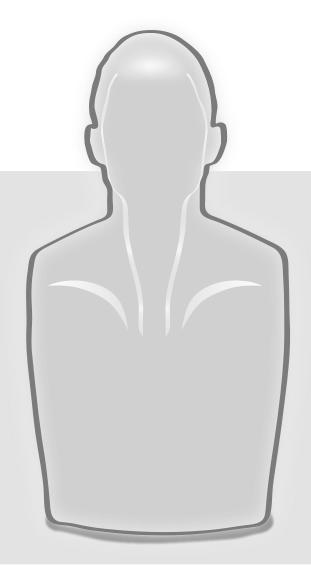
Advanced CPR Coaching

BRAVDEN PRO

Instructions for Use







INNOSONIAN



Getting started

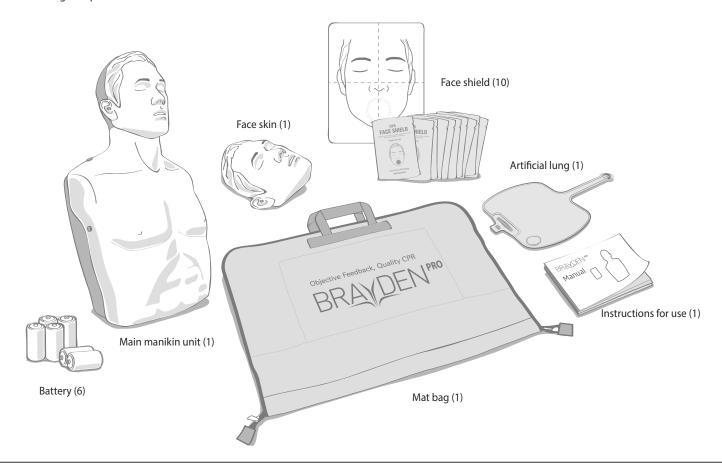
Thank you for purchasing our product.

The purpose of CPR is to supply oxygen to the brain and heart of a patient whose heart has stopped beating normally. Applying chest compressions correctly achieves this by causing blood to flow, supplying oxygen to the brain and heart.

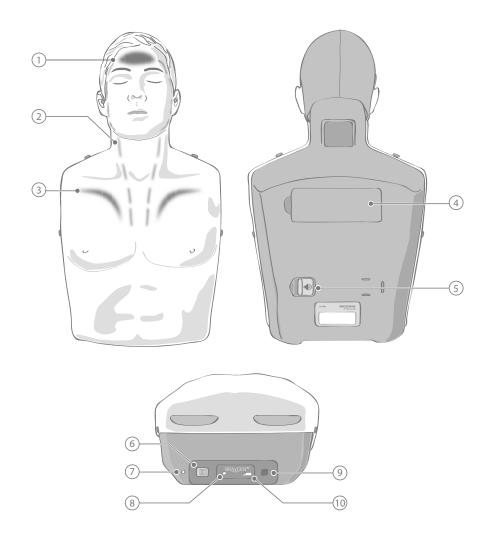
'BRAYDEN PRO' is the first CPR training manikin in the world which has a blood circulation display – designed to help the student understand and remember the principles of CPR – including a mobile app.

The student can wirelessly connect via Bluetooth the Brayden Pro manikin with a Google Android device (sold separately) to check, analyze, manage, and share the results of performing CPR in real time through the BRAYDEN PRO app (free of charge).

The product package includes the following components:



Component names



① Normal circulation indication light

When the compression depth and speed and correct release between compressions are performed, the light will illuminate. With this light, the student can easily see if the compressions are being performed at the correct depth and frequency.

② Blood circulation indication lights

These illuminate to represent the flow of blood from the heart to the brain through chest compressions. The speed of the blood flow varies according to the depth and frequency of the chest compressions.

3 Compression depth indication lights

These illuminate to represent the volume of blood being circulated by the chest compressions depending upon the depth of the compressions. Deeper compressions illuminate the lights for a longer time, shallower compressions illuminate the lights for a shorter time.

4 Battery cover

If the battery is low, open the battery cover and replace the batteries.

⑤ Clicker On/Off switch

This turns the clicker on and off.

6 Power switch

This powers the manikin on and off.

Power status indicator lamp

This indicates the power status. A green light indicates that it is operating normally, while a flashing red light indicates that the batteries are running low.

8 Bluetooth button

While connecting, it will flash green every 2 seconds, becoming a solid green once the connection is made.

Press this button to disconnect.

9 AC Adapter connection

Connect the optional AC Adapter here.

10 Terminal for inspection

This terminal is used by a professional engineer to inspect the main unit. Users should not touch.



Connecting the mobile app

■ Installing the mobile app

This mobile app runs on Google Android device.

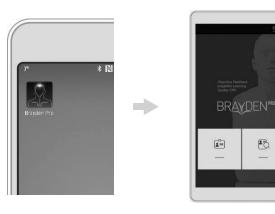


- Should be downloaded under a WiFi environment. Communication charges may apply in some cases.
- For optimal operation of the BRAYDEN PRO app, a Google Android device equipped with Android operating system version 6.0 or higher and Bluetooth hardware 4.1 or higher is recommended.



Connecting the mobile app

■ Connecting with the BRAYDEN PRO manikin



• Select Learner mode or Instructor mode.

Learner mode

Instructor mode



- 1. Turn on the manikin's **power** switch. (The Bluetooth button of the manikin will flash every 2 seconds.)
- 2. Click the circular **Search for** an available manikin button.



- 1. Turn on the manikin's **power** switch. (The Bluetooth button of the manikin will flash every 2 seconds.)
- 2. A list of 6 minikin options will appear. Select the Search for an available manikin button for the manikin you intend to use.



3. Select the relevant manikin from the Bluetooth list. If the item does not appear, click the Rescan button.



4. Once the connection is made, the Bluetooth button of the manikin will illuminate blue.



3. Select the relevant manikin from the Bluetooth list. If the item does not appear, click the Rescan button.



- 4. Once the connection is made, the same light position on the manikin and that displayed on the app will illuminate.
- 5. The **Bluetooth button** of the manikin will illuminate blue.
- Repeat steps 1 to 5 when connecting to 2 or more manikins at the same time.



app

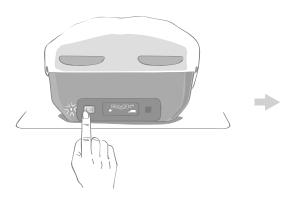
• Opening BRAYDEN PRO

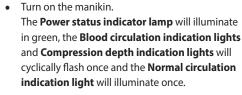
- Once the connection is made for the first time, the manikin and app will connect automatically.
- For more detailed instructions on use, refer to the instruction manual provided with the BRAYDEN PRO app.



Using the manikin

Chest compression

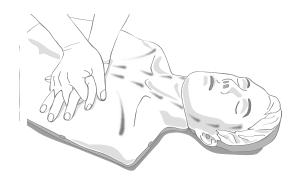






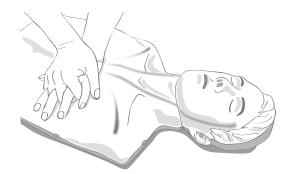


When chest compressions of excessive depth are performed, the **Compression depth indication lights** will illuminate.

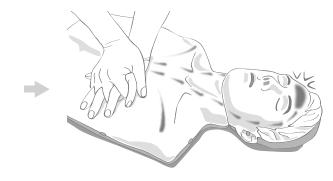


 Once you start compressions, the Blood circulation and Compression depth indication lights will cyclically illuminate.

■ Fast compression



When the compressions are performed too rapidly all of the **Blood circulation indication lights** will illuminate.

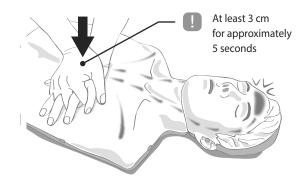


 Once you are performing compressions at the correct depth and speed and with correct release between compressions, the Blood circulation and Compression depth indication lights will cyclically flash and the Normal circulation indication light will illuminate.

Note

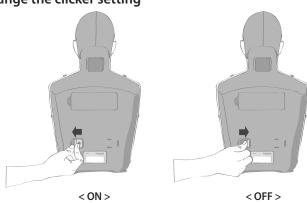
- When the BRAYDEN PRO app is connected, the manikin's indication lights will not illuminate if the chest compressions are performed for the purpose of education.
- When the manikin is turned on, a one-time automatic calibration is carried out for approximately 2 seconds. It is recommended that chest compressions on the manikin are not performed when the automatic calibration is occurring.
- If the battery life is low, the Power status indicator lamp will flash red. When this happens, replace the batteries with new ones.

■ Change the operation method



- When the manikin is turned on, the manikin operates in **<basic operation>**. When the chest is continuously compressed once to a depth of at least 3cm for approximately 5 seconds then the manikin will switch to **<specialised operation>** mode.
- In <basic operation>, the Normal circulation indication light will illuminate when chest compressions have a depth of compression at least 5cm and a speed between 100 times and 120 times per minute.
 In <specialized operation>, the Normal circulation indication light will illuminate when chest compressions have a depth of compression between 5cm and 6cm and a speed between 100 times and 120 times per minute.

■ Change the clicker setting



Turn the clicker on and off using the switch as shown.
 When the clicker is <ON>, it makes a "clicking" sound when the chest is compressed at least 5 cm.

Artificial respiration



- Open the face shield.
- Place the mouth part of the face shield on the mouth of the manikin.
- Open the airway.

- Hold the nose with your thumb and index finger, and blow air through the mouth for 1 second.
- Visually check that the manikin chest is rising.
 Alternatively, connect the manikin to the
 Brayden Pro mobile app and look for a change in the CPR feedback display.

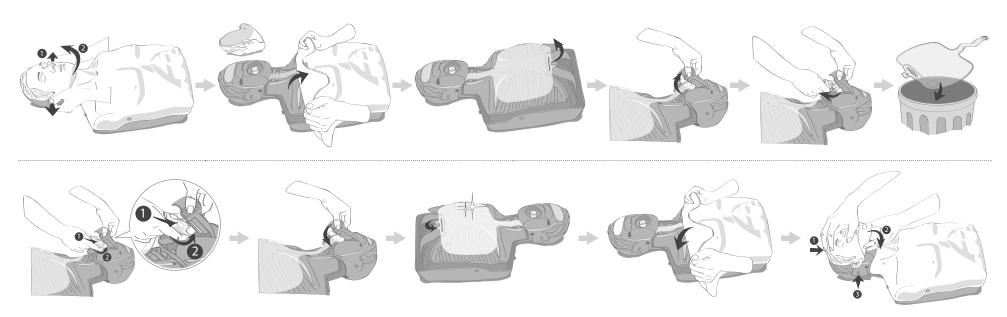


• Consider adding the following note: The Brayden Pro manikin can also be ventilated using other airway barrier devices such as an Adult sized pocket mask or an Adult sized Bag Valve Mask.



Maintenance of the manikin

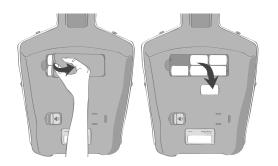
■ Replacing the artificial lung



Note

• To see a video of how to change the lung then please go to www.innosonian.eu

■ Replacing the battery



Caution

- Keep used batteries out of reach of children and dispose of safely.
- Do not use new batteries and old batteries together. Replace all 6 batteries together.
- If you do not plan to use the manikin for a long period of time, remove and store the batteries.

Product specifications and optional accessories

■ Product specifications (IM16)

Dimensions 32 cm x 59 cm x 21 cm (W x H x D)

Weight 3.2 kg (7.0 lb)

Operating temperature 0 °C – 40 °C (32 °F – 104 °F) Storage temperature -20 °C - 60 °C (-4 °F - 140 °F)

Relative humidity between 5 % – 95 % Humidity

(without dew condensation)

AC Adapter (AC 100 – 260 V, Output DC 9 V 1 A) Power

Battery C type 1.5 V (6 batteries)

Components and optional accessories



Face skin IM16-SA01



Body skin IM16-SA02



Head unit IM16-SA03



Chin IM16-SA04



Body IM16-SA05



Rib IM16-SA06



Face connection IM16-SA07



Airway valve IM16-SA08



Artificial lung IM16-SA09

BRAYDEN

Mat bag



Clicker IM16-SA10



Clicker actuator IM16-SA11



Spring IM16-SA12



Instructions for use IM16-SA13 IM16-SA14





Face shield IM16-SA15



Respiration backflow prevention film IM16-SA16



Air filter IM16-SA17



AC Adapter IM16-OA01

* not included but available as an optional extra



Google Android device

* not included and needs to be purchased separately



Quality assurance

The manikin is guaranteed against defects for 3 years from the date of purchase. The electronic components are guaranteed for 2 years from the date of purchase. Consumable items are excluded from this guarantee. If making a claim, you must enclose a proof of purchase and details of when and where the manikin was purchased, to check the guarantee period. In the event that you are not able to supply a proof of purchase, or if it is illegible, free after sales service may be restricted.

Also, in any of the following cases, after-sales service may be restricted:

- Damage or defect of the manikin due to abnormal use, user's negligence or accident
- Damage or defect of the manikin due to repair of the manikin at a place other than the company, authorized sales agency or service center or replacement of component with another company's product which is not provided by us
- Damage or defect of the manikin due to its use or storage in unsuitable environments such as high temperatures, high humidity, or exposed to chemical compounds or microorganisms
- Damage or defect of the manikin due to natural disasters such as fire, earthquake, flood, lightning, and other events that are beyond the scope of the company's control
- When information such as the date of purchase, customers name, name of supplier and manufacture's serial number has been modified intentionally
- When there is no proof of purchase with the product guarantee

Service center

Innosonian, Inc.

Homepage www.innosonian.com

Address 3rd floor, 10-11, Seocho-daero 19-gil, Seocho-gu, Seoul, Korea,

(Zip code)06573

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Product purchase and service inquiries

Tel +82 70-4801-5378

E-mail info@innosonian.com

Product name BRAYDEN PRO

Model name IM16

Manufacturer / Country Innosonian, Inc. / Korea

Authenticator identification code MSIP-RMM-InM-IM16

Class B device

 $(Broad casting\ communication$

device for home use)

This device has gone through EMC registration for home use (Class B) which means it is intended mainly for home use. This device can

be used in all areas.

This device may malfunction when operated very close to a wireless communication device such as a mobile phone, WiFi

connections or a Bluetooth device.





This manikin observes the environmental requirements specified in EMC Guideline 2014/30/EU and EU Guideline RoHS 2011/65/EU for harmful substances.

Cautions when disposing of battery

Do not dispose of used batteries in a fire. Recycle them through your local, free battery return system.