



Nymi Band 3.0 Charging Recommendations Guide

September 27, 2023

Version 1.7

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1 Revision History

Date	Version	Revision History
July 16, 2020	1.0	Initial Release.
Aug 11, 2020	1.1	Corrections
Aug 13, 2020	1.2	Updated images

Sept 18, 2020	1.3	Added units to appendix diagram
October 23, 2020	1.4	Added charging temperature range
May 16, 2023	1.5	Added link to the Nymi Power House, a bulk charging solution
July 26, 2023	1.6	Added recommendation for Nymi Band storage and periodic charging
September 26, 2023	1.7	Best practices for leaving Nymi Bands on chargers

2 Charging Overview

2.1 Nymi Band Charging Requirements

To charge a Nymi Band™ 3.0, the following are required:

- Nymi Band charging cradle (one per Nymi Band)
- USB-A charging port (one per Nymi Band) capable of 5V @ 150mA or greater

Additionally, to ensure your Nymi Band fully charges in a timely manner, charging must occur between 15°C and 30°C. Attempting to charge outside of this range may result in the Nymi Band only partially charging or not charging at all due to the internal battery protection.

2.2 Nymi Band Charging Cradle

The charger for Nymi Band 3.0 is powered by a standard USB charging port. A red power indicator is always on when the charger is plugged in, letting you know it is ready to charge a Nymi Band. A blue indicator on the right side of the charger illuminates when the Nymi Band is properly seated and receiving power. The Nymi Band itself will also indicate it is properly seated on the charger by illuminating its screen and showing the state of charge.



Figure 1 - Nymi Band charging cradle

Keyholes on the back of the charger allow for mounting to flat surfaces.



Figure 2 – Mounting holes on the back of charging cradle

2.3 Charging Indication

While a fully charged Nymi Band will typically last at least 3-days, it is recommended to store the Nymi Band on the charging cradle at the end of each shift to ensure that there will be sufficient charge the following day.

The Nymi Band is magnetically held on the charger and power is delivered by several charging pins.

If the Nymi Band is placed on the charging cradle in the incorrect orientation, the Nymi Band will not charge. Note that Nymi Band will not sit flush on the charging cradle, the blue indicator will not turn on and the screen of the Nymi Band will not light up.

When placed on the charging cradle, a Nymi Band takes **2 hours or less to fully charge**. To determine the state of charge, simply wake the Nymi Band by pressing either button and observe how many bars appear on the battery icon. It is recommended that you wait until the battery icon displays two bars before using the Nymi Band to complete a 10-hour shift.

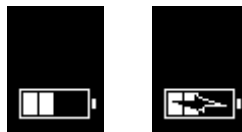


Figure 3 - Battery charge indication when off charger (left) and on charger (right)

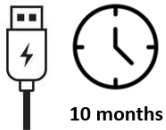
3 Storage and Charging Recommendations

Nymi Bands are shipped to customers with a minimum of 50% battery charge. If the devices are not deployed immediately and go into storage, please follow the best practices detailed below. In addition, if Nymi Bands are placed on charge for prolonged periods of time, ensure that care is taken in removing them after the period outlined below. If these recommendations are not followed, the Nymi Band batteries may experience a degradation in battery life.

3.1 Best Practices



1. Store the bands at **room temperature** (22 °C – 25 °C).



2. The Nymi Bands should be removed from storage and charged fully **every 10 months**. This ensures that the batteries do not discharge to very low levels while in storage, which may impact the overall battery life.



3. If Nymi Bands are stored **on-charger** for prolonged periods of time, ensure that they are removed within a **30-day period** (ie. 1 month) and returned into storage. Excess charging may cause an accelerated reduction in overall battery life.

4 Charging Cradle Mounting Options

4.1 Unmounted

The simplest way to charge a Nymi Band is to place it on a charging cradle and set it down on a flat surface with the buttons on the Nymi Band facing up. This orientation allows the user to see the charging indicator to ensure the Nymi Band is properly seated and is receiving a charge.



Figure 4 – Battery charger unmounted on surface

4.2 Mounted

For more permanent installations, the Nymi Band charging cradle features two keyhole slots you can use to mount to a flat surface. The following figure gives an example how several Nymi Band charging cradles are mounted to a piece of slotted wire duct. For detailed instructions on how to fabricate this reference design, please contact your local Nymi representative to receive a copy of the “Bulk Charger Reference Design”.

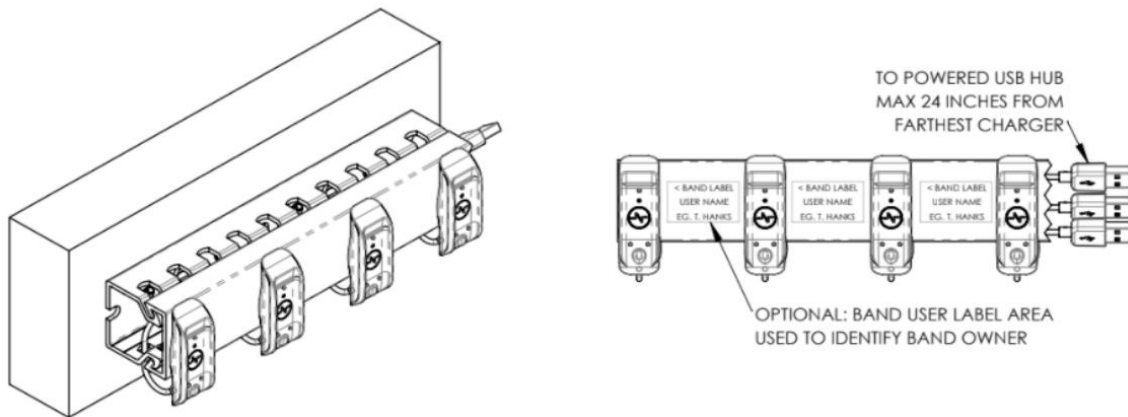


Figure 5 – Example from bulk charger design reference

4.3 Mounting Considerations

The appendix provides a reference diagram with the basic dimensions you should consider when fabricating a mounting surface for the Nymi Band charging cradle. A summary list of considerations is as follows:

Placement: Mount the charging cradle in such a way that the charging indicator on the right side is visible and there is sufficient access to the buttons

Mounting screw spacing: Place mounting screws 17.5mm apart to line up with the charging cradle keyhole slots

Cradle spacing: If mounting several charging cradles, provide a minimum of 30mm of space between the cradles to ensure that users can access the buttons of the Nymi Band while on the charger

Cable run: If the USB charging port will be more than 60cm away from where the charging cradle will be mounted, use a standard USB-A male to USB-A female cable to extend the charging cable

Mounting surface height: Ensure the mounting surface has a surface height between 25 - 50mm to ensure that the straps of the Nymi Band can straddle the surface

Mounting surface depth: Use a mounting surface that has a minimum depth of 25mm to ensure that the straps of the Nymi Band do not interfere with obstacles behind the mounting surface that could cause the Nymi Band to become dislodged

Labelling: Consider placing a label with the user's name next to the charging cradle to help users quickly find their Nymi Band

5 Power House – Bulk Charging Solution

Nymi provides an off-the-shelf bulk charging solution called the Power House, a tabletop or wall-mountable solution that cradles and charges 10 Nymi Bands per unit. For more information, download the Power House Overview and the Power House Quick Start Guide available at [GEN 3 Nymi Band Charging Documentation](#).

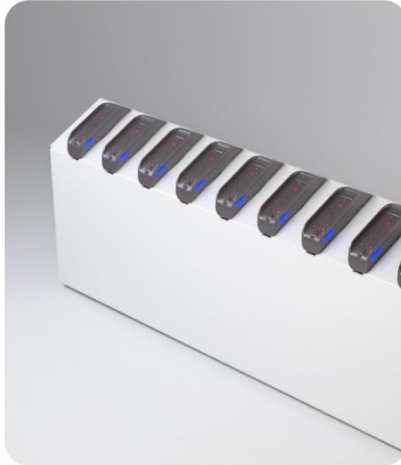
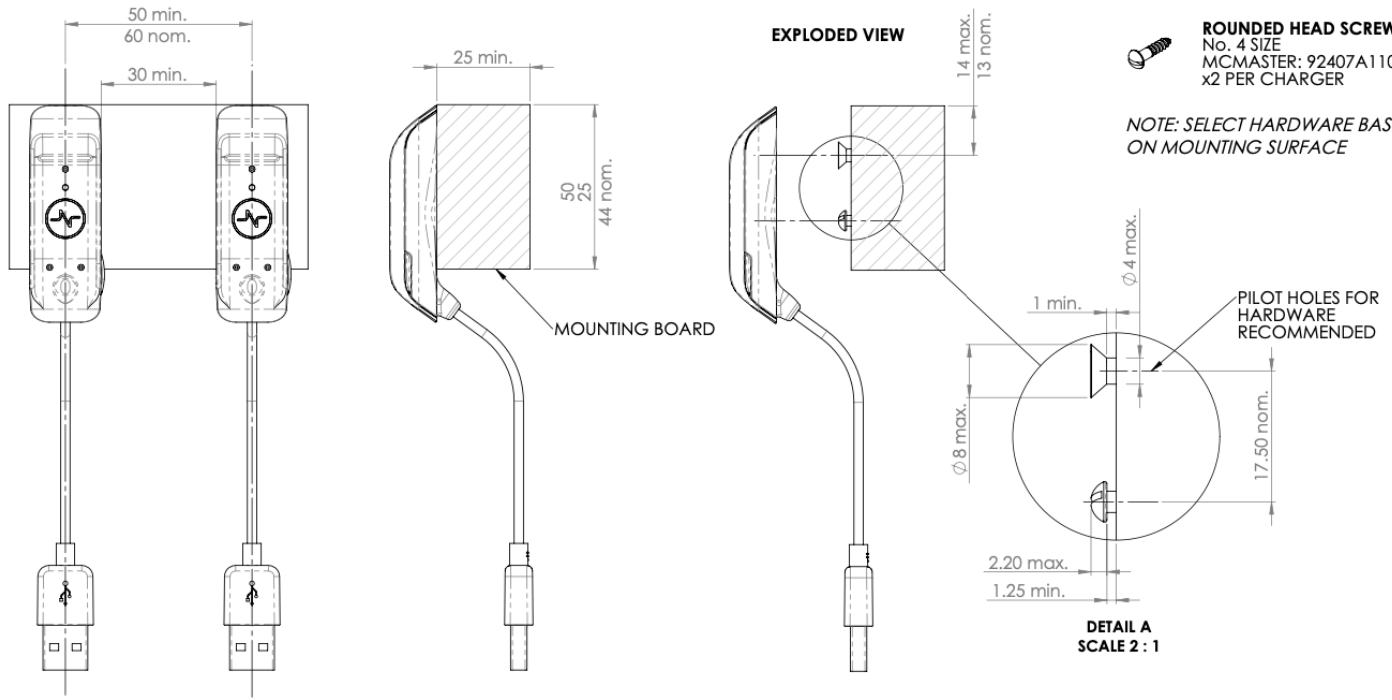


Figure 6 – Nymi Power House bulk charger

6 Appendix: Charger Mounting Specification

CHARGER MOUNTING SPECIFICATION GUIDE



SUGGESTED HARDWARE

 **FLAT HEAD SCREW**
No. 6 SIZE
MCMMASTER: 90031A148
X2 PER CHARGER

 **ROUNDED HEAD SCREW**
No. 4 SIZE
MCMMASTER: 92407A110
X2 PER CHARGER

NOTE: SELECT HARDWARE BASED ON MOUNTING SURFACE

NOTES:

1. DIMENSIONS SPECIFIED AS **X min.** ARE **MINIMUM** DIMENSIONS
2. DIMENSIONS SPECIFIED AS **Y max.** ARE **MAXIMUM** DIMENSIONS
3. DIMENSIONS SPECIFIED AS **Z nom.** ARE **RECOMMENDED** (NOMINAL) DIMENSIONS



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SPECIFICATION GUIDE
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v1.0

Note: All dimensions are in millimeters unless otherwise specified.



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