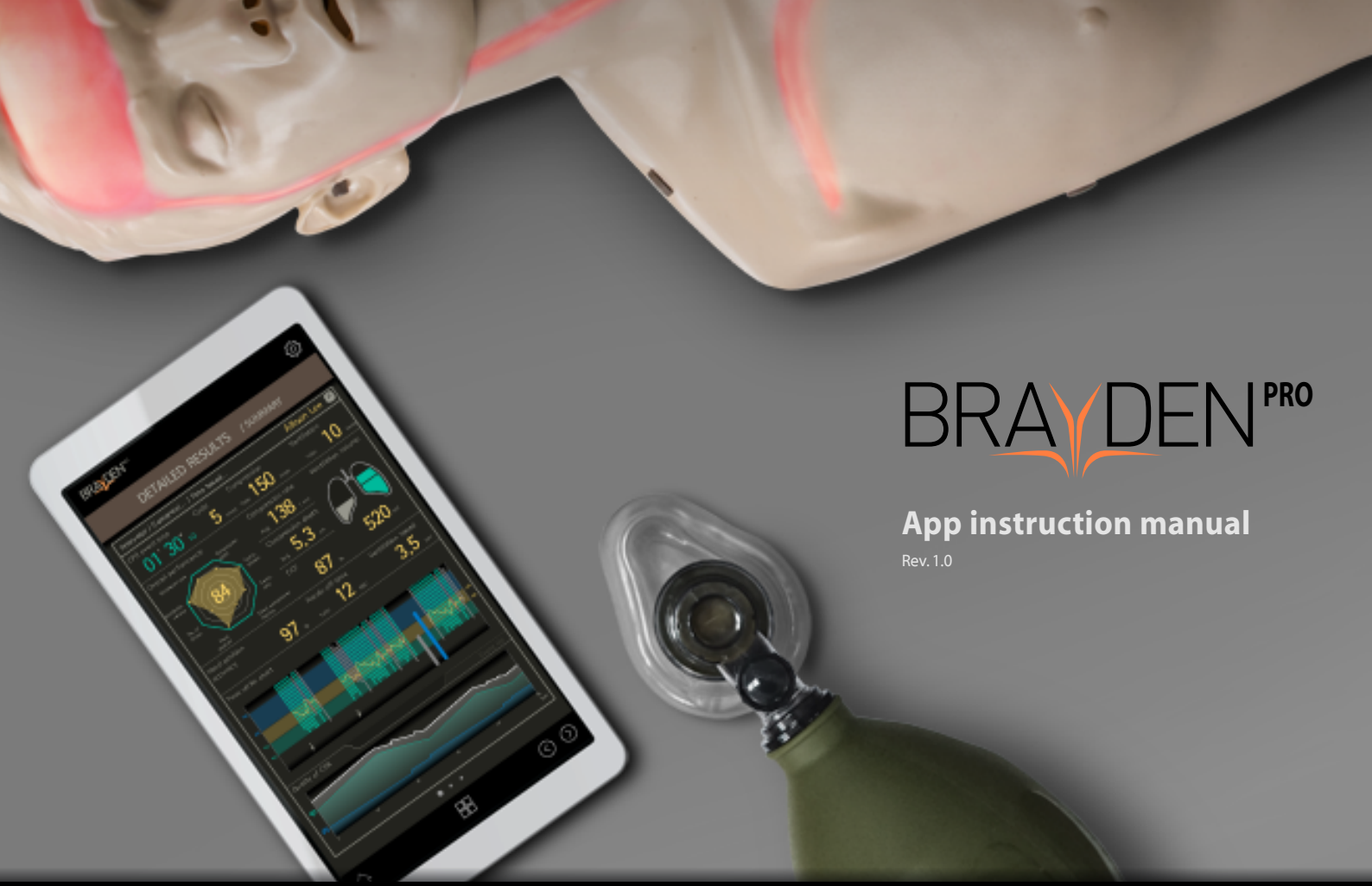


BRAYDEN PRO

App instruction manual

Rev. 1.0

INNOSONIAN

English

Getting started

BRAYDEN PRO is a CPR training system which uses an Android compatible app in conjunction with a manikin, the first in the world to display blood circulation in the upper body.
The BRAYDEN PRO system can be used to help understand the effects of CPR training as well as help improve the quality of CPR performance.

BRAYDEN PRO provides real-time feedback of CPR performance which can be reviewed and analysed and downloaded and exported by connecting the BRAYDEN PRO manikin to an Android compatible device loaded with the BRAYDEN PRO app.

Table of Contents

0 Getting started / Table of Contents / Summary of BRAYDEN PRO app

1 Select a user (Home menu)

2 Connect the BRAYDEN PRO manikin wireless

3 Select training and assessment method (Main menu)

4 Start and stop training and assessment

5 Review and send the results

Note

- *The app screen displayed in the instruction manual may differ from the Android device used.*
- *The functions, composition and design of this app are subject to change without notice.*
- *Bluetooth should be enabled in your Android device settings.*
- *This app instruction manual is provided in PDF format.*
  The tap link function is partially supported in this instruction manual.*

*** The tap link function**

If the symbol on the left (tapping finger) is displayed in the instruction manual, the page for the next step will appear when you tap the related icon.
When you tap the top right corner of each page in the instruction manual, the Table of Contents page will appear.

The tap link function may not be supported depending on the PDF viewer app you use.

Summary of BRAYDEN PRO app

1 Select a user (Home menu)

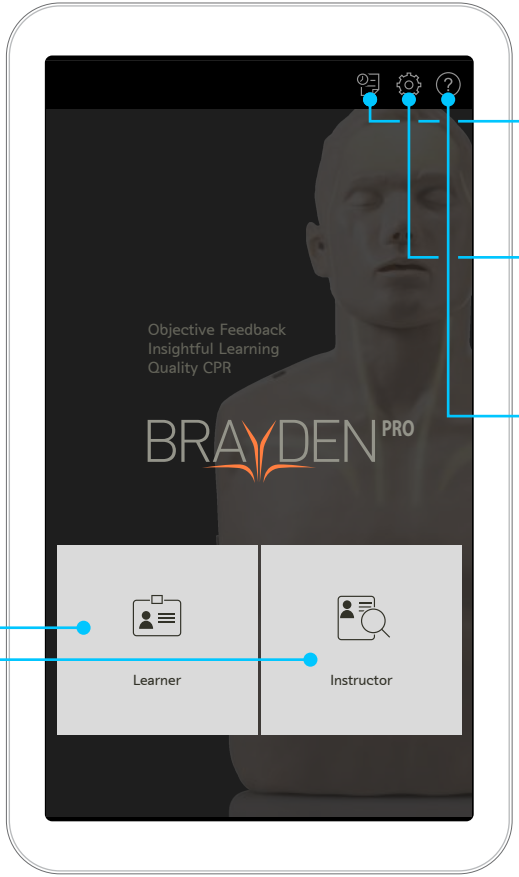
2 Connect the BRAYDEN PRO manikin wireless

3 Select training and assessment method (Main menu)

4 Start and stop training and assessment

5 Review and send the results

Select a user (Home menu)



Training Record

Manage the data results of learners.
Confirm the data results by name, date or score and view the page results by learner.

Setup

Change the settings of the app and the BRAYDEN PRO manikin, including Lay Rescuer / Professional Rescuer settings and a range of key CPR Guideline parameters.

App instruction manual

View this instruction manual.

Learner Mode

Select to enable a learner to train by himself / herself.

Instructor Mode

Select to enable an instructor to help a learner train. Up to 6 manikins can be selected simultaneously. The assessment of a single individual can also be carried out.

■ Connecting with the BRAYDEN PRO manikin

- Select **Learner** Mode or **Instructor** Mode from the **Home menu**.

Learner

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.

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 and the screen will move to the **Main menu**.

Move to the **Main menu**

Instructor

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 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.
6. Move to the **Main menu** by tapping the ⟩ button at the bottom.

Move to the **Main menu**

Note

- *Bluetooth should be enabled in the Android device settings.*
- *Once the connection is made for the first time, the manikin and app will connect automatically.*

Learner Mode

- **Top-level menu**

Single rescuer Mode

Select when a single learner trains for CPR.

Two rescuer Mode

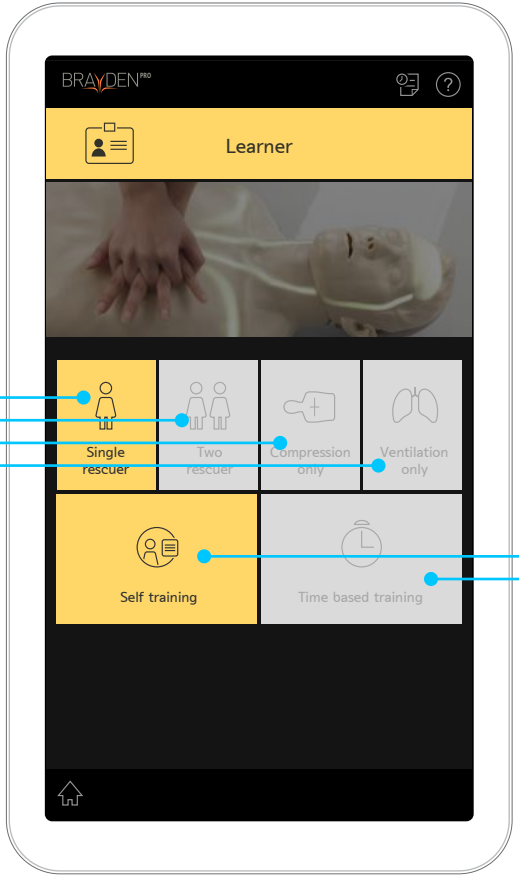
Select when two learners train for CPR working as a pair.

Chest compression only Mode

Select this for training on chest compression only.

Ventilation only Mode

Select for training with ventilations only.



Note

Selected items
(The previously-executed mode is displayed as the default value)

Selectable items

Non-selectable items
(Changes according to the selection of the Top-level menu)

- **The results scores are calculated using a scoring algorithm weighted and scored according to the key CPR parameters measured. This scoring algorithm is adjusted when in single and two rescuer mode accordingly.**

- **Sub-level menu**

Self training Mode

Begin self training.

Time based training Mode

Begin time based training.

Move to page "Start and stop Self-training Mode" in chapter [4. Start and stop training/assessment] by tapping the *Sub-level menu*.

Instructor Mode

- **Top-level menu**

  Monitoring Mode

  Select this to monitor a learner.

- **Sub-level menu**

  Single rescuer monitoring Mode

  Begin single rescuer training.

  Two rescuer monitoring Mode

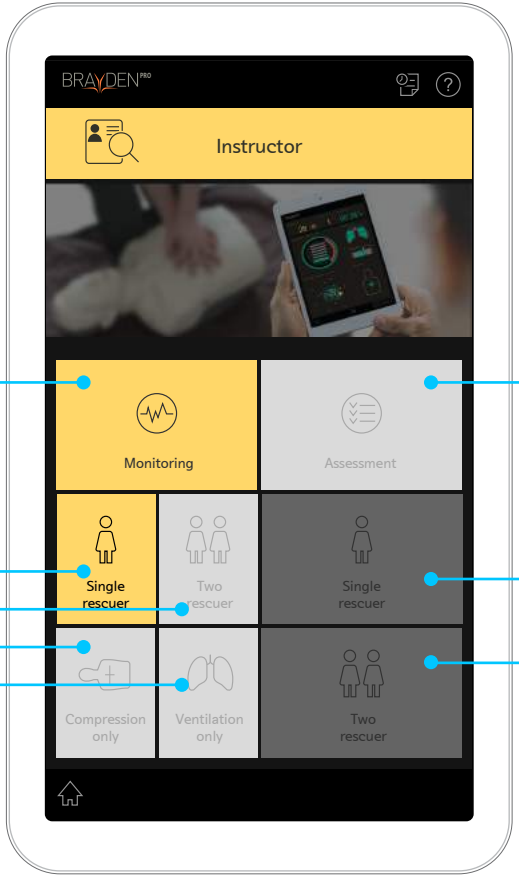
  Begin two rescuer training.

  Chest compression only monitoring Mode

  Begin the chest compression only training.

  Ventilation only monitoring Mode

  Begin the ventilation only training.



Note

Selected items
(The previously-executed mode is displayed as the default value)

Selectable items

Non-selectable items
(Changes according to the selection of the Top-level menu)

- **The results scores are calculated using a scoring algorithm weighted and scored according to the key CPR parameters measured. This scoring algorithm is adjusted when in single and two rescuer mode accordingly.**

- **Top-level menu**

  Assessment Mode

  Select this to assess a learner.

- **Sub-level menu**

  Single rescuer assessment Mode

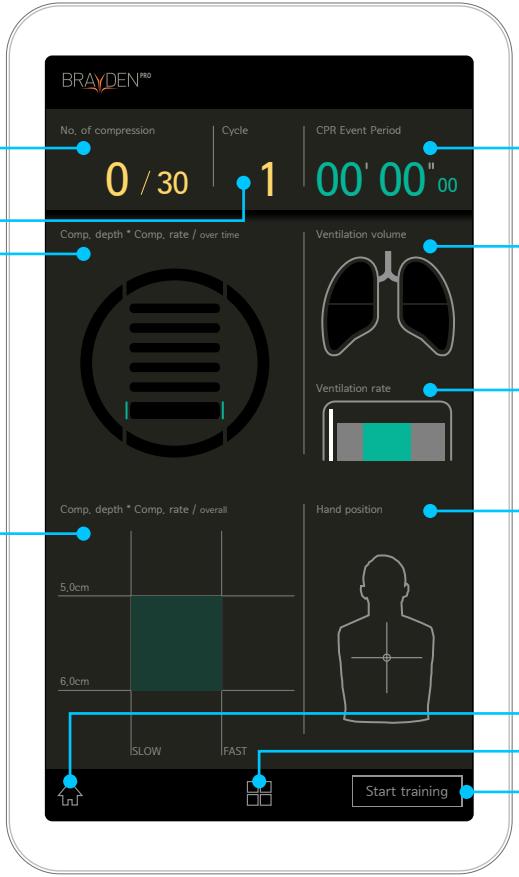
  Begin single rescuer assessment.

  Two rescuer assessment Mode

  Begin two rescuer assessment.

Move to page "Start and stop Monitoring Mode" or "Start and stop Assessment Mode" in chapter [4. Start and stop training/assessment] by tapping the *Sub-level menu*.

Start and stop Self training Mode (1/3)



No. of compression

The number of compressions by cycle is displayed.

Cycle

The number of compressions and ventilations are recorded and a corresponding cycle number is displayed.

Comp. depth * Comp. rate / over time

Correct depth, speed (rate) and compression release are measured and displayed for each compression.

Comp. depth * Comp. rate / overall

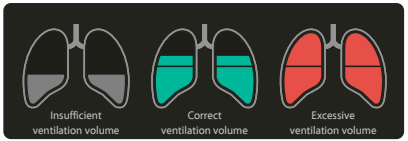
The overall compression depth, speed (rate) and compression release of the current cycle are displayed on a distribution diagram to help encourage consistent and correct chest compressions.

CPR Event Period

Starts when the *Start training* button is tapped.

Ventilation volume

The lung is displayed in grey for insufficient ventilation volume, green for correct ventilation volume and red for excessive ventilation volume.



Ventilation rate

A needle pointer moves to the green zone when ventilations are carried out at a frequency of two times per cycle.

Hand position

The hand position for each chest compression is displayed.

Home menu

Main menu

Start / Stop training

Start and stop training.

Start and stop Self training Mode (2/3)

Comp. depth * Comp. rate / over time

Detailed analysis is displayed for each chest compression.

No chest compression release indicator lamp

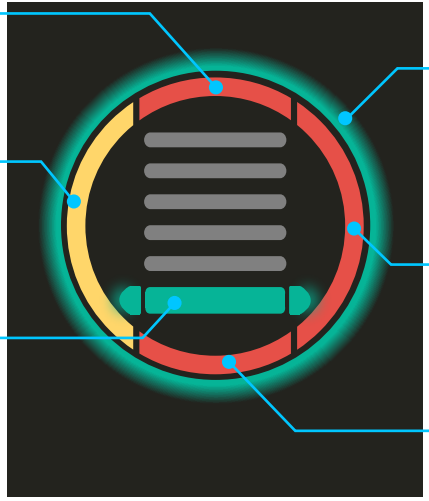
Illuminates red when compression is not released properly.

Slow chest compression speed indicator lamp

Illuminates yellow when chest compression speed is too slow.

Normal chest compression depth indicator lamp

Illuminates green when chest compression depth is optimal.



Optimal chest compression indicator lamp

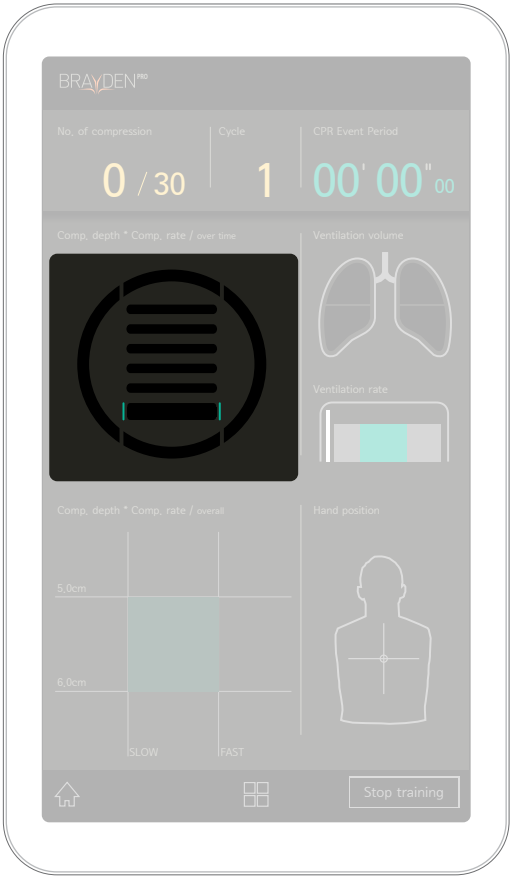
When both compression speed and compression depth are optimal, a green circle will appear.

Fast chest compression indicator lamp

Illuminates red when chest compression speed is too fast.

Excessive compression indicator lamp

Illuminates red when compression depth is too deep.



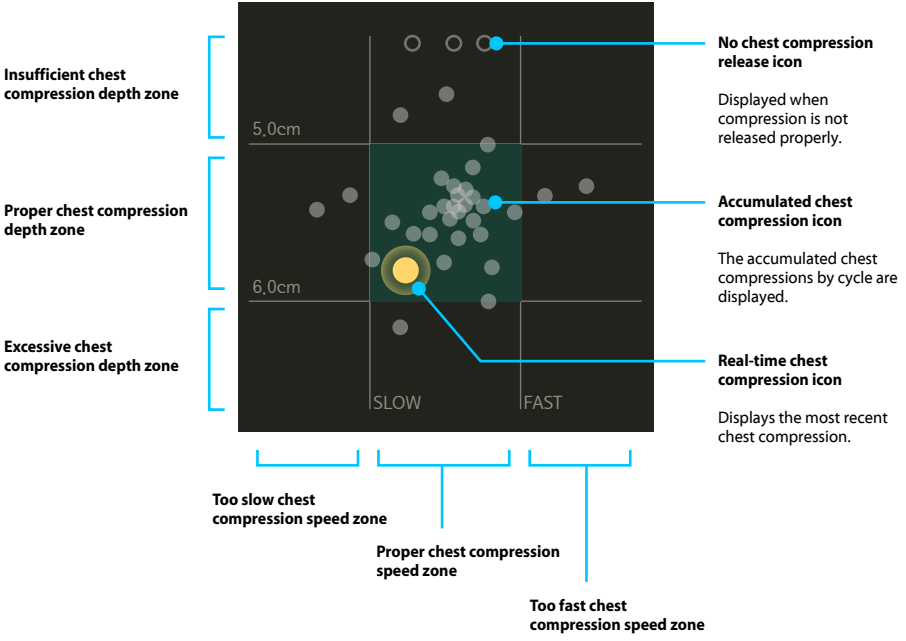
Note

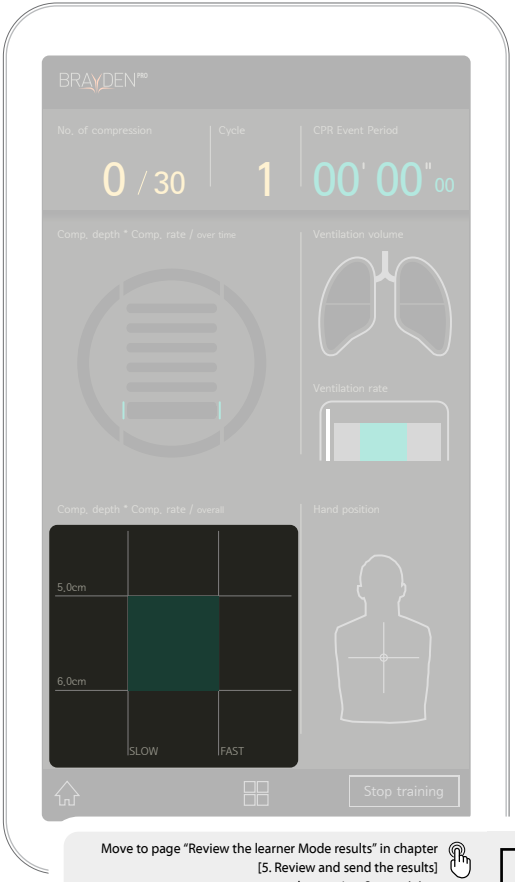
- *If no chest compression is carried out for 3 seconds or more, the screen will change to the Hands-off time screen, indicating no compressions performed until the next chest compression is performed.*

Start and stop Self training Mode (3/3)

Comp. depth * Comp. rate / overall

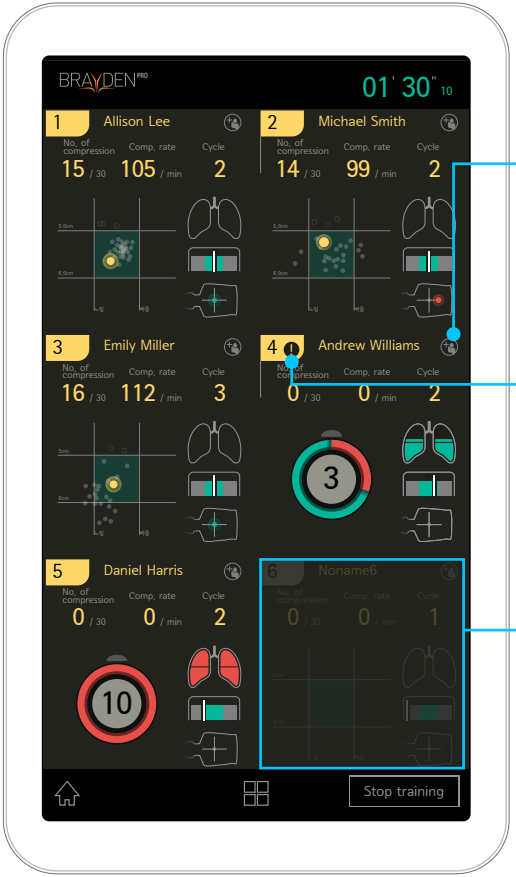
The accumulated record by cycle is displayed to promote consistent chest compression performance.





Move to page "Review the learner Mode results" in chapter [5. Review and send the results] by tapping *Stop training*.

Start and stop Monitoring Mode



Change learner

When you tap the Change learner icon, the entered name on the left will be reset to noname (*number*).
Tap noname (*number*) and enter the new learner information.

Manikin troubleshooter indicator

This is displayed when an abnormality is detected according to the self-check results of the BRAYDEN PRO manikin.
Check the details by tapping it.

** If this icon is displayed, check the details and contact the place of purchase or a service center in your area.*

The BRAYDEN PRO manikin "No connection" window

If a BRAYDEN PRO manikin is not connected, the related area will become inactive.

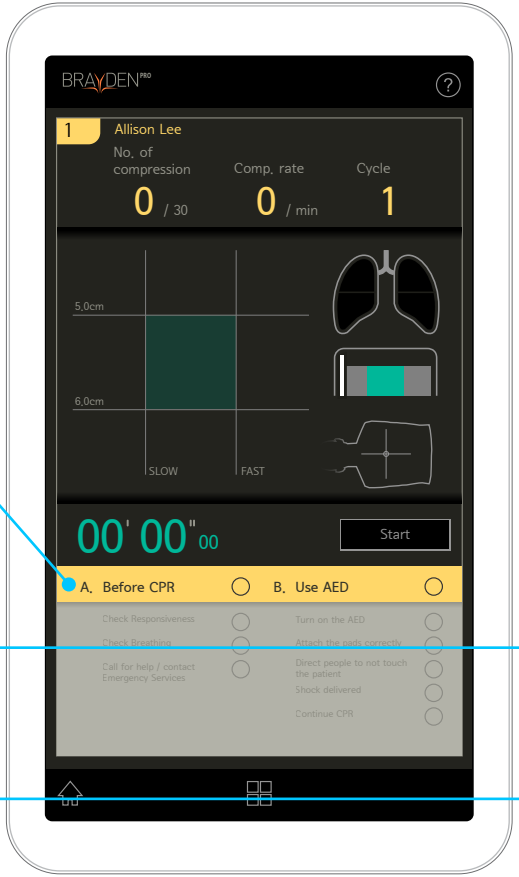
Note

- *Simultaneous monitoring is available in real time by connecting up to 6 BRAYDEN PRO manikins.*
- *For detailed descriptions of items, refer to the [Start and stop Self-training Mode] page.*

Move to page "Review the Instructor Mode results" in chapter [5. Review and send the results] by tapping *Stop training*.

Start and stop Assessment Mode

When this is area is highlighted by tapping on it, the event items listed below will be highlighted and enabled. These event items can be recorded by tapping each item as the assessment is correctly carried out. These items, however, are not reflected in the scoring algorithm.



When this item is marked, the event item at the bottom will be enabled.
The enabled event item is entered during assessment but is not reflected in the results score.

Retry

Tap when you wish to carry out another assessment without leaving the results after the assessment begins.

Shock delivered

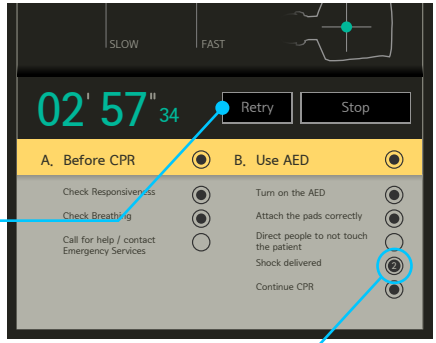
Records the number of shocks whenever the relevant item is tapped.

Note

- *Carry out separate assessments using one manikin selected from up to 6 connected BRAYDEN PRO manikins.*

*** Start assessment**

Record the event items in real time as the learner carries out the assessment.
The time that each event item has been recorded can be observed on the results page.



Move to page "Review and send the detailed results" in chapter [5. Review and send the results] by tapping *Stop*.

Review the Learner Mode results

CPR parameters are displayed on a pictorial diagram which are scored against a theoretical perfect score. An overall Quality Score is also displayed.

Compression depth
Illustrates the chest compression depth performance in accordance with the parameters set.

Compression release
Illustrates the chest compression release performance.

Compression rate
Illustrates the chest compression rate performance in accordance with the parameters set.

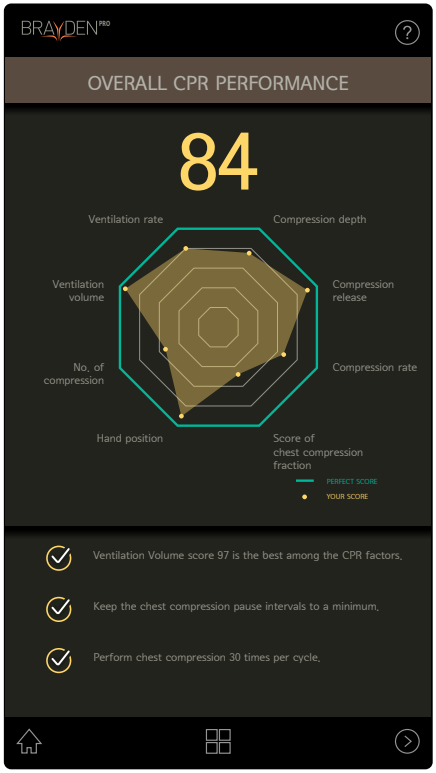
Score of chest compression fraction
Measures the hands off time (as a percentage of total CPR time) but converted into a maximum score out of 100.

Hand position
Records the accuracy of the chest compression hand position.

No. of compression
Illustrates the accuracy of counting the correct number of compressions per cycle.

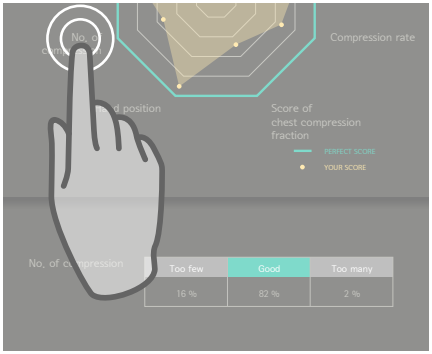
Ventilation volume
Illustrates the ventilation volume performance recorded in accordance with the parameters set.

Ventilation rate
Illustrates the ventilation rate performance recorded.



*** Detailed data**

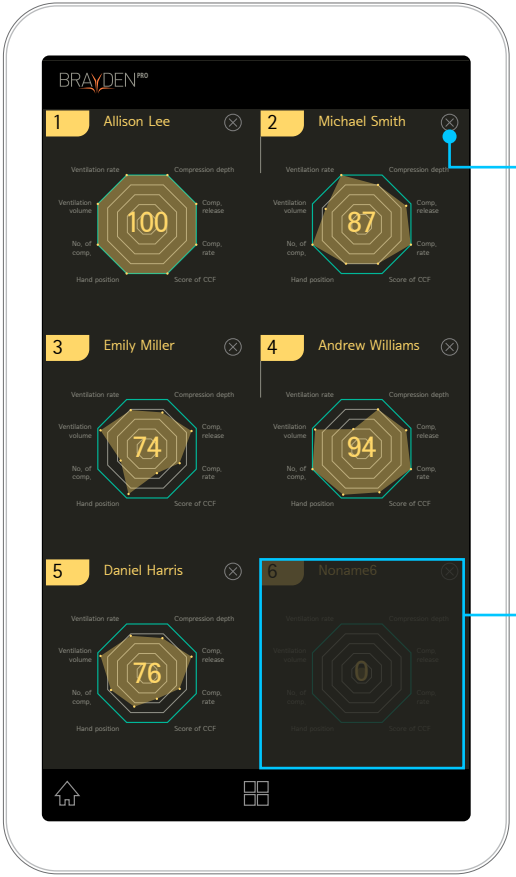
When you tap each item, the detailed results of the relevant item will be displayed at the bottom.



Move to page "Review and send the detailed results" in chapter [5. Review and send the results] by tapping ⟩ button at the bottom.

Review the Instructor Mode results

When you tap the score of each item, the results screen for the relevant learner will be displayed.



Delete the results

The results for the relevant learner will be deleted and not saved.

The BRAYDEN PRO manikin "No connection" window

If a BRAYDEN PRO manikin is not connected, the related area will become inactive.

Move to page "Review and send the detailed results" in chapter [5. Review and send the results] by tapping the score of each item.

Review and send the detailed results

- Self training Mode, Monitoring Mode

Training Mode

The Training Mode is displayed.

Subject

A subject selected from the Settings screen is displayed.

L - *Lay Rescuer*
P - *Professional Rescuer*

1st average ventilation volume

2nd average ventilation volume

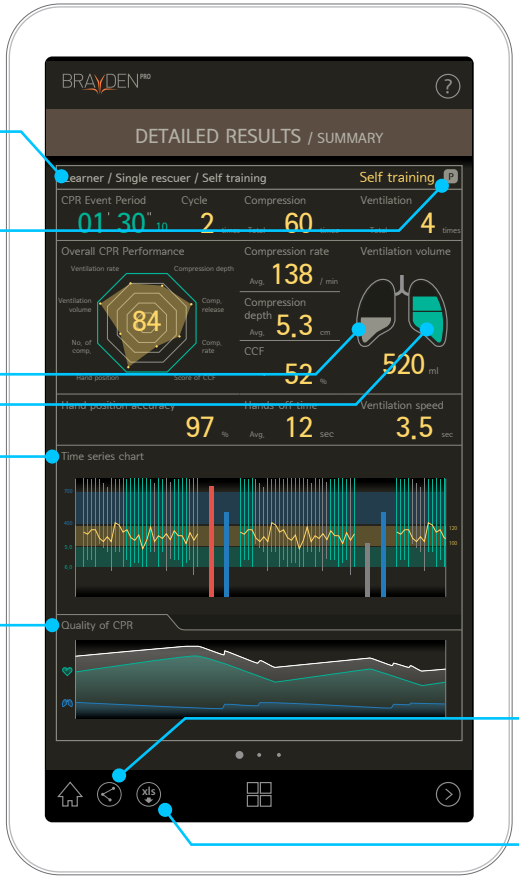
Time series chart

Chest compression depth, chest compression speed and ventilation rate are displayed in chronological order.

Quality of CPR

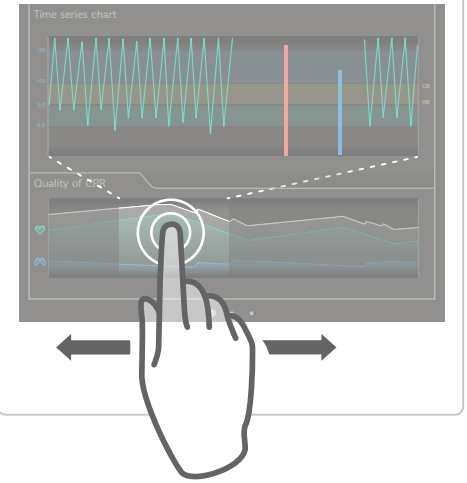
The trend of chest compression quality (*green line*) and ventilation quality (*blue line*) is recorded over time and the trend for overall CPR quality (*white line*) is displayed.

When you tap the graph, you can enlarge and scroll* it.



***Enlarge and scroll**

When you tap the **Quality of CPR** trend screen, the corresponding area of the **Time series chart** is enlarged and highlighted (*showing 15 seconds of activity*). Tap again to return to the full screen.



Send a file in an image format

You can convert the results to a PNG file and send it by e-mail, share it on social media, or save it; other options are also available.

Send a file in document format

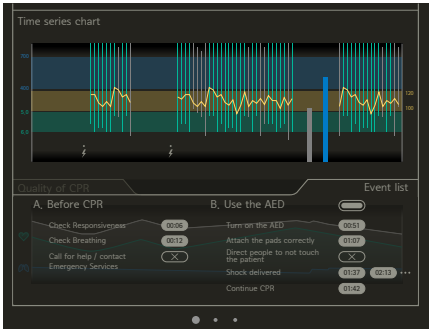
You can also convert the results into an XLS file and send by e-mail or save it.

■ Review and send the detailed results

- Assessment Mode

*** Event list**

You can review the timing of each recorded Event item as well as the Quality of CPR trends.



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