1. Product Name

CardioWall® (Large) & CardioWall® (Small)

2. Product Code

21171 and 21163

3. Colour

Colours may vary from product shown

4. Brief Description

A wall mounted interactive game which has physical, cognitive benefits for the user and has gradeable sound and activities. Robust, this panel can withstand vigorous activity.

5. Contents

1 x CardioWall with either 5 light pods (Small) or 9 light pods (Large)

6. Snoezelen® Stimulations

- Sight
- Sound
- Touch
- Vestibular
- Proprioceptive

7. Best Use

Wall mount and use interactively or passively. The use of two CardioWalls side by side allows further opportunities for interaction and team activities.

8. Compatible ROMPA® Products

See www.rompa.com for a wide range of balls and leisure products that may compliment the use of the CardioWall.

9. Starting Up

- Decide on a suitable area to install the CardioWall. There needs to be enough space for safe use without blocking doorways, entrances and away from any obstacles. Area required clear in front of the CardioWall would be a depth of 1m minimum.
- Unpack the CardioWall carefully.
- Visually check the CardioWall before using it for any signs of damage, component failure or loose cables that could become a tripping hazard. Immediately inform the person responsible for maintenance if you have concerns.
- Attach to wall using appropriate fixings (see installation information). The CardioWall should only be installed by a trained engineer.
- Plug in.
- Press the 'menu' light pod (upper left in the Large CardioWall, upper centre in the Small version) to engage the 'Quickstart' game light pods, from where each game is launched. Please note: until the 'menu' light pod is pressed, the lights will gently scroll around the CardioWall to provide passive visual appeal.

10. Detailed Description

The CardioWall is extremely robust and can withstand vigorous and repetitive play. It records and displays current score and time taken enabling progression to be seen and offering motivational cues. Whether used from a standing or seated position, it is great for developing core strength and balance, requiring use of a range of muscle groups e.g. encouraging bending, reaching, stretching, gripping and throwing. Use of hand-held objects can be used to target different grips and be graded up or down according to need (e.g. using heavier/lighter/bigger/smaller and different shaped objects). It also offers passive visual appeal without requiring active participation.

Game Modes:
1. **ClearOut** - Knock out the light pods as quickly as you can to build a huge score for one minute. Each batch of light pods respond with a different, entertaining sound.
2. **ClusterShot**– Knock the groups of light pods as quickly as you can. Green scores the highest, red the lowest.
3. **Chaser** – find the red light among the green for one minute.
4. **SoundBoard** – pick a light pod and choose a set of sounds then play the lights to hear some more.

- To change activities on the 'Small' version you simply wait 30 seconds for the CardioWall to 'time out' and return to the menu of Quickstart options. The full-size CardioWall has a 'return to menu' pad that can be hit at any time during the set up of the game, and also during the 'Soundboard' game. During normal gameplay of the other three games – ClearOut, Chaser and ClusterShot, wait 30 seconds for the CardioWall to 'time out' in order to return to the menu, or – to speed things up a little – switch the equipment off at the wall and then back on again.
- Some games can be tailored to ability (Large CardioWalls only). A noise reward is sounded when "hit" (which can be increased/decreased) and the light goes out. The palm of a hand, weighted balls, boxing gloves or balls thrown at the targets can be used to put out the lightpads. All provide opportunities to adjust according to need and it is accessible to seated and standing users.
Sound and light can be increased or decreased using the knobs on the top left of the panel.

Instructions for Gameplay:

On power up, the CardioWall will sound a 'laugh' and will turn to its idle state. Initially the dot matrix will display the **Hub Software Version Number** for the CardioWall.

The Sensory CardioWall has **two menu options**:

1.   **QuickStart Menu** – QuickStart access to the programs.
2.   **5 Pod Menu** – Provides QuickStarts to play the middle 5 pods only for specific programs.

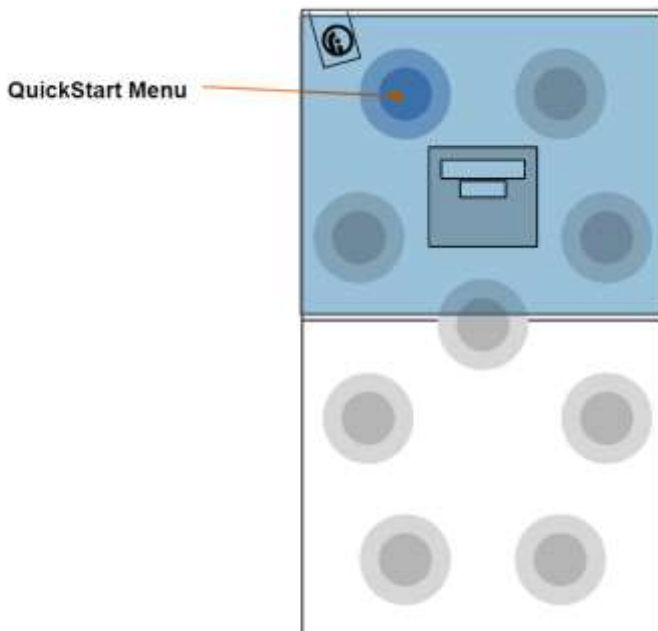In the idle state the blue pod must be pressed to access the Quickstart menu (Fig 1):

Fig 1

QuickStart Menu

The QuickStart Menu is enables access to the QuickStart options for the programs **ClearOut, ClusterShot, Chaser** and **SoundBoard**. The green pods are QuickStart options for the programs. The blue pod enables access to the 5 Pod Menu (Fig 2)
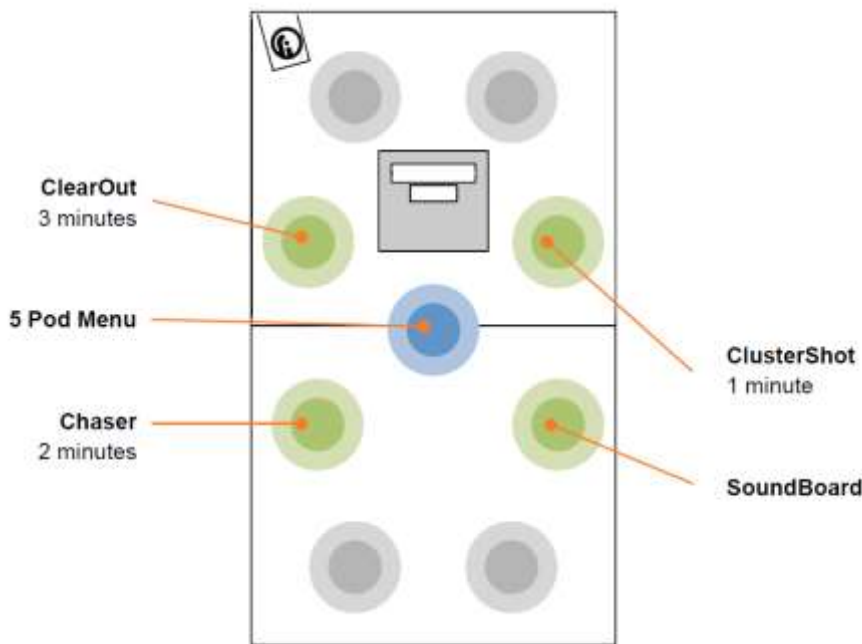
Fig 2

5 Pod Menu

The 5 Pod Menu is specifically designed for users with restricted movements such as wheelchair users. Selecting the 5 Pod Menu will display QuickStart options for the programs **ClearOut, ClusterShot** and **Chaser**. The 5 Pod Menu programs will only play the central 5 pods. On selection of the 5 Pod Menu option, the CardioWall will sound, "Select programme." The lights will illuminate as shown in **Fig 3.** Select any of the green pods to begin any of the 5 Pod Menu programs. Select the blue pod to return the CardioWall to its idle state.
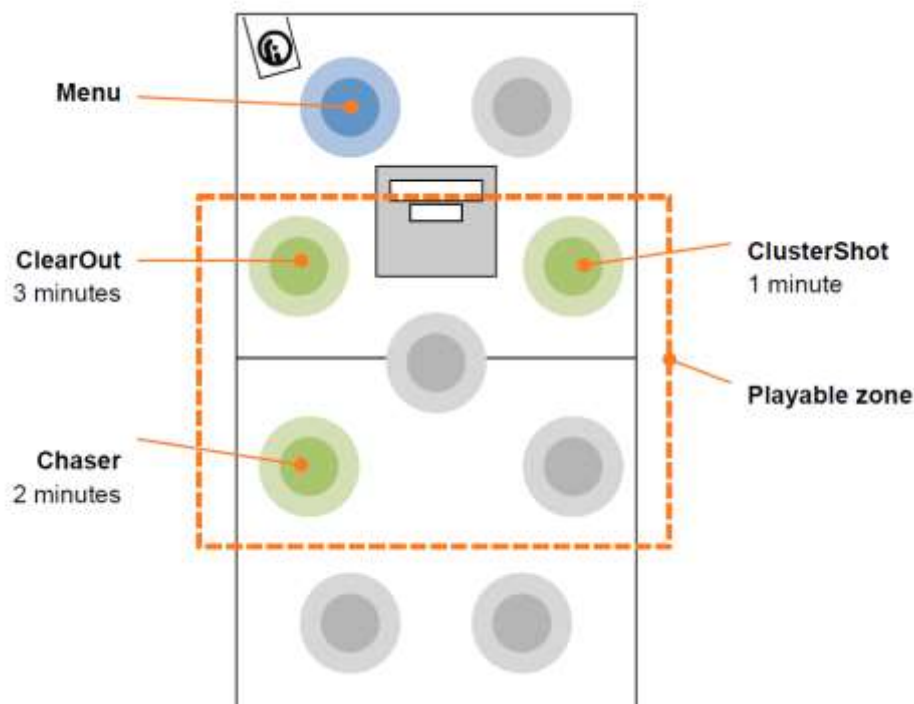
Fig 3

NOTE: The blue **Menu** pod will remain active throughout these programs so it is possible to quit the program to the CardioWall's idle state. If at any time, the CardioWall behaves unexpectedly, wait for at least 30 seconds for the unit to reset to its idle state.

SoundBoard is an interactive, multi-sound, non-competitive sound synthesiser. It is popular with users whom have sensory processing disorders such as autism, brain injury and dementia. On selection of **SoundBoard**, 8 pods will light up in various colours **(Fig 5)**. Each lit pod is a sound set. Select a sound set to experience 5 different sounds with in that set. Select the top-left pod to return to the **Menu**.
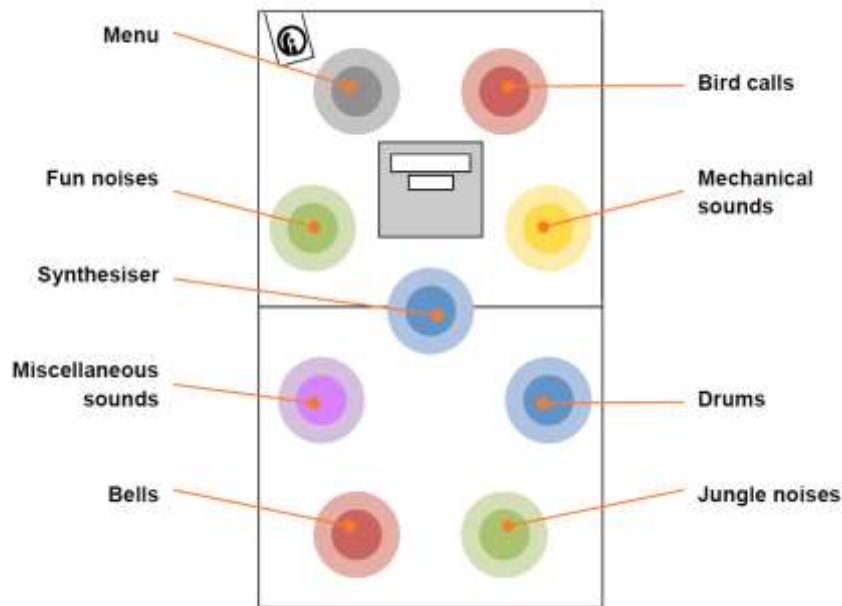
Fig 5

NOTE: At any time, if the CardioWall behaves unexpectedly, wait for at least 30 seconds for the unit to reset to its idle state.

At the end of any program, the CardioWall will sound, "Would you like to play again?" The pods will light up as shown in **Fig 6**. Selecting the **green pod** will replay the game. Selecting any of the **red pods** will return the CardioWall to its idle state.
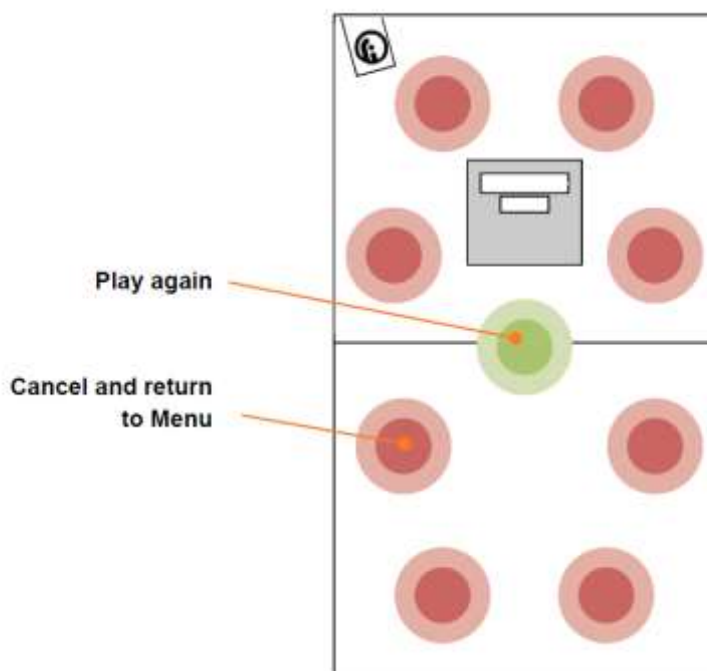
Fig 6

NOTE: At any time, if the CardioWall behaves unexpectedly, wait for at least 30 seconds for the unit to reset to its idle state.

Programmes Guide:

ClearOut Game

Summary: For repetitive exercise, stamina building and core stability. Popular within circuit training routines and effective with all types of accessory. A good alternative to body weight squats.

Gameplay: All pods will appear green. On selection of each illuminated pod, the light will turn out. Once all lit pods are cleared, all pods will reappear blue. Once all of the blue pods are cleared, all pods will reappear red. Once all of the red pods are cleared, all pods will reappear green, etc.

Aim: To clear as many illuminated pods as possible within the given time limit.

Scoring system: +1 point for each pod hit

**Duration:** 0.5 / 1 / 2 / 3 / 4 / 5 / 10 / 15 / 20 / 25 / 30 minutes

NOTE: At any time, if the CardioWall behaves unexpectedly during gameplay, wait for at least 30 seconds for the unit to reset to its idle state. For gameplay greater than or equal to 10 minutes, wait for at least 2 minutes for the unit to reset to its idle state. This longer time-out period is designed to allow multiplayer circuit training

ClusterShot Game

Summary: A high intensity challenge of speed and visual awareness. Mentally testing.

Gameplay:

Pods will illuminate in clusters of 3, 4 or 5 at random. The illuminated pods will firstly appear green, then yellow, then red. Once an entire cluster of lit pods are cleared, a new cluster of lit pods will appear at random.

Aim: To earn as many points as possible within the given time limit by hitting the illuminated pods quickly.

Difficulty: Beginner (Slow) – Level 1
Intermediate (Medium) – Level 2
Expert (Fast) – Level 3

Scoring system: +3 point for each green pod hit
+2 point for each yellow pod hit
+1 point for each red pod hit

Duration: 0.5 / 1 / 2 / 3 / 4 / 5 / 10 / 15 / 20 / 25 / 30 minutes

NOTE: At any time, if the CardioWall behaves unexpectedly during gameplay, wait for at least 30 seconds for the unit to reset to its idle state. For gameplay greater than or equal to 10 minutes, wait for at least 2 minutes for the unit to reset to its idle state. This longer time-out period is designed to allow multiplayer circuit training.

Chaser Game

Summary: A pure speed and reaction challenge which also tests peripheral vision.

Gameplay: A single red pod will illuminate at random. Other pods will be green. On selection of the red pod (the chaser), another pod will reappear red.

Aim: To hit as many red pods with in the given time limit as possible.

Scoring system: +1 point for each red pod hit
-1 point for each green pod hit

Duration: 0.5 / 1 / 2 / 3 / 4 / 5 / 10 / 15 / 20 / 25 / 30 minutes

NOTE: At any time, if the CardioWall behaves unexpectedly during gameplay, wait for at least 30 seconds for the unit to reset to its idle state. For gameplay greater than or equal to 10 minutes, wait

for at least 2 minutes for the unit to reset to its idle state. This longer time-out period is designed to allow multiplayer circuit training.

SoundBoard Game

Summary: An interactive, multi-sound, non-competitive sound synthesiser. Popular with users whom have sensory processing disorders such as autism, brain injury and dementia.
CardioWall:
Ability and Sensory.
Gameplay:
8 pods will light up in various colours. Each lit pod is a sound set. Select a sound set to experience 5 different sounds with in that set.
Sounds key - top left to bottom right:
Red – bird calls
Green – fun noises
Yellow – mechanical sounds
Blue – synthesiser
Pink – miscellaneous sounds
Blue – drums
Red – bells
Green – jungle noises
Aim:
Play and enjoy the sounds.
Scoring system: N/A
Duration: 3 minutes
NOTE: At any time, if the CardioWall behaves unexpectedly during gameplay, wait for at least 30 seconds for the unit to reset to its idle state.

11. <u>Safety</u>

- This product is not a toy.
- Always supervise the use of this product.
- To prevent electric shock, keep all electric components away from contact with water.
- Always ensure that the play area in front of the CardioWall is clear before attempting to begin exercise.
- The CardioWall is not a toy. Children must be supervised when using the CardioWall and/or accessories at all times.
- Wear appropriate clothing, do not war loose clothing or jewellery.
- Do not wear shoes with leather soles or high heels.
- Long hair should be tied back.
- Do not distract others while they are using the Cardiowall.
- Always work within your recommended exercise level. Do NOT work to exhaustion.
- If you feel any pain, dizziness, nausea or any other abnormal symptoms, Stop your workout immediately. Consult your doctor immediately. Incorrect or excessive training may lead to injuries.

12. Technical Specification

Dimensions: Large 210cmH x 122cmW x 5.5cmD; Small 122cmH x 122cmW x 5.5cmD
Weight: Large 42kg; Small 25kg
Power Supply: 13 A
Max Power Consumption: 36 W
Voltage: 110 - 230 V The power supply automatically adjusts from 110V to 230V
AC. No adjustment is necessary. 5A supply (with approx 1m of trailing wire)
Frequency: 60 - 50 Hz
Warranty: 1 year on electronics. 3 years on all other parts.
Regulatory Requirements: CE Approved.
Operating Environment: Indoors: keep dry and out of direct sunlight.
Optimum ambient temperature: 5°C to 30°C. Avoid extreme fluctuations of temperature.
Other: All parts designed for easy maintenance. Replacement LED pods can be swapped out by staff in seconds.
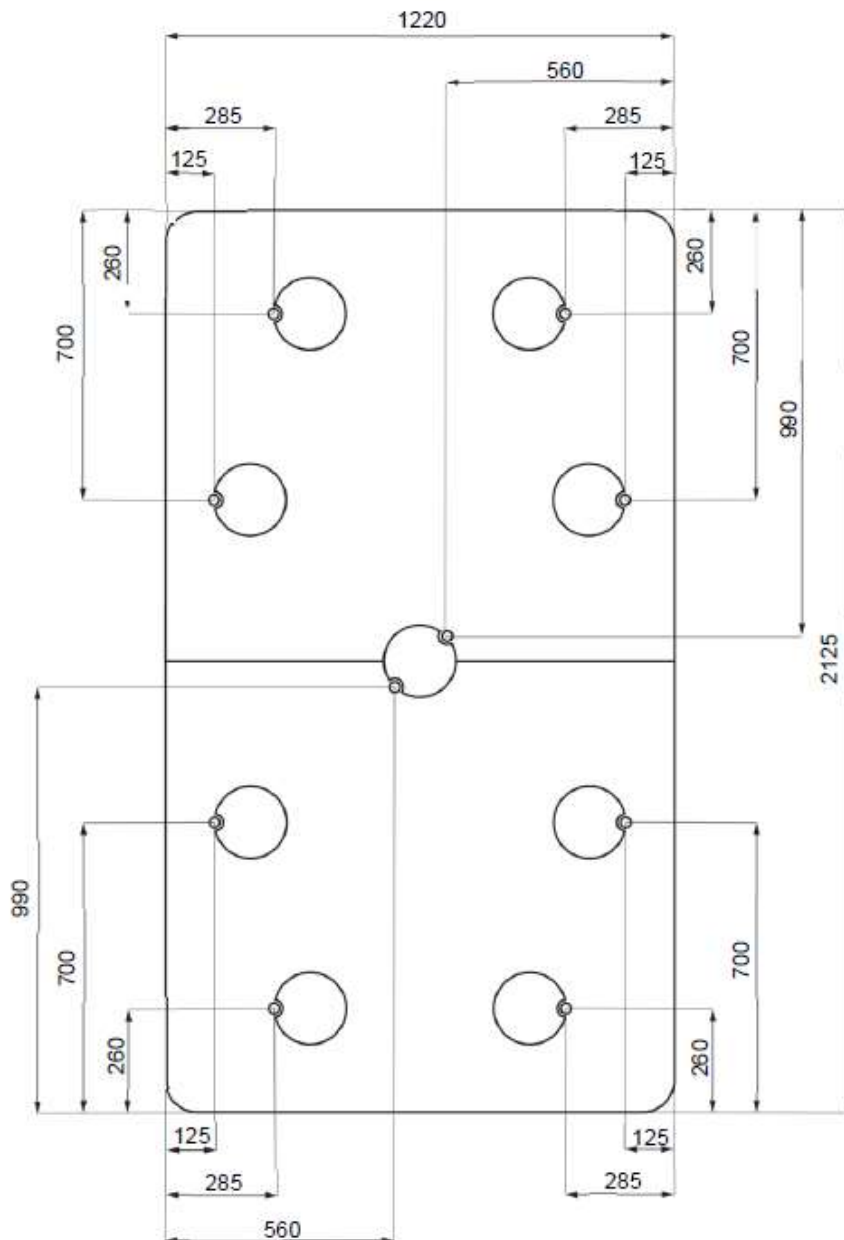
13.   Installation

Read this manual before mounting the CardioWall.

The product should be fixed to a solid (block built, portal frame with structural infills or brick built) wall that is capable of supporting its weight and gameplay. Try to avoid stud walls or unsupported portal infills. It is possible to install the Cardiowall on other constructions. To do so, use a suitably sized 18mm ply backboard to mount the CardioWall on.

- The manufacturer has supplied fixings for a standard block wall.
- When fixing it to the wall please consult a suitably qualified professional builder, surveyor or personnel from an estates department to check the construction of the wall the panel is to be fixed to is appropriate and can withstand the weight of the product and its use.

The following instructions assume that the wall is of brick or block construction and the wall surface is flat over the area of the wall: 1220mm wide x 2125mm tall. A suitable electricity supply is available within 1000mm (110 – 230v 13A)

- Do not install in direct sunlight

- Choose a safe and suitable indoor location for your panel. The panel is ONLY to be used in dry environments.

- Consider the space where the panel is to be located. The CardioWall requires a reasonable amount of space around the area to enable interactive movement that will not obstruct other users of the space.

- Unpack the product carefully. Please note the centre pod (if installing a large Cardiowall) and a spare pod are secured into recesses on the back of each section on the CardioWall to ensure that they are safe during transit. Please remove these before installing your equipment. These can be located in the spaces such as the one shown in Fig 7

Fig 7

It is recommend you have the following tools and consumables to hand before and during

installation:

1. A spirit level – to check floor is level before installation and that the CardioWall is level during installation.
2. An industrial vacuum cleaner.
3. A dustpan and brush.
4. A SDS impact drill.
5. A cordless drill – with torque adjuster to avoid over-tightening of screws.
6. A set of No.2 pozi bits.
7. A set of screwdrivers:
a. An electrical-type flat-bladed screwdriver to unclip the CAT5 connectors from the pods.
b. A tiny flat-bladed screwdriver to adjust the volume on the main hub.
8. A socket set.

Suggested extras:
1. 3 m of self-adhesive 'mini' box trunking to secure the power cable.
2. An extension cable in case the power supply is not within 1000 mm of the base of the CardioWall. (CardioWalls are supplied, unless otherwise requested, with a power adaptor cable that extends 1000 mm from the base of the CardioWall.)
3. Cleaning cloth and gentle cleaning spray.

N.B. A typical installation should take 2 people about 2 hrs.

01
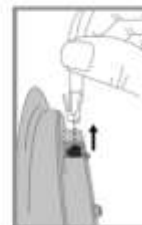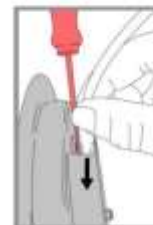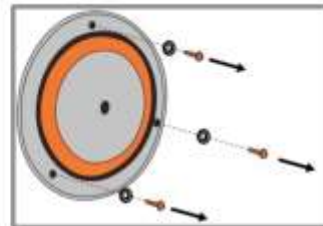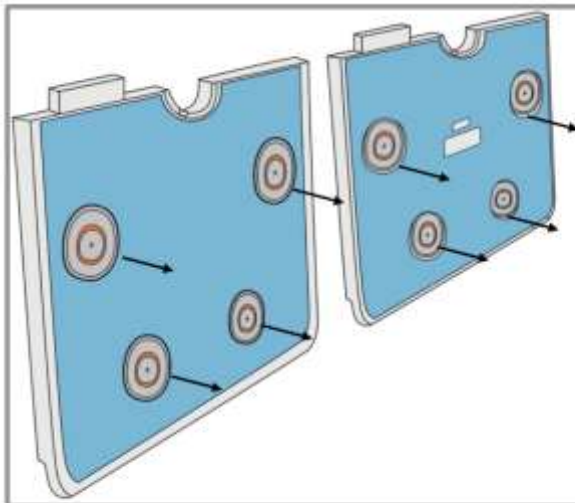
Remove pods x 8. Retain screws, washers and pods.

02
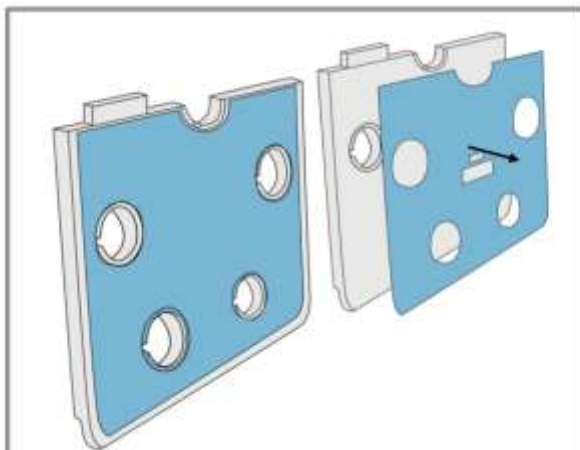
Remove the graphics panels from the large moulding that contains the hub (i.e. the scoring screen).

Remove all of the outside screws and washers. Retain screws and washers and store graphics panel in a safe place.

NOTE: Before touching the hub, touch a grounded object to remove any static charge.

The graphics panel on the other moulding can remain in place.

03
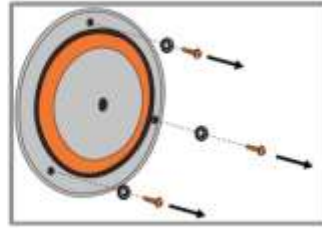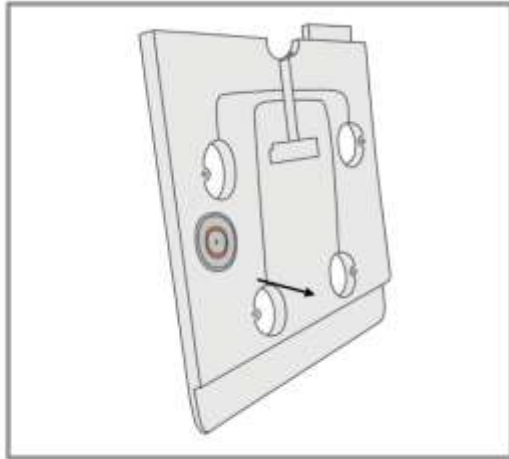
Remove pod x 1 from the back of the main body. Retain screws, washers and pod.

04
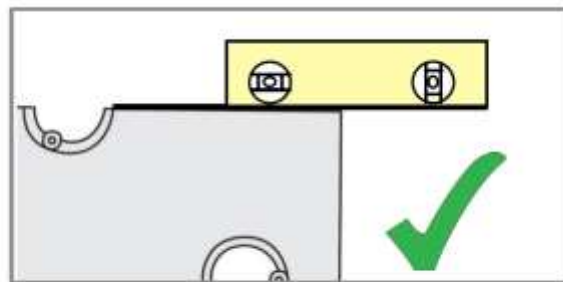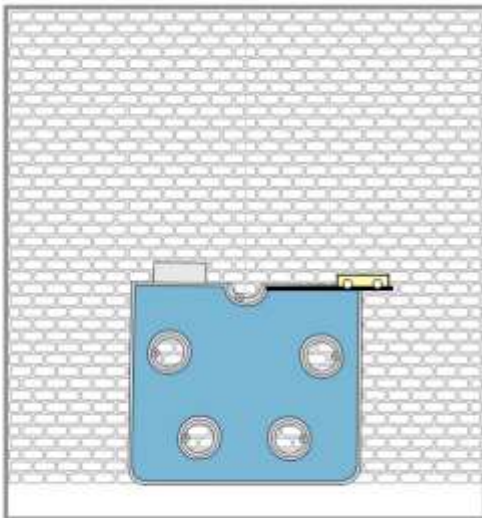
2 people required: one to hold the main body in place; one to ensure it is level.

05
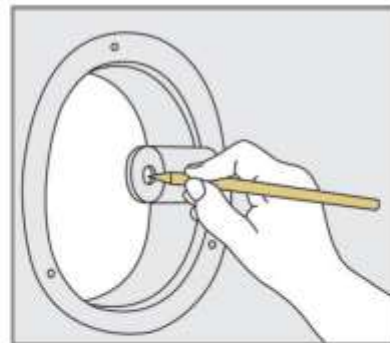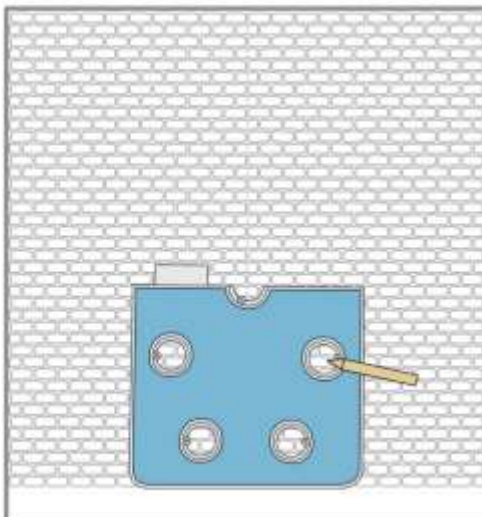
2 people required: one to hold the main body in place; one to clearly mark holes x 5.

06
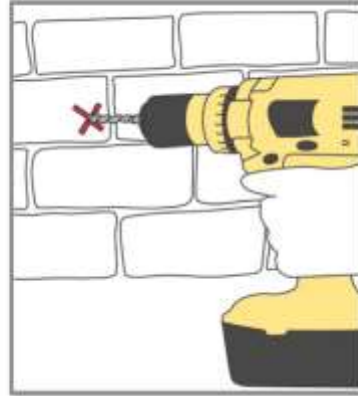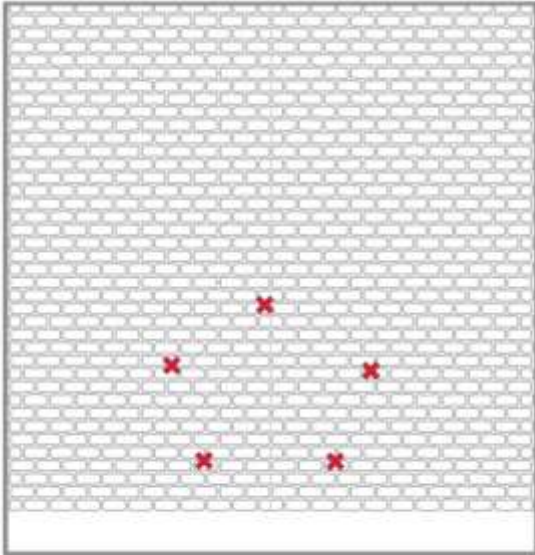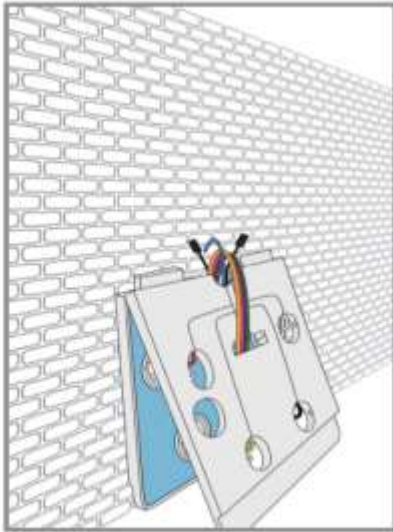

Drill holes and insert mountings x 5.

07
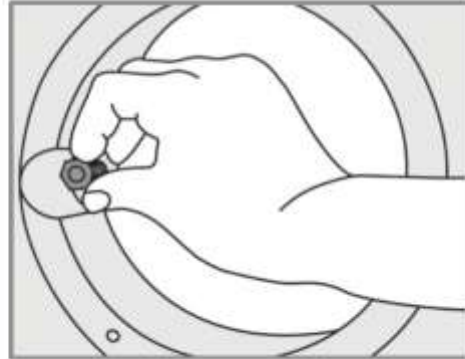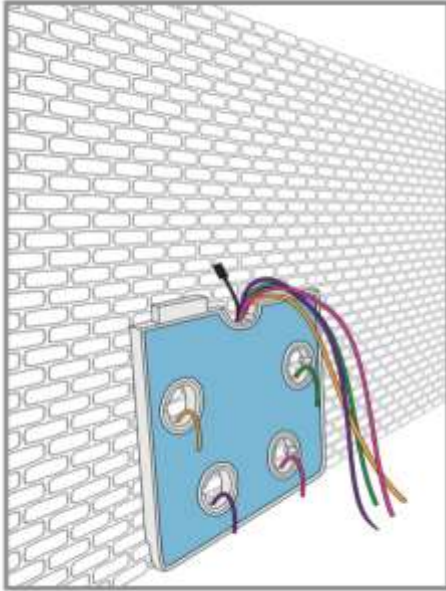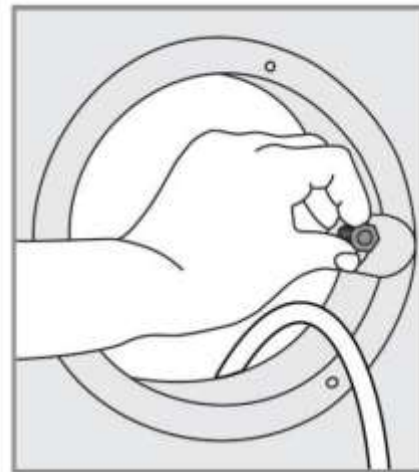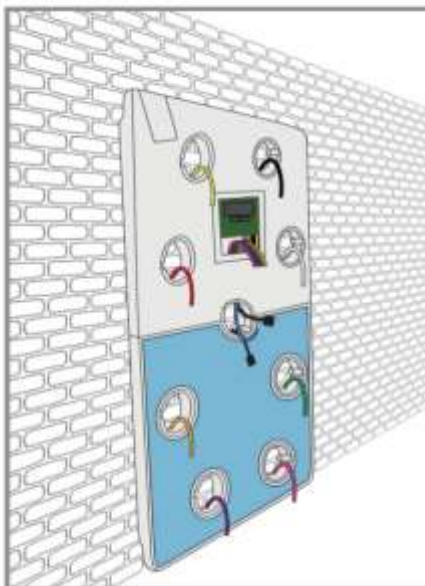

Tighten fixings by hand x 5.

Ensure CAT5 cables are not trapped anywhere behind the lower moulding of the CardioWall.

08
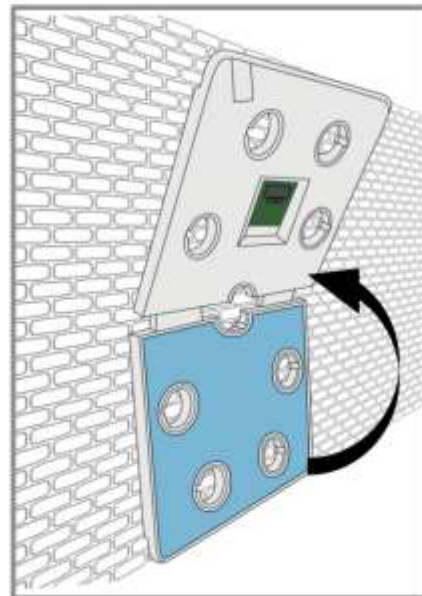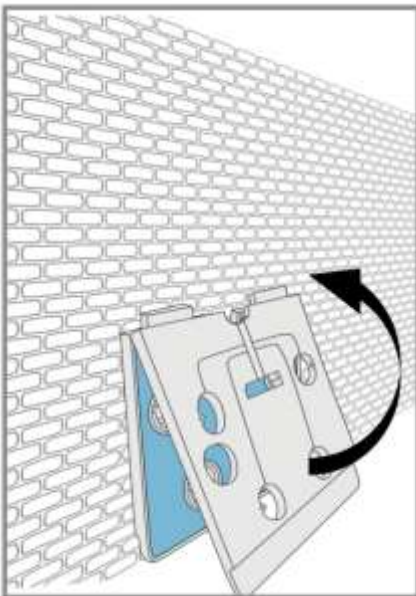
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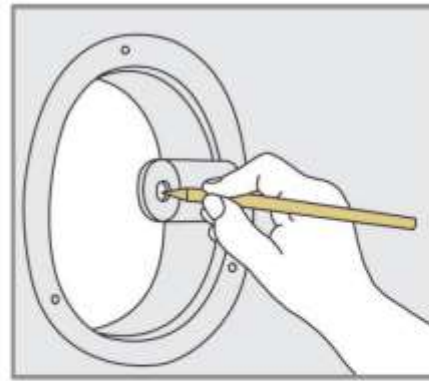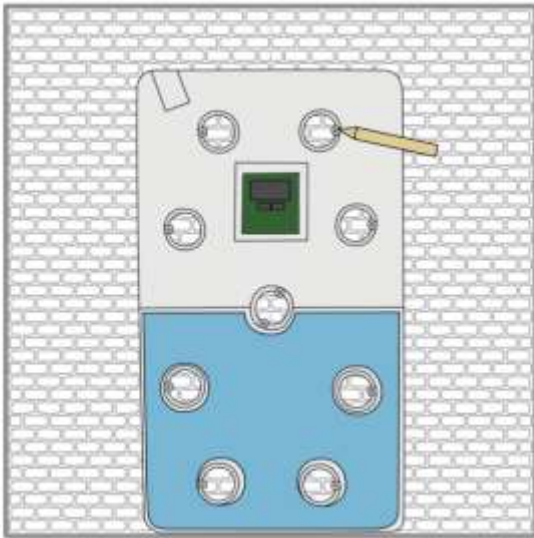
Clearly mark hole x 5.

10
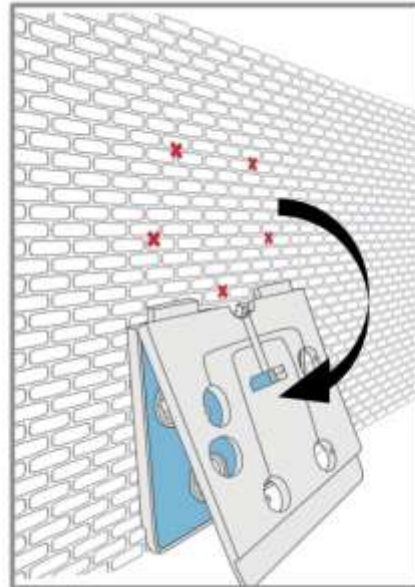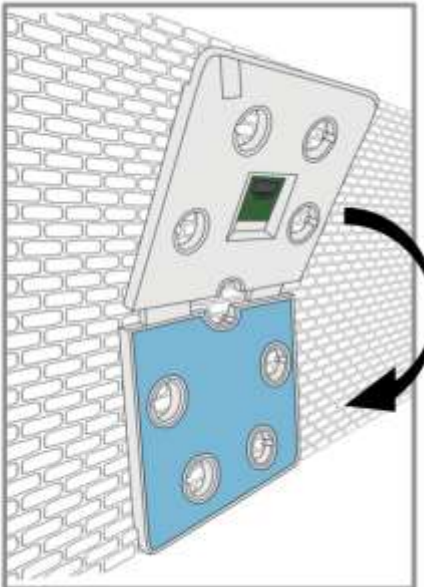
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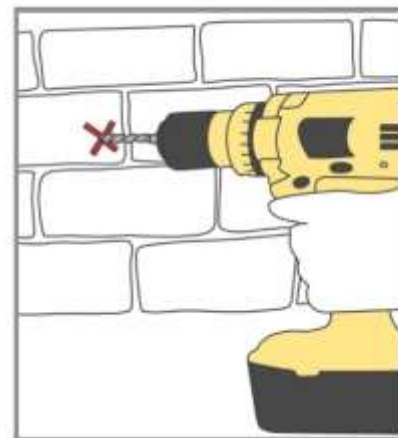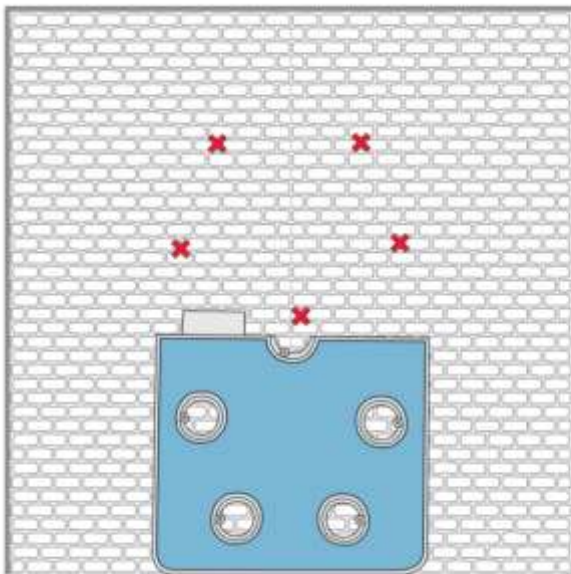
Drill holes and insert mountings x 5.

12
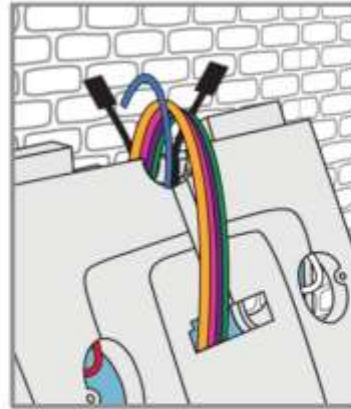
Feed lower cables
through slot.

13
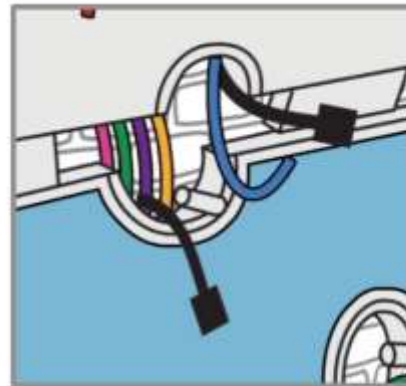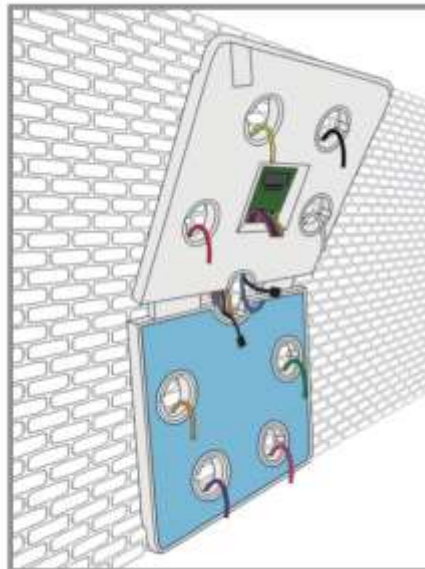
Ensure all cables are not
trapped between walls.

14

Tighten fixings by hand x 5.

15
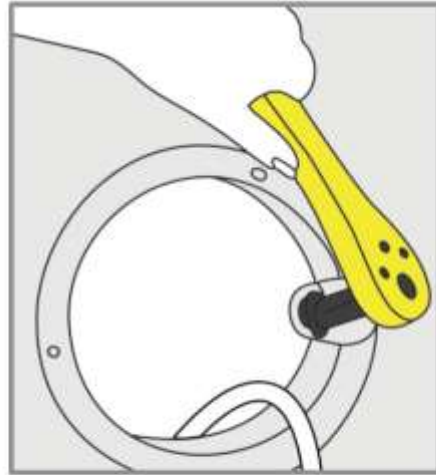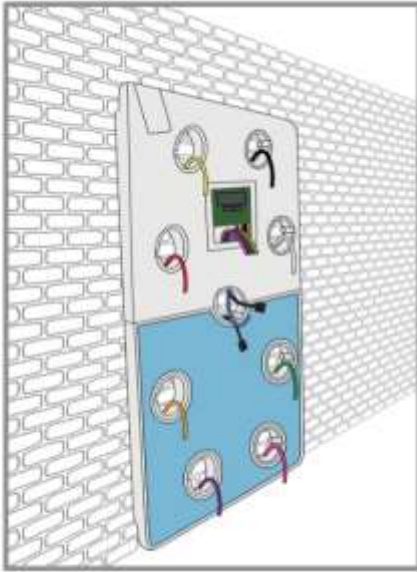
Tighten fixings with tool x 10.

16
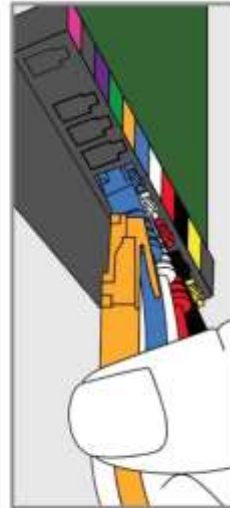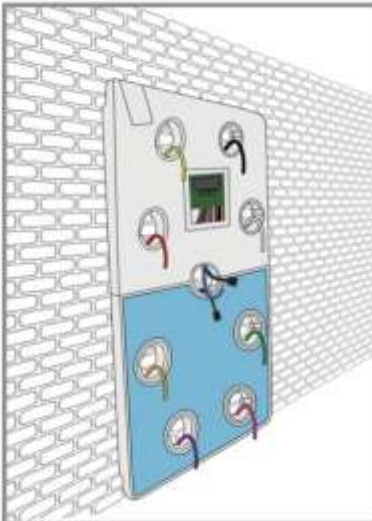
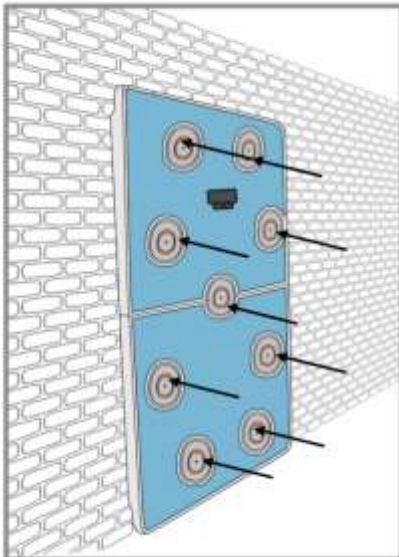Connect the lower CAT5 cables x 4 in the designated slots on the hub PCB.
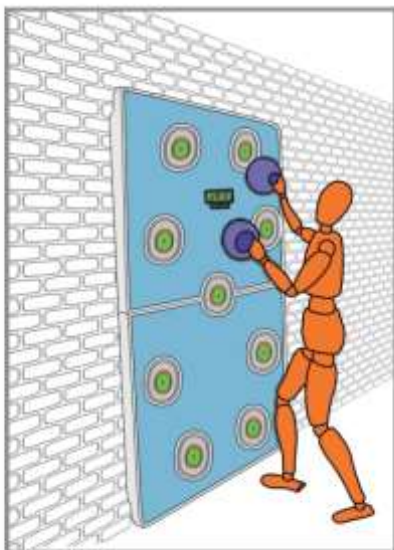
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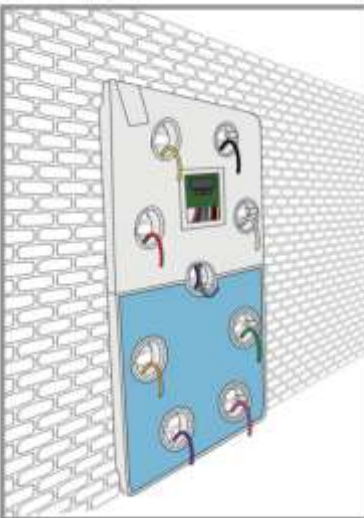
Connect the power cable in the centre pod opening.

18
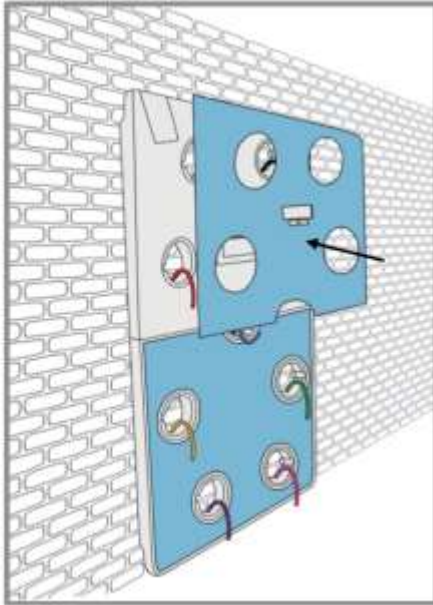
Reposition the graphics panels for the top moulding. Use the screws and washers retained from earlier.

19
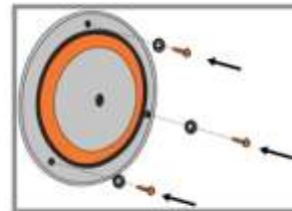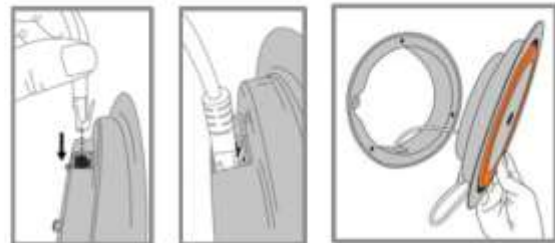
Reinstall pods x 9. Ensure cable is not trapped when replacing pod.

20

- Make sure everything is tight and secure.
- Plug into a mains socket.
- Switch on and check that all pods light up, that text appears on the hub display and that sounds can be heard.
- Play a game (e.g. QuickStart ClearOut.) Check that all lights turn on and sounds can be heard when the lights are hit.
- If the CardioWall acts unexpectedly, seek support from the **Troubleshooting Guide.**
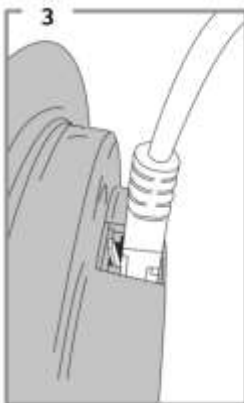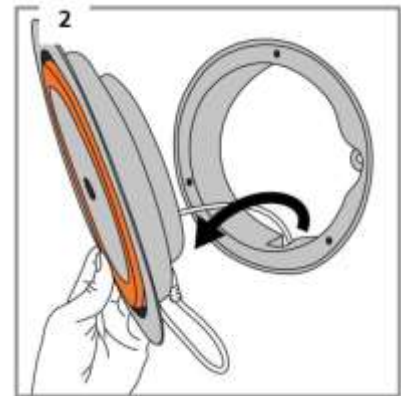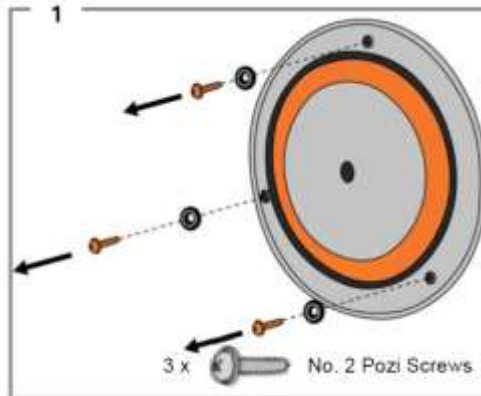
POD REMOVAL

Read this manual <u>before</u> removing or installing any pods.

One pod will be secured behind one section of the CardioWall.
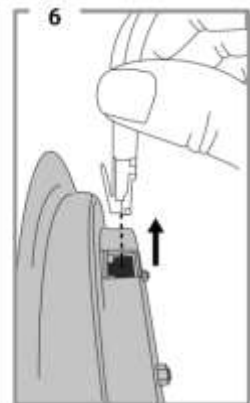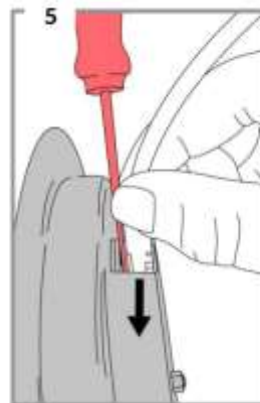
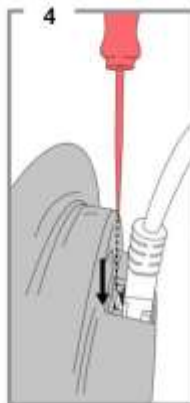Do not worry which order the pods come off in. They can be refitted in any order.
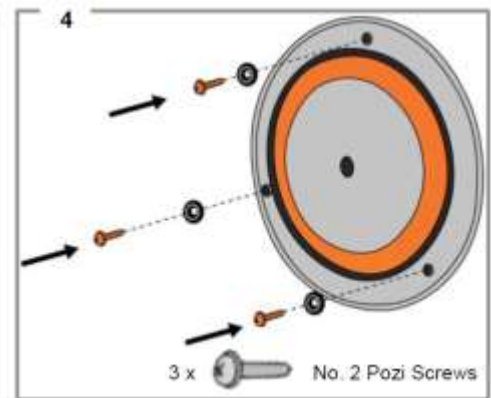
Retain all screws & washers.
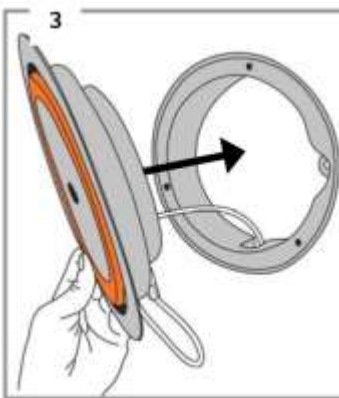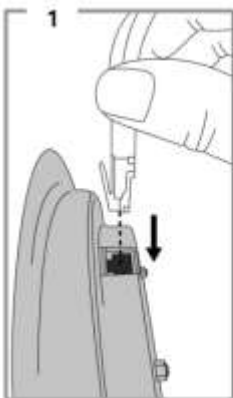
1

3 x — No. 2 Pozi Screws

2

3

NOTE:

To remove the CAT5 cables, you will require a flat blade screwdriver to release the clip.

Remove the CAT5 cables **CAREFULLY**.

4

5

6

POD INSTALLATION

1

2

3

4

3 x — No. 2 Pozi Screws

- Installation must only be carried out by an experienced technician who has received CardioWall installation training (this is available online & by webinar).

14. <u>Care and Maintenance</u>

- Dust or wipe with a damp cloth and a mild soap solution, not abrasive cleaning products. A mild kitchen cleaning product (not containing bleach or alcohol) with a damp (not wet) cloth are best to use. Avoid overly wet cloths around the light pads and the electronic display.
- Handle the panel with care.

15. Troubleshooting

Simply follow Fig 8: CardioWall Troubleshooting Flow Diagram for diagnostic and repair instructions for the CardioWall.

Please make sure to read all of the options first. Refer to Fig 9 and Fig 10 for support if necessary.
Before beginning the troubleshooting, ensure you have made a note of the following:

Hub Software Version No.:   *(e.g. V 307.70)* ……………………………………

(The hub software version no. is displayed on the hub's dot-matrix immediately after the CardioWall is switched on.)
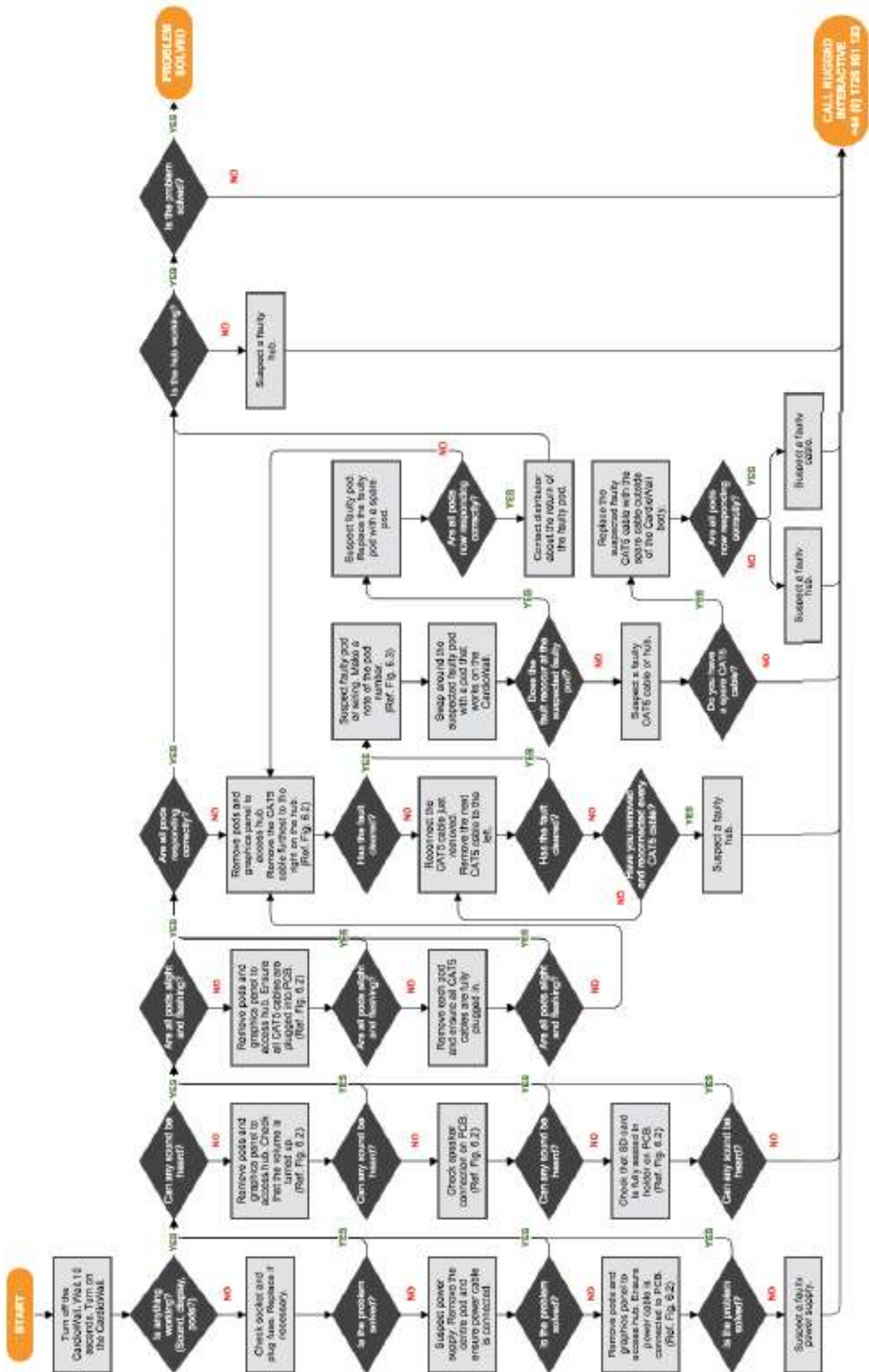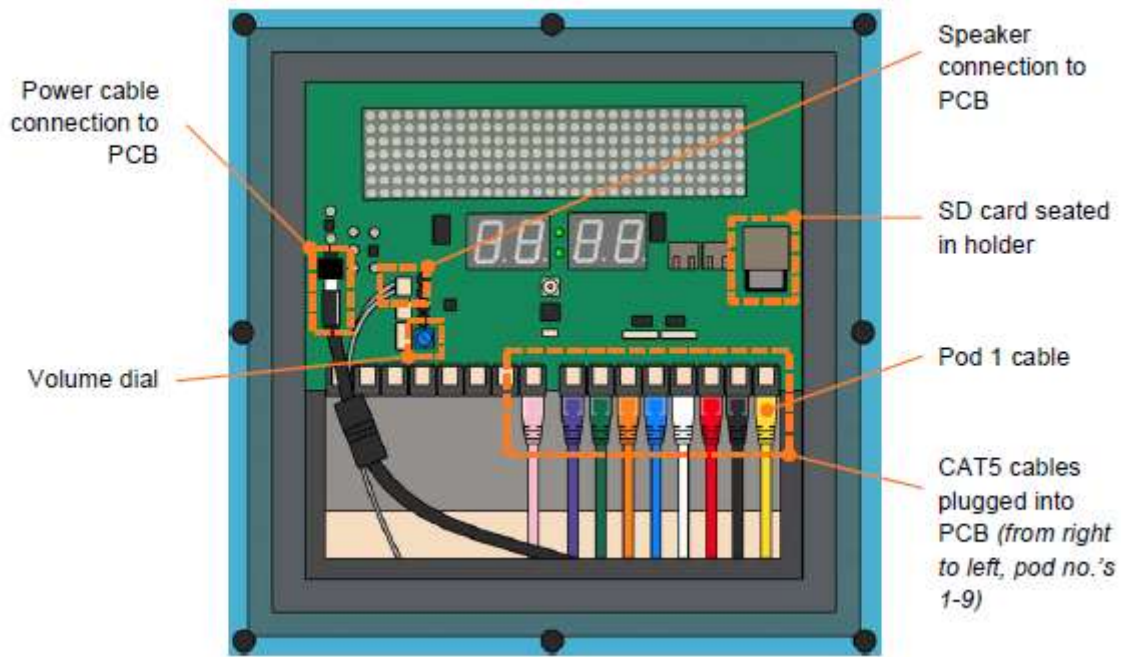
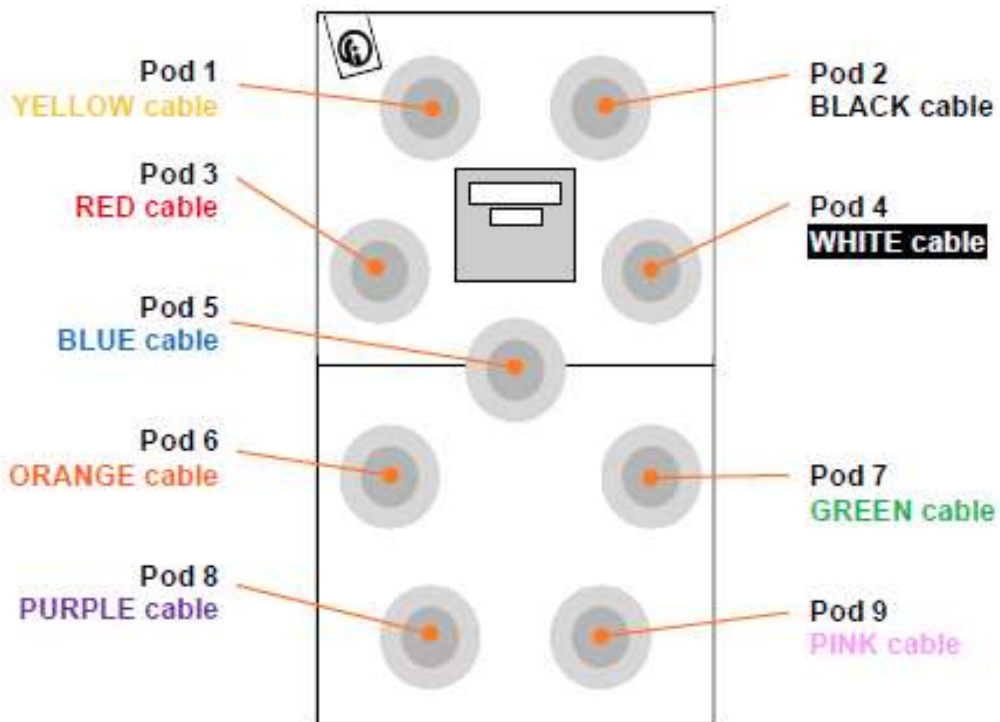Fig 8 Troubleshooting Flow Diagram

Fig 9 Hub Diagram

Fig 10 Cardiowall Pod Numbers and Corresponding CAT5 Cable Colours

Connecting FitMakr Software

Simply follow Fig 11 to correctly connect the FitMakr touchscreen to the CardioWall and the Internet. If you are in any doubt, call ROMPA.

Key:

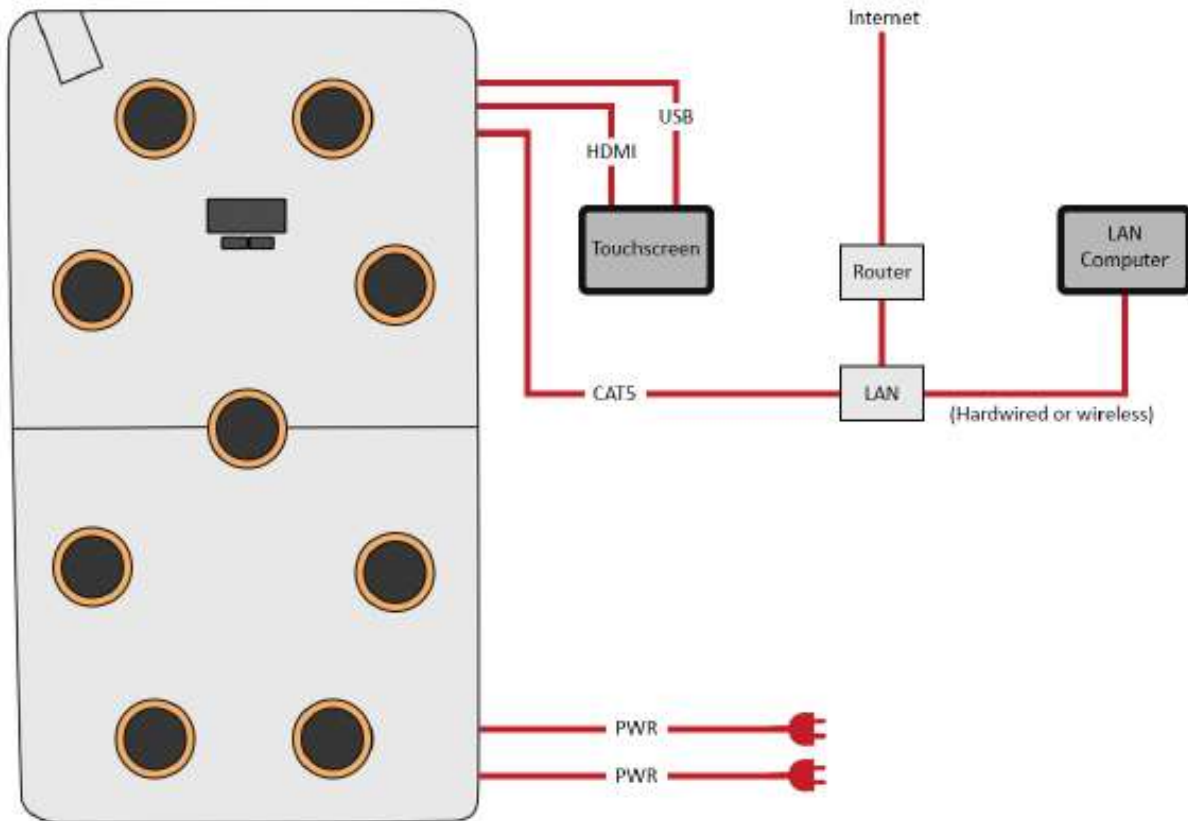• LAN: Local Area Network

• PWR: Power Connection

Fig 11

Printing data from FitMakr Software.

1. Ensure that the FitMakr Software is up and running on the touchscreen.

2. From the home page, press the software version number (e.g. V.1.5.0) in the bottom right-hand corner.

3. Look for the IP address of the wall and make a note of this number. (This should be 192.168.1.XXX)

4. Open any Internet browser from a Local Area Network connected computer.

5. Enter the IP address into the search bar. You should now see the FitMakr Software displayed on your computer screen.

6. Log in to the account with the data that you wish to print. Access the profile and find the data by looking through "Latest results."

7. Take a screenshot of the game end screen and print.

8. To finish, log off or select another session to print.

Further copies of these instructions can be downloaded at www.rompa.com

We hope you find our instructions invaluable. If you have any suggestions for improving them further your comments will be greatly received – please contact us at producthelp@rompa.com