

STAGESDASH™



Stages Dash™ Owner's Manual

English

Stages® Cycling, LLC
www.stagescycling.com
Info@stagescycling.com
1-800-778-7218

Offices:

Sales, Accounting, Customer Support: 606 SE 9th Ave,
Portland, OR 97214

Design, Manufacturing, Engineering: 5335 Sterling Dr,
Boulder, CO 80301



This product is ANT+™ certified and complies with the following specified ANT+ Device Profiles:



www.thisisant.com/directory

TSS® (*TRAINING STRESS SCORE*®), *NP*® (*NORMALIZED POWER*®), and *IF*® (*INTENSITY FACTOR*®) are trademarks of TrainingPeaks, LLC and are used with the permission. Learn more at www.trainingpeaks.com.

T-score™ and Adjusted Power™ are trademarks of Today's Plan Pty Ltd.

Contents

Device Description	4	Editing Pages.....	10
Dash Schematic.....	4	Orientation	10
Charging Dash	4	Adding/Deleting Pages	10
Installing the Mount.....	4	Data Fields	10
Installing/Removing Dash	5	Data Field Categories.....	10
Initial Setup	5	Data Fields List.....	10
Power On/Off.....	5	Displayed Units for Data Fields.....	12
Connecting to GPS.....	6	Span	12
Activity Profiles	6	Totaling.....	12
Changing Activity Profiles	6	Editing Data Fields	12
Renaming Activity Profiles	6	Resizing Fields.....	12
Enable/Disable an Activity Profile.....	7	Riding a Workout.....	13
Creating/Deleting an Activity Profile	7	Using Workout Activity Profiles.....	13
Backlight Setting	7	Using Workout Target Fields	13
Data Recording.....	7	Additional Workouts Features.....	13
Power and Cadence Zeros.....	7	Widgets.....	14
Connecting to Sensors	7	Lap History Chart	14
Bluetooth and ANT+ Sensors	8	Training Zones	14
Manual Entry.....	8	Power Zones	14
Cadence Sensors	8	Setting FTP	14
Speed Sensors	8	Power Zone Calculation Method.....	14
Wheel Size.....	8	Stages Power Zones.....	14
Speed Sensor Preference	9	Coggan Power Zones	14
Zero Resetting a Power Meter.....	9	Heart Rate Zones	15
Sensors Already Saved to Dash.....	9	Setting FThr and Max HR	15
Removing Sensors.....	9	Heart Rate Zone Calculation Method	15
Riding with Dash	9	Stages Heart Rate Zones.....	15
Start a Ride.....	9	Friel Heart Rate Zones	15
Pausing a Ride	9	Estimate FTP or FThr.....	15
Ending a Ride.....	9	Ride Uploading.....	15
Laps	10	USB.....	15
Navigation in Ride	10	Stages Sync	15
Viewing Data Pages.....	10	USB Mass Storage	15
Ride Data Recording.....	10	.fit Export	15
Data Pages.....	10	BLE	16
		Settings	16

Sleep.....	16	Text Editor	17
Screen Inversion.....	16	Large Number Editor	18
Time Zone.....	16	Small Number Editor	18
Time Format.....	16	Stages Link	18
System Alerts	16	Stages Link App.....	18
Units	17	Stages Sync	18
Rider Attributes.....	17	Technical Specifications.....	18
Weight.....	17	Device Care	18
Age	17	Troubleshooting.....	19
Gender	17	Trademark and Licenses	19
Other Attributes.....	17	Legal and Regulatory Information	19
Language	17	Warranty.....	19
Updating Firmware	17	Index	20
Editing Widgets	17		

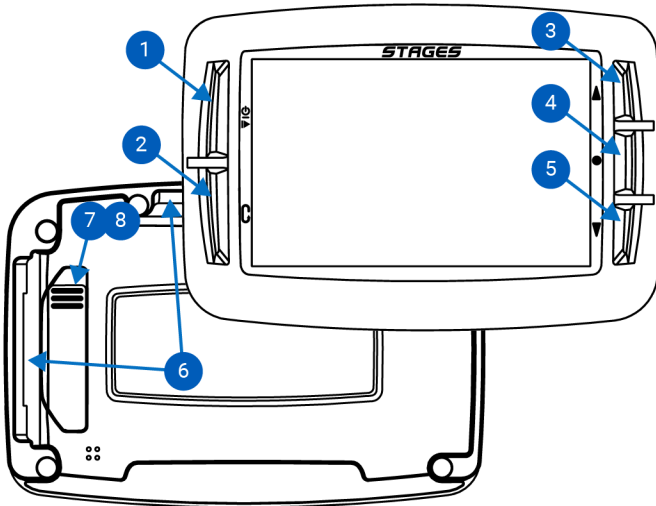
⚠ Warning

Recycling/disposal of device and battery: This device includes a lithium-ion battery. In compliance with your local laws and regulations, please contact local authorities for end of life disposal of this product and battery.

See [Important Product Information](#) insert provided with product for important safety and product information.

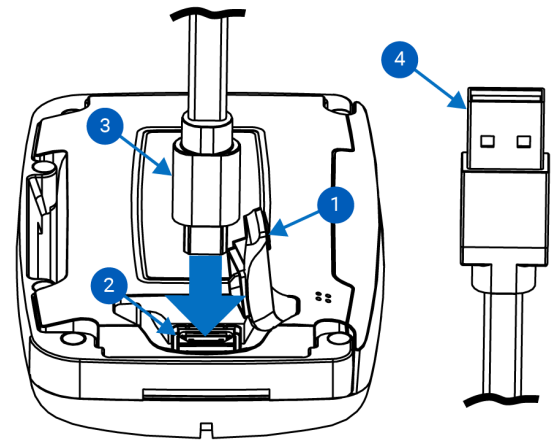
Device Description

Dash Schematic



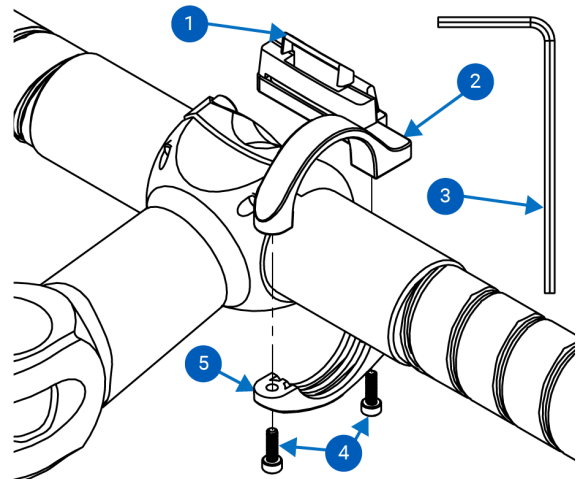
①	⏻ ▶	On/Off - Start/Stop Button: Press to power device on, then press to start/stop an activity. To power the device off, hold button for 3s.
②	↺	Lap: Select to mark a new lap, return to previous page within the menu
③	▲	Up: Scrolls to previous menu item or page
④	●	Enter: Selects item in menu or activity page
⑤	▼	Down: Scrolls to next menu item or page
⑥		Mount Locations (x2): Two rear mounting locations allow for use in portrait or landscape mode
⑦		USB Dust Cover: When installed properly, protects the Micro-USB Plug from the elements
⑧		Micro-USB port: For device charging and data transfer

Charging Dash



To charge your Dash, lightly lift the rubber dust cover ① to allow access to the Micro-USB port ②, insert the Micro-USB plug ③, and insert USB plug into certified USB 2.0 5V wall-mounted charger or USB 2.0 port on your computer ④.

Installing the Mount

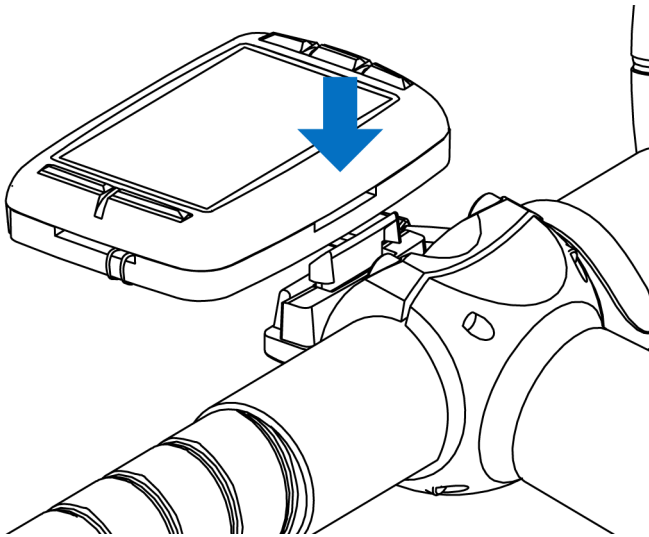


①	Thumb Tab
②	Main Arm
③	2.5mm Hex Key (not provided)
④	M2.5 Cap Head Screws (x2)
⑤	Handlebar Clamp Ring

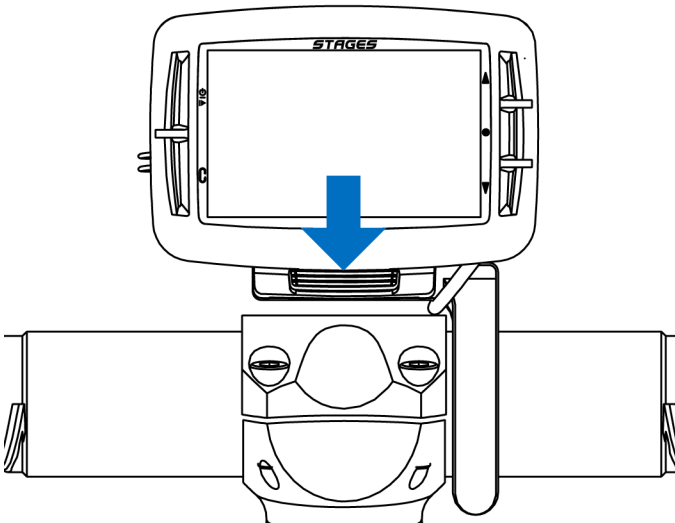
1. Position handlebar clamp ring ⑤ to the right of the stem and between any cables and the 31.8mm handlebar
2. Insert the two M2.5 screws ④ into the holes of the clamp ring ⑤ and use a 2.5mm hex key ③ to loosely tighten ring on handlebars
3. Adjust mount to preferred angle
4. Tighten screws ④ to **2 Nm**.

⚠WARNING: DO NOT OVERTIGHTEN SCREWS.

Installing/Removing Dash

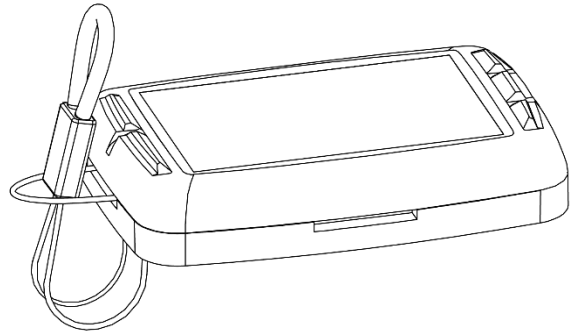


1. Install mount to proper specification (see [Installing the Mount](#)).
2. Orient device in either portrait or landscape position and line up with mount.
3. Make sure lip of the mount is behind the aluminum mounting rail.
4. Slide Dash downward until the thumb tab audibly clicks tab into place.

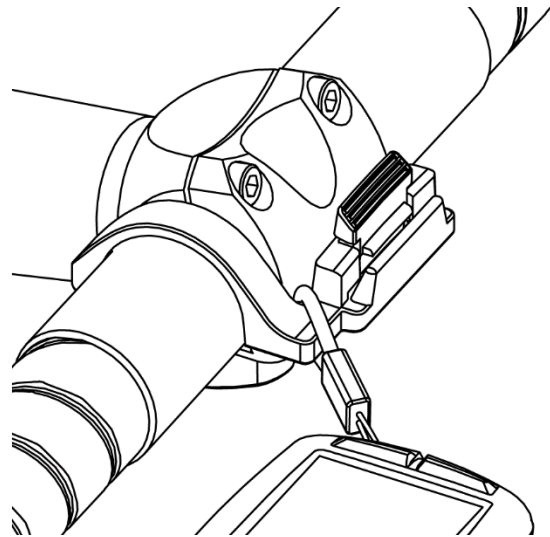


5. Check to make sure the thumb tab is properly seated in the mounting slot.
6. To remove, pull back on thumb tab and pull up on Dash. The Dash should come out easily, if you are forcing it, pull further back towards the bike with the thumb tab.

To install the included safety lanyard (recommended):



1. With the Dash removed from the mount, insert the loop end of the lanyard into the hole on the unused mounting location on the Dash.
2. Pull the lanyard cord end through the loop.





3. Slip the elastic side of the lanyard over the thumb tab and mount arm.
4. Make sure the lanyard is completely clear of the thumb tab.
5. Install the Dash onto mount ([Installing/Removing Dash](#)).

Initial Setup

When powering on the Dash for the first time, you will be prompted with a few questions to set up the Dash. These settings can always be changed from the [Settings](#) menu.

Power On/Off

- **To power ON the Dash:** Press .
- **To power OFF the Dash:** Press and hold  for 3s.

Language Selection

Select your preferred language for set up and use of the Dash.

See Also: [Settings](#) > [Language](#)

Time Zone Selection

Select your default time zone.

See Also: [Settings](#) > [Time Zone](#)

Units

Select your preferred units for display.

See Also: [Settings](#) > [Units](#)

Power Meter?

If you will be using a power meter with Dash, select yes. Your selection here will help Dash set up your default activity profiles.

See Also: [Connecting to Sensors](#)

Heart Rate Monitor?

If you will be using a heart rate monitor with Dash, select yes. Your selection here will help Dash set up your default activity profiles.

See Also: [Connecting to Sensors](#)

Do you perform structured workouts?

If you will be using workouts on the dash, select yes. Your selection here will help Dash set up your default activity profiles.

See Also: [Riding a Workout](#)

Connecting to GPS

To locate GPS satellites, Dash must be in clear view of the sky.

1. Turn on the Dash.
2. Place Dash in clear view of the sky.
3. Unless GPS is disabled, Dash should typically lock on to GPS satellites in a minute or less.

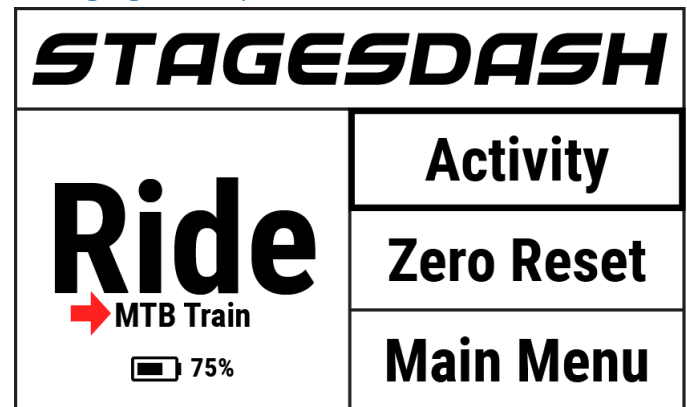
Note: An overlay message will appear if the Dash is not able to find GPS lock and may take additional time (up to 3 minutes). Follow on screen prompts if the Dash is being turned on for the first time, has moved over 300 miles since the last GPS lock, or has not been turned on for a period of over 3 months.

See Also: [Activity Profiles](#) > [Data Recording](#) > [Continuous with GPS Off](#)

Activity Profiles

An activity profile is a group of paired sensors (See [Connecting to Sensors](#)), [Data Pages](#), and specific settings that allow you to set up the Dash for different types of riding, different bikes, or both. Up to 10 unique activity profiles can be configured.

Changing Activity Profiles



From Home Screen:

1. From the home screen, select **Activity** and use the enter button ● to toggle selection.
2. The selected activity profile will be visible in **Ride** panel of the home screen.

From Main Menu:

1. Go to: **Main Menu** > **Activity Settings** > **Select Activity Profile**
2. From here, the selected activity profile's menu will be displayed.
3. Use the lap button ⌚ to return to the main menu.

Manage Activity Profiles

Activity profiles can be managed on the Dash unit by accessing the **Manage** setting within each profile. To find this setting, go to: **Main Menu** > **Activity Settings** > **Select Activity Profile** > **Manage**

- **Rename:** Renames the selected profile (10 character limit).
- **Duplicate:** Creates a duplicate of the selected activity profile (max 10 profiles).
- **Delete:** Deletes the selected activity profile.

See Also: [Using the Text Editor](#), [Stages Link™](#)

Enable/Disable an Activity Profile

Enabled activity profiles have a ✓ listed next to them in the activity profile list.

To enable or disable an activity profile, go to: **Main Menu > Activity Settings > Select Activity Profile > Status Enable/Disable**

- **Enable:** Enabled activity profiles are available for use on rides and can be selected from the home screen.
- **Disable:** Disabled activity profiles will still be saved on the device and can be selected from the activity menu to use in a ride, but will not be visible from the home screen for quick selection.

Managing an Activity Profile

Activity Profiles can be renamed, duplicated, or deleted within the **Manage** section of the activity profile settings. To access the activity profile manage section, go to: **Main Menu > Activity Settings > Select an activity profile > Manage**.

Activity profiles can also be managed in the Dash manager tab in [Stages Link](#).

Backlight Setting

The LCD backlight settings are specific to each activity profile. To update the backlight setting, go to: **Main Menu > Activity Settings > Select Activity Profile > Backlight > Enabled Option: ▶**

Off	No Backlight
On	Backlight always on
10s Button Push Only	Backlight stays on for 10s on button press

Data Recording

Data recording options determine when the Dash unit will automatically stop recording data during a ride.

To update these settings, go to: **Main Menu > Activity Settings > Select Activity Profile > Recording > Enabled Option: ▶**

GPS Pause	Records all data when user is moving (GPS detected movement), pauses recording when user is stopped or when user presses the start/stop button ▶
------------------	--------------------------------------------------------------------------------------------------------------------------------------------------

Sensor Pause	Records all data when user is moving, or when power, cadence, or speed is detected. Pauses when all are 0 or when user presses the start/stop button ▶
Continuous	Records all data regardless of user activity, can only be paused when the user presses the start/stop button ▶
Continuous with GPS Off	Disables the GPS chip and records all data regardless of user activity (good for indoor riding), can only be paused by push of the start/stop button ▶

Power and Cadence Zeros

While riding, Dash can either include zero values (which occur while coasting) in average calculations or ignore them. These settings apply only to activity data collected while using a power meter or cadence sensor.

To update these settings, go to: **Main Menu > Activity Settings > Select Activity Profile > P+C Zeros > Enabled Option: ▶**

Include	Includes zero values in average calculations for power (W) and cadence (RPM)
Ignore	Excludes zero values in average calculations for power (W) and cadence (RPM)
Ignore Power	Excludes zero values in average calculations for power (W), includes values for cadence (RPM)
Ignore Cadence	Excludes zero values in average calculations for cadence (RPM), includes values for power (W)

See Also: [Connecting to Sensors](#)

Connecting to Sensors

Sensors include power meters, heart rate monitors, smart phones, or any other wireless transmitting device that use ANT+ or Bluetooth® to transfer data.

For the Dash to find and connect to a sensor during a ride, the sensor must first be paired to the current [Activity Profile](#). Once a sensor is paired to an activity profile, the Dash will remember it until it has been deleted or removed from the activity profile's sensor list. When pairing a sensor, first select the activity profile in which you will be using the sensor.

To select a different activity profile, see [Changing Activity Profiles](#).

Bluetooth and ANT+ Sensors

The Dash can be paired to Bluetooth and ANT+ sensors, including power meters, heart rate monitors, speed and cadence sensors. To pair to a Bluetooth or ANT+ sensor:

1. First activate or wake the sensor up
 - Heart rate monitor: Put the sensor on.
 - Speed/Cadence sensors: Either move or pass by the corresponding magnet.
 - Power meter: Rotate the sensor.
2. Go to: **Main Menu > Activity Sensors > Add Sensor > BLE or ANT Sensors**
 - A list of sensors available to the Dash will populate
3. Select a sensor and then choose from the following options:
 - **Cancel:** Cancels selection and sensor will not be added.
 - **Confirm:** Adds sensor to the currently selected activity profile.
 - **Enabled Activities:** Adds sensor to all currently enabled activity profiles.
 - **Add to All:** Adds sensor to every activity profile.

Manual Entry

ANT+ sensors have simple ANT+ IDs that can be entered and saved to the Dash without using the search function. If the sensor has a visible ANT+ ID, it can be added directly into the activity sensors list:

1. Go to: **Main Menu > Activity Sensors > Add Sensors > Manual Entry**
2. Select **Sensor Type**, then use the arrow buttons ▲ ▼ to select the correct sensor category.
3. Press the enter button ● to confirm selection, then select **Confirm**.
4. Locate the ANT+ ID number on your sensor and enter it into the number field.
 - Use the arrow buttons ▲ ▼ to change the digit and then use the enter button ● to advance to the next digit.
 - Note that if your sensor ID is shorter than the number of fields, it should be preceded by 0s.

See Also: [Large Number Editor](#)

Cadence Sensors

Cadence data can be collected from either a cadence sensor, combo speed/cadence sensor, or a power meter that sends cadence information.

To set your preference for which sensor to use for cadence when two sensors are present (such as a power meter and a cadence sensor), go to: **Main Menu > Activity Sensors > Select cadence sensor > Cadence sensor or Power meter**

Speed Sensors

Speed and distance data can be collected from either a speed sensor or GPS data. Within the sensor menu, you can choose a wheel size and set a preference to use GPS or speed sensor data to calculate speed and distance.

Wheel Size

To collect accurate speed data from a speed sensor, you will need to set your wheel size within the sensor settings. To set your wheel size, go to: **Main Menu > Activity Sensors > Select speed sensor > Wheel Size**

Rim / Tire Size	Diameter (mm)	Circumference (mm)
700 x 20mm	662	2080
700 x 23mm	668	2099
700 x 25mm	672	2111
700 x 28mm	678	2130
700 x 32mm	686	2155
700 x 35mm	692	2174
700 x 38mm	698	2193
26 x 2.00	660.6	2075
26 x 2.30	675.84	2123
26 x 2.50	686	2155
26 x 4.00	762.2	2395
26 x 4.80	802.84	2522
27.5 x 2.00	731.6	2298
27.5 x 2.30	746.84	2346
27.5 x 2.50	757	2378
27.5 x 2.75	769.7	2418
27.5 x 3.00	782.4	2458
29 x 2.00	723.6	2273
29 x 2.30	738.84	2321
29 x 2.50	749	2353
29 x 2.75	761.7	2393
29 x 3.00	774.4	2433

Speed Sensor Preference

To set your preference on whether to use GPS or the speed sensor for speed and distance, go to: **Main Menu > Activity Sensors > Select speed sensor > Movement > GPS or Speed Sensor**

Zero Resetting a Power Meter

The zero reset process, also referred to as calibration or zero offset calibration, resets the zero value on your power meter for improved accuracy. Please refer to the manufacturer for instructions on the zero reset process for your power meter. To initiate a zero reset from the Dash:

1. Ensure sensor is transmitting and paired to Dash.
 - For a Stages Power meter, orient the power meter vertically with no weight on the pedals.
2. Select **Zero Reset** from the home screen, or go to: **Main Menu > Activity Sensors > Select Power Meter > Zero Reset.**
3. A screen prompt will return **Success** with the value(s) from the power meter or **Calibration Error** if it cannot complete the zero reset process.

Sensors Already Saved to Dash

Once a sensor is paired to any activity profile, it will appear in the list of saved devices found here: **Main Menu > Activity Sensors > Add Sensor > Saved Sensors.**

A previously paired sensor does not need to be present to pair to an additional [Activity Profile](#). Simply select it from this list and the sensor will be added to the current activity profile. Sensors already paired to Dash will not appear in ANT or BLE search lists!

Removing Sensors

To eliminate a sensor from an activity profile or from the saved sensors list, go to: **Main Menu > Activity Sensors > Select Sensor > Remove Sensor or Delete Sensor.**

- **Remove Sensor:** Deletes sensor from the activity profile, sensor remains on **Saved Sensors** list for use on other activity profiles.
- **Delete Sensor:** Removes sensor from the Dash completely. To use sensor again, it will need to be paired as a new sensor.

Riding with Dash

Start a Ride

First confirm that the desired [Activity Profile](#) is selected and listed under the word **Ride** on the home screen. If not, see [Changing Activity Profiles](#).

- Press the **▶** button to begin recording.
- During a ride, all the settings in the current activity profile apply; see [Activity Profiles](#) for more information.

Pausing a Ride

Pressing the start/stop button **▶** will manually pause the ride. When a ride is paused, no data is recorded from sensors, so all averages and totals will not change. This can be useful when stopping for longer periods.

- To resume a ride, simply press start/stop **▶** again or select **Resume Ride** from the on screen message.
- After being paused for a long duration, the Dash will automatically go to sleep. Press **⏻/▶** to wake up the Dash and resume the ride where you left off or save the ride if it has already been completed.
- All previously recorded data will be retained upon entering sleep mode and can be saved or deleted by ending the activity. However, after 3 hours of sleep, the Dash will save the current ride and power off completely.

See Also: [Sleep](#)


Note: Manually pausing a ride with the start/stop button is slightly different than pauses triggered by conditions in the ride, see [Data Recording](#) for more information.

Ending a Ride

Pressing **▶** will display a **Ride Paused** on screen message with the following options:

- **Resume Ride:** Continues recording ride.
- **End Ride and Save:** Displays a brief ride summary and saves the activity to memory. Once ride is saved, a more in-depth summary of the ride is available that can be navigated using arrow buttons **▲ ▼**.
- **End Ride and Delete:** Discards the ride from memory, returns to home screen.



Laps

Laps allow the rider to keep track of specific segments of a ride through use of the lap button . At ride start, the first lap also starts recording lap totals and averages. Each time the rider presses the lap button, the lap re-starts and begins recording averages and totals from the beginning of the current lap. Laps are very useful for riding a workout, as well as keeping track of more specific parts of rides, such as pacing up a climb.

- Upon pressing the lap button, a new lap will begin automatically and any lap-based data fields will restart to include only the current lap.
- A summary of the previous laps will be shown with an overlay message.
- A lap summary field can also be [added to one of your ride pages](#).
- All lap data will be saved into the ride file for post-ride evaluation.

Navigation in Ride

Viewing Data Pages

By default, all rides begin on Page 1. Use the arrow buttons   during a ride to change data pages in the current [Activity Profile](#).

Ride Data Recording

Ride data is recorded to the Dash as frequently as it is available. For more information on when data recording is paused, see [Data Recording](#). The Stages `.rde` file, when used with [Stages Link](#), allows more data than standard file formats to be saved. See [.fit Export](#) for conversion to the industry standard FIT file.

Data Pages

Data Pages consist of up to 16 fields of customizable size and content. Each activity profile is allowed up to 5 data pages, with a wide range of configuration options to view all of your preferred data metrics with ease.

Editing Pages

All pages in an activity profile can be customized by changing the [field size](#), [metric](#), [span](#), and [totaling](#) of the field. Data pages can be edited within the unit, as well as in [Stages Link](#) in the Dash manager tab. Configuring pages in Stages Link is a simple process that allows you to preview each configuration before syncing them to the Dash.

To edit pages of the current activity profile, go to: **Main Menu > Edit Pages**

See Also: [Changing Activity Profile](#)

Orientation

Page layout can be set to Landscape or Portrait.

- Landscape: 4x4 grid of data fields
- Portrait: 2x8 grid of data fields

Note that changing the orientation permanently changes some data fields to fit the page, so it is recommended to set up an [Activity Profile](#) dedicated to this mode before changing this option.

To change your screen orientation, go to: **Main Menu > Edit Pages > Orientation > Landscape or Portrait**

Adding/Deleting Pages

To add or delete a page, use the Dash Manager in [Stages Link](#).

Data Fields

Data fields make up the ride data pages and can be customized by size and data displayed.

Data Field Categories

A metric refers to data recorded from a sensor or GPS that gives information about the ride to the rider.

Metrics have been categorized to make them easier to find when editing a field. The categories are:

- **Power:** All metrics related to data gathered from a power meter.
- **Heart Rate:** All metrics related to data gathered from a heart rate monitor.
- **Time/Cadence:** All metrics related to a timer or cadence sensor.
- **Movement:** All metrics related to GPS data or speed sensor.
- **Workout:** All metrics related to workout targets and laps.
- **Widgets:** All preset fields.
- **Special:** All metrics related to the Dash or other sensor types.

Data Fields List

The following items can be selected for any data field. Some metrics cannot fit in the smallest 1x1 field, so they do not have that size as an option:

Power		
Data Field	Displayed	Definition
Power	W	Power reading in watts
LR Balance	LR Bal	Left/Right power balance (%:%)
Power Zone	P Zn	Current power zone based on programmed zones and FTP setting
W/kg	W/kg	Ratio of power to user set body weight
Pedal Smooth	PdI Sm	Pedal smoothness calculation (%:%) from Left – Right power data
Torque Eff.	T Eff	Torque effectiveness calculation (%:%) from Left - Right power data
<i>NORM POWER</i>	<i>NP</i>	<i>NORMALIZED POWER</i>
Adjusted Power	Adj W	Adjusted power
<i>INTENSITY FACTOR</i>	<i>IF</i>	<i>INTENSITY FACTOR</i> calculation from <i>NORMALIZED POWER</i> to FTP ratio
<i>TSS</i>	<i>TSS</i>	<i>TRAINING STRESS SCORE</i>
T-Score	T Scr	T-score calculation from power data
Energy	kJ	Total work in kilojoules from power data
%FTP	% FTP	Power reading in percent of set FTP

Heart Rate		
Data Field	Displayed	Definition
Heart Rate	bpm	Heart rate from heart rate data
%FThr	%FT hr	Heart rate reading in percent of set FThr
% HR Max	%HR Max	Heart rate as a percent of user set max heart rate
HR-P Eff.	HRP Eff	Heart rate efficiency as a ratio of <i>NORMALIZED POWER</i> to heart rate
HR Zone	HR Zn	Heart rate zone based on zone settings and FThr
Calories	Cal	Estimated calories burned from heart rate data

Time/Cadence		
Data Field	Displayed	Definition
Ride Time	H:MM:SS	Recorded ride time
Lap Time	Lap	Lap time
Time of Day	AM or PM	Time of day (no AM / PM for 24h time)
Elapsed Time	T El	Elapsed time, including time spent stopped or paused
Cadence	rpm	Cadence in rotations per minute

Movement		
Data Field	Displayed	Definition
Distance	mi or km	Elapsed distance
Speed	mph or km/h	Current speed
Elevation	ft or m	Current elevation
Total Ascent	ft or m ↑	Total ascent during ride
Total Descent	ft or m ↓	Total descent during ride
VAM	VAM	Average ascent speed in vertical meters per hour
Vertical Speed	ft/h or m/h ↑	Vertical speed in feet or meters per hour
Gradient	% ↑	Current gradient
Heading	NSEW	Heading based on GPS data

Workout		
Data Field	Displayed	Definition
Target Power*	W	Target power during workout
Target Cadence*	rpm	Target cadence during workout
Target HR*	bpm	Target HR during workout
Target RPE*	RPE	Target rate of perceived exertion
Target Lap Time	T Lap	Planned lap time during workout
Lap Time Remaining	To Go	Time left in lap during workout
This Lap #	Lap	Current lap number during ride
Next Laps	--	Upcoming lap prescription Note: Requires 4x2 (landscape) or 2x2 (portrait) grid space
Lap Text	--	Lap text description Note: Requires 4x1 (landscape) or 2x2 (portrait) grid space.

*All workout target metrics will have the word **Target** in the data field.

Widgets	
Data Field	Definition
Lap History Chart	Summary chart of complete laps within the workout Note: Requires at least 2x3 grid space.

Special		
Data Field	Displayed	Definition
Battery	% Bat	Battery remaining on Dash
Temperature	°F or °C	Temperature reading from internal sensor
Latitude	Lat	Current Latitude coordinate from the GPS
Longitude	Lon	Current Longitude coordinate from the GPS
Satellites	nSV	Number of Satellites connected

Displayed Units for Data Fields

The following data fields can be displayed in multiple unit configurations:

Metric	ft/mi/lb	m/km/kg	m/km/lb
Distance	mi	km	km
Speed	mph	kph	kph
Elevation	ft	m	m
Total Ascent	ft↑	m↑	m↑
Total Descent	ft↓	m↓	m↓
Vertical Speed	ft/h↑	m/h↑	m/h↑
Temperature	°F	°C	°F

See also: [Units](#)

Span

Span is the period of time over which the metric is calculated. Some metrics include limited options for span, while the full list of span options includes:

- Instant
- 3 Second
- 10 Second (power and heart rate)
- 30 Second (power and heart rate)
- 1 Minute
- 1 Hour (kJs, Calories, TSS, T-Score)
- Lap
- Ride

The selected span will be indicated in the data field unless 1 second (instantaneous) or ride (spans entire ride) is selected.

Totaling

Totaling is the way in which a metric is calculated over the setting span. List of possible totaling values:

- **Average:** The average rate of a metric over the selected span, e.g.: 3s Average Power.
- **Maximum:** The maximum average of the metric over the selected span, e.g.: Max 30s Power.
- **Total:** The accumulated total amount of a metric over the selected span, e.g.: kJs in this Lap.
- **Per:** Rate per hour, available only when 1 hour **Span** is chosen (kJs, Calories, TSS, T-Score), e.g.: Calories per Hour.

For example, if the metric **Power** is selected, and the **Span** selected is 1 minute, **Totaling** could show either a current 1 minute average or a maximum 1 minute power achieved during the ride.

Editing Data Fields

From the **Edit Data Fields** menu, both the individual data field metrics and the page layout can be updated.

To access a data field menu:

1. Go to: **Main Menu > Edit Pages**
2. Use the arrow buttons ▲▼ to scroll to the page you would like to edit and press the enter button ● to edit the selected page.
3. Use the arrow buttons ▲▼ to scroll to the metric field you would like to update and press the enter button ● to enter the menu for the selected field.

Resizing Fields

1. From the data field menu, select **Field Size**.
2. This will return to the data page with **Height** and **Width** options shown in an overlay message to adjust the field size.
3. Select either **Height** or **Width** and press enter ● to toggle through the options for height and width.
4. Once you are happy with the field size, select **Confirm** to save changes and return to the data field menu.

Tip: Start editing the field size from the upper left corner and move across the page from there. Since resizing fields requires shifting other fields on the page,

starting in this corner will ensure that previously adjusted fields aren't affected by field size changes that follow.

Riding a Workout

Workouts are ordered laps with prescribed effort that help a rider train properly. [Stages Link](#) can provide workouts and sync them to the Dash via USB ([Stages Sync™](#)) or Bluetooth ([Stages Link app](#)).

All workout data is saved directly to the ride file when riding the workout. Upon completion, uploaded ride files will be given a compliance score on [Stages Link](#).

To select a workout to ride:

1. Go to: **Main Menu > Courses & Workouts**
2. Choose from:
 - **Select Workout from Calendar:** Lists all workouts coming up from your Stages Link training calendar by date.
 - **Other Workouts:** Lists all workouts [imported manually onto the Dash](#).
3. Select a workout from either of these lists to view an on screen message with a description of the workout.
4. Select **Start Ride** to begin a ride with the selected workout file.

Importing a Workout

Compatible workouts can also be imported into the Dash via USB. Workout files must be in the **.fit** file format.

To import a workout manually:

1. Plug in the Dash via USB and view the contents as a USB mass storage device.
2. Drag your **.fit** workout files into the *Load* directory.
3. Eject the Dash from your computer.
4. Go to **Main Menu > Courses & Workouts > Other Workouts** and select your workout.

Using Workout Activity Profiles

The Dash comes preloaded with workout-based [Activity Profiles](#) to allow you to get started using the workout feature. Choose an existing workout activity profile that suites your needs (such as HR or Power workout profiles), then load your workout to populate the target fields based on the prescription provided in the workout.

Using Workout Target Fields

New profiles and pre-loaded activity profiles can be customized to view workout prescriptions and targets. To set up a target field or workout text field, select metrics from the **Workout** category of the [Data Fields](#) menu.



Workout category options:

1. **Target Power:** Current lap power target range
2. **Target Cadence:** Current lap target cadence range
3. **Target Heart Rate:** Current lap heart rate range
4. **Target RPE (Rate of Perceived Exertion):** Current lap effort prescription
5. **Target Lap Time:** Current lap time length
6. **To Go:** Lap time remaining
7. **This Lap #:** Current lap number
8. **Next Laps:** Upcoming lap targets
9. **Lap Text:** Upcoming lap text or instruction

Additional Workouts Features

After selecting a workout to complete on the Dash, use the Dash display to follow on screen prompts to complete each step of the workout and preview upcoming steps using the **Next Laps** or **Lap Text** fields.

Navigating Laps

Within the workout, use the lap button  to advance to the next lap. By default, laps under 1 minute will complete automatically and advance to the next lap without a button press. If you have advanced a lap in error, press and hold the lap button  to go back a lap.

Inner/Outer Laps

A workout can also prescribe inner laps to be performed within a larger main interval. This allows for flexibility to perform specific shorter efforts anywhere within a longer ride duration. The Dash can track time of both the main interval and the prescribed efforts within the main interval. Inner laps will be indicated in the lap number field ([This lap #](#)) by decimal points, i.e. lap 1.1 would indicate the first step of the first main interval.

Previewing Laps

Current and upcoming lap targets can be previewed using the **Next Laps** workout field. Next Laps information may include the lap, time, power, heart rate, cadence, and RPE prescribed for the current and upcoming laps.

Lap Descriptions

The text descriptions associated with each step of the workout can be viewed using the **Lap Text** field. This field will show text for the current and upcoming lap and can be used to add in additional reminders or areas of focus that don't fall within the normal target ranges.

Riding a Course

Courses are mapped routes that can be followed as a simple breadcrumb style map on your Stages Dash device. Courses are synced from [Stages Link](#) using [Stages Sync](#) desktop application. When riding a course, the Dash will automatically add a map page to your existing ride pages.

To select a course:


1. Go to: **Main Menu > Courses & Workouts**
2. Choose from:
 - **Select a Course:** Chooses courses from your Stages Link calendar
 - **Favorite Courses:** Chooses courses from the favorites list on the Routes sidebar.
3. Select your course from the list.
4. Select **Start Ride** to begin a ride using this course

Creating Courses

Courses can be created in [Stages Link](#) using the route builder or imported into the route builder by uploading .GPX files.

Widgets

Lap History Chart

The lap history chart allows you to view a record of each recorded lap on a summary chart. This chart will not populate until at least one lap has been completed, either by pressing the lap button  or the completion of a lap within a [Workout](#).

Training Zones

Training zones divide up levels of effort into categories based on physiological effects of each intensity level. Zones are used when programming specific workout targets and can be set separately for both power and heart rate. You can utilize training zones when training with a power meter or heart rate monitor.

To edit or view training zones for power or heart rate, go to: **Main Menu > Zones**

Power Zones

Power zones are calculated based on percentage of your Functional Threshold Power (FTP) and are commonly used for workout targets in order to give a range of intensity for an interval.

To view or edit your power zone settings, go to: **Main Menu > Zones > Power**

Setting FTP

Functional Threshold Power (FTP) is the maximum wattage you can sustain for a long duration, usually 1 hour. This number is the basis for setting your power training zones and calculating several power based metrics, such as *TSS*, *T-Score*, and *IF*. If you are training with a power meter, you should enter an FTP value here.

To update your FTP setting, go to: **Main Menu > Zones > Power > FTP**

See Also: [Small Number Editor](#)

Power Zone Calculation Method

The Dash comes preloaded with two options for calculating power training zones based on FTP.

To update your zone calculation preference, go to: **Main Menu > Zones > Power > Method > Stages or Coggan**

Stages Power Zones

Zone	% of FTP
Zone 1	0-59%
Zone 2	60-79%
Zone 3	80-90%
Zone 4	91-104%
Zone 5	105-120%
Zone 6	121%+

Coggan Power Zones

Zone	% of FTP
Zone 1	0-55%
Zone 2	56-75%
Zone 3	76-90%
Zone 4	91-105%
Zone 5	106-120%
Zone 6	121-150%
Zone 7	150%+

Heart Rate Zones

Heart rate zones are calculated based on percentage of your Functional Threshold Heart Rate (FThr) and are commonly used for workout targets in order to give a range of intensity for an interval.

To view or edit heart rate zone settings, go to: **Main Menu > Zones > Heart Rate**

Setting FThr and Max HR

Functional threshold heart rate (FThr) is an approximation of your highest sustainable heart rate for an hour effort. This number is the basis for setting your heart rate training zones, as well as calculating several heart rate based metrics that can be displayed in your data fields. If you are training with a heart rate monitor, you should enter an FThr value here. If you prefer to use and display HR metrics based on % Max Heart Rate, you may also enter your max heart rate here.

To enter your FThr, go to: **Main Menu > Zones > Heart Rate > FThr or Max HR**

See Also: [Small Number Editor](#)

Heart Rate Zone Calculation Method

The Dash comes preloaded with two preset options for calculating heart rate training zones based on FThr.

To update your zone calculation preference, go to: **Main Menu > Zones > Heart Rate > Method > Stages or Friel**

Stages Heart Rate Zones

Zone	% of FThr
Zone 1	0-64%
Zone 2	65-84%
Zone 3	85-91%
Zone 4	92-99%
Zone 5	100-104%
Zone 6	105%+

Friel Heart Rate Zones

Zone	% of FThr
Zone 1	0-81%
Zone 2	82-89%
Zone 3	90-93%
Zone 4	94-99%
Zone 5	100-102%
Zone 6	103-106%
Zone 7	107%+

Estimate FTP or FThr

If you are new to training with a power meter or heart rate monitor, [Stages Link](#) will estimate your values during account creation. When you are ready, we recommend performing a threshold test. Having an accurate threshold value will assure that training zones and other metrics are calculated correctly.

Ride Uploading

Rides are stored on the Dash in the **.rde (Stages Ride File)** format. Completed activities can be uploaded and synced via Bluetooth ([Stages Link app](#)) or USB ([Stages Sync](#) or [USB Mass Storage](#) drag and drop). Additionally, Stages Link allows the automatic uploading (“Data Broker” services) of ride files to 3rd party sites.

USB

To download your ride data via USB, use the provided USB 2.0 cord to plug the Dash into a USB 2.0 port on your computer. This will enable USB Mode on your Dash allowing you to select files manually from the Dash storage in the *Activities* directory.

Stages Sync

Download and install the Stages Sync desktop application to your computer to automatically sync your files to Stages Link. Once installed, Stages Sync will upload all new files from the device to Stages Link. For more information, see [Stages Sync](#).

USB Mass Storage

When plugged into your computer, the Dash will enter USB mode automatically and display **USB Enabled** on the screen. On your computer, follow on screen prompts to view the contents of the device.

- By default, files are saved in the **.rde** format and saved into the *Activities* directory.

⚠WARNING: CHANGING OR DELETING FILES IN OTHER FOLDERS MAY EFFECT THE OPERATION OF YOUR DEVICE.

.fit Export

The Dash records data into the **.rde (Stages Ride File)** file format that allows it to log more data than other bike computers. Since this format is designed to be used with Stages Link and may not work with all other third party sites, an option is included to convert all files to

the .fit format upon completion of the activity or after the fact in [Stages Sync](#). *Note: A Stages Link account is not required to utilize the .fit export feature in Stages Sync.*

To change .fit export setting, go to: **Main Menu > Settings > .fit Export**

- **Disabled:** Saves only the .rde (Stages Ride File).
- **Enabled:** Saves ride file in both .rde (*activities* directory) and .fit format (*fit* directory)

REMINDER: [Stages Link](#) provides data brokering services, which allows the automatic uploading of rides to supported 3rd party sites.

BLE

To utilize Bluetooth data transfer on your Dash, you must first install the [Stages Link App](#) to your compatible mobile device.

1. Download and install the Stages Link app.
2. On your mobile device, enable Bluetooth and search for available devices in the Stages Link App.
3. Select **Stages Dash** from the Bluetooth menu.
4. When prompted, confirm pairing by typing the confirmation number shown on the Dash display into the Stages Link app.

Ride History

The ride history section allows you to view the ride summary data from your 10 most recent ride recordings.

To view the ride history menu, go to: **Main Menu > Ride History**

Settings

Sleep Never	Screen Normal	Time Zone MST	Time Fmt 24h
System Alerts	Units ft/mi/lb	Weight 140lb	Age 31
FTP 255	FThr 167	Gender Female	.fit Export Enabled
Language English	Factory Reset	STM DFU Mode	About

The settings menu is where you will find system settings, rider attributes, and other items that apply to all aspects of the Dash and are not specific to certain activity profiles.

To access the settings menu, go to: **Main Menu > Settings**

Sleep

When not in a ride, or a ride is paused, the Dash will enter a sleep state after a period of inactivity. Options for sleep time are:

- 5 Minutes
- 20 Minutes
- Never

To update your sleep time preference, go to: **Main Menu > Settings > Sleep**

Screen Inversion

The Dash display colors can be inverted to enhance visibility. Options for viewing are:

- **Normal:** Black text with gray background
- **Inverted:** Black background with gray text

To update your display to inverted, go to: **Main Menu > Settings > Screen Normal/Inverted**

Time Zone

The time zone for the device can be updated by going to: **Main Menu > Settings > Time Zone > Select time zone**

Time Format

The time format can be either 12h based or 24h based.

To update your time format preference, go to: **Main Menu > Settings > Time Fmt**

System Alerts

System Alerts are tones and on screen notifications for various operations on the Dash.

To update your system alerts, go to: **Main Menu > Settings > System Alerts**

GPS Both	Pause Both	^ Tone ► Overlay Both None v
Sensor Both	Key Press None	
Lap Overlay	Battery Both	
Riding Detected Tone		

Alerts may have the following notification options:

1. **Tone:** Audio tone alert.
2. **Overlay:** On screen message alert.
3. **Both:** Audio tone and visual alert.
4. **None:** No notification for alerts.

Alert Categories:

GPS	GPS fix and signal loss alerts
Pause	Button press and ride pause alerts Related: Data Recording
Sensor	Sensor pairing alerts Related: Connecting to Sensors
Key Press	Key press tones
Lap	Lap button press alerts
Battery	Low battery alert for Dash unit
Riding Detected	Ride detected alert

Units

Dash allows for imperial, metric, or a mix of both units. For a complete list of units, see [Displayed Units for Data Fields](#).

- **ft/mi/lb** – Imperial units for all data fields.
- **m/km/kg** – Metric units for all data fields.
- **m/km/lb** – Mixed units uses metric units for distance calculations and imperial units for body weight and temperature.

To update your default units setting, go to: **Main Menu > Settings > Units**

Rider Attributes

Your personal attributes can also be found within the settings menu.

Weight

To set your weight, go to: **Main Menu > Settings > Weight**

Age

To set your age, go to: **Main Menu > Settings > Age**

Gender

To set your gender, go to: **Main Menu > Settings > Gender**

Other Attributes

For training attributes, see [FTP](#) and [FThr](#).

Language

To set your language preference, go to: **Main Menu > Settings > Language**

Factory Reset

Factory reset will restore all factory defaults and take you through the initial setup menu again. Using this option will remove all saved sensors, user data, and ride totals from the device.

To perform a factory reset, go to: **Main Menu > Settings > Factory Reset**

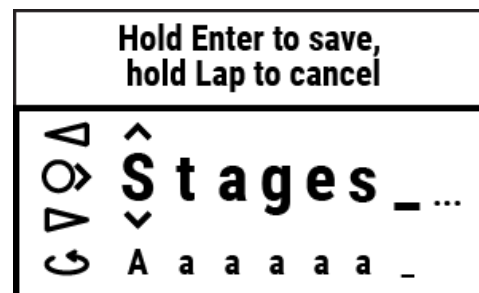
Updating Firmware

Dash firmware updates can be completed via Bluetooth or USB connection to your computer. Updating firmware is an important way to stay on top of new features, bug fixes, and improvements. A [Stages Link](#) account is recommended in order to take advantage of the full range of features built into both Stages Dash and Stages Link. Stages Dash owners will always be able to access Dash management features in Link for free.

- To update via Bluetooth, see [Stages Link app](#).
- To update via USB connection, see [Stages Sync](#).

Editing Widgets

Text Editor



The text editor widget allows customization of [Activity Profile](#) and [Sensor](#) names. While using the text editor, the button functions are as follows:

▲	Scrolls letter selection up
▼	Scrolls letter selection down
●	Advances to the next character
⌂	Changes the list of letters to choose from
●	Long Press: Save and Exit
⌂	Long Press: Cancel and Exit

Once you have completed your changes, press and hold the enter button ● to save your changes.

Additionally, activity profile and sensor names can be edited on [Stages Link](#) in the Dash manager tab.

Large Number Editor

The large number editor functions exactly like the text editor, but is restricted to numerical inputs.

Small Number Editor

The small number editor allows the user to quickly edit numbers less than 1000. To use the small number editor, press the arrow buttons ▲ ▼ to change the digit, then use the enter button ● to save.

Stages Link

The Dash is designed to fully integrate with the Stages Link online training platform. Through the Dash tab on Stages Link, you may set up activity profiles, customize data pages, update settings, as well as use the training platform to follow a training plan, sync workouts, and analyze rides. Dash updates can then be synced to Dash via [Stages Sync](#) (USB) or the [Stages Link app](#) (Bluetooth).

To learn more or create an account, go to: www.stagescycling.com/link

Stages Link App

The Stages Link app is a mobile application that works in conjunction with the Dash and your Stages Link account and utilizes the Dash's Bluetooth connection to your smart phone. The Stages Link app can be used to automatically upload completed activities, sync workouts, update Dash settings (changed in the app or on Stages Link), and update Dash firmware.

To download the Stages Link app, go to: www.stagescycling.com/link

Once installed, follow on screen instructions to pair the Dash with your device.

Stages Sync

Stages Sync is a desktop application for both Mac® and Windows® operating systems that works in conjunction with the Dash and your Stages Link account via USB connection to your computer. The Stages Sync desktop application can be used to upload completed activities, sync workouts, update Dash settings (changed in Stages Link), update Dash firmware, and to export ride files into the .fit format.

To download Stages Sync, go to: www.stagescycling.com/sync

Technical Specifications

Weight	98g
Resolution	240x400
Battery	Rechargeable lithium-ion battery
Battery Life	24-30h, typical usage
Charging Information	Input: 5V, Rate: 500mA, Charge time: 3h, Capacity: 1700mAh
Radio Information	2.4 GHz ANT+, Bluetooth LE
Water Rating	IP67

Device Care


Operating use temperature range: Recommended from 0°C to 55°C (32°F to 131°F)

Charging temperature range: Recommended from 10°C to 40°C (50°F to 104°F)



Periodic cleaning: Use only a water dampened cloth to wipe off dirt and debris. Never use any harsh cleaning chemicals that may damage the plastic housing. No submersion, no spraying of any liquid or water into device seals, and no harsh scrubbing/scratching of surfaces.

Maintenance: Internal items of the Dash unit cannot be serviced. No items are serviceable and no attempt should be made to adjust or alter any internal items.

Water resistance: The Stages Dash is designed to provide excellent water resistance and tested to resist dust and water ingress up to the IP67 standard (up to 1 meter). This provides outstanding water resistance for cycling conditions on and off-road. Please keep in mind this is an electronic device and the overall condition and age of the specific device can diminish its water resistance.

 **Battery Warning:** Only power adaptors with output of 5V DC, and maximum 500mA, should be used to avoid device damage and/or electrical fire. The use of USB splitters and hubs, or other voltage DC output than 5V DC, should be used with extreme caution. It's also recommended to use only direct plug-in sources, or splitters and hubs with only one device inserted for charging.

Troubleshooting

If the device or display is frozen, you can perform a hard reset by pressing and holding the power button  /  for 10 seconds.

To search our full list of troubleshooting topics, frequently asked questions, or submit a support request, please visit: support.stagesdash.com.

Trademark and Licenses

The Stages Dash™ and Stages Power® devices may be protected by USA or foreign patents or patents pending. This document may contain trademarks or registered trademarks of Stages Cycling®, LLC as represented by the use of ™ and ® respectively. All rights reserved. Stages Dash™, Stages Link™, Stages Sync™, and Stages Power® are trademarks of Stages Cycling, LLC. ANT+™ is a trademark of Dynastream Innovations Inc. Bluetooth® is a registered trademark of Bluetooth SIG, Inc.

Mac® is a registered trademark of Apple Inc.

Windows® is a registered trademark of Microsoft in the US and other countries.

Other trademarks and trade names are the property of their respective owners.

Legal and Regulatory Information

To view the legal and regulatory information on the Dash, go to: **Main Menu > Settings > About**

Warranty

For warranty details, visit our online support page at support.stagesdash.com.

Copyright © Stages Cycling, LLC, 2017

Index

- .fit Export, 10, 16
- Activity Profiles, 6, 7, 8, 9, 10, 13, 18
- Age, 18
- Alerts, 17
 - System Alerts, 17
- Backlight, 7
- Bluetooth, 8, 13, 16, 19, 20
- Calibration. See Zero Reset
- Calories, 11
- Charging, 4
- Course, 14
- Data Fields, 11, 12, 13, 14, 18
- Data Pages, 10
- Data Recording, 6, 7, 10, 17
 - Power and Cadence Zeros, 7
- Factory Reset, 18
- Firmware, 18
- FThr, 11, 15, 16, 18
- FTP, 11, 15, 16, 18
- Gender, 18
- GPS, 6, 7, 11, 12, 17
- Heart Rate Monitor. See Sensors
- Language, 6, 18
- Laps, 10, 14
- LR Balance, 11
- Max Heart Rate, 15
- Mount, 4
- Normalized Power, 11
- Orientation, 10
- Pedal smoothness, 11
- Power Meter. See Sensors
- Ride History, 17
 - Records, 7
 - Totals, 10, 16
- Sensor Pause, 7
- Sensors, 6, 7, 8, 9, 17
 - ANT, 8, 19
 - Bluetooth, 8, 13, 18, 19
 - Heart Rate, 6, 11, 14, 15, 16
 - Power Meter, 6, 9
- Sleep, 10, 17
- Span, 12, 13
- Stages Link, 7, 10, 11, 13, 16, 18, 19, 20
- Stages Sync, 18, 19, 20
- Time Zone, 6, 17
- Torque effectiveness, 11
- Totaling, 13
- Training Zones, 14
 - Heart Rate Zones, 15, 16
 - Power Zones, 11, 15
- T-Score, 11, 15
- TSS, 11, 15
- Units, 6, 12, 18
- Uploading, 16
- VAM, 12
- Weight, 18
- Workout, 11, 12, 13, 14
- Zero Reset, 9