



EMERALD

HW13 User Manual

FCC ID: 2BSYY-EMHW130627

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I Introduction & RF Exposure Compliance Statements

This manual provides an overview of the installation of the Emerald Device.

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 in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation. Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, this equipment should be installed and operated with a minimum distance of 20 cm (7.9 inches) between the antenna and your body during normal operation. Users must follow the specific operating instructions for satisfying RF exposure compliance.

This equipment may only be operated indoors. Operation outdoors is in violation of [47 U.S.C. 301](#) and could subject the operator to serious legal penalties.

II Product Overview

The Emerald Device described in this document, model number HW13, is a contactless, in-home health monitoring system that uses low power radio waves to passively measure health metrics without the need for wearables.

The HW13 device is designed to be deployed on the wall where it will passively collect health data without any intervention needed by the user. It securely encrypts and uploads data to the cloud via the home's Wi-Fi network, where Emerald's powerful AI algorithms extrapolate useful health metrics from the measured signals.

Device installation involves physically mounting the device to the wall, connecting it to power, and using the Emerald Mobile App to connect the device to the user's home Wi-Fi network.

III Device Installation

III.1 Choosing the Deployment Location

The HW13 device location should be chosen to maximize the coverage area and capture activities of interest. The specific room and mounting location within the room to install the device should be chosen to maximize data quality and quantity.

III.2 Mount the wall Mount on the Chosen Location

III.3.1 Attach Wall Strips to Wall Mount

The wall strips have a double-sided adhesive. The blue side has the word "Command", which should be attached to the wall mount. The black side has the words "WALL side", which should be attached to the wall.

Take the Wall Strips and peel away the blue sided cover in the configuration shown in [Figure III-1](#). Make sure the wall strip tabs hang over the edge so they can be pulled off when the mount is removed.



Figure III-1: Back of Wall Mount with Wall Strips Attached

III.3.2 Attach Wall Mount to the Wall

Peel away the black “This Side Wall” covers of the wall strips and firmly press the wall mount to the wall ([Figure III-2](#)).

For best contact, pressure should be placed on the wall mount with both hands at the places of the wall strips for 30 seconds.



Figure III-2: Front view of Wall Mount

The wall mount should be level and placed at the height of the user's abdomen.

III.3 Mounting the Device on the Wall

After the wall mount was mounted, place the device on the wall mount. The device is hung by lifting the back of the device above the wall mount and sliding it down such that the slots on the back of the device hang on the hooks of the wall mount. ([Figure III-3](#)).



Figure III-3: Device Placement in Wall Mount

III.4 Powering on the Device

Once the device is configured by the remote technician, connect it to power using the provided AC/12VDC power cable.

One side of the provided power cable connects to the outlet, and the other to the power jack on the bottom of the case



Fig III-4: Device plugged into power

The device should stay powered on as the remaining operations are performed.

IV Connecting Device to Wi-Fi

The device will be connected to the user's home Wi-Fi network through the Emerald Setup application found in the iOS and Android app stores. Note that the app is used only for Wi-Fi configuration, and does not provide access to any firmware settings on the device.

V Uninstallation

The device and wall mount will be removed when the device is no longer needed by the user. Prior to uninstallation, the device should be disconnected from power by unplugging the power cord. The wall strips can be removed by pulling downwards on the rounded tabs. The rounded tabs should be pulled along the wall (up or down) and away from the wall mount, rather than away from the wall.



Fig V-1: Removing wall strip by pulling away from the mount and parallel to the wall

Once the wall strips on the bottom sensor have been removed, the device can be removed from the wall by sliding it upwards out of the wall mount.

VI Certifications and Approvals

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The HW13 product complies with applicable FCC Part 15. See [Section I](#) for applicable RF exposure and safety statements

VII Safety and Maintenance

The HW13 is an FCC certified radio product under part 15 of the FCC standards.

For your safety:

- Do not disassemble or modify the product.
- Do not expose the device to water, fire, or excessive heat.
- Only use supplied or certified accessories.
- Clean with a soft dry cloth only.

VIII Support and Contact Information

For product support, please contact:

Emerald Innovations Inc.

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