User's Manual

Bluetooth Adapter (Bluetooth adapter for a glucometer) BA-110 Roche Version 1.0 (2017. 07. 20)



USA-Federal Communications Commission (FCC)

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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. If not installed and used in accordance with the instructions, it 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the distance between the equipment and the receiver.
- Connect the equipment to outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Caution: Exposure to Radio Frequency Radiation.

1. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter. To maintain compliance with FCC RF exposure guidelines for bodyworn operation, do not use accessories that contain metallic components.

2. This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

Welcome

- Thank you for purchasing Bluetooth adapter (BA-110).
- The Bluetooth adapter is a data transmitter that receives data from a glucometer and sends the data to other devices such as a mobile phone, a gateway, etc. via Bluetooth.
- The Bluetooth adapter can be connected to Accu-chek Aviva.

Packaging List

- Bluetooth adapter (BA-110)
- User's manual

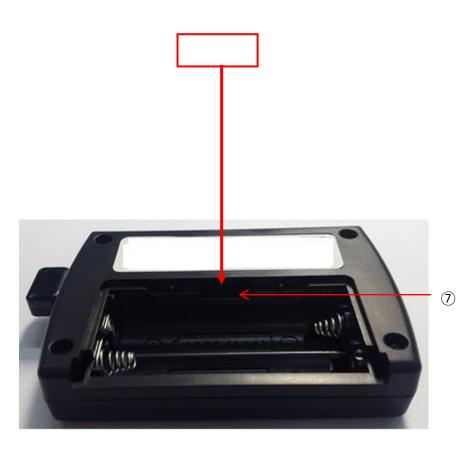
Descriptions



- 1 Body
- ② IrDA
- ③ LED: 2-color(Green and Red) LED
- (4) Red button: A button used for Bluetooth pairing or manual data transfer



- Label
- \bigcirc Dry cell cover: Cover below which dry cells are put



O Hidden button: A hidden button used for Bluetooth pairing

How to Use

- 1. [Preparation]
 - Insert batteries.

Open the cell cover to place AAA 1.5V 2 EA while checking the polarity (+,-) and then close the cover.

- Connect the cable to a glucometer
- 2. [Bluetooth pairing]

Bluetooth pairing is an authentication process between a Bluetooth adapter and a target device that readings are supposed to be sent to.

- The following procedure should be performed to pair the Bluetooth adapter with a NEW target device.
- If Bluetooth pairing fails, the latest pairing info is preserved. And the Bluetooth adapter can send readings to the latest paired device.
- If you try to pair with the latest paired device, the Bluetooth adapter considers it as a failure. This feature may make confusion. So it is recommended not to pair with already paired device again.
- There are two ways to make the device be pairing mode. For details, please see the table below. The firmware version 1.2 or later supports both.

Pairing method	With Hidden button	With Red button	
Supported firmware version	All	Version 1.2 or later versions	
Action	Press the Hidden button	Press and hold the Red button on the top cover until the LED turns RED (for more than 5 seconds)	
BT device name	AMC_JandJ	H3GMA_(Model)_(FW version)_(BT address)	
Pin CODE	1234	9314	
* Notes Model: ROCHE			

FW version: X.X (e.g. 2.0)

BT address: The last 3 hexas, that is, 6 digits. For example, A1B2C3.

Table 2-1

- The detailed steps are as follows:
 - Let the device be pairing mode. For example, press and hold the Red button for more than 5 seconds.
 - (2) When the LED turns RED, the Bluetooth adapter is at pairing standby mode.
 - ③ Perform "Device search" with the target device and find a device named as
 → AMC_JandJ or H3GMA_(Model)_(FW version)_(BT address)
 - (4) Pair the target device with the Bluetooth adapter.
 - (5) If the pairing succeeds, the Green LED blinks three(3) times.

If fails, Red LED blinks five(5) times.

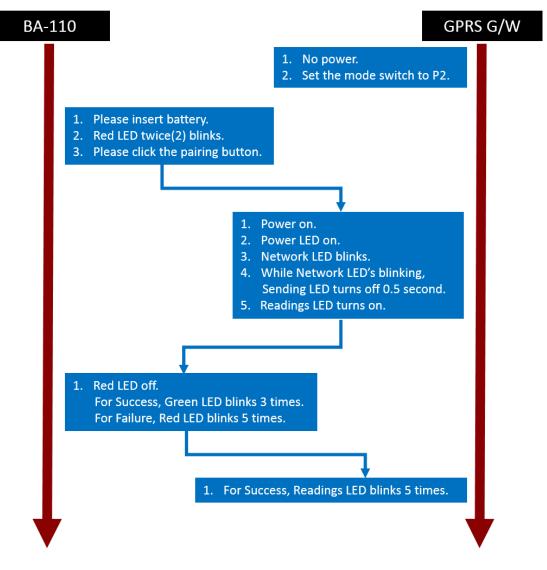


Figure 1 Sample procedure of Bluetooth pairing with H3 GPRS gateway(H3G-700)

3. [Data transfer]

- Press the Red button of the Bluetooth adapter while a glucometer and the adapter are being connected.(Accu-Chek Aviva)
- The adapter wakes up and starts downloading data from the glucometer. At the wake-up, you can see Green LED's short flashing and "PC" on the glucometer display.
- If the data transmission succeeds, the Green LED blinks three(3) times and if fails, the Red LED blinks five(5) times.
- The measured data is transmitted to the paired target device such as a mobile phone, a gateway, etc.
- Even in the case that there is no reading unsent in the glucometer; the adapter connects to the target device via Bluetooth. But it disconnects soon.
- Notes
 - Only normal readings will be transmitted. Control solution readings and erroneous readings will not be transmitted.
 - "HI" and "LO" readings will be transmitted.
 - If data download from the glucometer succeeds but Bluetooth communication fails, then the downloaded readings are stored in the adapter and the readings will be transferred to the target device at the next successful Bluetooth communication.
 - · 혈당계가 wakeup or sleep 상태에서도 Red button 으로 측정데이터 다운로드가 가능 합니다.
 - Automatic time synchronization is not supported.

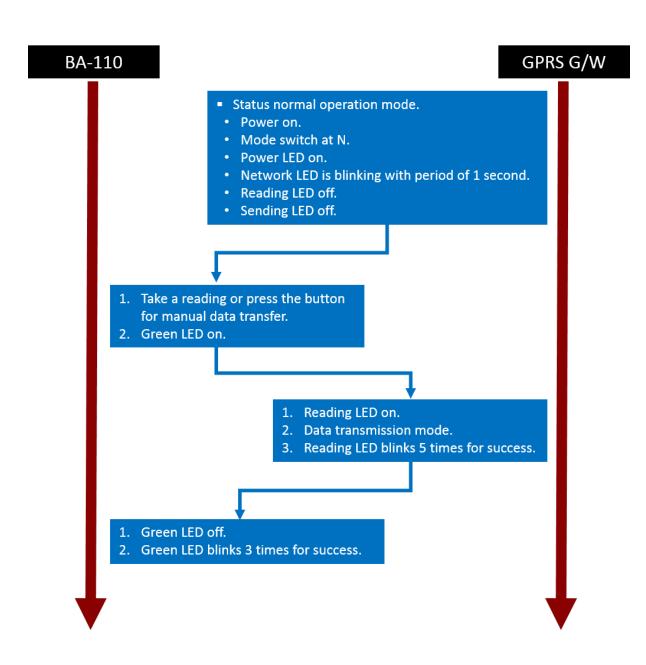


Figure 2 Sample procedure of data transmission to H3 GPRS gateway(H3G-700)

- 4. [Changing the glucometer connected]
 - After pairing or changing the glucometer, it is strongly recommended to do data transmission once.
 - When the glucometer is changed, the entire information stored in the adapter will be initialized. For example, readings downloaded from a glucometer before will be deleted.

- 5. [Low battery sign and battery replacement]
 - If the LED keeps blinking Red just after taking a reading or pressing the Red button, please replace the batteries with brand-new ones.

Cautions

- Be sure to carefully read the user's manual before use.
- Keep the Bluetooth adapter in a clean and dry place away from dust or corrosive gases as well as away from fires
- Do not apply any shock or vibration to the product
- Do not rub the product with inflammable such as alcohol, benzene, or acetone the can cause chemical change. Use a dry cloth to prevent the surface from being damaged.
- Do not stretch nor bend the cable by force.
- Disassembling the product is not advisable.
- Keep a Bluetooth adapter connected to a glucometer. Frequent connection and disconnection may cause damages on the connector port.
- If Bluetooth communication failure continues for a long time, the oldest readings may not be transferred to the target device. The maximum storage of the adapter is 500 readings.

Troubleshooting

- If you have some troubles in data transmission, please check the below
 - Try to do "Data transfer" by pressing the Red button while a glucometer and the adapter are being connected.
 - Replace batteries with new ones.
 - Disconnect the glucometer, remove batteries, press the Red button several times, wait for a while, insert batteries again, and connect the glucometer again. And take a reading and confirm data transmission.
 - If the adapter does not work even after the above, please contact customer services.

Specifications

- Function: It receives blood glucose data measured from a glucometer and transmits to a pre-determined target device via Bluetooth.
- Usable devices: Accu-chek Aviva
- Bluetooth 2.0 Class 2, SPP.
- Connectivity to smart phones: Connectivity to Android smart phones is generally available. But the adapter does not support communication with iPhones.
- Maximum storage: 500 readings.
- Power supply: Dry cells AAA 2 EA
- Battery life: More than 1,000 tests or 3 months (For normal use)
- Size: $70 \times 47 \times 16 \text{ mm}$
- Weight (other than the batteries): 28 g

Remarks

This version instruction manual is generally based on the firmware version 2.8.

Customer service

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Revision notes

Version	Change descriptions	Date
1.0	Initial release	2017. 07. 20.