

Bodypro 100

User Manual <Rev 1.1>



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Caution

- Do not disassemble or modify the device. Please contact us if there is any trouble using the device.
- Do not expose the device on high temperature or high pressure environment as it can damage the device or the battery.
- Please avoid any external impact such as vibration and crash. Keep the device in safe position.
- Please consult your physician or family doctor and stop using Bodypro 100 if you have any allergic reaction with material or if you have a pacemaker or other implanted electronic device.

1. Introduction

This product "Bodypro 100" consists of a transmitter(DS100), a chest belt(DS100B), a receiver(DS1100), and an installation CD. Wrist belts(DS100C) and a zigbee router(DS2000) are to be purchased as optional devices.

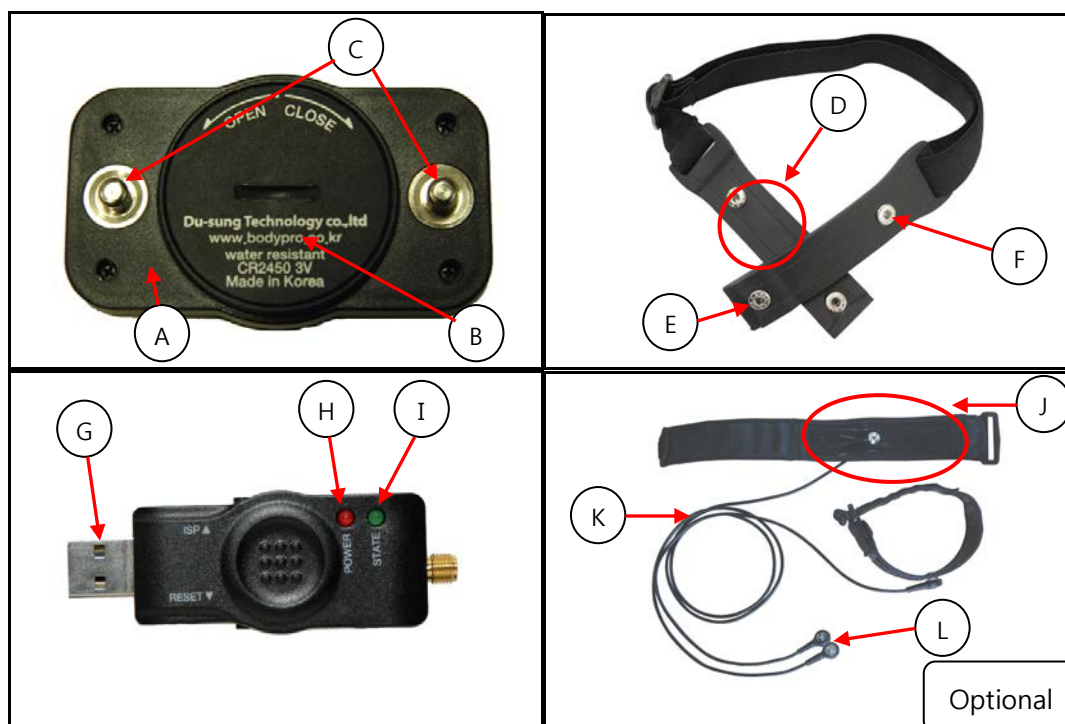
Bodypro 100 is a wireless heart rate monitor which detects multiple heart rates and measures cardio respiratory endurances. It measures up to 100 signals, and therefore it eases measurement processes.

In addition, users are able to set desired heart rate zone and train in the zone for optimal and scientific exercise program.

2. In the box

PRODUCTS		NAMES	QUANTITIES				FEATURES
			Bodypro 100(10)	Bodypro 100(20)	Bodypro 100(30)	Bodypro 100(40)	
In the box	DS100	Wireless transmitter	10	20	30	40	Measures HR and transmits wirelessly (zigbee)
	DS100B	Chest belt	10	20	30	40	Chest belt
	DS1100	Wireless receiver	1	1	1	1	Multiple bio-signal receiver (zigbee)
	PAPS_Plus	Software program	1	1	1	1	PAPS_Plus program / Hardware driver
	User Manual	Manual	1	1	1	1	Device manual / warranties
Additional (not including)	DS100C	Wrist belts	20	40	60	80	Wrist belts
	DS2000	Zigbee router	1~3	1~3	1~3	1~3	Increases transmitting range to over 1.5km

3. Name and Function of Each Component



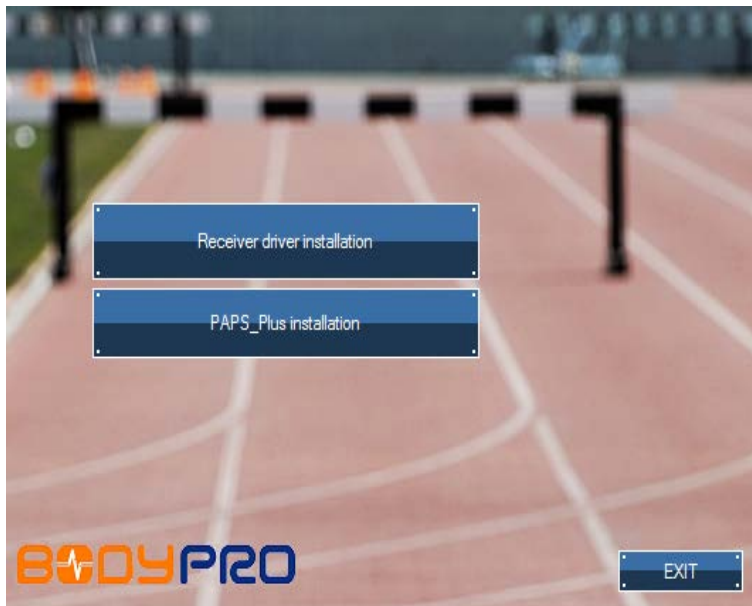
- A. DS100 body : wireless heart rate signal transmitter body.
- B. Battery cap : open/close to change battery.
- C. Electrode clip : connection/electrode clip to chest belt.
- D. Electrode belt : electrode rubber part of chest belt where heart rate signal is detected. Direct contact to chest.
- E. DS100 connection clip : connection clip to transmitter body.
- F. DS100C connection clip : connection clip to wrist belts.
- G. USB connector : to connect a receiver to PC USB port
- H. POWER LED : Indicates power status of receiver.
- I. STATE LED : Blinks at each time the heart rate signal is received.
- ※ If multiple transmitters are connected, it may seem to be turned on.
- J. Electrode belt : electrode rubber part of wrist belts where heart rate signal is detected. Direct contact to wrists.
- K. Cable(DS100C) : connection cable for chest belt and wrist belts.
- L. DS100B connection clip : connection clip to wrist belts

4. PAPS_Plus Program Installation

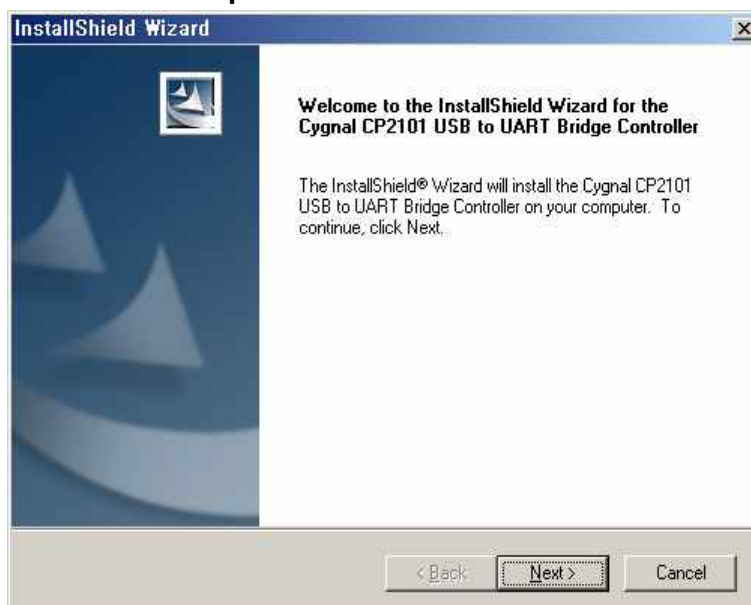
1) Install a driver for receiver

- to activate a receiver connected to PC.

A. Insert CD and click "Receiver driver installation" when the below image shows up.



B. Click "Next" to proceed.



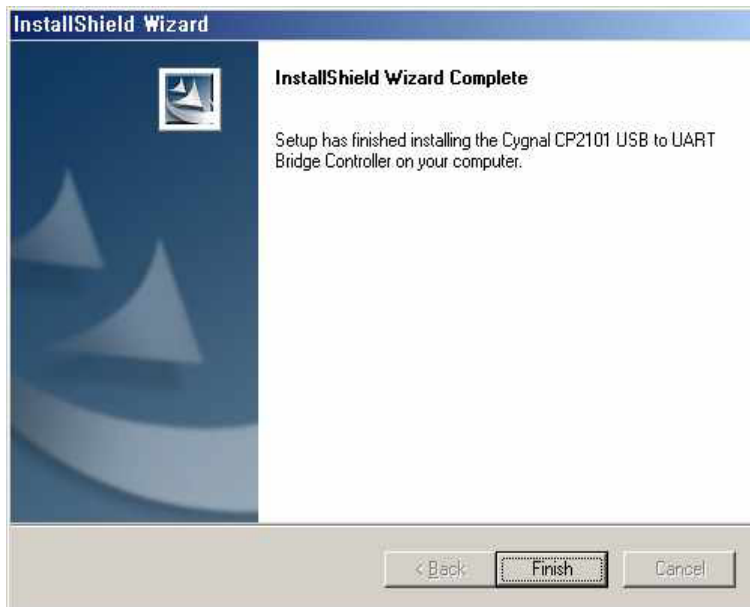
C. Click "Yes" to proceed.



D. Click "Next" to start installation.



E. Click “Finish” to finish installation.



F. Connect receiver to PC.

a. Check “Yes, this time only” and click “Next”.



- b. Check "Install the software automatically [Recommended]" and click "Next". The driver will be detected automatically.



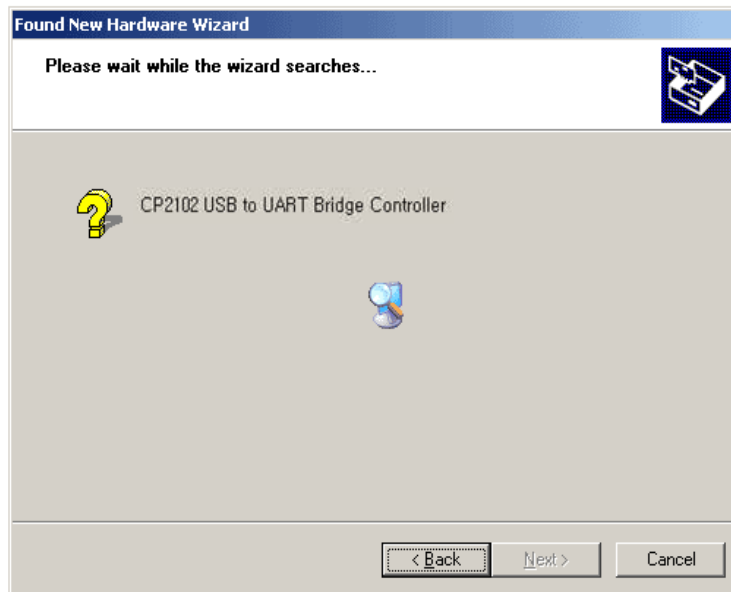
- ※ If PC doesn't detect the driver from this method, check "Install from a list or specific location [Advanced]" and click "Next". The below page will show up.

- c. Check "Include this location in the search" and type the directory where the driver is installed. Click "Next" to search the driver.

- C:\Cygnal\CP2101\WIN



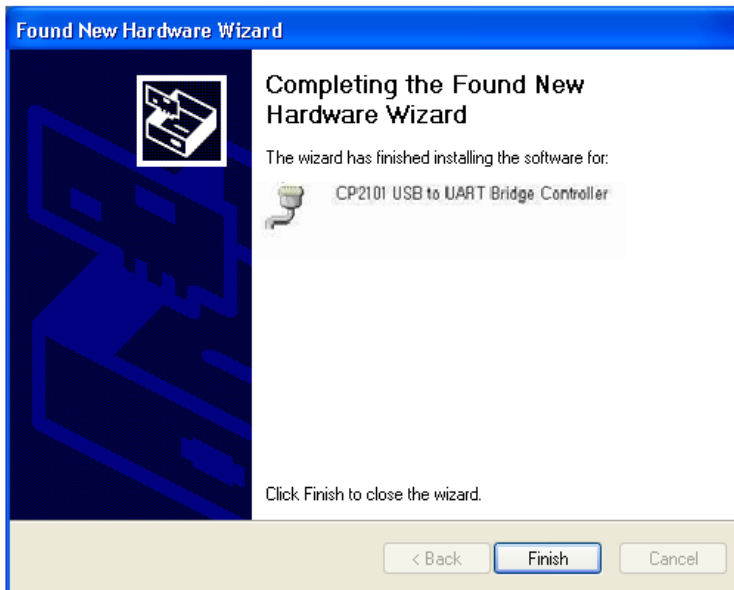
- d. If below page show up, it means PC is searching the driver and it will take some time.



- e. The below message will show up as the driver is detected. Click "Continue Anyway" to proceed.



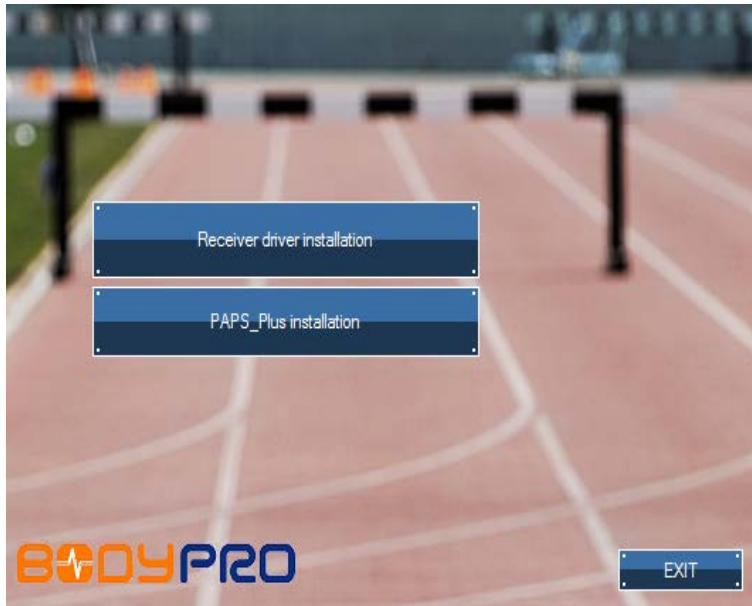
- f. If below page show up, it means the driver for receiver is completed. Click "Finish" to complete the installation.



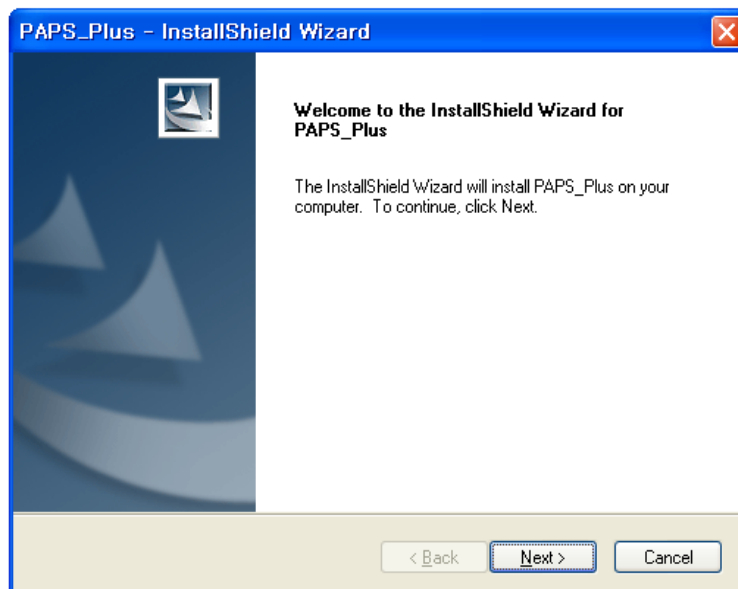
- ※ Installation for receiver only needs to be done once for the first time. Later time, a receiver will be detected automatically without additional installations.

2) PAPS_Plus Program Installation

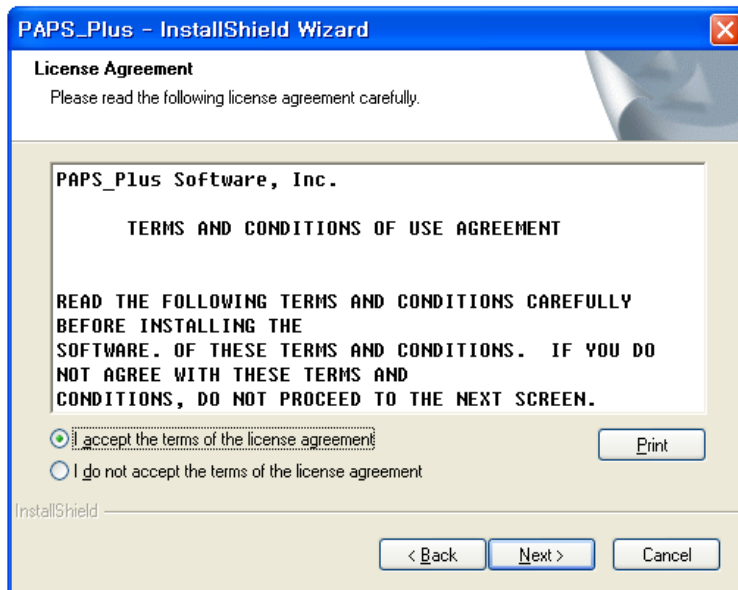
A. Click "PAPS_Plus Program Install".



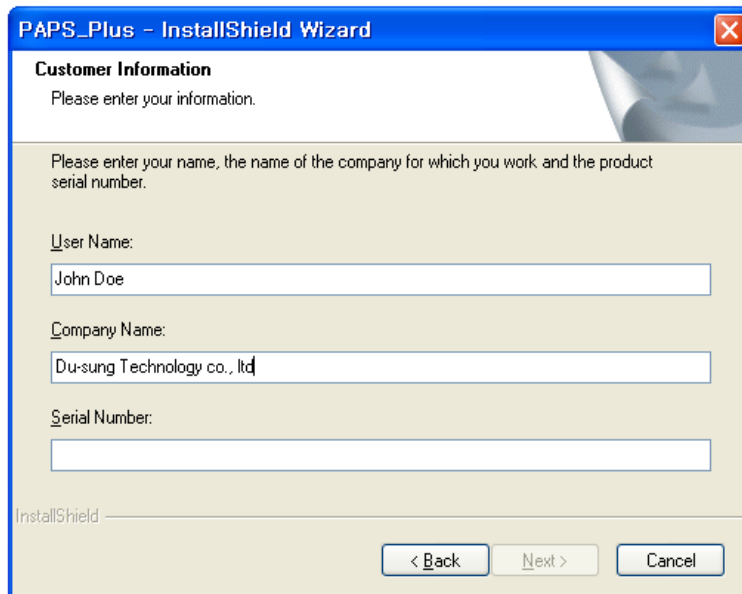
B. Click "Next" to proceed.



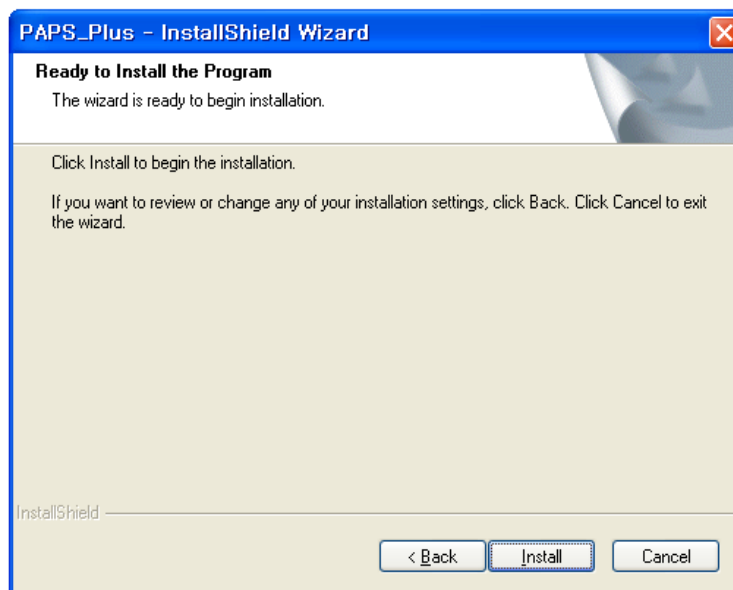
- C. Check "I accept the terms of the license agreement" and click "Next" to proceed.



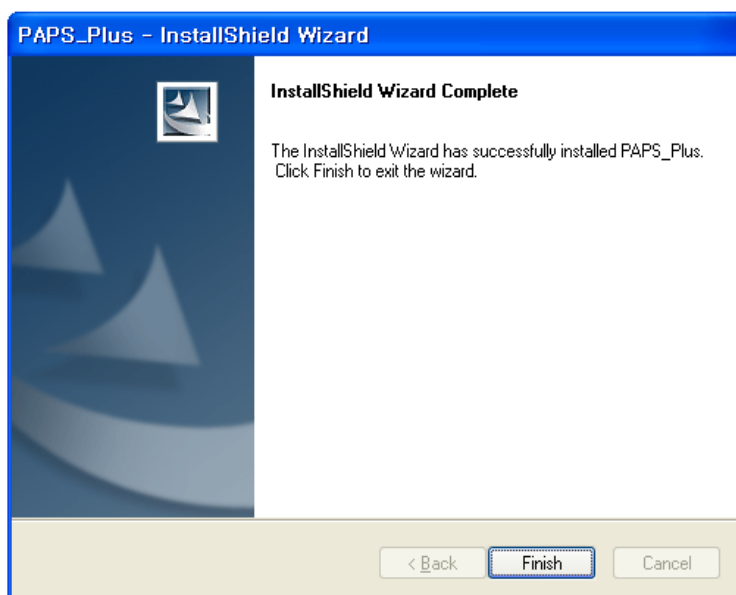
- D. Type user information and serial number from attached film on CD. Click Next to proceed.



- E. Choose desired directory for PAPS_Plus installation and click "Install" to begin installation.



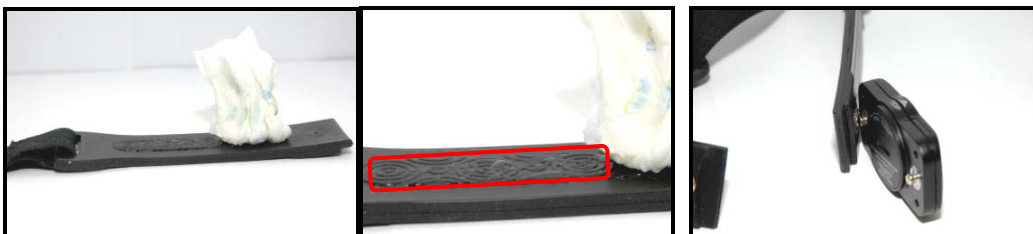
- F. Click "Finish" to complete the installation.



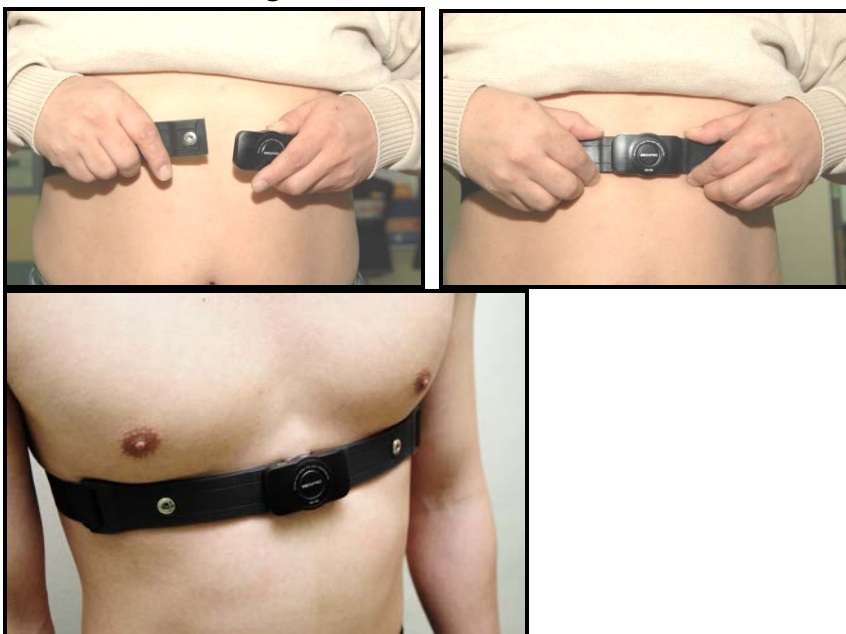
5. Wearing Bodypro

1) Wearing chest belt(DS100B)

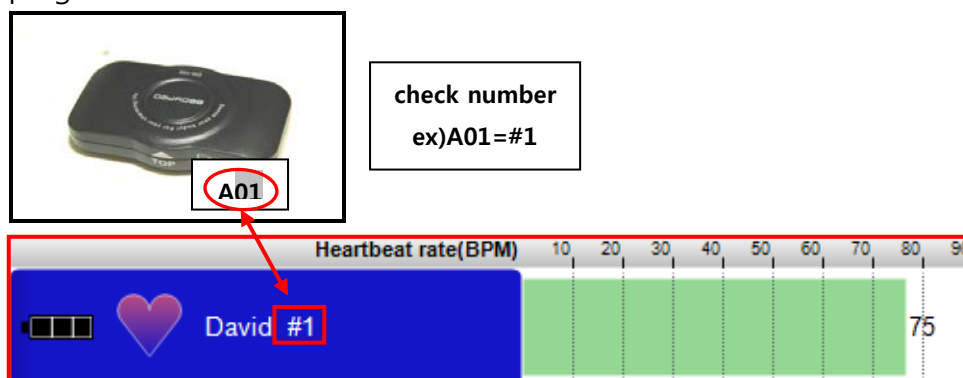
- A. Using wet tissue or other things, clean and moisten the surface of electrode part of chest belt at the same time. Connect one side of chest belt and transmitter at connection clip.



- B. Wind the belt around the body to place the transmitter body at the center of chest as below images.



- C. Check with PC program that monitoring heart rate is working correctly.
The number from a transmitter body is the same as the signal number from the program.



2) Wearing chest belt(DS100B) with wrist belts(DS100C, optional)

A. Wear chest belt with transmitter around the chest or core on outfits.



B. Use wet tissue to moisten wrists and wear wrist belts. Make sure the electrode parts contact skin.

※ **CAUTION : wrap the belts 5~7cm above you hands.**



C. Connect one end of cable(DS100C) to wrist belt.



D. Connect the other end of cable(DS100C) to chest belt.

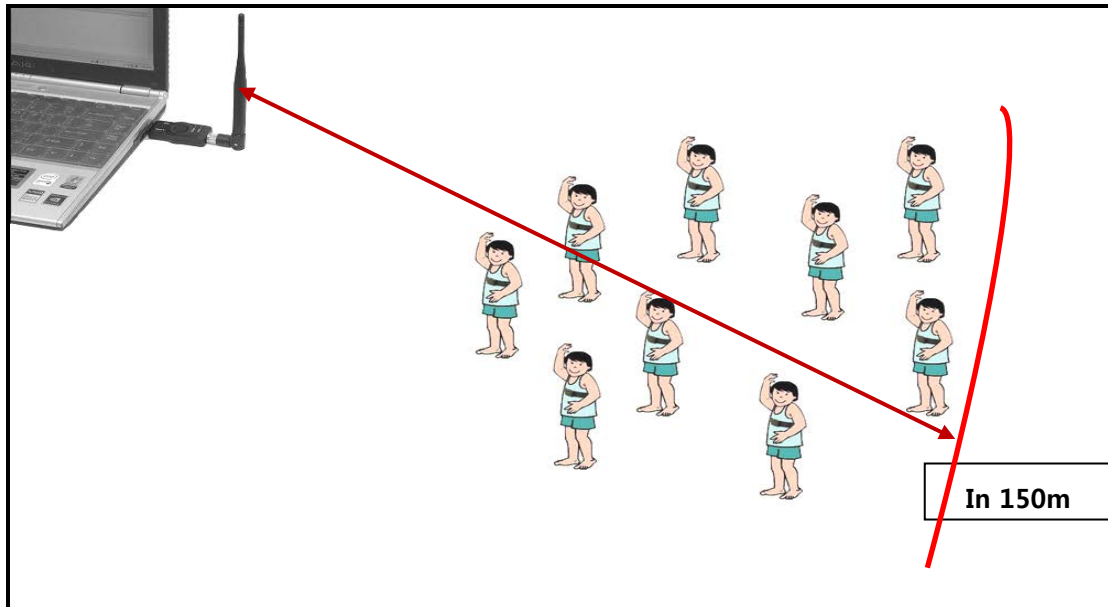


E. Check PC program for monitoring process.

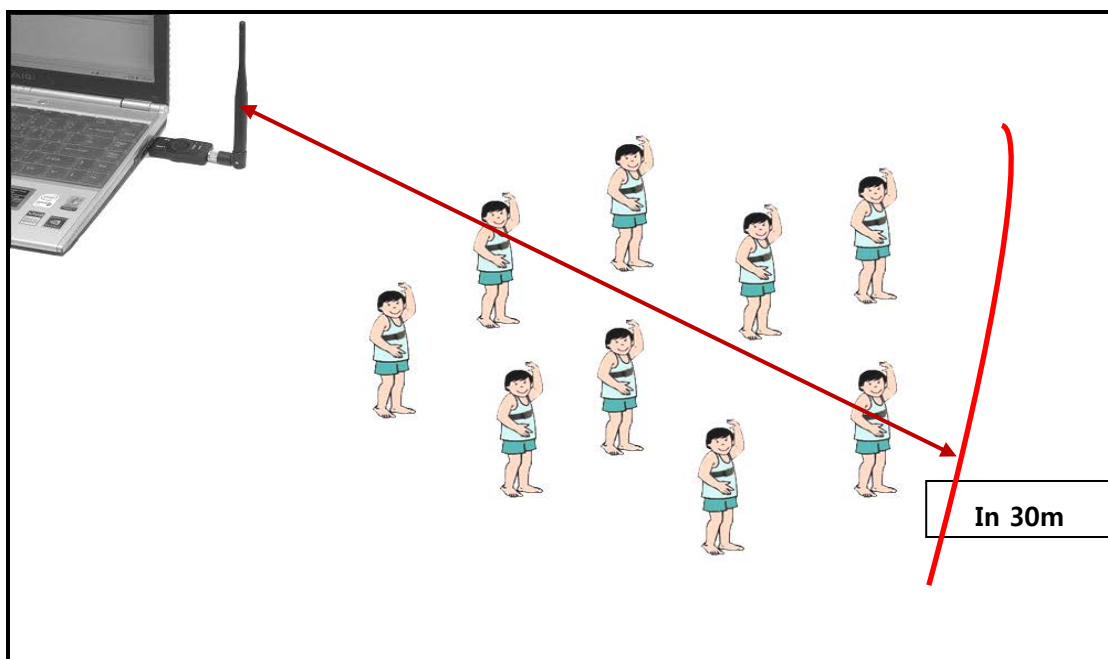


6. Monitoring Environments

- A. When a transmitter(DS100) faces a receiver(DS110), the transmission can be made up to 150m.
- B. When a transmitter(DS100)'s back faces a receiver(DS110), the transmission can be made up to 30m.



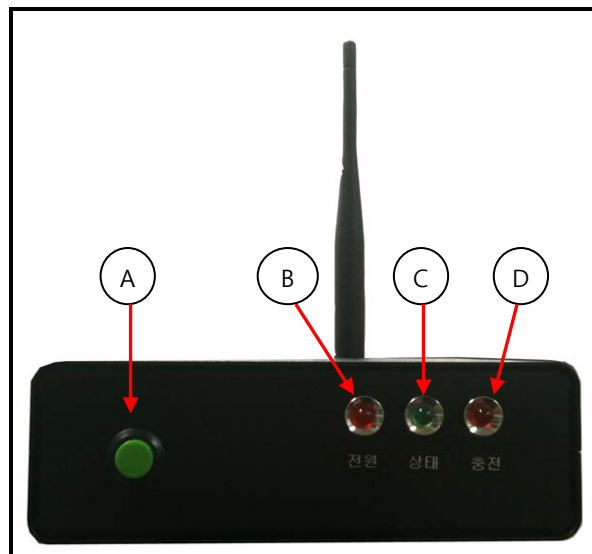
<A> transmitter faces receiver



 transmitter's back faces receiver

7. ZIGBEE router(DS2000, optional) name and functions

1) Names



- A. Power button : turns on and off the zigbee router(DS2000)
- B. Power LED : indicates power status of zigbee router(DS2000)
- C. Status LED : blinks at each time heart rate signal is received.
- D. Charging LED : indicates charging status of zigbee router(DS2000).

2) Transmission range



- zigbee router(DS2000) ↔ receiver(DS1100) : maximum around 1.5km
- zigbee router(DS2000) ↔ transmitter(DS100) : maximum around 150m
- receiver(DS1100) ↔ transmitter(DS100) : maximum around 150m

8. Specifications


1) Transmitter(DS100)

	Detail		Detail
Picture		Transmission method	ZIGBEE (IEEE 802.15.4)
		Frequency range	2.4 GHz ~ 2.4835 GHz
		Available channel numbers	16ch
		Transmitting output	8dBm(6.3mW)
		Power save	<ul style="list-style-type: none"> · On when worn (automatic) · Off when not worn (automatic)
Feature	Transmitting and measuring heart rate is in one body. Convenient to wear.	Transmission range	maximum 150m
Power supply	3V lithium battery (CR2450-3V), replacement type	Size	65(W) x 38(L) x 15(H)mm
Measurement method	ECG(EeectroCardioGram) method	Weight	30g
Measurement range	· 40~240 bpm(bit per minute)		


2) Chest belt(DS100B)

	Detail		Detail
Picture		Length	<ul style="list-style-type: none"> • minimum 490 mm • maximum 1,100 mm
		weight	40g
Feature	It is made of harmless silicon material. Its unique flexibility makes it easy to wear and surface enhances comfort when worn.		


3) Receiver(DS1100)

	Detail		Detail
Picture		Transmission method	ZIGBEE (IEEE 802.15.4)
		Frequency range	2.4 GHz ~ 2.4835 GHz
		Reception	-98dBm
		Reception range	around 150m
		Maximum reception number	Maximum 100 signals
		antenna	2dBi dipole antenna
Power supply	5V (USB port power)	Size	76(L) x 28(W) x 12(H)mm
LED indicator	<ul style="list-style-type: none"> • red : supplying power • green : receiving 	weight	40g
PC interface	USB connection		

4) Wrist belts(DS100C, optional)

	Detail		Detail
Picture		Length	<ul style="list-style-type: none"> • wrist band 330 mm • cable 75 mm
		Weight	<ul style="list-style-type: none"> • wrist band 5g • cable 5g
Feature	<p>It is made of harmless silicon material. Its unique flexibility makes it easy to wear and surface enhances comfort when worn.</p>		

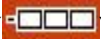
5) ZIGBEE router(DS2000, optional)

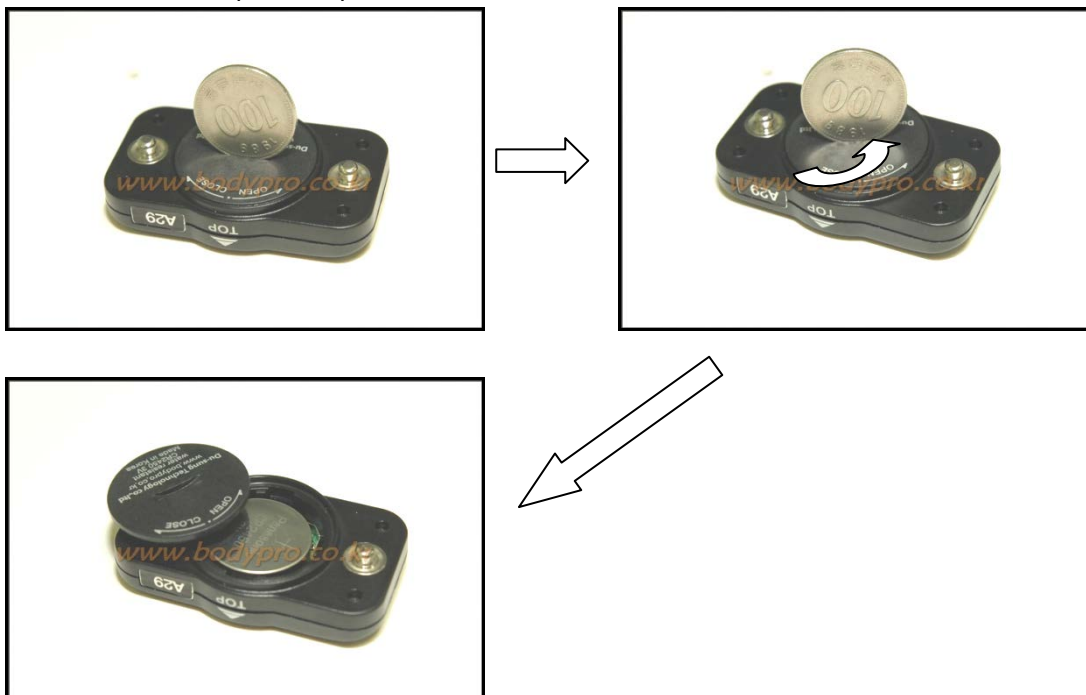
	Detail		Detail
Picture		Transmission method	ZIGBEE (IEEE 802.15.4)
		Frequency range	2.4 GHz ~ 2.4835 GHz
		Reception	-98dBm
		Reception range	More than 1.5km
		Multiple reception number	Maximum 100 signals
		Antenna	2dBi dipole antenna
Power supply	3V/600mAh × 3, rechargeable	Size	130(L) x 160(W) x 540(H)mm
LED indicator	<ul style="list-style-type: none"> • red : supplying power • green : receiving • white : recharging 	Weight	1300g (including tripod)
Interface	zigbee transmission		

6) PC system requirements

- i. CPU : Intel Pentium3 or above CPU, compatible CPU
- ii. Memory : 256MB or above RAM
- iii. HDD : 20MB or more space
- iv. CD-ROM : X8 or above CD-ROM Drive
- v. OS : Windows XP(recommended) or Vista

9. Battery Replacement

- A. If battery sign() from the program is blinking or in case monitoring doesn't work and considering its period, battery has to be replaced.
- B. Use CR2450 lithium battery(3V).
- C. Follow below steps to replace.



- i. Using a coin or other things, turn battery cap counter-clockwise to unlock.
- ii. Take the cap off and replace the battery.
- iii. Put the cap on and turn it clockwise to lock again.

10. CAUTIONS

- A. Do not place the device in humid environments
- B. Do not drop, hit or step on the device.
- C. Do not disassemble or modify the device.
- D. Do not immerse the device in water.
- E. Do not use if you have a pacemaker or other implanted electronic device.
- F. Do not use if you have any heart related disease.
- G. Stop using if you have any allergic reaction.
- H. Note that the device can be changed without notice for enhancing purpose.

11. Self-diagnosis

- A. Check if chest belt(DS100B) is fastened tight and moistened enough.
- B. Check if receiver(DS1100) is correctly connected to PC port and PC program recognizes it.
- C. Check battery for low voltage or etc.
- D. If it doesn't seem to be related to above cases, please contact us.

12. Guarantee

- A. This guarantee does not affect the consumer's statutory rights under applicable national or state laws in force, or the consumer's rights against the dealer arising from their sales/purchase contract
- B. Du-sung Technology co., Ltd guarantees the original consumer/purchaser of this device that the product will be free from defects in material or workmanship for two years from the date of purchase.
- C. The guarantee does not cover normal wear and tear damage due to misuse, abuse, accidents or non-compliance with the precautions; improper maintenance, commercial use, cracked, broken or scratched cases/displays, strap.
- D. The guarantee does not cover any damages, losses, costs or expenses, direct, indirect or incidental, consequential or special, arising out of, or related to the product.
- E. Items purchased second hand are not covered by the two year warranty, unless stipulated by local law.
- F. During the guarantee period, the product will be either repaired or replaced at any of the authorized Du-sung Technology co., Ltd no matter which country you purchased.
- G. Guarantee with respect to any product will be limited to countries where the product has been initially marketed.



Customer Service Center

 **Office Hour**

Business days : AM 09:00~ PM 18:00

Saturday, Sunday, Holiday : closed

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