VALD

SmartSpeed Dash

(Formally SmartSpeed Dash Fusion Sport PT)

Quick Start Guide

Contents

1 Overview

SmartSpeed Dash is a simple and accurate single lane timing system popular with schools, clubs, gyms and performance centres for common speed and non-reactive agility and interval tests.

2 Components

Each SmartSpeed Dash system consists of the following components:

- 2 x Dash timing units
- 2 x Reflectors
- 4 x Tripods
- 1 x 5V USB charger
- 1 x Dash hard travel case (stores up to 2 timing gates)

Note: Multiple SmartSpeed Dash systems can be combined to provide users with additional timing gates.

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 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 Timing Unit(s)

To charge your timing unit(s), connect the unit(s) to the provided 5V charger.

The charging LEDs on the unit, will display:

- Red on, Green off – when unit battery is very flat
- Red on, Green on – when normal charge
- Red off, Green on – when unit is fully charged

It is recommended SmartSpeed Dash timing units are charged prior to every session.

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
- View and export results

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

6 Hardware Setup

If you are setting up your SmartSpeed Dash system or trying to troubleshoot, please click here to **Identify your SmartSpeed Dash timing unit**. It is important to identify your model as they both behave differently.

SmartSpeed Dash BLE

This model of SmartSpeed Dash includes updated BLE (Bluetooth Low Energy) communication.

SmartSpeed Dash LEGACY

This is the original model of the SmartSpeed Dash timing units and includes legacy Bluetooth communication. (You may have one that looks slightly different that is branded SmartSpeed PT Fusion Sports, which was from when VALD acquired SmartSpeed)

Each SmartSpeed Dash system includes at least one timing gate.

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 any additional SmartSpeed Dash systems.

Once the timing gates have been assembled, the command timing unit can be setup.

6.1   Command Timing Unit

The command timing unit operates as the command centre for the SmartSpeed Dash system.

The SmartSpeed Dash timing unit **includes a speaker**, used to provide an audible signal to athletes and coaches.

The timing unit also **includes two light beams:**

- Photocell beam - this is what is used with the reflector to detect objects and has a wider, weaker appearance.
- Laser aiming beam - this is purely an aid in aligning the timing unit with a reflector, as it is significantly more visible and pointed than the photocell beam.

When turned on, the timing unit will produce a loud audible beep until it is aligned with a reflector.

Button Functions

Power Button

Action	Unit Response	Purpose
Press once and release	LED Display lights up, power indicator LED turns red, buzzer may sound if not aligned with reflector	Turn unit on
Press and hold for 2 seconds	All LEDs turn off	Turn unit off
Press and hold for 10 seconds	Power indicator LED on back unit turns on	Reset the unit

Bluetooth Button

Action	Unit Response	Purpose
Press and hold for 3 seconds Legacy units only (not BLE)	Button will turn green and unit will emit a triple beep	Initial pairing of command unit to your device
No action	Button flashing blue	Waiting for Bluetooth connection
No action	Button solid blue	Unit is connected to Bluetooth

Channel Button / ID Button

Action	Unit Response	Purpose
Press once and release	Displays current channel and ID settings	Check current unit settings
Press and hold for 3 seconds	Unit will emit a triple beep, channel and ID displays will begin flashing	Enter channel or ID setting mode
Press once and release when display is flashing	Channel or ID display number will change	Change channel or ID

It uses two in-built radio devices:

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

6.2   Setup a Command Timing Unit:

- Position a reflector opposite a timing unit
- Turn the timing unit on

Note: *When a timing unit is turned on, it will produce a high-pitched beep sound. This beep is designed to alert users when the unit is not aligned correctly with a reflector.*

To stop the beep:

Aim the laser beam from the timing unit onto the reflector until the red alignment light (see image above) is on and the unit stops beeping.

Now, check the ID of the timing unit is set to 0. When the ID is set to 0, the unit will operate as the command timing unit.

To set the ID:

1. Press and hold the ID button for 3 seconds until it beeps, and the display shows an illuminated number between 0-9
2. Continue to press the ID button quickly, until 0 is shown as the ID

Next, connect the timing unit to an iOS or Android device via Bluetooth.

6.3   Configure Timing Units

For each drill setup:

To configure timing units:

1. Set the timing unit to the same channel as the command unit
2. Set the timing unit to a unique ID (see image below)
3. Repeat the above steps for each timing unit

SmartSpeed Dash works by identifying a 'command' unit that communicates with all other timing units. **All units must be on the same Channel, yet have different IDs,** in order to connect to each other.

The command unit (starting gate) must <u>always</u> have an ID of 0 (zero). Subsequent gates should be assigned IDs in ascending order (i.e. 1, 2, 3, etc.).

Timing gate	Channel	ID
	Must always be the same	Must increase numerically
1st gate AKA Command unit	0	0
2nd gate	0	1
3rd gate	0	2
4th gate	0	3

6.4   Position Timing Gate(s)

Once the timing units(s) have been assembled, and the command timing unit is connected, the timing gate(s) can be positioned for the required drill.

> *Refer to **SmartSpeed Protocols** for suggested drills.*

To position timing gates:

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 (on the back of each gate)
9. Repeat the above steps for each timing gate required

Note:

- If using a SmartScan (RFID), SmartPad or Portable Jump Mat, connect it to the start timing unit using the provided PS2 cable. Timing units connected to a Portable Jump Mat require a reflector.
- In windy environments, ensure timing unit is optimally aligned by moving it side by side slightly and ensure it remains aligned with the reflector.

6.5 Connect Your Command Unit to Mobile Device

BLE (Bluetooth Low Energy) Connection Process

1. **Press the Power button** on your timing unit
2. **The command unit must <u>always</u> have an ID of 0 (zero).** To set this, hold down the ID button for three seconds until the display turns on and the device beeps three times. Continually press until the ID display now shows 0
3. Open the SmartSpeed app and navigate to **Options** *(hamburger menu)* **> Bluetooth Setup**.
4. If the device does not appear, click **Start Discovery**
5. Click **Connect** next to the device in the list - this will be labelled as the serial number of the timing unit
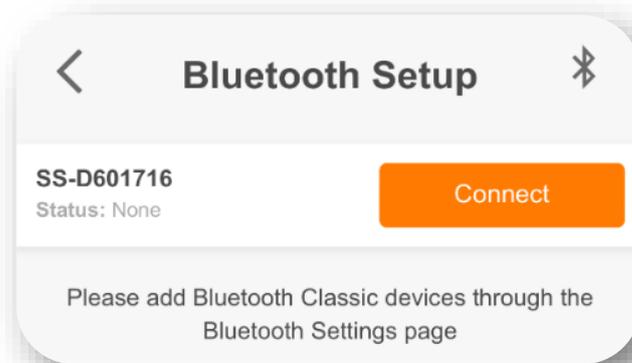
6. Place the command unit on the tripod and realign with the reflector
7. Once you have connected your command unit to your device, you can set up additional units using our SmartSpeed Dash - Set up your timing gates guide

Legacy Connection Process

To connect the timing unit to an iOS or Android device:

1. **Press the Power button** on your timing unit.
2. **The command unit must <u>always</u> have an ID of 0 (zero).** To set this, hold down the ID button for three seconds until the display turns on and the device beeps three times. Continually press until the ID display now shows 0.
3. **Next, hold down the Bluetooth button for three seconds** until it **flashes green,** and you hear it beep. This will enable Bluetooth and allow you to search for the timing unit on your device.

> The command unit will be discoverable via Bluetooth for **three minutes** as you connect using the device-specific steps below.

IOS device

4. Navigate to your **phone Bluetooth settings** and ensure Bluetooth is toggled on.

5. **Select the timing unit** from the available device list - this will be labelled as the serial number.
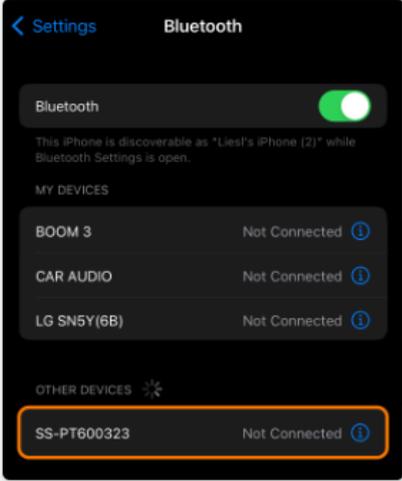
6. If a Bluetooth Pairing Request appears on your device, click **Pair**.

Android device

4. Open the SmartSpeed app and navigate to **Options** *(hamburger menu)* > **Bluetooth Setup**.

5. If no devices appear, click **Start Discovery**.

6. Click **Connect** next to the device in the list - this will be labelled as the serial number of the timing unit.

7. Place the command unit on the tripod and realign with the reflector.
8. Once you have connected your command unit to your device, you can set up additional units using our **SmartSpeed Dash timing units** guide

7 Run a Session

To get started with running a session, ensure:

1. Your timing unit(s) are turned on and positioned for the required drill.
2. You are logged into the SmartSpeed app.
3. The command timing unit is connected via Bluetooth.

To run a session with the SmartSpeed app:

1. Select **Start Session**.
2. Ensure your timing units are configured correctly.
3. Select a **Drill**.
4. Select a **Team or Profile**.
5. Select **Start**.
6. Select **User Options** as required for the drill.

7. Select the **Tick Icon**.
8. 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.

9. Select **Stop** to end the session.
10. Select **Confirm** (or cancel to continue session).
11. Select **View Session Results** or **New Session Setup**.
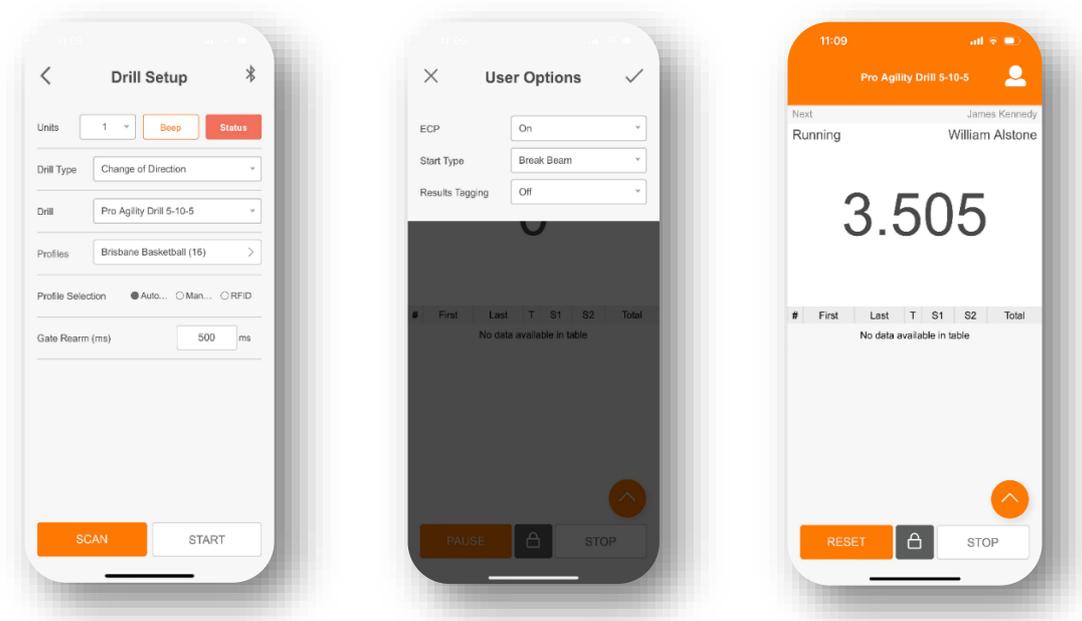
8   Care

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

- When not in use, store your SmartSpeed Dash system in the provided hard travel case.
- In the case of wet weather, ensure the SmartSpeed Dash system components are dry prior to storage.
- Your SmartSpeed Dash system should only be charged using the chargers provided.

9   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. (It has an 8-hour battery life when fully charged).

- 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.