S+

Sleep better

User Manual

Welcome to Better Sleep!

Congratulations on your purchase of the S+ by ResMed. This booklet is designed to guide you through setting up your S+ bedside device for the first time. It will clearly explain how to pair the device with your iPhone®/Android™ smartphone or tablet, and will also provide details on key features of the S+ by ResMed smartphone app.

The S+ contains one of the most pioneering, non-contact sleep sensors on the market, and, when paired with a compatible smartphone or tablet, gives you access to a powerful analysis tool that will provide you with tailored feedback to help improve your sleep. We at ResMed have years of research and expertise as a global leader in the development of products for the diagnosis, treatment and management of respiratory disorders, with a focus on sleep-disordered breathing.

This expertise in sleep science has enabled us to design important features to actively help you improve your sleep.

Please read the instructions before using your S+.
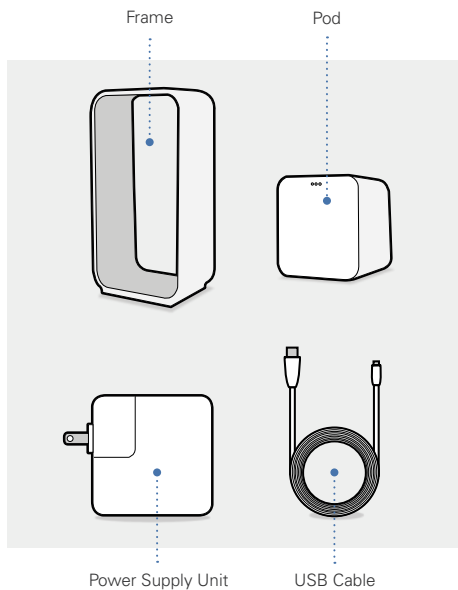
Sleep better,

The S+ by ResMed Team

Table of Contents

What's Included

Frame   Pod

Power Supply Unit   USB Cable

The Pod

The pod is the engine of the S+ which captures your sleep and bedroom environment data. It uses highly accurate patented sensor technology to monitor your breathing and body movement. In addition, it measures the ambient light, temperature and noise levels as these can affect your sleep.

The front of the pod features the S+ logo and also features a small LED which indicates whether or not the pod is connected. The back of the pod contains a micro USB socket for the power cable.

The Frame

The frame is used to hold the pod and to ensure it is positioned above the level of the mattress.

The USB Power Cable

The power cable connects your pod to the power supply unit.

⚠️ Warning

The USB power cable supplied should be used for the S+ unit only.

The Power Supply Unit

The power supply unit provided is a certified AC-DC adaptor and features two USB outlets. One is to power your pod using the USB power cable supplied. The second USB power outlet is to allow you to plug in your smartphone or tablet cable for charging. The pod must only be powered via the power supply unit supplied and not through other USB outlets, such as those on a laptop or docking station.
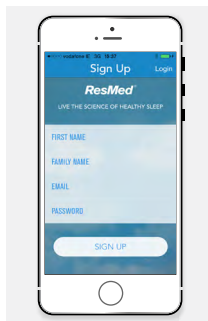
Downloading the App

Download the S+ by ResMed app from the Apple App Store or Google Play stores. Simply search for "S+ by ResMed" or follow the link from our website www.mySplus.com.

For a list of compatible smartphones and tablets, please check:
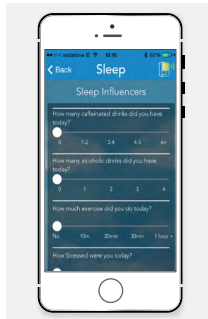http://www.mySplus.com/help

App Setup

1 Sign Up

Once you have downloaded the app, open it and follow the on-screen instructions to register your details.

ⓘ Note

Actual lay-out of screens may vary depending on what operating system you are using.

2 How's Your Sleep?

Give the S+ Mentor feature a little information by answering a few questions about you, your sleeping patterns and lifestyle. This is one of the ways we ensure the feedback you will receive is tailored to your individual requirements.
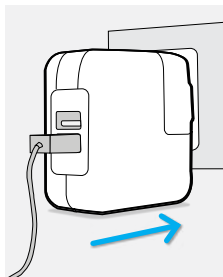
3 Take the App Tour

At this point, we recommend you take our app tour, the S+ Guide, to help you get the best results from your S+ and better understand how it can help improve your sleep performance. You can access this tour at any time through the Settings menu.

How to set up your S+
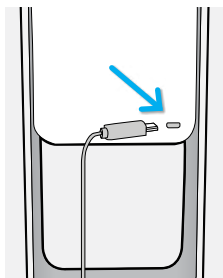
1 Connect Cable

Insert the power cable into the micro USB socket in the back of the pod.

2 Connect to Outlet

Connect the other end of the USB power cable into one of the USB outlets in the power supply unit. Plug the power supply unit into the AC wall outlet.

3 Charge Device

We recommend you charge your smartphone or tablet while using the S+.

i Info

You can use the power supply unit provided to charge your smartphone. A phone charging cable is not supplied. Please use your own charger/cable if using the S+ with a tablet.
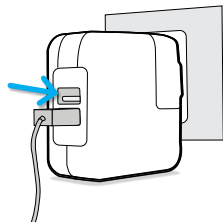
Pairing your S+

Connecting with Bluetooth

The S+ communicates to your compatible smartphone or tablet via Bluetooth. After taking the app tour, the app will guide you through connecting to the bedside device via Bluetooth.
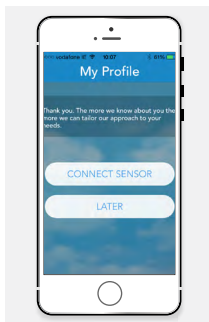
1. Ensure that Bluetooth is switched on and the S+ is powered up.

2. Complete and Exit our app tour, the S+ Guide.

3. Tap on "Start".

4. Select "S+ by ResMed" on your available Bluetooth devices screen.

5. You will see the message "Device Successfully Paired".

About Bluetooth and S+

We recommend that you keep your smartphone or tablet in your room once you have started sleep tracking to maintain the Bluetooth connection. If the Bluetooth connection between it and your S+ is interrupted, the S+ will continue to track sleep, although it will require reconnection to transfer data to the smartphone or tablet.

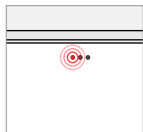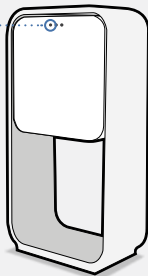The S+ can be used by multiple users (i.e. paired with different phones), but only one at a time.

Two S+ devices cannot be used in the same room at the same time as this will affect performance.

ℹ Note

If your phone is in Airplane or Flight Mode, the Bluetooth function will be disabled.

LED Indicator

LED

Flashing Red

Meaning
The S+ has not yet been paired for the first time.

Action to take
Pair your S+
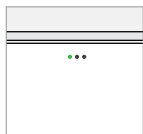
Steady Green

Meaning
The S+ is connected and ready to monitor sleep.

Action to take
Tap the "Sleep" icon to start the pre-sleep monitoring process.
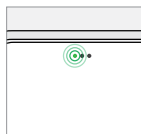
Flashing Green, Fades Out

Meaning
The S+ is in sleep monitoring mode

Action to take
Go to sleep.

Steady Red Light

Meaning
Bluetooth is not connected or smart phone or tablet is out of range.

Action to take
Initiate Bluetooth connection to smart phone or tablet.

Steady Yellow Light

Meaning
Firmware upgrade taking place.

Action to take
Follow upgrade instructions given by app. Do not unplug device.

Sleep Basics

Understanding the language of S+

Sleep Stages

Your sleep is divided into different stages: light sleep, deep sleep and REM (Rapid Eye Movement). A healthy combination of the three will ensure you feel rested.

Light sleep takes up the majority of your rest time. It is important for the development of muscle memory. While in light sleep, your breathing becomes more regular and more shallow as you transition into deep sleep.

During deep sleep, many physical functions slow down, which is necessary to revitalise both the body and immune system. Deep sleep is the state during which your breathing rate is slowest and most regular.

REM is the period of sleep in which you dream the most. Eye movements are rapid and random, memories are stored, and the brain is regenerated. During REM sleep your breathing becomes more irregular as you process your dreams and your mind recharges.

Sleep Score

This is a score combining multiple elements of your sleep measured against averages for your age and gender.

It's measured on a scale between 0 and 100. Continued use of the S+ should help you improve this score.

Sleep Recharge

Your Mind Recharge is based on measurement of your REM sleep and indicates how much mental regeneration you experienced during the night.

Your Body Recharge shows your level of deep sleep and indicates how much physical rejuvenation your body underwent while you slept.
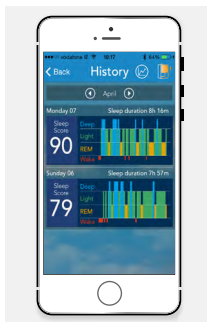
App Features

Getting started with S+

S+ Mentor

Using a sophisticated analysis tool, the S+ by ResMed combines your sleep, daily activity and bedroom environmental data. It gives you the personalized and actio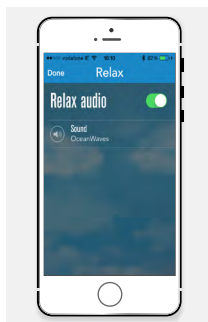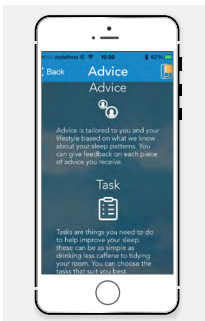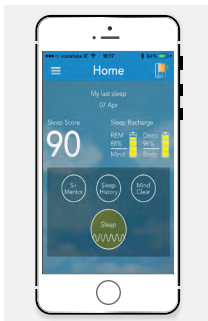nable feedback for you to use in getting a better night's sleep. This may be in the form of small, daily changes you may choose to make, or larger tasks over a period of several days.

Relax to Sleep

Select a soothing sound which synchronizes to your breathing.

While lying still, reduce the pace of the sound by slowing your breathing*. Then follow the sound as it leads you into a more relaxed state, helping you to fall asleep more easily. The sound then automatically fades to off.

*Sound will synchronize to your breathing within approximately two minutes of your lying stil.
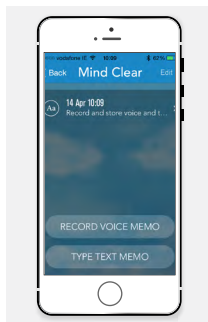
Mind Clear

Mind Clear enables you to take note of the thoughts that come into your head and keep you awake. Record a 60 second voice clip, or type a quick text note to clear those thoughts from your mind until the next day.

18   19

Smart Alarm

Awakening during a period of light sleep is likely to mean you will feel more refreshed than if you are woken from a period of deep sleep.

Simply choose a time window of up to 30 minutes and we will gently wake you from a light sleep stage. If you do not enter light sleep during this window, the Smart Alarm will instead sound at the very end of it.

Ensure mute function is not enabled to allow this feature to work.

Sleep Chart (Hypnogram)

This chart shows the sleep stages that make up your night's sleep. It also highlights when your sleep pattern may have been disturbed due to environmental disturbances such as a sudden change in background noise, temperature or light level.

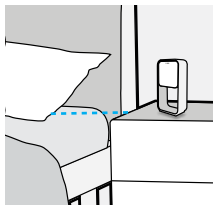The Sleep Chart shows four stages of sleep:

› Wake

› REM

› Light

› Deep

It also indicates your absence by displaying a gap on the chart.
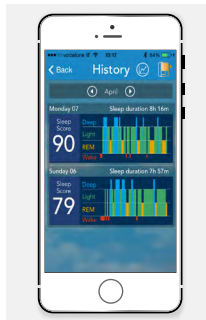
Positioning your S+

Using S+ with Frame.

To position the S+ correctly by your bed, simply place it on the nightstand nearest you as follows.

Height

Make sure that the bottom of the pod is slightly higher than the top of your mattress.
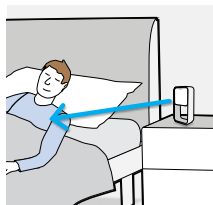
Direction

The S+ should be angled so that it is facing your chest. The S+ logo on the pod should be pointing towards you. The device will work irrespective of your sleeping position. You can tilt the pod downwards in the frame in order to adjust the angle if required.
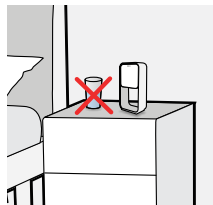
Obstacles

The S+ uses technology that can detect your breathing rate even through your warmest winter comforter. Avoid placing any item on the nightstand, such as a glass of water, between you and the pod when you go to sleep as this may adversely affect product performance.
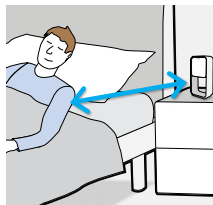
Distance

The pod should be about arm's length away when you're in bed. It is close enough if you can reach out and touch it comfortably when lying down normally. If there are two people in the bed, the S+ will measure breathing from the closest person only.

Using S+ without Frame.

You can also use your S+ without the frame, for example, when away from home on vacation or business trips.

1 Face Pod Towards You

To remove the pod from the frame – ensure that the front is facing towards you. You can identify the front of the pod as it has 3 small LEDs and the S+ logo.
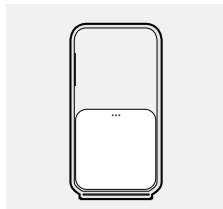
2 Pull Pod

Pull it **gently** downwards – you will feel a "click" when it has loosened.

3 Slide Down

Slide it down inside the frame and remove it carefully.
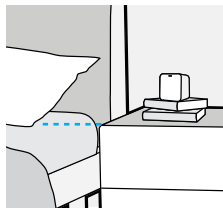
4 Position Pod
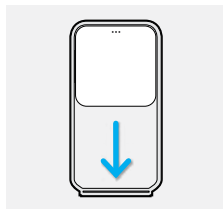
Position the pod slightly above the height of the mattress.

i Note

You must always use the power supply unit provided with this product.

Tracking your First Sleep

Now that your S+ is set up and correctly positioned, you are ready to start monitoring your sleep.
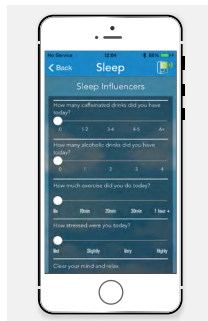
1 Select Sleep

Tap the "Sleep" icon on the Home screen and answer the daily questions.

2 Sleep

Select "Sleep" on the Sleep screen to start your sleep monitoring.

3 After Sleep

After you have finished sleeping, select "Stop Tracking" on your smartphone or tablet screen to end the sleep monitoring.
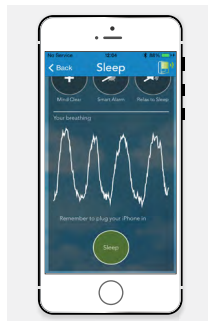
Product Information

❗ Product Warnings

- Read the instructions before using the S+ bedside device.

- Only the certified AC-DC adaptor provided should be used to power the S+ bedside device. The condition of the power supply should be periodically checked. Do not use if the power supply is damaged or the cables are frayed.

- Keep out of reach of children.

- Ensure the power cable does not pose a tripping or strangling risk.

- Avoid contact with corrosive materials.

- Avoid contact with alcohol based liquids or sprays.

- To avoid the risk of fire, do not use in the presence of flammable gasses or vapors.

- Patients using oxygen should not use this device.

❗ Cautions

- Do not use outside the specified operating conditions.

- To avoid mechanical or electrical damage, do not drop the unit.

- Placing objects between S+ device and the user may impair its performance.

- Using objects with moving parts, such as an electric fan, in the vicinity of the S+ device may impair its performance.

- In the event of a power failure the S+ device will not operate.

Cleaning/Maintenance

- The S+ device should only be cleaned by wiping with a damp cloth.

- Do not immerse the S+ device or AC/DC adapter (power supply unit) in water.

- Do not use furniture polish, solvent sprays or alcohol based cleaners/wipes.

- There are no serviceable parts. No maintenance is required. Opening the device will void the warranty.

Explanation of symbols

DC Power Input Only

Follow instructions for use.

Double insulated device.

Follow local laws and recycling plans regarding disposal or recycling of components and packaging.

Specifications

Power supply:

Input:	100-240VAC, 50/60Hz, 0.15A
Output:	5VDC, 1A
Model	HLT – 408
Current consumption (Pod):	100mA (5V input)
Weight (Pod and frame only):	1 pound (500g)
Operating Conditions:	41°F to 95°F (+5 °C – +35 °C) and 30% – 85% Relative Humidity
Storage/Transport Conditions:	-13°F to 140°F (-25°C – +60°C) and 30% – 85% Relative Humidity
FCC	FCC ID: YAK22102. Contains FCC ID: YAKBM14
Product Model Number	22102
Origins	Designed in Ireland Manufactured in China

List of Compatible Devices and Operating Systems

- Apple smart phones and devices - iPhone 4, 4S, 5, iPad 2, 3 and 4 and iPad mini.

- Apple operating systems – iOS 6 and iOS 7.

- Android smart phones - Samsung S3 and S4.

- Android operating systems - 4.0 (Ice Cream Sandwich); 4.1, 4.2 and 4.3 (Jelly Bean); and 4.4 (KitKat).

ⓘ Note

The Power Supply Unit is not recommended for charging an iPad or iPad mini.

FCC Statement

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.

FCC Caution: Any changes or modifications not expressly approved by ResMed Sensor Technologies could void the user's authority to operate this equipment.

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. 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 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.

Standards

Complies With:

EN 60335-1: 2002 / A15:2011 - Safety of household and similar electrical appliances - Part 1 General Requirements

EN 60950-1: 2006 A11:2009 A12:2011 A1:2010 Information Technology Equipment - Safety part 1: General Requirements

EN 60601-1-2 - Medical electrical equipment - Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests."

FCC Title 47 Part 15 Subpart C, Parts 15.207,15.209,15.245,15.247

iPhone, iPod Touch and iPad are trademarks of Apple Inc. Apple Store is a service mark of Apple Inc.

Android is a trademark of Google Inc.

Bluetooth® word mark and logos are the registered trademarks of Bluetooth SIG.

"Made for iPod Touch" and "Made for iPhone" mean that an electronic accessory has been designed to connect to iPod touch or, iPhone respectively and has been certified by the developer to meet Apple performance standards.

Warranty

S+ by ResMed One Year Warranty

ResMed Sensor Technologies Ltd., trading as ResMed Sensor Technologies Ltd., warrants this product to be free from defects in workmanship and materials at the point of sale. Subject to this product being used in accordance with its instructions for use, the product shall continue to be free from defects, for a period of one (1) year from the date of original purchase.

Any damage or defects caused by a failure to follow the instructions which relate to this product or as the result of an accident, abuse, misuse, misapplication, product modification, faulty ancillary equipment, improper voltage or current, lightning or other acts of God, commercial non-home use, normal wear and tear, shipping damage or loss, damage to digital media players or damage caused by the actions of anyone other than ResMed Sensor Technologies Ltd. are expressly excluded from the warranty stated above.

ResMed Sensor Technologies Ltd. will, at its sole election, repair or replace any product that proves to be defective in either or both of workmanship or materials and as covered by this warranty. If the product is no longer manufactured or is out of stock at or after the time ResMed Sensor Technologies Ltd. learns of the warranty claim, ResMed Sensor Technologies Ltd. may, at its sole election, replace your product with a similar product. ResMed Sensor Technologies Ltd.'s liability is limited to the repair or replacement, of any defective product under warranty and any incidental or consequential damages are expressly excluded to the fullest extent permitted by law. This warranty is not transferable and does not extend to users other than the person who originally purchased the product.

Return Policy / Warranty Service

Warranty claims will only be valid when proof of purchase is supplied to ResMed Sensor Technologies Ltd. to evidence that the product was purchased from an authorized ResMed Sensor Technologies Ltd. dealer and that the claim is within one (1) year of purchase. To make a warranty claim you must first contact ResMed Sensor Technologies Ltd. by email to warrantysupport@mySplus.com stating your name, full postal address, contact telephone number, the name of the product and its serial number, date and place of purchase and a detailed description of the problem you are experiencing.

If the defect is covered by this warranty then you will be provided with an authorization number and instructions for return shipment. Where possible, you must send to ResMed Sensor Technologies Ltd. the damaged or defective product, return shipments are at the customer's expense. The returned product MUST be accompanied by the original proof of purchase. We highly recommend that you retain a copy of this proof of purchase for your records. ResMed Sensor Technologies Ltd. shall not be responsible for lost or damaged products during shipment. Any product returned without the original proof of purchase will be returned without being examined or tested and such return shall be at the customer's expense.

To avoid any additional charges, all returns and exchanges must include the original packing materials, product box, all included accessories which may include, but not necessarily be limited to, power adapters or power cords, connecting cables, adapters, inserts, cards and instruction manuals. The absence of any of the aforementioned items may mean that you incur a charge for their replacement. ResMed Sensor Technologies Ltd. shall not be liable for any indirect or direct consequential loss.

Disclaimer

The S+ is designed to improve sleep through coaching and
biofeedback. It is not a medical device. If you have concerns
that sleep is affecting your health, you should consult your
physician.

ResMed®