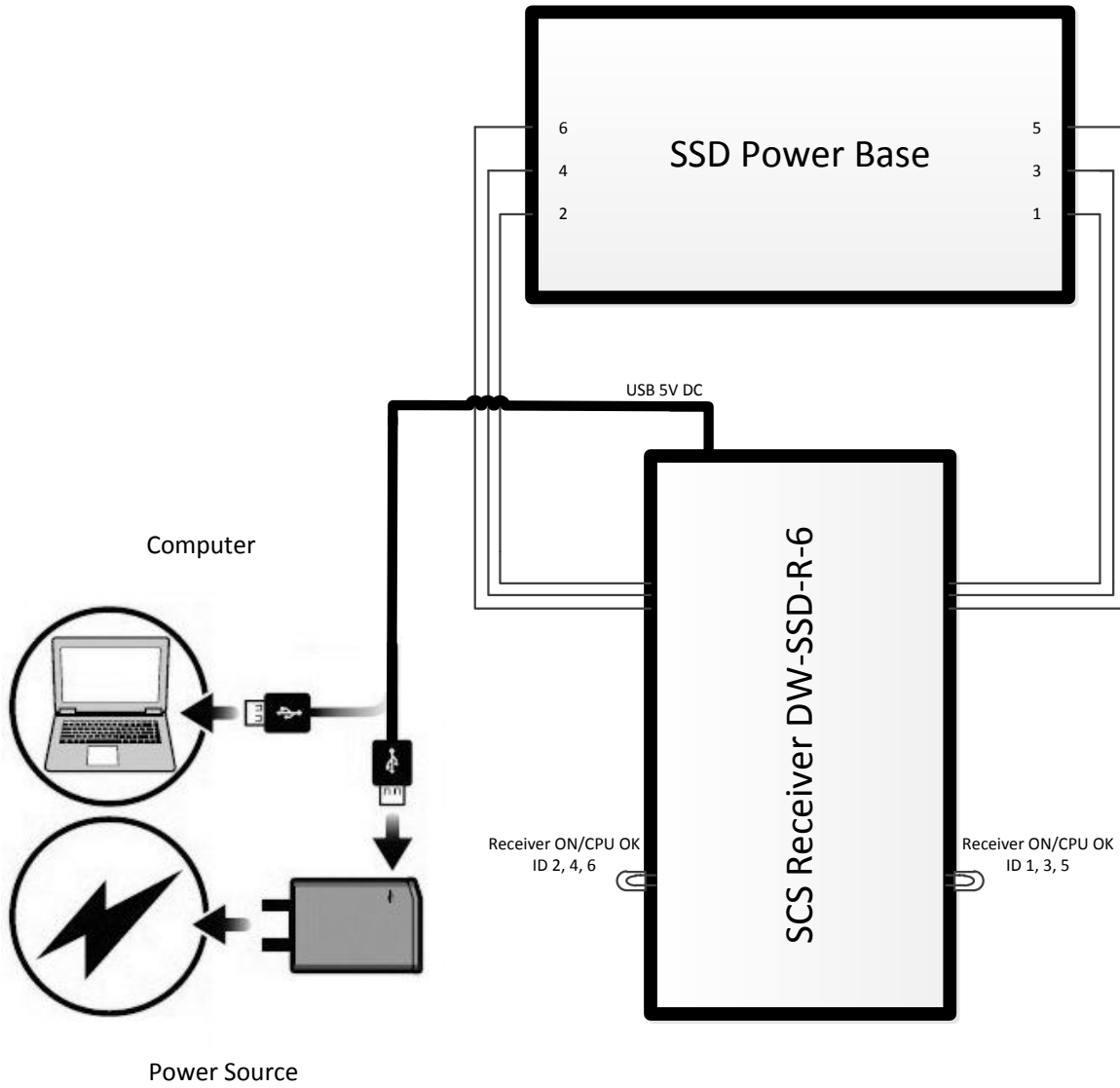
Jumper on 1 – 2 used for:

- PB6 (C 7030) or PB4 with Slot.it 3,3V controller.

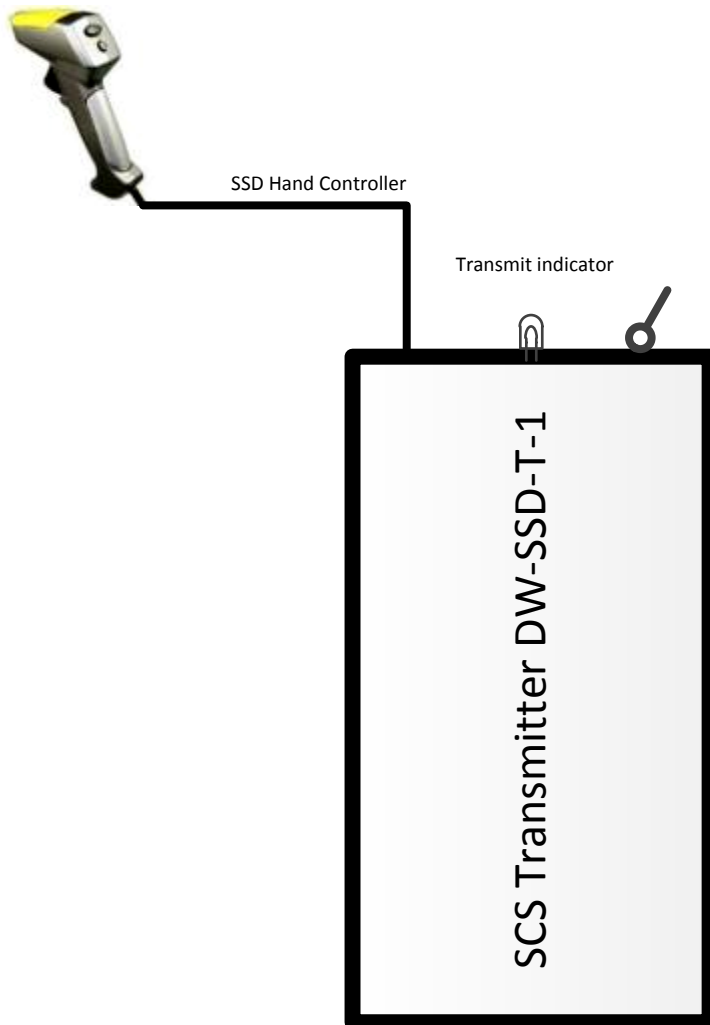
Jumper on 2 – 3 used for: (factory default)

- Advanced Power Base (C 7042) with resistive controller (Scalextric standard, Truspeed etc.) or Slot.it 5V controller.

2.2 Connection of SCS Receiver



2.3 Connection of SCS Transmitter



2.4 Battery installation/replacement

Each Transmitter box is powered by a 9V battery. Battery compartment is found under the battery hatch.

Note, when using 9V power plug for slot.it batteries will drain pretty fast (2-10 hours depending on battery type). Remember to switch those Transmitters off when not racing to save valuable battery time.

We highly recommend using lithium batteries for longer operation.

3 Operation

1. Connect the Receiver to any USB power source and allow the system to boot. It will take ~5 seconds and the indicator will blink while booting. The indicators will be off when ready.
2. Switch on the transmitters and confirm that the transmit indicator is lit (blinking in child mode). Corresponding channel ID indicator on the Receiver will be lit.
3. Power up the power base and race!

The SCS wireless system does not add or change any functionality; it just creates a wireless connection between your hand controller and power base. Your other functionality such as lap counters, Race management software, etc. should work exactly as before.

The range is specified to 10 meters. This is chosen as an optimal value which should be sufficient to all needs and keep the battery performance as good as possible.

It is important to know that interference may appear if the transmitter is too close to the receiver. We recommend 1 meter minimum distance between the receiver and any transmitter.

3.1 Child Mode

The SCS transmitters can be configured to use reduced maximum throttle. Ideal when racing with young racers who normally would de-slot within seconds. This can be done individually on each transmitter. As an example you can have two transmitters at normal (full throttle), one at max 50% and one at max 75%. To set it up, follow this procedure:

1. Switch off the transmitter
2. Hold the trigger at desired max value while switching on the transmitter.

To change back to normal (full throttle) operation, simply restart the transmitter without depressing the trigger.

The LED indicator on the transmitter will indicate if set up in child mode as follows:

BLINKING	Child mode enabled
SOLID light	Normal operation

3.2 Ghost car

The SCS system can be used to program a car to run at constant throttle.

1. Switch on the transmitter
2. Hold the trigger at desired throttle level and switch off the transmitter.

The system will now maintain a constant speed on that channel (ID).

To change back to normal operation, simply start the transmitter without depressing the trigger.

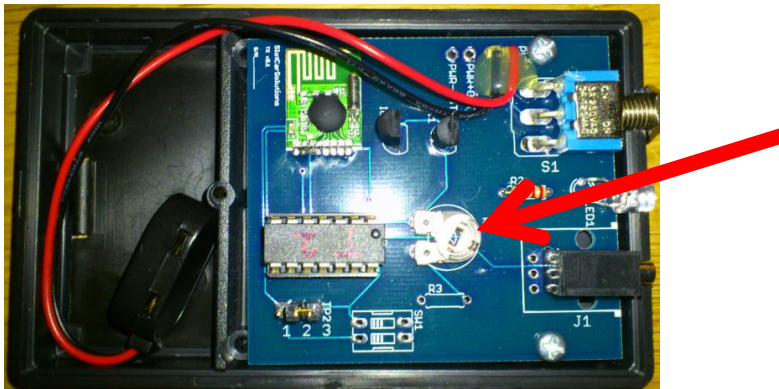
4 Fine tuning

4.1 Tuning inside the SCS transmitter

Depending on your controllers and Power base, it might be necessary to adjust the resistance sent by the SCS receivers for optimal operation. Typical signs of this are:

- Cars not reaching full throttle when lane shift is pressed
- Cars are creeping when lane shift is pressed.

Use a screw driver to open up the affected transmitter and locate the trim potentiometer inside. Use a small screw driver to change its value. It is very sensitive, so please make very small changes.



We suggest adjusting by depressing LC button and turn the potentiometer very slowly until the car creeps and then just a little back until it stops, this should give the optimal adjustments.

4.2 Tuning on the Power Base

If you use the Advanced Power Base C7042 or the C7030 base with PBPro modification, there is a calibration function available in the Power base. If you experience symptoms like this:

- Cars are creeping on the track without throttle applied.

Then we suggest a tuning in the Power base. That should correct the problem.

4.3 Frequency shift

If you experience interference with other 2.4 GHz devices or if you are racing with a friend also using SCS, there is a small risk for frequency collision. The SCS system has a feature to temporarily shift frequency, individually for each channel (ID).

To change frequency, follow those steps:

1. Power up the receiver. Wait until boot sequence is finished (LED will be off)
2. Switch on the transmitter while depressing the brake button. Keep it depressed until the receiver and transmitter led indicators blinks 5 times to indicate that the frequency is shifted.

To go back to default values, restart the system, both receiver and Transmitter, without depressing the button.

5 LED Indicators

5.1 Transmitter

OFF	Transmitter switched off
BLINKING	Child mode enabled (see 3.1)
SOLID LIGHT	Normal operation

5.2 Receiver

The LED indicator on the receiver is blinking to indicate the data transmission received. In ideal conditions it constantly receives data and will blink very quickly, appearing like a solid light. When interference or low signal occurs you will notice that it blinks much slower. Very often this is because the transmitters are too close to the receiver.

OFF	Receiver is switched off, OR no signal for that channel.
BLINKING	Interference or low signal
SOLID LIGHT	Optimal operation/Ideal reception

6 Trouble shooting

The cars are not running smooth and behave strange.

1. The transmitter is out of range or too close to the receiver. Try to stay between 1-10 meters from receiver.
2. The batteries in the transmitter are getting low. Replace them with fresh ones.
3. Another wireless device is interfering with your SCS system. Use the frequency shift feature described in 4.3 above.

One or more channels are not responding at all and I'm using fresh batteries.

1. You might have accidentally made a frequency shift. Make sure a controller is plugged into the affected transmitter and then restart BOTH the transmitter and the receiver.

7 Wireless interference

The SCS systems works with 2.4 GHz. This frequency is also commonly used by other devices for home use, such as; wi-fi, wireless alarm systems, door openers, wireless power switches, weather stations, etc. If interfering with your wi-fi network, you can change wi-fi channel in your wireless access point to go around the problem.

SCS cannot guarantee that there won't be interference with other devices, but it is not very likely since the SCS systems sends at relatively low power and short range.

SCS can't be held responsible for this type of interference and possible strange behavior of surrounding wireless systems. It is the owner's responsibility to test and ensure that safe operation can be done.

If you notice strange behavior of your SCS system or your surrounding wireless devices, please contact SCS with all possible details of the system.