sgnl

Press Kit Updated on 24 August 2018

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1. Products

1) Sgnl Smart Strap

Make your smart watch even smarter: upgrade your watch into a hybrid watch!
Any timepiece can be more stylish with the Sgnl smart watch strap.

The Sgnl smart watch strap helps you enjoy a smarter life simply by replacing the strap of the watch you're now wearing. By providing smart features it can enhance users' quality of life. With its elegant design, it will complement and enhance your style. The WB-S50 is a smart watch strap that offers fingertip calling and is scheduled for release next year. The WB-S30, a watch strap that turns analogue watches into hybrid watches is under development.

a. WB-S50

WB-S50 is the smart watch strap that lets you take phone calls by simply placing your finger to your ear. Whether attached to a classic watch or a smartwatch such as the Samsung Galaxy Gear, Apple Watch or Pebble Time, you can enable fingertip communication and a number of smart functions simply by replacing the watch strap. Smart functions include Call Reminders, Fitness Tracker and Smart Notifications.

a-1. WB-S50 Key Features

① Fingertip Communication

WB-S50 key technology lies in its unique patented Body Conduction Unit (BCU), which is capable of transmitting vibrations through the body and converting them to sound. WB-S50 communicates with the user's phone through Bluetooth, and when a voice signal is received, WB-S50 generates vibrations with the BCU. These vibrations are sent from the user's wrist to their fingertips, and when the user places their fingertip to the tragus of their ear, the vibrations echoes and create an amplified sound within their ear. The user can speak through the microphone embedded in WB-S50 strap. With WB-S50 you can:

- **Carry your phone without needing extra devices like headsets and earphones**
  With WB-S50, answering calls is direct and immediate. There is no need to rummage through bags or pockets when your phone rings. Users can simply place their finger on their ear to answer calls.
- **Hear callers' voices clearly, even in loud places**
  Even in a noisy environment, users can hear their calls clearly. With WB-S50, their finger doesn't only just transmit a voice to their ears, but also blocks out background noise.
- **You don't have to worry about others listening in on your calls**
  With WB-S50, users can take calls discretely. Since the vibration transmitted from the wrist generates sound in the user's ear, only the WB-S50 user can hear the sounds of the call. Whether in a meeting room or a packed elevator, users never need to worry about being overheard. WB-S50 is particularly useful for smartwatch wearers as it prevents others from listening into conversations over their speaker phone.

② Watch Compatibility

WB-S50 is a wearable smart strap and watch companion. With its specially designed lug adapter, WB-S50 is designed to fit 18, 20, 22, and 24mm standard watch lugs and Apple Watch connectors. This allows for a nearly comprehensive watch compatibility, whether with classic or smart watches, including Samsung Gear, Apple Watch and Pebble Time.

- **For Classic Watch -** WB-S50 can transform a classic watch into a hybrid smartwatch with Fingertip Communication, Fitness Tracker, and Smart Notifications features.

▲ Watch Compatibility

- **For Smartwatch -** WB-S50 solves the inconvenience of smartwatches speakerphones. Users can enjoy complete call privacy through fingertip communication instead of speaking through a speakerphone.
- **For Non-watch Wearers -** WB-S50 can be worn as a stylish, stand-alone smart band with its lug-connector accessory, while retaining all of its core functionality.

③ The WB-S50 App
The WB-S50 strap pairs seamlessly with the WB-S50 app to make the user's day healthier, more organized and more manageable.

▲ WB-S50

- **Call Reminder - Keep in touch with those who matter**
  Users can manage significant others' call frequency and duration and receive discreet nudges to call them and manage relationships more effectively.
- **Fitness Tracker - Stay fit and healthy**
  Synced with the app, WB-S50 monitors users' health and tracks their daily activity. Users can get detailed information about their workout patterns and count their steps with the built-in pedometer.
- **Smart Notifications - Stay connected throughout the day**
  WB-S50 users can keep their life on track and never miss an important alert. WB-S50 will gently vibrate to alert them to calls, texts, or app notifications with different notification patterns.

a-2. How WB-S50 works (Technology)

WB-S50 receives voice signals from the user's phone via Bluetooth. When a voice signal is received, WB-S50 generates vibrations through its Body Conduction Unit (BCU), which transmits the vibrations through user's wrists to their fingertips. As transmission is made with vibrations, there is no risk of harm to the body. When the user places a fingertip to the tragus of their ear the vibrations echo to create amplified sound within the closed space of the user's ear

Unique patented technology of the BCU

- An actuator unit that generates a body-conductible vibration
- An audio algorithm which selectively amplifies voice signals via wavelength modulation

a-3. Specifications

Watch Compatibility	Watches using 18, 20, 22, and 24mm lug and Apple Watch
Weight	Approximately 116 grams
OS	Android 4.4 or above / iOS 9 or above
Battery	Li-Ion 3.7V / 200mA (Charging time : Approx. 2 hours)
H/W	BCU(Body Conduction Unit), Pedometer, Haptic features

b. Sgnl WB-S30

▲ WB-S30

WB-S30 received the Innovation Award selected by the world's leading luxury group LVMH (Louis Vuitton Moët Hennessy) at VIVA Tech 2018. WB-S30 is a smart strap designed to upgrade high-end classic timepieces into hybrid watches simply by replacing the strap. Without wearing any extra devices, such as a smart bands, the user can enjoy a smarter life through the WB-S30's functionality, including a health function (step and calorie counting) and app vibration notifications.

It has a simple design and lighter weight compared to the WB-S50, but is more sophisticated and designed to express your personality and enhance the style of classic watches. To offset the quality of luxury timepieces, the smart strap is available in crocodile leather and cowhide. The component that provides smart functionality is concealed discreetly in the buckle of the watch strap, leaving the user unencumbered and maintaining its clean aesthetic. The WB-S30 is currently under development. The Sgnl smart watch straps will come in the most common 20mm and 22mm widths.

2) Sgnl Hearable

Control the Sound Around You : Sgnl Hearable lineup helps you enjoy music anytime, anywhere!

Sgnl's Hearable products provide open ear control which allows users to listen to music safely and enjoy activities while wearing earphones. In addition, they provide a high level of noise cancellation so that users are not disturbed by noises around them. Sgnl Hearable products are smart products that can not only implement the best sound but also adjust ambient sounds according to each user's situation.

▶ Key Features of Sgnl Hearable

Open Ear Control

Open ear control allows you to detect ambient sounds even with the earphones on. For jogging or other outdoor activities, open control mode can detect sounds indicative of potential danger, making for a safer outdoor listening experience.

Active Noise Cancelling

High-end noise canceling technology blocks repetitive external noises, creating an environment where you can focus only on your music free from ambient noise. This is a convenient function useful not only in an airplane or while riding public transit, but is great for studying as well.

a. HB-N50

Bluetooth stereo neckband-style headset HB-N50 provides stylish music listening

The HB-N50 is a Bluetooth-enabled neckband-style product that allows users to listen to music conveniently without being bothered by annoying, tangling earphone cables. It provides open ear control that allows you to listen to music and ambient sounds at the same time, protecting you from possible dangers that can occur when you jog or cycle while wearing earphones.

▲ HB-N50

Weighing only 35 grams, the HB-N50 lets users can enjoy music without being disturbed thanks to noise cancellation up to 28 decibels. This is a convenient function that can be used not only by those who commute on noisy subways and buses but also those who requires unhindered concentration, such as students.

The HB-N50 neckband has a refined matte black color and curved exterior that allows users to move freely while listening to music. It has many other key characteristics designed for comfort and stays comfortable even after hours of non-stop use. With powerful battery performance while connected via Bluetooth, the user can have continuous music playback and make voice calls for at least 13 hours.

a-1. Specifications

Sweatproof	IPX4
Weight	35.6g
Multi pairing	2
Battery	Li-Ion 3.7V / 200mAh
Charging Time	2 hours
Operation Time	Nomal Mode : 13 hours
	OEC / ANC : 10 hours

b. HB-V70

A smart headphone, the HB-V70 provides Open Ear Control, Active Noise Cancelling and Touch Control UX

The HB-V70 model proposes a new paradigm of headsets with its noise cancelling function. Equipped with a 40 mm neodymium driver to transmit a vivid impression of the original sound, it is technically outstanding in noise cancellation (up to 35 decibels). It can reduce background noise by mounting the noise monitoring function.

▲ HB-V70

It is a two-way wireless product and wired connectivity in order to provide convenience for users.

With its "Touch Control" function, it can play, pause, or skip a song, and adjust volume with a simple touch. Its "Motion Detection Control" function pauses music automatically when a user takes off their headset. This product incorporates the latest technologies, such as Bluetooth 4.2, the apt-X LL (low latency) codec, and high-end chips to realize CD-level high-quality audio. It is perfect for enjoying games and videos with flawless audio and video synching thanks to its rapid transmission speed. The HB-V70 headphones are equipped with a high-performance battery that can play continuously for up to 10 hours, allowing long-time music enjoyment.

b-1. Specifications

Bluetooth	v4.2
Weight	280g
Multi pairing	2
Battery	600mAh
Charging Time	3~4 hours
Operation Time	Bluetooth + ANC : 10 hours
	ANC : 25 hours (Wired)

2. Company

1) About the company : Innomdle Lab

- Established : September 10, 2015
- Address : #720, 815, Daewangpangyo-ro, Sujeong-gu, Seongnam-si, Gyeonggi-do, 13449
- Employees : 12 (as of August, 2018)
- Website : http://www.mysgnl.com
- Facebook : https://www.facebook.com/sgnlstrap
- Instagram : https://www.instagram.com/sgnlstrap

WB-S50 is the brainchild of Innomdle Lab, the first company to ever officially spin off from Samsung Electronics. Pronounced "i-nom-dul", it means "dudes" or "guys" in Korean with a nuance of friendliness and intimacy. Innomdle also stands for "Innovation Medley", conveying the idea that the team's ambition for endless pursuit of innovation by using groundbreaking technology to resolve daily discomfort. For additional information, please visit Innomdle's website and follow Innomdle Lab on Facebook and Instagram.

2) CEO - Hyunchul Choi

- Innomdle Lab CEO (2015-present)
- C-LAB creative leader, Samsung Electronics (2014-2015)
- DMC research and development, Samsung Electronics (2011-2014)
- Software engineer, Samsung Electronics (2006-2011)
- Visiting scholar, Michigan State University with Professor Anil K. Jain
- Masters in Brain Engineering, Korea University
- Summa cum laude in Media and Business Administration, Soongsil University

3) Story & Timeline

With just a simple idea, CEO Hyunchul Choi developed WB-S50 after winning first place during Samsung's C-LAB competition in 2014. He said, "A colleague was boasting about his smartwatch but was embarrassed by the fact that everyone around him could hear the conversation over the speakerphone. As the number of smartwatch users increases, they will face the same privacy issues. CEO Choi began to wonder if there was a solution and came up with the idea of transmitting sound through one's finger. He immediately proposed the idea to Samsung's internal corporate venture department and WB-S50 was born.

- May 2018 : Selected as one of the TOP 30 startups by LVMH at the VIVA 2018
- January 2018: Attend CES 2018 Las Vegas
- September 2017: Invited to IFA NEXT hall at IFA 2017 in Berlin
- January 2017: Revealed final design of WB-S50 at CES 2017 in Las Vegas
  November 2016: Awarded the Invio Experience Technology Challenge at the Creative Business Cup
- in Copenhagen
- October 2016: Launched Indiegogo campaign
- October 2016: Ended Kickstarter project as top 0.03% most funded project
- September 2016: Featured as "Best Wearable" at IFA 2016 in Berlin
- August 2016: Launched Kickstarter project
  August 2016: Announced "Sgnl" as new name of product

- July 2016: Developed third product
- May 2016: Received seed money investment from China's DT Capital
- May 2016: Received seed money investment from China's CyZone
      Named one of Asia's Top 15 Hardware Startups at Asia Hardware Battlefield 2016
- February 2016: Champion at D.CAMP's Demo Day
- January 2016: Introduced fourth prototype, "TipTalk", at CES 2016 in Las Vegas
- October 2015: Patent registered
- October 2015: Awarded grand prize at Investment Conference, Startup Runway
- September 2015: Received seed money investment from Samsung Ventures
- September 2015: Spun off from Samsung and established Innomdle Lab Ltd with its first Sgnl prototype
- November 2014: Received C-LAB Fair's Best Investment Award (organized by Samsung Electronics)
- May 2014: Samsung Electronics C-LAB Best Assignment Selection

Innomdle Lab is an independent startup, previously accelerated by Samsung C-LAB
Innomdle Lab is an independent startup developed as an internal project of Samsung's new intracompany acceleration program C-LAB (Creative Laboratory) in 2014. In September 2015, after only a year of acceleration and incubation, Innomdle Lab's outstanding performance enabled it to become the first company to spun off from Samsung. Upon Innomdle's incorporation, Samsung contributed a small amount of seed funding but no board seats. Although Innomdle Lab began within Samsung, it is now a fully independent company with all IPs and no board seats available outside of the company.

3. Press Resources

Access press material including all photo & videos can be found at link here.

- Official Video published on Dec, 2017 (Youtube)
- Official Video published on Feb, 2017 (Youtube)
- Reaction Video (Youtube) @Seoul
- Reaction Video (Youtube) @New York
- Kickstarter Page
- Indiegogo Page
- Photo&Video resource