VALD

SmartSpeed Pro

Quick Start Guide

Contents

1 Overview

The SmartSpeed Pro system is a comprehensive speed, reactive and agility training tool used by elite clubs, combines and academies around the world.

2 Components

The base SmartSpeed Pro System consists of the following components:

- 2 x Pro timing units
- 2 x Reflectors
- 1 x SmartHub
- 5 x Tripods
- 1 x 5V charger
- 1 x SmartHub hard travel case
- 2 x Pro timing unit sleeves
- 1 x 12V Daisy chain charger
- 1 x Pro hard travel case (stores up to 6 timing gates)

Note: Additional SmartSpeed Pro timing gates can be added to a SmartSpeed Pro system.

3 Accessories

3.1   Portable Jump Mat (SmartJump)

The Portable Jump mat enables users to incorporate explosive power measurement and plyometric training in to their SmartSpeed drills.

3.2   SmartScan (RFID)

SmartScan lets users automate SmartSpeed sessions. SmartScan identifies a reusable RFID wrist band allowing the SmartSpeed app to identify the wearer performing the drill.

3.3   SmartShoxx

SmartShoxx can be attached to an object such as a target or tackle bag. It then detects a vibration or impact over a desired threshold and records the event with millisecond accuracy.

3.4   SmartPad

Available in two sizes, short and long, SmartPads are hand start pads that connect to a start gate to measure the accuracy of sprint starts. Timing starts after runners have pressed down on the pad, then lifted their hand or foot off to start their movements.

4 Charging your system

4.1 Timing units

To charge your timing units, connect the units to the provided 12V daisy chain charger.

The charging LED, located on the back of each SmartSpeed Pro timing unit, will flash red when charging.

The LED will turn solid red when fully charged.

Note:

- **It is recommended that you charge your timing units regularly**.
- If the units are used whilst connected to the charger, the units will automatically turn off after a short period. This is to protect the batteries.

4.2 SmartHub

To charge your SmartHub, connect the SmartHub to the provided 5V charger.

The power LED light, located on the bottom left of the SmartHub, will flash when on.

The charging LED light, located on the bottom right of the SmartHub, will flash when charging.

5 Software setup

5.1 SmartSpeed App

The SmartSpeed app is the data capture application for the SmartSpeed system.

The app is available for iOS and Android devices and can be downloaded from the App Store and Google Play Store – search for **SmartSpeed.**

Your VALD Hub credentials are required to log in to the app.

5.2 VALD Hub

VALD Hub is a cloud-based centralised data analytics and account administration platform for VALD Systems. It includes additional features to the SmartSpeed app, for example the ability to:

- Add and edit teams

- Create custom drills
- Create custom pacing tapes
- View and export results

To access VALD Hub visit hub.valdperformance.com and log in with your VALD Hub credentials.

6 SmartHub setup

The SmartHub is the command centre for the SmartSpeed Pro system. It uses two in-built radio devices:

- IEEE 802.15.4 - to communicate between timing units; and
- Bluetooth - to communicate to a mobile device (SmartSpeed app)

To setup the SmartHub, start by turning the SmartHub on and extend the antenna (rotate the antenna clockwise), then connect the SmartHub to an iOS or Android device via Bluetooth.

To connect the SmartHub to an iOS or Android device via Bluetooth:

For iOS devices

1. Go to **Settings**
2. Go to **Bluetooth** settings
3. Turn Bluetooth **on**
4. Select the Bluetooth device that matches the serial number displayed on the SmartHub
5. Confirm Bluetooth pairing with the SmartHub

For Android devices

1. Go to **Options** menu in top left corner
2. Select **Bluetooth Setup**
3. Select **Bluetooth Settings**
4. Turn Bluetooth **on**
5. Select the Bluetooth device that matches the serial number displayed on the SmartHub
6. Confirm Bluetooth pairing with SmartHub
7. Select **Connect**

Once the SmartHub is connected to the device, the details will be saved for the next time you use the SmartSpeed app.

7 Hardware setup

To assemble a timing gate:

1. Assemble the tripods
    a. Loosen tripod knob and pull legs away from stem.
    b. Push down on knob assembly until supports are horizontal.
2. Connect the timing unit and reflector to the tripods
    a. Line up the tripod connection with the bayonet on the tripod.
    b. Press down into the tripod and twist into a locked position.
    c. Ensure tripod neck is firmly tightened.

Repeat the above steps for all timing gates in your system.

Once all timing gates have been assembled, the gates can be positioned for the required drill.

> *Refer to **SmartSpeed Drills** for suggested protocols.*

To position a timing gate:

1. Accurately measure the distance between timing units (use a tape measure)
2. Place a timing unit and a reflector in line with each other (generally 1-4m apart)
3. Stand behind a timing unit
4. Turn on the timing unit – *the unit will beep until it is correctly aligned with the reflector*
5. Hold the top of the unit with one hand
6. Hold the tripod neck with the other hand
7. Direct the light towards the reflector
8. Adjust the light until the red alignment light is on and the unit stops beeping
9. Repeat the above steps for each timing gate required.

Note:

- If using a SmartScan (RFID) or SmartPad, connect it to the start timing unit using the provided PS2 cable.
- If using SmartShoxx, connect it to the relevant timing unit using the PS2 connector (green end) on the SmartShoxx. Timing units connected to SmartShoxx do not require a reflector.
- If using a Portable Jump Mat, connect it to the relevant timing unit using the PS2 connector on the Portable Jump Mat.
- In windy environments, ensure timing unit is optimally aligned by moving it side by side slightly and ensure it remains aligned with the reflector.

8 Run a session

8.1 Timing Units

Note: Timing units need to be on the same channel as SmartHub to be automatically scanned in. If you need to change channel, go to SmartHub Tools > System Setup in the SmartSpeed app.

8.2   Running a Session

To get started with running a session, ensure:

1. Click the **Options** menu in the SmartSpeed app.
2. Select **SmartHub Tools > System Setup.**
3. Click **Search** - the SmartHub details are displayed at the top of the screen. Once the search is complete, the details for each scanned timing unit will display under *Scanned Units.*
4. Click **Set** to update your timing units to the same channel as your SmartHub.

To run a session with the SmartSpeed app:

1. Select **Start Session**
2. Ensure your timing units are automatically scanned in
3. Select a **Team**
4. Select number of **Tracks**
5. Select a **Drill**
6. Select **Ready**
7. ***Physically walk through the timing gates in the order they have been set up***
8. Confirm the order of the timing gates displayed on screen

Note: The battery status of each timing unit will be displayed on screen

9. Select **Start**
10. Select **User Options** as required for the protocol
11. Select the **Tick Icon**
12. Run through the protocol as configured

Note: Results will automatically display onscreen, and the name of the current participant will display on the right, above the timing clock

13. Select **Stop** to end the session
14. Select **Confirm** (or cancel to continue session)
15. Select **View Session Results** or **New Session Setup**

9   Care

The following is recommended to ensure the protection of your SmartSpeed Pro system:

- When not in use, store your SmartSpeed Pro system in the provided hard travel case.
- In the case of wet weather, ensure the SmartSpeed system components are dry prior to storage.
- Ensure the timing units and SmartHub are turned off after each session
- Your SmartSpeed Pro system should only be charged using the chargers provided
- Once charged, disconnect the SmartHub and ensure it is turned off.

10 Health and safety information

Precautions when using batteries

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If left unused, a fully charged battery will discharge itself over time.
- Always charge in or as close to room temperature (20 degrees Celsius) as extreme temperatures will affect the charging capacity of the batteries.
- If Batteries will not recharge (batteries provided have a recharge life of 800 times), DO NOT ATTEMPT to change the batteries yourself. Instead contact VALD.

Electronic devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from the units.

Pacemakers

Pacemaker manufacturers recommend that a minimum of 15cm should be maintained between the units and a pacemaker.

Hearing aids

Some wireless technology can interfere with some hearing aids. In the event of such interference, you may wish to consult your hearing aid manufacturer to discuss alternatives.

Other medical devices

If you use other personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your Physician may be able to assist you in obtaining this information.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.