# Nitelog™

## User Manual

For use with the Z1 Auto™ CPAP System

HDM
HUMAN DESIGN MEDICAL

# Thank you for choosing the *Z1 Auto ™ CPAP System* from Human Design Medical, LLC.

This *Nitelog User Manual* provides information as to how to use the proprietary mobile app, *Nitelog*, to enhance your use of the *Z1 Auto* through its range of functionality from device remote control to data viewing available via its embedded Bluetooth capability. Please note all *Z1* functions can be controlled without the use of this mobile app directly through the machine.

This *Nitelog User Manual* is meant to supplement the information in the *Z1 Auto User Guide* that was provided with the purchase of the *Z1 Auto CPAP*. It is **not** intended to replace the User Guide. As such, the owner/user of the *Z1 Auto System* is responsible for reading and understanding the *User Guide*. The user is responsible for any injury or damage that results from:

- Operation of the *Z1* other than in accordance with the operating instructions contained in the *User Guide* supplied.

- Unauthorized maintenance or modifications to the device or attached accessories.

**Medical Information**

Indications for Use

Your *Z1 Auto System* is a single patient, reusable device that provides continuous positive airway pressure (CPAP) to support treatment of adults weighing over 66 lbs (30 kg) with obstructive sleep apnea (OSA). Please see the *Z1 Auto User Guide* for Contraindications and Adverse Effects that may occur during the use of this medical device.

**WARNINGS:**

- US Federal law restricts this device to sale by or on the order of a physician.

- Use your *Z1* and its accessories only for their intended use as described in the *User Guide* supplied with the *Z1 Auto CPAP* and as directed by your physician, clinician or healthcare provider.

**Data**

All data generated through Nitelog will be stored solely on your iOS device.  HDM will not receive, store or back-up any of your data and is not responsible for any loss of your data.  Please review the privacy policy on HDM's website before using Nitelog.

Because access to your data and the ability to control your Z1 Auto are protected by the password that you create using the Nitelog app and the passwords that secure your iOS device generally, we highly recommend that you do not share your passwords with other people.  In addition, because the password on your Z1 Auto may be reset by any person in physical possession of your Z1 Auto, we highly recommend that you maintain physical security over your Z1 Auto device to avoid unauthorized access to and control of the settings and data on your Z1 Auto.

# Quick Start

1. Make sure that **Bluetooth** is enabled in your phone settings and the Z1.

2. To **connect to a Z1** , click the '**+**' button in Nitelog, open *Device List,* and select your device.

3. Set your Z1 password (see page 2).

4. Once connected, the Nitelog main screen (*Classic View* (see page 3)) will light up and **display live Z1 information** as it updates.

5. Use the up, down, and start/stop button on Classic View just as you would on the Z1.

6. View and edit **Z1 Device Settings** by swiping left on the Classic View.

7. **View your data** with *Chart View* (see page 4) by clicking the top middle icon on the main screen.

8. To **update your sleep data** , use the green sync button located at the bottom of Chart View.

9. **Share data or generate compliance reports** by clicking the action menu on the bottom left of Chart View.

10. View **more options** by clicking the gear icon in the top right corner of the Classic View.

1

# Set Password

**1.** To change or set your password, press "Update Password" on the initial password screen. After choosing "Update Password", the screen below will appear. You may "Select Another Device", "Update Password", or "Cancel". Choose "Update Password".

**2.** The Z1 device that you are connected to will display its device ID (the last 4 digits of the serial number) at the top of the screen. Type in your new password in the first field and then type in your new password a second time in the "Verify Password" field.

**3.** Press and hold the power button on the Z1 for two seconds to confirm the password change. You will have 20 seconds to confirm.

**4.** If your password has been saved successfully, the below picture will be displayed.

**5.** The password may fail for the following reasons:
- User cancels the change
- Z1 has timed out
- Z1 is not in *Standby Mode*

To reset password, check that your Z1 is in Standby mode, close the failure screen, and repeat steps 1 - 4.
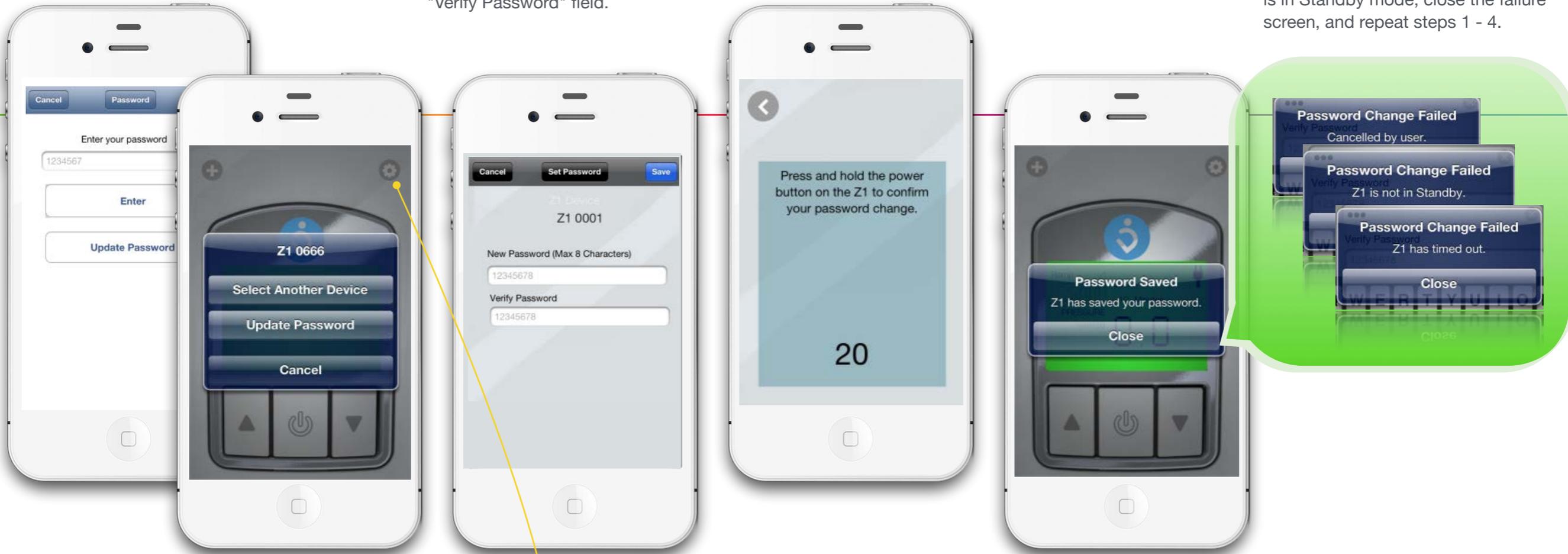
Open Options to Set Password/ Visit Website. Press "Set Password" to set a new password.
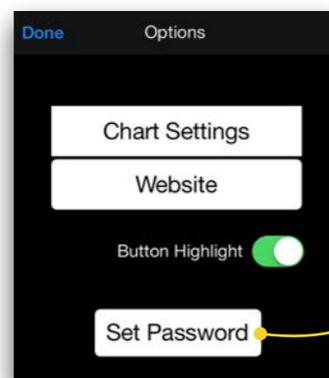
2

# Classic View

**Device Connection**

**Chart View**

**More Options**

## Settings

| | | |
|---|---|---|
| 🔒 Mode | CPAP | › |
| Z-Breathe | 2 | › |
| 🔒 APAP Pressure | 4.0 - 10.0 | › |
| 🔒 CPAP Pressure | 8.0 | › |
| Ramp Start Pressure | 14.0 | › |
| Ramp Time | 15 | › |
| Time | 10-22-14 09:41 | › |

**Z1 Display**

Ramp

CPAP - 2

0 Minutes

PRESSURE

cmH20

**8.0**

Swipe left

This view allows you to change *Z1 device settings*.

**Z1 Buttons**

Allows you to operate your Z1 from your iPhone

3

🔒 You may access only your Z-Breathe™, Ramp Start Pressure, Ramp Time and Device Date + Time settings.
For Mode, CPAP Pressure and APAP Pressure settings please contact your Healthcare Provider if changes are desired.

# Chart View

**Navigation**
Navigate your data using the calendar, arrows, or by swiping, pinching or zooming.

Press these three buttons to select which chart to display below (AH Count, Usage Hrs, or AH Index/Pressure). The selected button is highlighted.
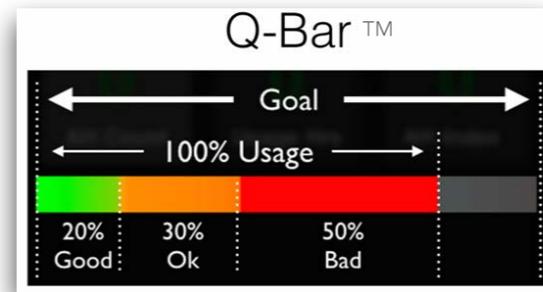
**Pressure / AH Index Toggle**

**Q-Bar** ™

Goal

100% Usage

| 20% Good | 30% Ok | 50% Bad |
|---|---|---|

**Chart**
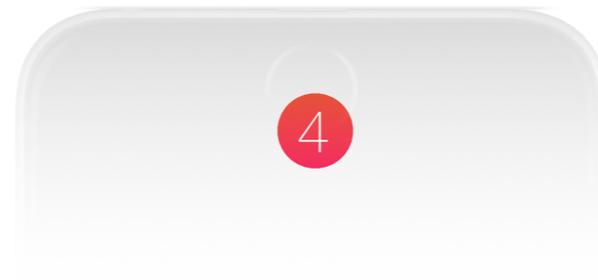View charts in portrait or landscape by rotating your device.

**Sync**
Use sync to get sleep data from your Z1.

**Action Menu**
This menu gives you options for sharing your data and generating reports.

DAY    WEEK    MONTH

Thu Jan, 01

| 96 | 10 | 7 |
|---|---|---|
| AH Count | Usage Hrs | Pressure |

20

15

10

5

0

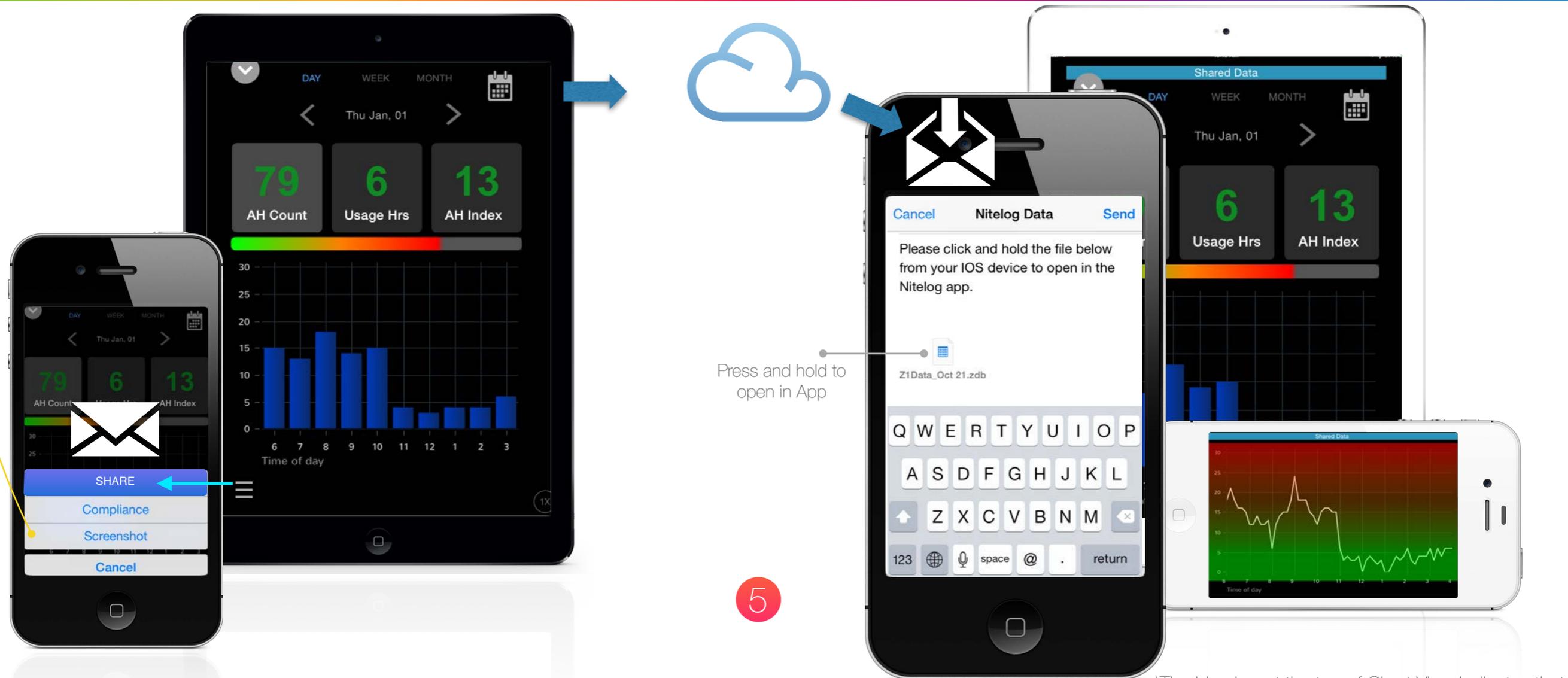6  7  8  9  10  11  12  1  2  3  4
Time of day

4

# Share Your Data

## Sending

1. Press the action menu. ▤

2. Select the share option.

3. A new email draft will be created that includes your data.

4. "Screenshot" will save a chart snapshot to Photos which can be sent via text message or email.

## Receiving

1. A Nitelog user can click and hold the attached file from their phone to open in the app.

2. Non - Nitelog users can view a screenshot of data.

DAY    WEEK    MONTH

Thu Jan, 01

**79**
AH Count

**6**
Usage Hrs

**13**
AH Index

30
25
20
15
10
5
0
6  7  8  9  10  11  12  1  2  3
Time of day

1X

SHARE
Compliance
Screenshot
Cancel

Cancel    **Nitelog Data**    Send

Please click and hold the file below from your IOS device to open in the Nitelog app.

Z1Data_Oct 21.zdb

Press and hold to open in App

Q W E R T Y U I O P
A S D F G H J K L
Z X C V B N M
123  🌐  🎤  space  @  .  return

Shared Data

DAY    WEEK    MONTH

Thu Jan, 01

**6**
Usage Hrs

**13**
AH Index

⑤

*The blue bar at the top of Chart View indicates that shared data is being viewed.

To exit this mode, close Chart View and click the option to *stop viewing shared data* when prompted.

# Generate Compliance Reports

1. To generate a compliance report, select the compliance option from the action menu.

2. Modify how a report is generated using Compliance Settings. (see page 9)



Share
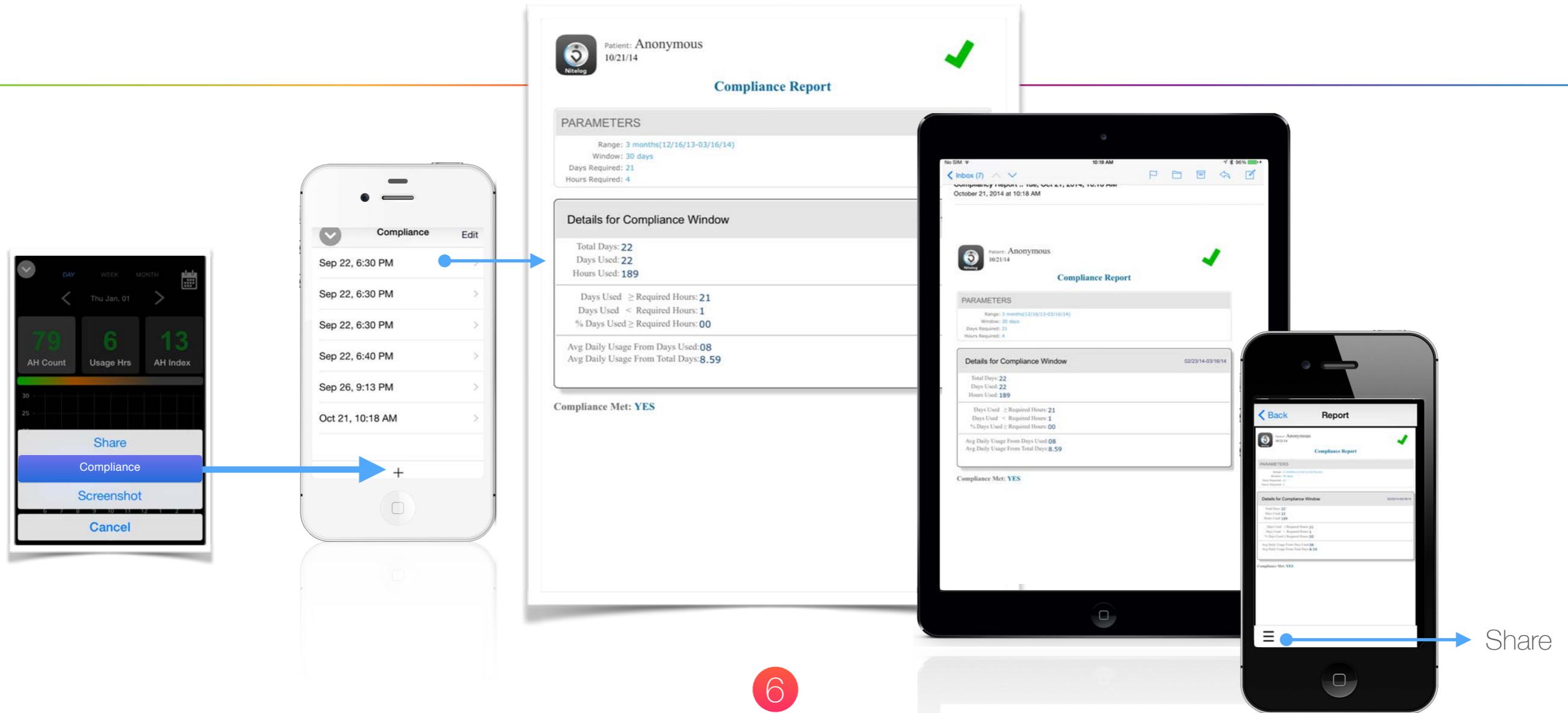
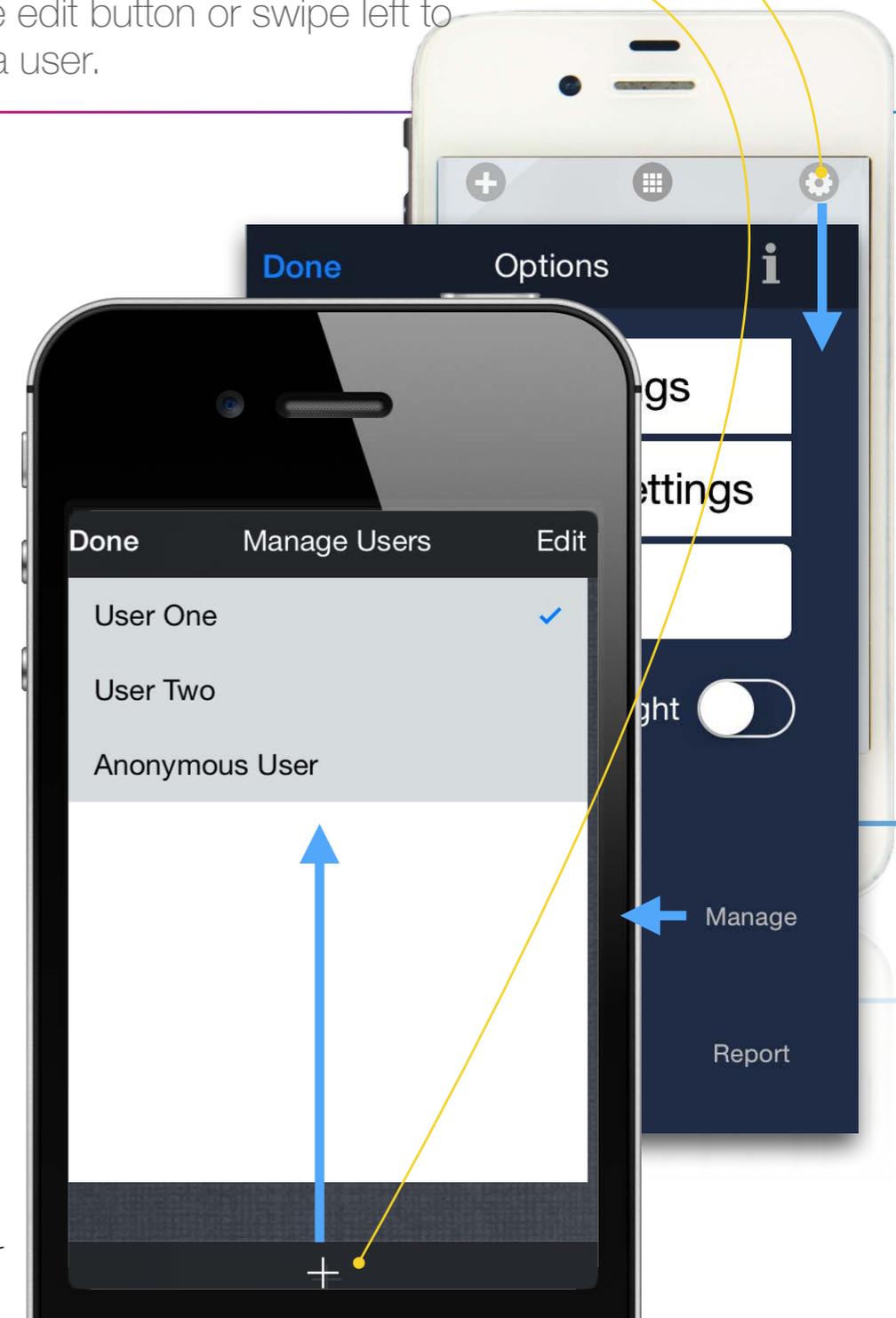# Manage Users and Devices

## Devices

1. Make sure that Bluetooth is enabled in your phone settings and the Z1.

2. Connect to a device by selecting from the list.

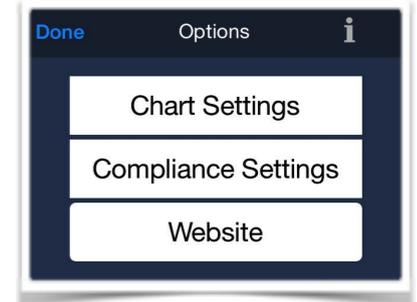3. Disconnect from devices using the Disconnect button.

## Users

1. Make sure that Bluetooth is enabled in your phone settings and the Z1.

2. Click the Option button.

3. Click the '+' button to add a user.

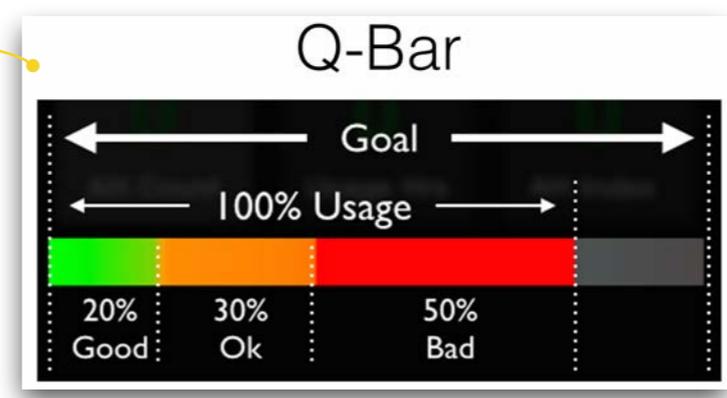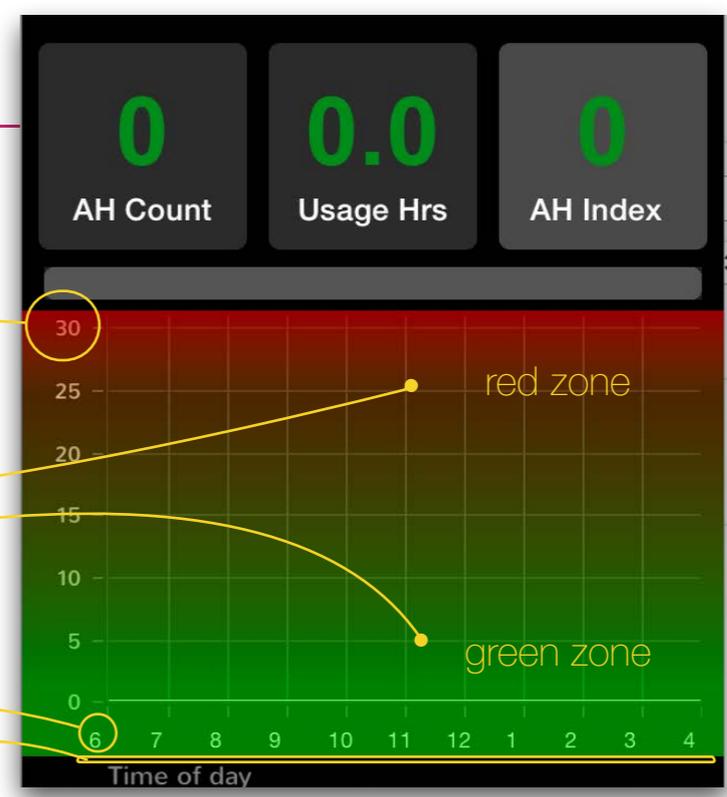4. Use the edit button or swipe left to delete a user.
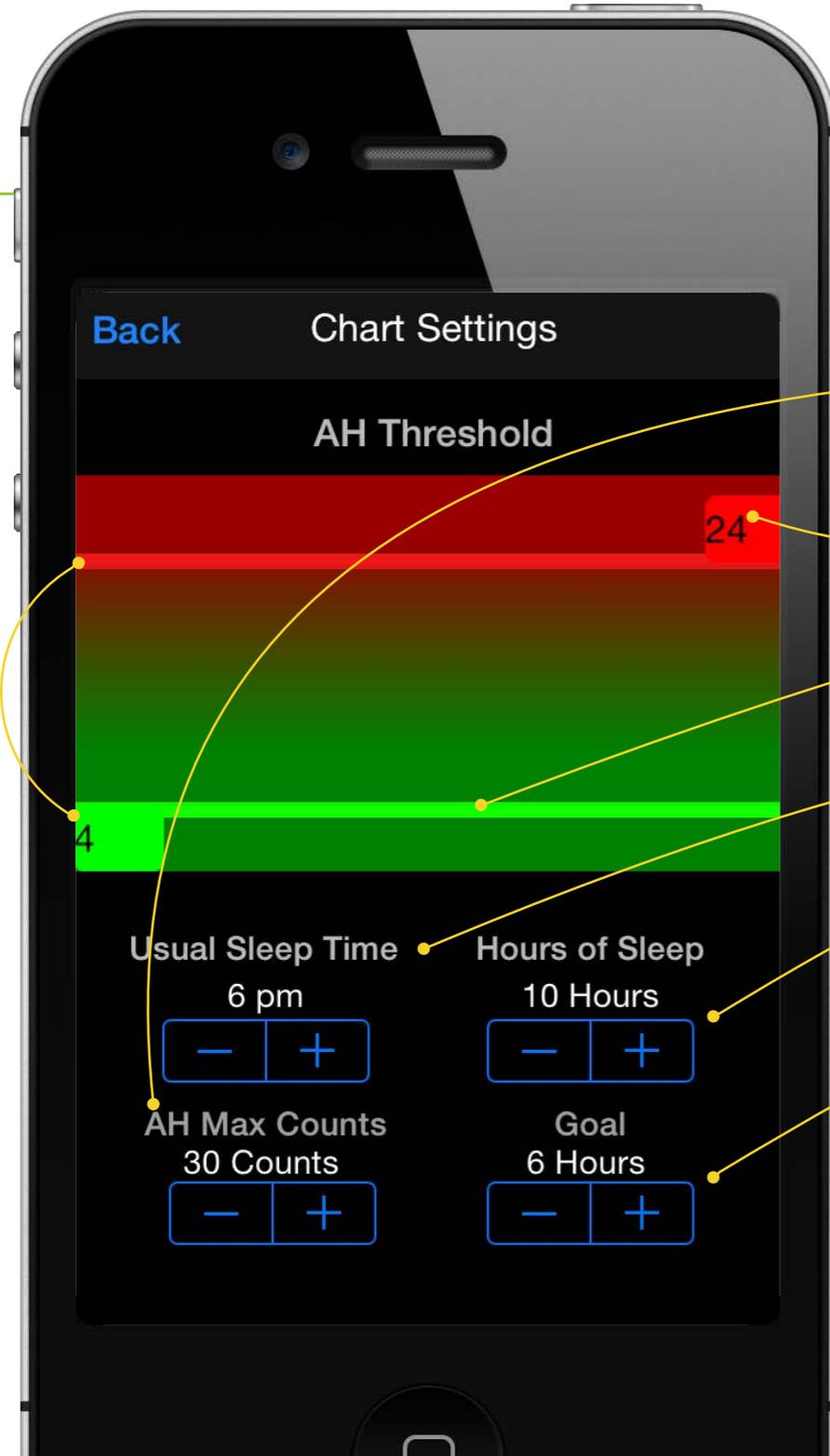
Z1

**Disconnect**

Z1

Z1 0325

Z1 1701

Z1 4359

7

**Done**          **Options**          i

gs

ettings

ght

Manage

Report

**Done**     **Manage Users**     **Edit**

User One     ✓
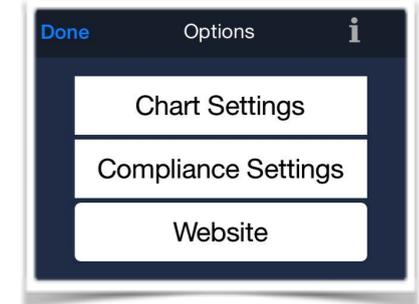
User Two

Anonymous User

Add a user

# Chart Settings

1. Locate Chart Settings in the option menu.

2. Use the sliders under AH Threshold to set the green and red zones in the AH Index chart and Q-Bar, representing good and bad sleep quality.

3. The Q-Bar shows total sleep time versus goal and the proportions of good, Ok and bad quality sleep.

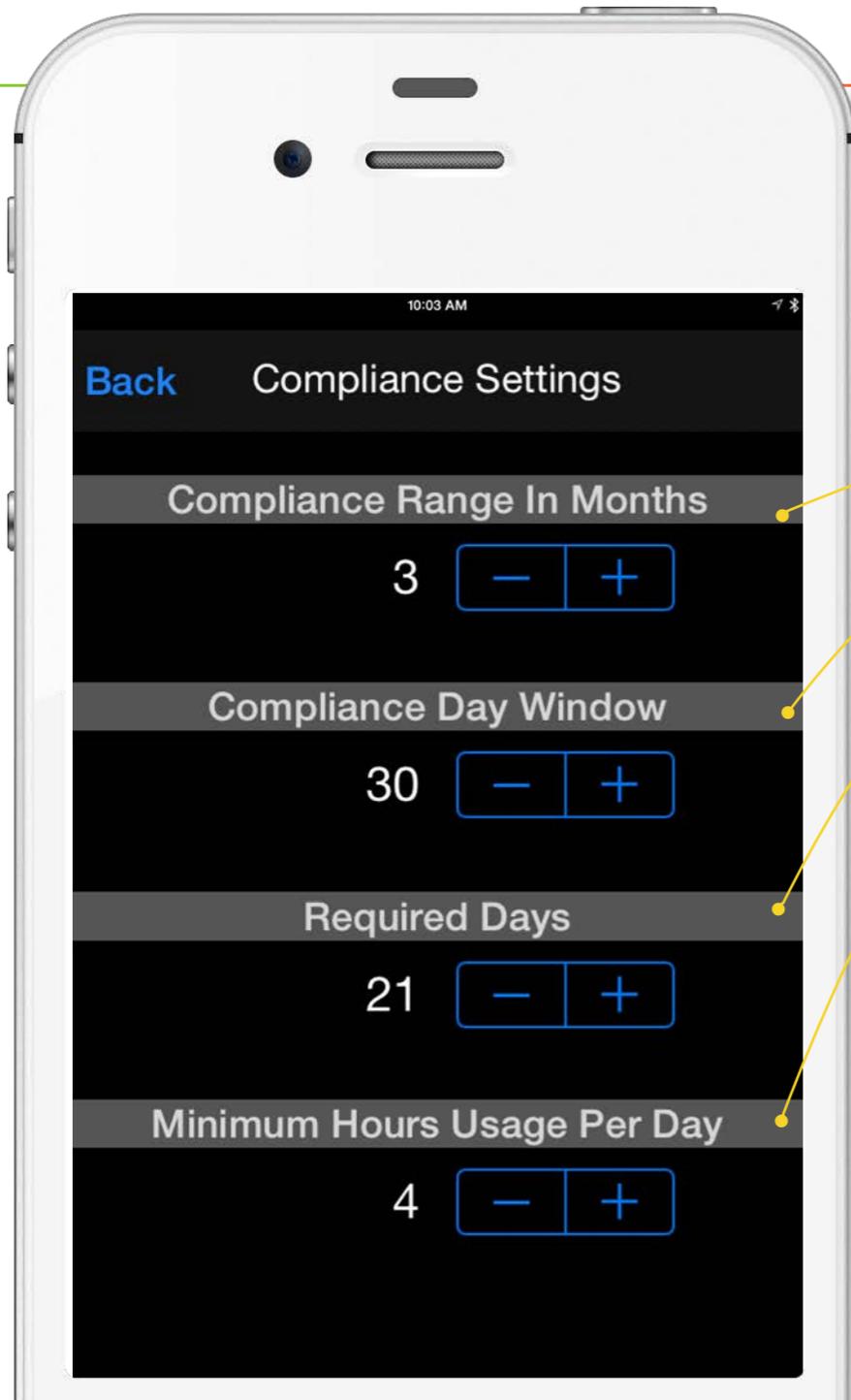● good → ideal / optimal
● Ok → acceptable
● bad → poor

**Back** | **Chart Settings**

## AH Threshold

24

4

sliders

Usual Sleep Time
6 pm
−  +

Hours of Sleep
10 Hours
−  +

AH Max Counts
30 Counts
−  +

Goal
6 Hours
−  +

8

| 0 | 0.0 | 0 |
|---|---|---|
| AH Count | Usage Hrs | AH Index |

30

red zone

25

20

15

10

5

green zone

0

6  7  8  9  10  11  12  1  2  3  4

Time of day

## Q-Bar

← Goal →

← 100% Usage →

20% Good | 30% Ok | 50% Bad

# Compliance Settings

⚙

Chart Settings

Compliance Settings

Website

1. Compliance Settings are the parameters used to determine whether or not compliance has been achieved.

2. Open Compliance Settings from the option menu.

3. Generate a report by clicking the action button in Chart View.

---

**10:03 AM**

**Back**    **Compliance Settings**

### Compliance Range In Months

3    —  +

### Compliance Day Window

30    —  +

### Required Days

21    —  +

### Minimum Hours Usage Per Day

4    —  +

---

Patient: **Anonymous**
11/25/14

Nitelog

✖

## Compliance Report

### PARAMETERS

Range: 3 months(08/27/14-11/25/14)
Window: 30 days
Days Required: 21
Hours Required: 4

---

### Details for Compliance Window        08/27/14-11/25/14

Total Days: 90
Days Used: 0
Hours Used: 00

Days Used  ≥ Required Hours: 0
Days Used  < Required Hours: 90
% Days Used ≥ Required Hours: 00

Avg Daily Usage From Days Used: 00
Avg Daily Usage From Total Days: 0.00

9

**Compliance Met: NO**

# Troubleshooting

✦ I don't see all of my data.
1. Make sure the date and time matches on the device and in Z1 Settings.
2. Check *Chart Settings* to make sure the sleep time and duration are within the viewable range.
3. Click the *Sync* button.
4. Verify that you have selected the correct date and day, week, or month range.

✦ I don't see my device in the Device List.
1. Make sure that Bluetooth is enabled on your phone and the Z1.
2. Unplug your Z1 for five seconds, plug it back in, and open Device Settings.

✦ I can't swipe to Device Settings.
1. Make sure you are connected to your device.
2. Make sure you are swiping left.

✦ I don't know my password.
1. Try to connect to your device, then use the Update Password option.

✦ I have another issue.
1. Try restarting the app by double clicking the home button, closing and re-opening Nitelog.
   * To close the app, double click the home button, then swipe up the Nightlog screenshot.
2. Please send us a report by going to the option menu and selecting the report option.
   This will create an email that goes to Z1MobileFeedback@hdmusa.com.
3. For more troubleshooting tips and support, use the app and click the website button in the *Option View*.

# Nitelog™

Human Design Medical, LLC
Charlottesville, VA 22902

Main phone (Supplies & replacement parts): 1-855-436-8724 (1-855-HDMUSA4)
Service support or warranty coverage: 1-855-436-8729 (1-855-HDMUSA9)

Email: service.support@hdmusa.com

Nitelog User Manual v1 121214
#40-0045 Rev A

**BREAS**

**HDM** HUMAN DESIGN MEDICAL