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WARNING
Always consult your physician before you begin or modify any training program. Please read the details in Warranty and Safety Information guide in the package.

Product Registration
Help us better support you by completing your device registration using Bryton Bridge. Go to http://support.brytonsport.com for more information.

Bryton Software
Go to http://brytonsport.com to download free software to upload your personal profile, tracks and analyze your data on the web.

Australian Consumer Law
Our goods come with guarantees that can not be excluded under the New Zealand and Australian Consumer Laws. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
Getting Started

This section will guide you on the basic preparations before you start using your Rider 21. Rider 21 is equipped with barometer which shows the real time altitude.

**NOTE:** To adjust the altitude settings on Rider 21, refer to page 13.

Your Rider 21

1. **BACK (BACK)**
   - Press to return to the previous page or cancel an operation.
   - When recording, press to pause recording. Press it again to stop recording.

2. **LAP/OK (LAP/OK)**
   - Press and hold to turn the device on/off.
   - In Menu, press to enter or confirm a selection.
   - In free cycling, press to start recording.
   - When recording, press to mark the lap.

3. **PAGE (PAGE)**
   - In Menu, press to move down to scroll through menu options.
   - In Meter view, press to switch meter screen page. Press and hold to enter Shortcut page.
Accessories

The Rider 21 comes with the following accessories:

- 4-pin USB cable
- Bike mount

Optional items:

- Heart rate belt
- Speed sensor
- Cadence sensor
- Speed/Cadence Dual sensor

Status Icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Bike in use" /></td>
<td>Bike in use</td>
</tr>
<tr>
<td>1 <img src="image" alt="Bike 1" /></td>
<td>Bike 1</td>
</tr>
<tr>
<td>2 <img src="image" alt="Bike 2" /></td>
<td>Bike 2</td>
</tr>
<tr>
<td><img src="image" alt="GPS Signal Status" /></td>
<td>GPS Signal Status</td>
</tr>
<tr>
<td><img src="image" alt="No signal (not fixed)" /></td>
<td>No signal (not fixed)</td>
</tr>
<tr>
<td><img src="image" alt="Weak signal" /></td>
<td>Weak signal</td>
</tr>
<tr>
<td><img src="image" alt="Strong signal" /></td>
<td>Strong signal</td>
</tr>
<tr>
<td><img src="image" alt="Power Status" /></td>
<td>Power Status</td>
</tr>
<tr>
<td><img src="image" alt="Full battery" /></td>
<td>Full battery</td>
</tr>
<tr>
<td><img src="image" alt="Half battery" /></td>
<td>Half battery</td>
</tr>
<tr>
<td><img src="image" alt="Low battery" /></td>
<td>Low battery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Heart Rate Sensor Active" /></td>
<td>Heart Rate Sensor Active</td>
</tr>
<tr>
<td><img src="image" alt="Cadence Sensor Active" /></td>
<td>Cadence Sensor Active</td>
</tr>
<tr>
<td><img src="image" alt="Speed Sensor Active" /></td>
<td>Speed Sensor Active</td>
</tr>
<tr>
<td><img src="image" alt="Dual Sensor Active" /></td>
<td>Dual Sensor Active</td>
</tr>
<tr>
<td><img src="image" alt="Training mode" /></td>
<td>Training mode</td>
</tr>
<tr>
<td><img src="image" alt="Meter mode" /></td>
<td>Meter mode</td>
</tr>
<tr>
<td><img src="image" alt="Log Record in Progress" /></td>
<td>Log Record in Progress</td>
</tr>
<tr>
<td><img src="image" alt="Recording is paused" /></td>
<td>Recording is paused</td>
</tr>
</tbody>
</table>

**NOTE:** Only the active icons are displayed on the screen.
Step 1: Charge your Rider 21

Connect Rider 21 to a PC to charge the battery for at least 3 hours. Unplug the device when it is fully charged.

Step 2: Turn On Rider 21

Press and hold $\text{LAP/OK}$ to turn on the device.

Step 3: Initial Setup

When turning Rider 21 on for the first time, the setup wizard appears on screen. Follow the instructions to complete setup.

1. Select the display language.
2. Select the daylight saving time.
3. Select the unit of measurement.
4. Enter your “user profile”.
   - The “user profile” includes the following data settings:
     - Gender
     - Height
     - Weight
   - It is recommended to input the data. The data accuracy will highly affect your training analysis.
5. Read and accept the Safety Agreement.

Step 4: Acquire Satellite Signals

Once the Rider 21 is turned on, it will automatically search for satellite signals. It may take 30 to 60 seconds to acquire signals. Please make sure you acquire the satellite signal for the first time use.

The GPS signal icon ($\text{GPS}$) appears when GPS is fixed.
- If the GPS signal is not fixed, an $\text{GPS}$ icon appears on the screen.
Step 5: Ride Your Bike with Rider 21

- **Free ride:**
  Select **Meter** from the menu list and start free ride.

- **Start an exercise and record your data:**
  In meter view, press **LAP OK** to start recording, press **BACK** to pause, press **BACK** again to stop.

- **Start a training:**
  Select **Train** from the menu list. Training can be based on time, distance, calories burn, or the saved workouts.

Reset Rider 21

To reset the Rider 21, long press all three keys ( **/ / PAGE**) at the same time.

How to connect your device with brytonsport.com

1. **Download Bryton Bridge 2**
   b. Follow the on-screen instructions to install Bryton Bridge.

2. **Register an Account**
   Go to [http://www.brytonsport.com](http://www.brytonsport.com) and register an account. Please provide accurate information in Personal Setting.

3. **Connect to PC**
   Turn on your Rider 21 and connect it to your computer by using USB cable.

4. **Share Your Experience With Other Bikers**
   To share your experiences with other bikers around the world, please visit [http://www.brytonsport.com](http://www.brytonsport.com).

**NOTE:** Go to corp.brytonsport.com > Support > Tutorial for more instructions.
Training

Bicycling is one of the best types of exercise for your body. It helps you to burn your calories, lose weight, and increase your overall fitness. With the Rider 21 Training feature, you can set simple workouts and use the Rider 21 to track your training or workout progress.

1. In the main screen, press PAGE to select Train.
2. Press LAP_OK to enter the Training menu.

Simple Workouts

You can set simple workouts by entering your time or distance goals. The Rider 21 offers you three types of simple workouts: Time, Distance, and Calories.

Time

1. In the Training menu, press to select To Plan > Time and press LAP_OK.
2. Press BACK/Page to set your time and press LAP_OK to confirm.
3. A “Save to My Workout?” message appears on the screen. Select Yes and press LAP_OK to confirm.
4. Enter the workout name using the on-screen keyboard.
5. Go for a ride.
   Go to Train > Workouts and choose the save workout. Press LAP_OK to start training and record log.
Using the On-screen Keyboard

1. Press \( \text{BACK/PAGE} \) to select the input character.
   - Select \( \text{DEL} \) to erase the data.
2. Press \( \text{LAP/OK} \) to confirm the selection.
3. When finished, press \( \text{BACK/PAGE} \) to select \( \text{END} \) and press \( \text{LAP/OK} \) to confirm.

**NOTE:** If user does not enter the workout name, the system will automatically label the file name according to the current date and time.

My Workout

With My Workout feature, you can start your workout using the training plan that you have saved in **To Plan** menu.

1. In the Training menu, press \( \text{PAGE} \) to select **My Workout** and press \( \text{LAP/OK} \).
2. Press \( \text{PAGE} \) to select **View** and press \( \text{LAP/OK} \) to enter its submenu.
   - Press \( \text{PAGE} \) to select your desired training plan and press \( \text{LAP/OK} \) to confirm.
   - Go for a ride. Press \( \text{LAP/OK} \) to start training and record log.
3. To choose which workouts to delete, select **Delete**.
4. To delete all workouts to delete, select **Delete All**.
NOTE: If the selected workout includes several interval settings, a workout details appear on the screen. Select Start and press \textit{\textsuperscript{l}}\textit{AP}\textit{OK} to proceed with the workout.

**Stop Training**

You can stop the current training after you have reached your goal or when you decide to end the current training.

1. Press \textit{\textsuperscript{BACK}} to pause the recording and press \textit{\textsuperscript{BACK}} again to stop the recording.
2. A “Do you want to stop?” message appears on the screen. To stop the current training, press \textit{\textsuperscript{BACK}} to select \textit{Yes} and press \textit{\textsuperscript{l}}\textit{AP}\textit{OK} to confirm.

**View Exercise/Training Record**

Use View History to view or delete your exercise/training history.

1. In the main screen, press \textit{\textsuperscript{PAGE}} to select \textit{History} > \textit{View} and press \textit{\textsuperscript{l}}\textit{AP}\textit{OK}.
2. Press \textit{\textsuperscript{PAGE}} to select \textit{View} and press \textit{\textsuperscript{l}}\textit{AP}\textit{OK} to confirm.
3. Press \textit{\textsuperscript{PAGE}} to select a training history from the list and press \textit{\textsuperscript{l}}\textit{AP}\textit{OK} to view your history.

NOTE: You can also upload your history to brytonsport.com to keep track of all your ride data.
To delete your history:

1. In the main screen, press \( \text{PAGE} \) to select History > View and press \( \text{LAP} \) to enter the history list.

2. Press \( \text{PAGE} \) to select Delete and press \( \text{OK} \) to enter the history list.

3. Press \( \text{PAGE} \) to select a training history from the list and press \( \text{LAP} \) to delete the selected history.

4. A “Do you want to delete?” message appears on the screen. To delete the data, press \( \text{BACK} / \text{PAGE} \) to select Yes and press \( \text{OK} \) to confirm.

**History Flow**

\[
\begin{array}{c|c|c|c|c|c}
\text{09/19} & \text{21:44} & \text{trip} & \text{AVG} & \text{MAX} & \text{Lap 01} \\
00:03:08 & \text{00:02:25} & \text{0.25} & 75.6 & 75.6 & 00:49 \\
00:02:25 & \text{3.69} & \text{kmh} & 39 & 39 & \text{km} \\
3.69 & \text{km} & \text{bpm} & 19 & 19 & 81.4 \\
39 & \text{kcal} & \text{rpm} & 13 & 0 & \text{rpm} \\
04 & \text{laps} & & & 0 & \\
\end{array}
\]

The arrow appears only when there is lap in this record.

The arrow appears only when there are more than 1 lap.

\text{trip} = \text{Trip Time}

\text{Record#/Total records}
Settings

With the Settings feature, you can customize altitude, display settings, sensor settings, system settings, bike and user profiles, GPS setup, and view device information.

1. In the main screen, press \texttt{PAGE} to select \texttt{Settings}.
2. Press \texttt{LAP OK} to enter the Settings menu.

My Lap

With My Lap feature, you can use your device to automatically mark the lap at a specific location or after you have traveled a specific distance.

Lap by Location

1. In the Settings menu, press \texttt{PAGE} to select \texttt{My Lap > By Location} and press \texttt{LAP OK}.
2. Press \texttt{PAGE} to select \texttt{Detail info} and press \texttt{LAP OK} to change the setting.
3. A “Use current location as lap location?” message appears on the screen. To save the data, press \texttt{PAGE} to select \texttt{Yes} and press \texttt{LAP OK} to confirm.
4. Press \texttt{Back} to exit this menu.

\textbf{NOTE:} If the GPS signal is not fixed, a “No GPS signal. Searching GPS, please wait” message appears on the screen. Check if the GPS is on and make sure you step outside to acquire the signal.
### Altitude

You can set the altitude setting for the current location and four other locations.

#### Current Altitude

1. In the Settings menu, press \( \text{PAGE} \) to select \textbf{Altitude > Altitude} and press \( \text{OK} \).
2. Press \( \text{BACK} / \text{PAGE} \) to adjust the desired altitude and press \( \text{OK} \) to confirm the setting.
3. Press \( \text{BACK} \) to exit this menu.
Other Location Altitude

1. In the Settings menu, press \(\text{PAGE}\) to select \textit{Altitude > Location 1, Location 2, Location 3, or Location 4} and press \(\text{LAP}\) to confirm.
2. To set the altitude, press \(\text{PAGE}\) to select \textit{Altitude} and press \(\text{LAP}\) to confirm.
3. Press \(\text{BACK/PAGE}\) to adjust the desired altitude and press \(\text{LAP}\) to confirm the setting.
4. To calibrate the set altitude, press \(\text{PAGE}\) to select \textit{Set} and press \(\text{LAP}\) to confirm.
5. Press \(\text{BACK}\) to exit this menu.

Display

You can set the display settings for the Meter, Lap, and Auto Switch. You can also set the Auto Switch interval setting.

Meter Display

1. In the Settings menu, press \(\text{PAGE}\) to select \textit{Display > Meter > Meter 1, Meter 2, or Meter 3} and press \(\text{LAP}\).
2. Press \(\text{BACK/PAGE}\) to select the number of data fields and press \(\text{LAP}\) to confirm.
3. Press \(\text{PAGE}\) to select the item field that you want to customize, and press \(\text{LAP OK}\) to confirm the selection.

4. Press \(\text{BACK PAGE}\) to select the desired setting and press \(\text{LAP OK}\) to confirm.

5. Press \(\text{BACK}\) to exit this menu.

**NOTE:** The number of data fields shown on the screen depends on the “Data fields” selection.

---

### Lap Display

1. In the Settings menu, press \(\text{PAGE}\) to select Display > LAP > Meter 1 or Meter 2 and press \(\text{LAP OK}\).

2. Press \(\text{BACK PAGE}\) to select the number of data fields and press \(\text{LAP OK}\) to confirm.

3. Press \(\text{PAGE}\) to select the item field that you want to customize, and press \(\text{LAP OK}\) to confirm the selection.

4. Press \(\text{BACK PAGE}\) to select the desired setting and press \(\text{LAP OK}\) to confirm.

5. Press \(\text{BACK}\) to exit this menu.
Auto Scroll

1. In the Settings menu, press \( \text{PAGE}\) to select \textbf{Display > Auto scroll} and press \( \text{OK}\).

2. Press \( \text{PAGE}\) to select the setting that you want to change and press \( \text{OK}\) to enter its submenu.
   - Auto scroll: enable/disable the auto switch.
   - Interval: set the interval time.

3. Press \( \text{BACK} / \text{PAGE}\) to adjust the desired setting and press \( \text{OK}\) to confirm.

4. Press \( \text{BACK}\) to exit this menu.

Sensors

You can customize the respective sensor settings such as enable/disable the function or rescan the sensor for the device.

- **Heart Rate**
  - Status: active
  - ID XXXXXXXXXX
  - Rescan
  - Turn Off

- **Speed**
  - Status: active
  - ID XXXXXXXXXX
  - Rescan
  - Turn Off

- **Cadence**
  - Status: active
  - ID XXXXXXXXXX
  - Rescan
  - Turn Off

- **Speed/CAD**
  - Status: active
  - ID XXXXXXXXXX
  - Rescan
  - Turn Off
1. In the Settings menu, press \( \text{PAGE} \) to select **Sensors > Heart Rate, Speed, Cadence**, or **Speed/CAD** and press \( \text{LAP} \) \( \text{OK} \).

2. Press \( \text{PAGE} \) to select the desired setting and press \( \text{LAP} \) \( \text{OK} \) to confirm.
   - **Rescan**: rescan to detect the sensor.
   - **Turn on/Turn off**: enable/disable the sensor.

3. Press \( \text{BACK} \) to exit this menu.

**NOTE:**
- When the heart rate monitor is paired, the \( \text{\large \heartsuit} \) heart rate icon appears on the main screen.
- While pairing your speed/cadence sensor and the heart rate belt, please make sure there is no other cadence/speed sensor within 5 m. When the cadence sensor is paired, the \( \text{\large \cog} \) cadence sensor icon appears on the main screen.

---

### Personalize User Profile

You can change your personal information.

1. In the Settings menu, press \( \text{PAGE} \) to select **User** and press \( \text{LAP} \) \( \text{OK} \).

2. Press \( \text{PAGE} \) to select the setting that you want to change and press \( \text{LAP} \) \( \text{OK} \) to enter its submenu.
   - **Gender**: select your gender.
   - **Age**: specify your age.
   - **Height**: set your height.
   - **Weight**: set your weight.
   - **Max HR**: set your maximum heart rate.
   - **LTHR**: set your lactate threshold heart rate.
   - **FTP**: set your functional threshold power.
   - **MAP**: set your maximum aerobic power.

3. Press \( \text{BACK} \) \( \text{PAGE} \) \( \text{PAGE} \) to adjust the desired setting and press \( \text{LAP} \) \( \text{OK} \) to confirm.

4. Press \( \text{BACK} \) to exit this menu.
Personalize Bike Profile

You can customize and view your bicycle(s) profile.

### Bike 1

<table>
<thead>
<tr>
<th>Bike Type</th>
<th>Weight</th>
<th>Wheel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Folding Bike</td>
<td>13 kg</td>
<td>1700 mm</td>
</tr>
</tbody>
</table>

1. In the Settings menu, press \( \text{PAGE} \) to select \( \text{Bike} > \text{Bike 1 or Bike 2} \) and press \( \text{LAP} \text{OK} \).
2. Press \( \text{PAGE} \) to select the setting that you want to change and press \( \text{LAP} \text{OK} \) to enter its submenu.
   - Bike Type: select the bike type.
   - Weight: set the bike weight.
   - Wheel: set the bike wheel size.
   - Activate: select to activate the bike.
3. Press \( \text{BACK} \text{PAGE} \) to adjust the desired setting and press \( \text{LAP} \text{OK} \) to confirm.
4. Press \( \text{BACK} \) to exit this menu.

**NOTE:** For details on wheel size, see “Wheel Size and Circumference” on page 28.

View Bike Profile

1. In the Settings menu, press \( \text{PAGE} \) to select \( \text{Bike} > \text{Overview} \) and press \( \text{LAP} \text{OK} \).
2. Press \( \text{PAGE} \) to select the desired bike and press \( \text{LAP} \text{OK} \) to confirm.
3. Press \( \text{PAGE} \) to view more data of the selected bike.
4. Press \( \text{BACK} \) to exit this menu.
Change System Settings

You can customize the device system settings such as backlight off, self lap, key tone, beep, time/unit data format, on-screen display language, and data reset.

Backlight Off

<table>
<thead>
<tr>
<th>Back light</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td></td>
</tr>
<tr>
<td>1 min</td>
<td></td>
</tr>
<tr>
<td>10 min</td>
<td></td>
</tr>
</tbody>
</table>

1. In the Settings menu, press $\downarrow$ to select System $\Rightarrow$ Backlight Off and press $\Rightarrow$.
2. Press $\Rightarrow$ to select the desired setting and press $\Rightarrow$ to confirm.
3. Press $\Rightarrow$ to exit this menu.

Key Tone

<table>
<thead>
<tr>
<th>Key Tone</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
<td></td>
</tr>
<tr>
<td>Off</td>
<td></td>
</tr>
</tbody>
</table>

1. In the Settings menu, press $\downarrow$ to select System $\Rightarrow$ Key Tone and press $\Rightarrow$.
2. Press $\Rightarrow$ to select the desired setting and press $\Rightarrow$ to confirm.
3. Press $\Rightarrow$ to exit this menu.
1. In the Settings menu, press BACK/PAGE to select System > Alert and press LAP/OK.

2. Press BACK/PAGE to select the desired setting and press LAP/OK to confirm.

3. Press BACK to exit this menu.

---

**Alert**

<table>
<thead>
<tr>
<th>Alert</th>
</tr>
</thead>
<tbody>
<tr>
<td>On</td>
</tr>
<tr>
<td>Off</td>
</tr>
</tbody>
</table>

---

**Time/Unit**

**Daylight Save**

- +0:00
- +1:00

**Date**

- mmddyyyy
- yyyy-mm-dd
- ddmmyyyy

**Date format**

- 12hr
- 24hr

---

**Unit**

- Metric
- Imperial

---

20 Settings
1. In the Settings menu, press \textit{\textbf{PAGE}} to select \textit{System > Time/Unit > Daylight Save, Date format, Time format, or Unit} and press \textit{\textbf{LAP}}.

2. Press \textit{\textbf{\textit{BACK}}/PAGE} to select the desired setting/format and press \textit{\textbf{OK}} to confirm.

3. Press \textit{\textbf{\textit{BACK}}} to exit this menu.

**Language**

1. In the Settings menu, press \textit{\textbf{PAGE}} to select \textit{System > Language} and press \textit{\textbf{LAP}}.

2. Press \textit{\textbf{\textit{BACK}}/PAGE} to select the desired setting and press \textit{\textbf{OK}} to confirm.

3. Press \textit{\textbf{\textit{BACK}}} to exit this menu.

**My Device Manager**

1. Download Bryton Bridge 2. See page 7 for more details.

2. Turn on your device and connect it to your computer by using USB cable. My Device Manager will automatically launch when the device is connected to the computer.
   - If the software does not automatically launch, right-click Bryton Bridge icon in the system tray and select \textit{Open my device manager}.

3. Specify the file format and the location to save tracks in your computer.
   Tracks can be saved at local computer as BDX, GPX, TCX and PWF format.

4. Click \textit{Save} to save the file.
View GPS Status

You can view the GPS signal information that your device is currently receiving.

<table>
<thead>
<tr>
<th>Status</th>
<th>121.000000</th>
<th>25.000000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| PowerSaving |

1. In the Settings menu, press \p{PAGE} to select **Status** and press \p{LAP}\p{OK}.
2. To set the signal search mode, press \p{LAP}\p{OK} to confirm.
3. Press \p{BACK}/\p{PAGE} to select the desired setting and press \p{LAP}\p{OK} to confirm.
   - Off: Turn-off GPS functions. Choose this to save power when GPS signal is not available, or when GPS information is not required (such as indoor use).
   - Full Power: maximum position and speed accuracy, consumes more power.
   - PowerSaving: Achieves longer battery life when used in good GPS signal condition, but less accurate.

View Software Version

You can view your device current software version.

1. In the Settings menu, press \p{PAGE} to select **About**.
2. Press \p{LAP}\p{OK} to confirm.
   The current software version is displayed on the screen.
3. Press \p{BACK} to exit this menu.
## Appendix

### Specifications

#### Rider 21

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>1.6 FSTN positive transflective LCD</td>
</tr>
<tr>
<td>Physical Size</td>
<td>39.6 x 58.9 x 17 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>40g</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-10°C ~ 50°C</td>
</tr>
<tr>
<td>Battery Charging Temperature</td>
<td>0°C ~ 40°C</td>
</tr>
<tr>
<td>Battery</td>
<td>Li polymer rechargeable battery</td>
</tr>
<tr>
<td>Battery Life</td>
<td>17 hours with open sky</td>
</tr>
<tr>
<td>GPS</td>
<td>Integrated high-sensitivity GPS receiver with embedded antenna</td>
</tr>
<tr>
<td>RF Transceiver</td>
<td>2.4GHz Ant+</td>
</tr>
<tr>
<td>Water Resistant</td>
<td>IPX7 waterproof rating</td>
</tr>
</tbody>
</table>

#### Speed/Cadence Sensor

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical size</td>
<td>34.2 x 46.7 x 13.2 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>14 g</td>
</tr>
<tr>
<td>Water Resistance</td>
<td>IPX7</td>
</tr>
<tr>
<td>Transmission range</td>
<td>5 m</td>
</tr>
<tr>
<td>Battery life</td>
<td>1 hour per day for 16 months</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-10°C ~ 60°C</td>
</tr>
<tr>
<td>Radio frequency/protocol</td>
<td>2.4GHz / Dynastream ANT+ Sport wireless communications protocol</td>
</tr>
</tbody>
</table>

Accuracy may be degraded by poor sensor contact, electrical interference, and receiver distance from the transmitter.
Heart Rate Monitor

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Physical size</td>
<td>67~100 x 26 x 15 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>14 g (sensor) / 35g (strap)</td>
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<tr>
<td>Water Resistance</td>
<td>20 m</td>
</tr>
<tr>
<td>Transmission range</td>
<td>5 m</td>
</tr>
<tr>
<td>Battery life</td>
<td>1 hour per day for 24 months</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>5°C ~ 40°C</td>
</tr>
<tr>
<td>Radio frequency/protocol</td>
<td>2.4GHz / Dynastream ANT+ Sport wireless communications protocol</td>
</tr>
</tbody>
</table>

Accuracy may be degraded by poor sensor contact, electrical interference, and receiver distance from the transmitter.

Battery Information

Heart Rate Monitor and Cadence Sensor Battery

The heart rate monitor/cadence sensor contains a user-replaceable CR2032 battery. To replace the battery:

1. Locate the circular battery cover on the back of the heart rate monitor/cadence sensor.
2. Use a coin to twist the cover counter-clockwise so the arrow on the cover points to OPEN.
3. Remove the cover and battery. Wait for 30 seconds.
4. Insert the new battery, with the positive connector first into the battery chamber.
5. Use a coin to twist the cover clockwise so the arrow on the cover points to CLOSE.

NOTE:
- When installing a new battery, if the battery is not placed with the positive connector first, the positive connector will easily deform and malfunction.
- Be careful not to damage or lose the O-ring gasket on the cover.
- Contact your local waste disposal department to properly dispose of used batteries.
Install Rider 21

Mount Rider 21 to the Bike

1. Mount Rider 21 to the Bike
2. Securely attach Rider 21
3. Adjust the settings
4. Attach to the bike handlebars
Install the Speed/Cadence/Dual Sensor
(Optional)
NOTE:
- To ensure optimum performance, do the following:
  - Align both sensor and magnet as shown in the illustration (Sa / 5b). Pay attention on the alignment points.
  - Ensure the distance between the sensor and the magnet is within 3 mm.
  - Ensure that both Speed sensor and Speed magnet are installed and aligned horizontally, not vertically.
  - On the initial usage, press the front button to activate the sensor and start pedaling. When the sensor detects the magnet, the LED blinks once to indicate the alignment is correct (the LED blinks only for the first ten passes after pressing the button).

Install Heart Rate Belt (Optional)

NOTE:
- In cold weather, wear appropriate clothing to keep the heart rate belt warm.
- The belt should be worn directly on your body.
- Adjust the sensor position to the middle part of the body (wear it slightly below the chest). The Bryton logo shown on the sensor should be facing upward. Tighten the elastic belt firmly so that it will not turn loose during the exercise.
- If the sensor cannot be detected or the reading is abnormal, please warm up for about 5 minutes.
- If the heart rate belt is not used for a period of time, remove the sensor from the heart rate belt.
Wheel Size and Circumference

The wheel size is marked on both sides of the tires.

<table>
<thead>
<tr>
<th>Wheel Size</th>
<th>L (mm)</th>
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</thead>
<tbody>
<tr>
<td>12 x 1.75</td>
<td>935</td>
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<td>14 x 1.5</td>
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<tr>
<td>16 x 1.5</td>
<td>1185</td>
</tr>
<tr>
<td>16 x 1.75</td>
<td>1195</td>
</tr>
<tr>
<td>18 x 1.5</td>
<td>1340</td>
</tr>
<tr>
<td>18 x 1.75</td>
<td>1350</td>
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<td>1515</td>
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<tr>
<td>20 x 1-3/8</td>
<td>1615</td>
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<tr>
<td>22 x 1-3/8</td>
<td>1770</td>
</tr>
<tr>
<td>22 x 1-1/2</td>
<td>1785</td>
</tr>
<tr>
<td>24 x 1</td>
<td>1753</td>
</tr>
<tr>
<td>24 x 3/4 Tubular</td>
<td>1785</td>
</tr>
<tr>
<td>24 x 1-1/8</td>
<td>1795</td>
</tr>
<tr>
<td>24 x 1-1/4</td>
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<td>27 x 1-1/8</td>
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<td>27 x 1-1/4</td>
<td>2161</td>
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<tr>
<td>27 x 1-3/8</td>
<td>2169</td>
</tr>
<tr>
<td>650 x 35A</td>
<td>2090</td>
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<td>650 x 38B</td>
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<td>700 x 18C</td>
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<table>
<thead>
<tr>
<th>Wheel Size</th>
<th>L (mm)</th>
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<tr>
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<td>1953</td>
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<td>1970</td>
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<td>26 x 1-3/8</td>
<td>2068</td>
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<tr>
<td>26 x 1-1/2</td>
<td>2100</td>
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<tr>
<td>700 x 40C</td>
<td>2200</td>
</tr>
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</table>
Basic Care For Your Rider 21

Taking good care of your device will reduce the risk of damage to your device.
• Do not drop your device or subject it to severe shock.
• Do not expose your device to extreme temperatures and excessive moisture.
• The screen surface can easily be scratched. Use the non-adhesive generic screen protectors to help protect the screen from minor scratches.
• Use diluted neutral detergent on a soft cloth to clean your device.
• Do not attempt to disassemble, repair, or make any modifications to your device. Any attempt to do so will make the warranty invalid.

NOTE: Improper battery replacement may cause an explosion. When replacing a new battery, use only the original battery or a similar type of battery specified by the manufacturer. Disposal of the used batteries must be carried out in accordance to the regulations of your local authority.

For better environmental protection, waste batteries should be collected separately for recycling or special disposal.
# Screen Terminologies

<table>
<thead>
<tr>
<th>Screen Display</th>
<th>Terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td>LapAvSpd</td>
<td>lap average speed</td>
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<tr>
<td>LapMaSpd</td>
<td>lap maximum speed</td>
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<tr>
<td>L'stLpAvSp</td>
<td>last lap average speed</td>
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<tr>
<td>LapDist</td>
<td>lap distance</td>
</tr>
<tr>
<td>L'stLpDist</td>
<td>last lap distance</td>
</tr>
<tr>
<td>L'stLapT</td>
<td>last lap time</td>
</tr>
<tr>
<td>LapAvHR</td>
<td>lap average heart rate</td>
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<tr>
<td>LapMaHR</td>
<td>lap maximum heart rate</td>
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<tr>
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<td>last lap average heart rate</td>
</tr>
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<td>lap average MHR percentage</td>
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<tr>
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<td>LLLpSt'dAvL</td>
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</tr>
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<td>maximum pace</td>
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<tr>
<td>LapAvP</td>
<td>lap average pace</td>
</tr>
<tr>
<td>L'stLpAvP</td>
<td>last lap average pace</td>
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<tr>
<td>LapMaP</td>
<td>lap maximum pace</td>
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