

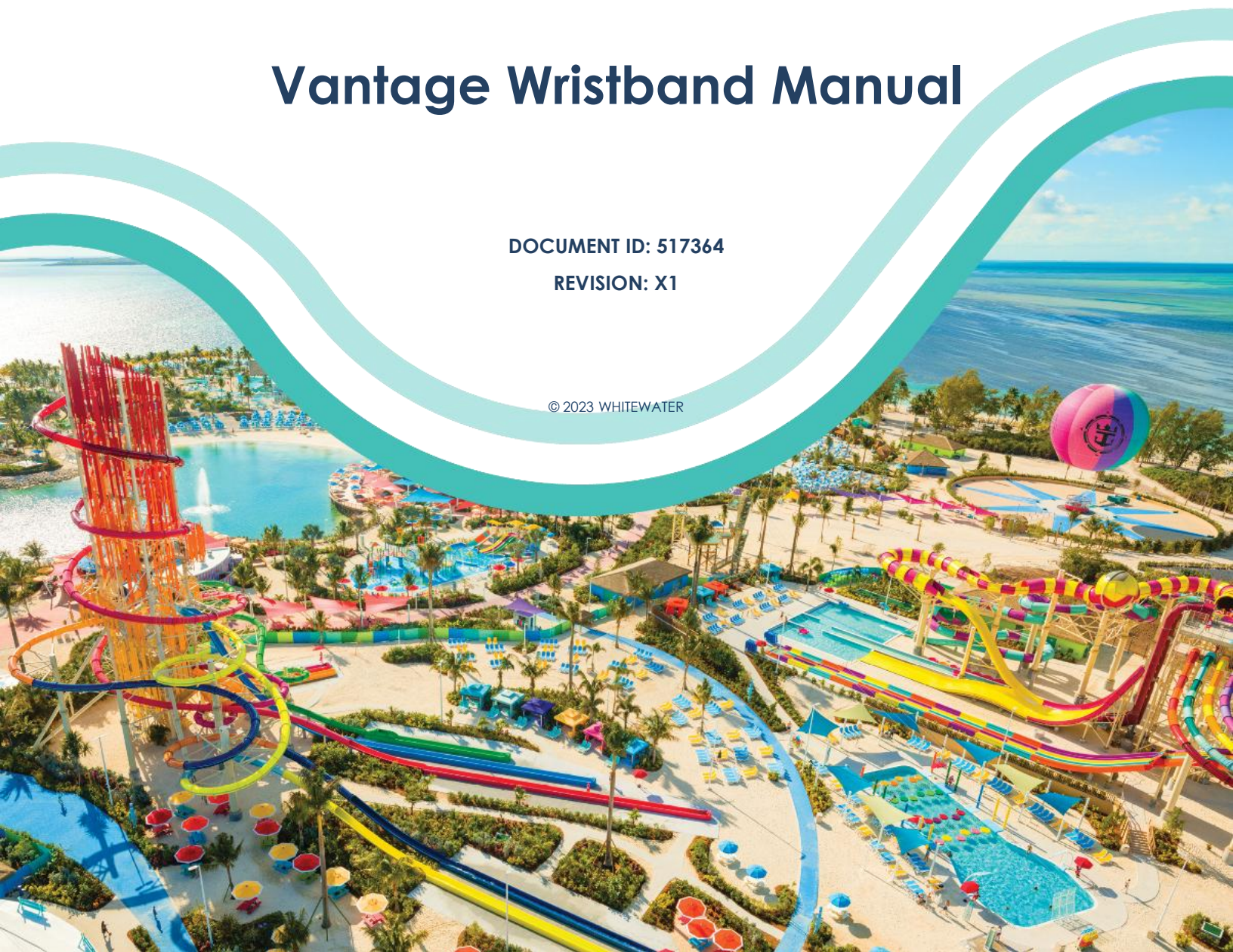


Vantage Wristband Manual

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Abbreviations and Acronyms	
BLE	Bluetooth Low Energy

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1 About this Manual

1.1 Purpose and Scope

This manual provides an overview of operations for the Vantage wristband with BLE capsule as used within water parks facilities equipped with the Vantage system.

1.2 Audience

This guide is intended for Vantage installation advisors and operators of the Vantage System.

1.3 Disclaimer

No modifications to the Vantage System (programming or equipment) can be made without express approval of Whitewater West Industries Inc. dba Vantage. Installation or modifications to the electrical system must adhere to local and national electrical codes and be carried out by certified technicians or electricians.

Vantage should be advised of any changes made in structures or equipment, manufactured, designed, or installed by WhiteWater West Industries Inc. dba Vantage since these changes could affect the safety of the attraction.

2 Standards and Compliance

2.1 Electrical Safety

The Vantage wristband BLE capsule uses a 3V button style battery that is sealed within the capsule. It is non-serviceable. The capsule must not be subject to excessive heat or flame. It must be disposed of in a recognized electronics recycling program.

2.2 Electromagnetic Compatibility

The radio frequency Intentional Radiator implemented inside the Vantage wristband BLE capsule is approved with FCC ID **2AZTM05-0042**.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment.

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Radiation Exposure Statement:

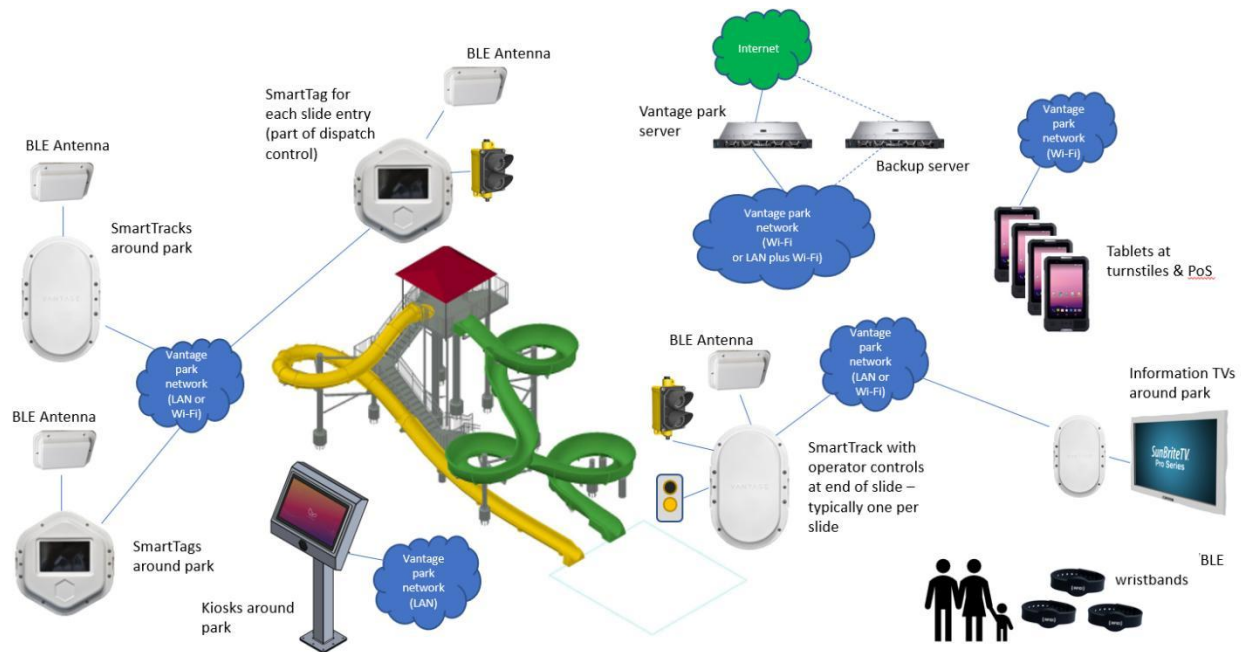
The wristband BLE transmitter has been evaluated to meet general RF exposure requirements .
The device can be used in portable exposure conditions without restriction .

3 System Overview

The Vantage wristband with capsule has BLE capability. the BLE function is used for longer range patron detection .

For patron location detection the Vantage system uses BLE antennas that are installed around the park in strategic locations . The wristband BLE capsule transmits a unique ID every 2 seconds that the antennas detect and pass on to the system .

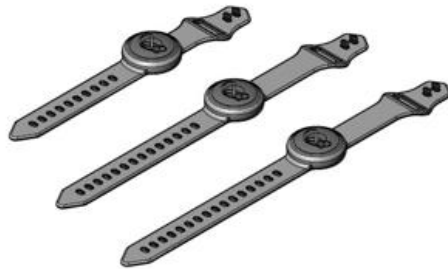
3.1 Typical Vantage Installation



4 Wristband Assembly

4.1 Wristband lengths

Vantage wristbands come in three lengths: short, medium, and long – suitable for different person wrist sizes.



Wrist size:

Short = 165mm (6.50")

Medium = 225mm (8.86")

Long = 240mm (9.45")

4.2 BLE Capsule installation



The BLE capsule needs to be installed in the wristband with the bar-code side towards the wearers body – this enables the bar-code to be read to register the wristband when it is issued to a park patron.





5 Park Operations

When a wristband with capsule is issued to a park patron it will have its bar-code scanned and entered into the Vantage system along with any personal information that the patron is willing to provide such as their name.

5.1 Kiosk Tag-Up

When in the park the patron can “tag-up” to any Vantage Kiosk using the function of the wristband to select options such as their music preference .



5.2 SmartTag Tag-Up

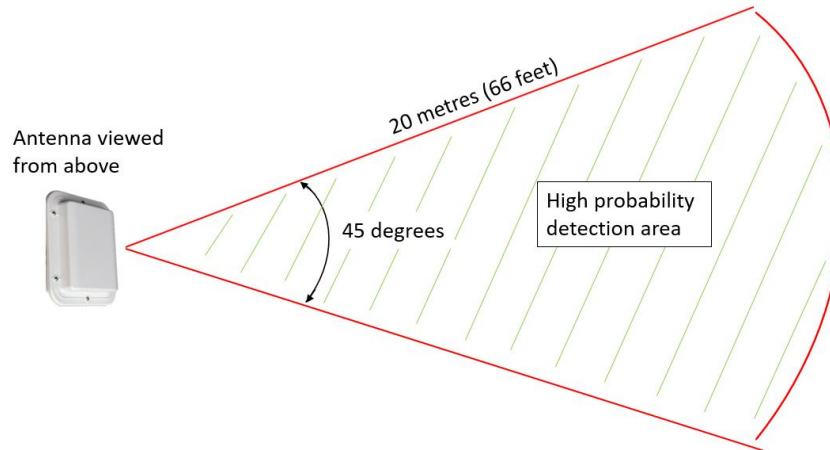
The Vantage system includes SmartTag units that are installed around the park. These are typically installed at the entry to slides and along with a lifeguard, may provide a dispatch control function for the slide. They may also be distributed around the park as part of a gaming experience.



5.3 Location detection

BLE antennas may be installed around the park and used to detect the location of patrons. This location information may then be used by the Vantage system to provide services such as “Find my child”.

The BLE antennas have a limited detection range so need to be installed correctly so that they can detect the wristband capsules BLE transmissions.



5.4 Capsule battery life

The Vantage wristband capsule has a unique battery saving feature that detects any movement of the capsule and switches the unit off after 30 minutes of inactivity. It will then switch on again immediately upon detecting movement. This feature enables the capsule to achieve typically a 2 to 3 year operation lifetime.

6 Technical Support

For technical assistance please contact Vantage support:

Vantage Customer Success Team
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