Smartspeed PT

Overview

HOW DOES IT WORK?

Each Smartspeed PT gate contains an in-built radio device for wireless communication through Bluetooth and IEEE 802.15.4.

You will set up one of your PT units to be the master gate, which will connect via Bluetooth to your mobile device. This gate will then command your other gates during the session. The master gate must have its ID set to 0 to enable the Bluetooth module.

It is **very important** that you always place your master gate close to where you will be standing to run the session, as the range of the Bluetooth connection is between 10 – 20m (depending on your device). The master gate can be any of the gates; it does not have to be at the start or finish.

Don't worry! If you walk out of range, the gates will still collect the data for the current athlete, and your mobile device will give you a warning message. Once you walk back into range, the results will show up on your device, and the next person will be able to start.

FRONT	BACK
Photocell and laser	Power/reset LED · Alignment LED

Once you set up and align your units, a beam will be created between the timing unit and the reflector. We call this a timing gate. When someone passes through this beam, we say that the gate has been broken. The first time you break the timing gate beam, the starting point (start time) will be set and the subsequent beam breaks will then list the split times. A split time is the time between beam breaks on one or more units.

UNDERNEATH

- Micro USB Charging port/LEDs
- Tripod connection
- SMARTSCAN RFID or Hand start pad input PS2 port
- Bluetooth LED/button
- Bootloader button (recessed)
- Channel display/button
- Power/Reset button
- ID display/button ("ID")

BUTTON FUNCTIONS

BUTTON	ACTION	UNIT RESPONSE	PURPOSE
Power / Reset button	Press once and release	LED display lights up, power / reset indicator LED turns red, buzzer may sound if not aligned with reflector	Turns unit on
	Press and hold (for 2 seconds)	All LEDs turn off	Turns unit off
	Press and hold (for 10 seconds)	Power / reset indicator LED on back turns on	Resets the unit
Bluetooth LED / button	Press and hold (for 3 seconds)	Button will turn green and unit will emit a triple beep	Initial pairing of master unit to your mobile device
	No action	Button flashing blue	Unit is waiting for Bluetooth connection
	No action	Button solid blue	Unit is connected to Bluetooth
Channel button (CH) / ID Button	Press once and release	Displays current channel and ID settings	Check current unit settings
	Press and hold (for 3 seconds)	Unit will triple beep, channel and ID buttons will begin flashing	Enter channel or ID setting mode
	Press once and release (when button is flashing)	Channel or ID display number will change	Change channel or ID setting

Usage Instructions

To get started with using Smartspeed PT, you will need the following;

1. Your PT system
2. A supported Apple or Android device with Bluetooth enabled and an internet connection
3. A computer that is connected to the internet

1. DOWNLOAD THE SMARTSPEED APPLICATION

Download the Smartspeed app by visiting either the iOS app store if you are using an Apple device, or Google Play store for an android device.

2. REGISTER YOUR ACCOUNT

You must register your account before you will be able to start using your system. To register, launch the Smartspeed app on your mobile device, click **Register**, and complete the form. **You need to be connected to the internet to do this.**

3. MAKE YOUR FIRST TEAM LIST

If you do not have an internet connection and computer with you then you can skip this step, but it is highly recommended in order to get the proper Smartspeed experience. To create your first team list, follow the instructions in our article on using the [Smartspeed Online service](#). If you don't want to do this right now, we have pre-installed a default team you can use to get started.

4. SET UP YOUR MASTER GATE

NOTE – when you turn on a PT unit, it will start to sound a high pitched buzz. This buzzer is designed to alert you when the unit is not aligned correctly with the reflector during use. During setup you may find this very annoying! If you press any of the buttons under the unit, the buzzer will stop for 15 seconds to allow you to perform your setup functions without the buzzer sounding.

4. Turn on only one of your timing units to start with. This will be set as your master gate. You can change this later, but it may be easier to take note that this unit is the master gate for future use without modifying the system.
5. Check that the ID of the unit is set to 0. This means the unit will operate in master gate mode. **If the unit is not set to ID 0, press and hold the ID button for 3 seconds until the 8 digit display turns on and the units makes 3 short audio beeps.** Then continue to press the ID button until 0 is shown as the ID. Once the ID is correct, wait until the display stops flashing – the ID is now set.
6. On the PT unit, press and hold the Bluetooth LED button until it starts to flash green. This means the unit is now discoverable by your mobile device and will remain in discoverable mode for 3 minutes.

Green = Discoverable
Flashing Blue = Ready to Connect
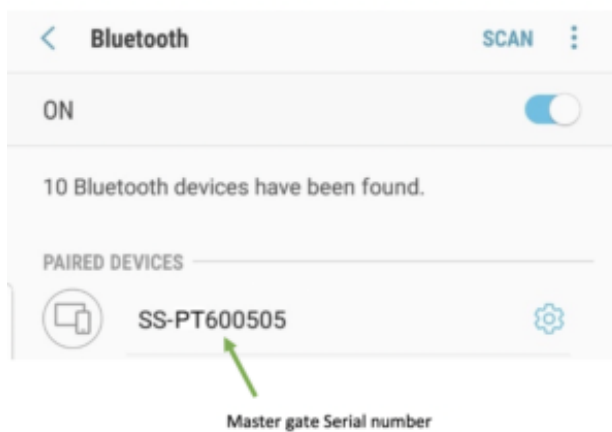Solid Blue = Connected

Channel   ID

a) Connecting using an Apple iOS device

On your mobile device, go to the Bluetooth settings area and you will see a device in the list starting with SS-PT. The other number in the list will correspond to the serial number of the unit, which you can see on the sticker under the unit. Click on this device to pair with the gate. If successful, the green Bluetooth LED button on the PT unit will turn to solid blue. Re-enter the Smartspeed application home page.

Master Gate serial number

b) Connecting using an Android device

On your mobile device, go to the Bluetooth settings area and you will see a device in the list starting with SS-PT. The other number in the list will correspond to the serial number of the unit, which you can see on the sticker under the unit. Click on this device to pair with the gate. If successful, the green Bluetooth LED button on the PT unit will turn to solid blue. Now go into the Smartspeed mobile application home page. Click the three white bars in the top left-hand corner to enter settings. Enter **Bluetooth Setup** and find your Smartspeed PT unit serial number on the list. Press the blue **Connect** button to connect the device. Press the top left-hand corner arrow to return to the home screen.

Master gate Serial number

NOTE – Once you have connected to your master gate, the device details will be saved. This means that the next time you use the application, all you need to do is turn your master gate on, and press the connect button like the one found on the home screen, and the application will attempt a connection to the master gate. Note that with this method, you do not need to make the device discoverable.

5. CONFIGURE THE REST OF YOUR GATES

When you turn on your Smartspeed PT gates you'll notice two values: one next to "CH" (shown in red) and one next to "ID" (shown in green).

For example:

- **Gate 1: CH: 0, ID 0**
- **Gate 2: CH: 0, ID 1**
- **Gate 3 :CH: 0, ID 2**

Depending on your desired setup, the gates will need to be configured in certain ways. We've provided some examples below.

Note – Change the CH or ID value by pressing and holding the corresponding button for 3-5 seconds. You will hear a triple beep. Once that has occurred, simply press the CH or ID button to toggle through the CH or ID options.

Example 1: One test using two gates together, such as a 20m sprint
7. Turn ALL gates to the same channel (we suggest channel 0)
8. Make sure to have one gate on **ID 0** – this is what's called your master gate
9. Connect your phone via Bluetooth to the gate on **ID 0** (your master gate)
10. Change your other gates ID to a unique ID
11. You DO NOT need to connect your phone to any other gate after connecting to the master gate

Example 2: two different tests at the same time, such as 1 x 20m sprint test and 1 jump test
12. Create two master gates – one for the sprint test, one for the jump test (we suggest using channels 1 and 4)
13. Connect a unique smart device to the master gate of each gate
14. Sprint test = **Gate 1: Ch 1 ID 0, Gate 2:Ch 1 ID 1.**
15. Jumping Test = **Gate 3: Ch 4 ID 0**

6. SET UP YOUR GATES FOR TESTING

When set up correctly each gate should look like this.

Tripod assembly

16. Loosen the tripod knob and pull its legs away from the stem.
17. Push down on the knob assembly until the supports are horizontal.
18. Extend the tripod to your desired height. We recommend extending one segment of the tripod to its full extension.
19. Connect the reflectors and remote data units, ensuring that the tripod neck is firmly tightened.

Attaching the timing gate

20. Line up the tripod connection with the bayonet the top of the tripod.
21. Press down, into the tripod, and twist the timing unit into a locked position.
22. When ready, you may turn the unit on by pressing the power button
23. Verify the unit turns on by viewing the power LED on the back of the unit

Aligning your timing gates

24. Place the reflector tripod opposite the PT unit. The reflector can be up to 5 meters away from the PT timing unit.
25. Stand behind the PT timing unit. Hold the unit with one hand and hold the tripod neck with the other hand to keep the tripod in place
26. Turn the PT unit on by pressing its power button.
27. Adjust the beam until the red alignment light on the back of the unit is on. This can be done by aiming the photocell and directional laser at the centre of the reflector. Once aligned, the laser will stay illuminated for an additional 5 seconds before turning off.
28. In windy environments, ensure the unit is remains aligned when wobbling the unit slightly side to side.

7. RUN YOUR SESSION

29. Press S**tart** on the home screen and proceed to the **Session Set Up** screen.
30. Choose your options and team for the session. If you haven't created any of your own teams yet using [Smartspeed Online](), you can use the default team.
31. Once you have configured your settings, press **Start** to start testing.
32. When you have completed your testing, press **Stop** to end the session and view the results.

8. PACKING UP AND CHARGING

To turn off your PT timing units, press and hold the power button on each unit until all LEDs turn off.

We recommend that you recharge your PT units prior to every session. To charge the units, connect them to the USB charger provided. When charging the red and green charge lights under the unit will illuminate. When fully charged, only the green charge light will remain.

Compliance

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

IC STATEMENT

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:
1. this device may not cause interference, and
2. this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
1. l'appareil nedoit pas produire de brouillage, et
2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement."