



ARMAGARD SDS 32/42/46/52/55 – DISPLAY & WALL MOUNTING

(ENGLISH)

## INSTALLATION MANUAL

# 32"-55"

**READ THIS MANUAL THROUGH BEFORE INSTALLING YOUR UNITS TO ENSURE CORRECT INSTALLATION AND THAT YOU'RE COVERED UNDER WARRANTY.**

- The following manual details the vital information and safety precautions needed for a safe installation of the Armagard SDS landscape enclosure.
- Due to the weight of your enclosure and for personal safety, it is recommended to refer to your company's own health and safety heavy lifting procedures before moving the enclosure.
- All power must be switched off until the enclosure has been fully assembled and is ready to use.
- If your enclosure is for outdoor use, don't attempt installation in bad weather; use correct lighting for optimum viewing conditions.
- Tools required for installation, Phillips Screwdriver, Drill and Sockets Kit or Wrench
- Electrical plugs, display bracket screws and wall plate bolts are not provided because of different customer setups.
- Armagard recommends that all enclosures should be securely attached to the wall before fitting the display to avoid any damage during lifting.
- Default thermostat settings can be found on page eleven.
- Because of its watertight seal, to lock an enclosure you have to push firmly against the door and then turn the key to lock.

**YOUR WARRANTY AGREEMENT IS VOID** if you perform any modifications on the enclosure, for example, drilling or penetrating any additional holes into the enclosure.

**FOR BEST PRACTICE** mount the enclosure using the recommended brackets to ensure integrity.

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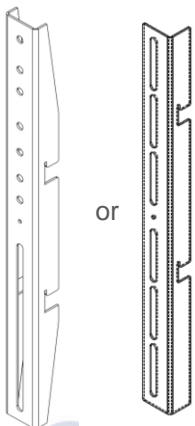
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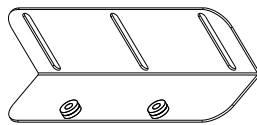
## PARTS LIST

## DISPLAY MOUNTING

1. SDS Enclosure x1
2. Keys x2
3. LCD Mounting Brackets x2
4. Reversible Brackets x2 (*Depends on Model*)
5. 20mm Open Grommets x3



LCD Mounting bracket x2

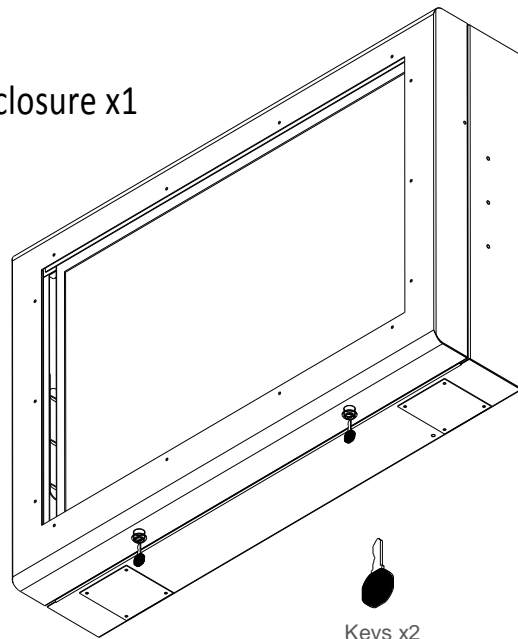


Reversible bracket x2



20mm Grommets x3

Enclosure x1



Keys x2

**Note:** Bracket design will vary

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## GLAND PLATE & CABLES

**STEP 1:** Unlock the door and position the enclosure on its back, securing the door stays within the side pins.

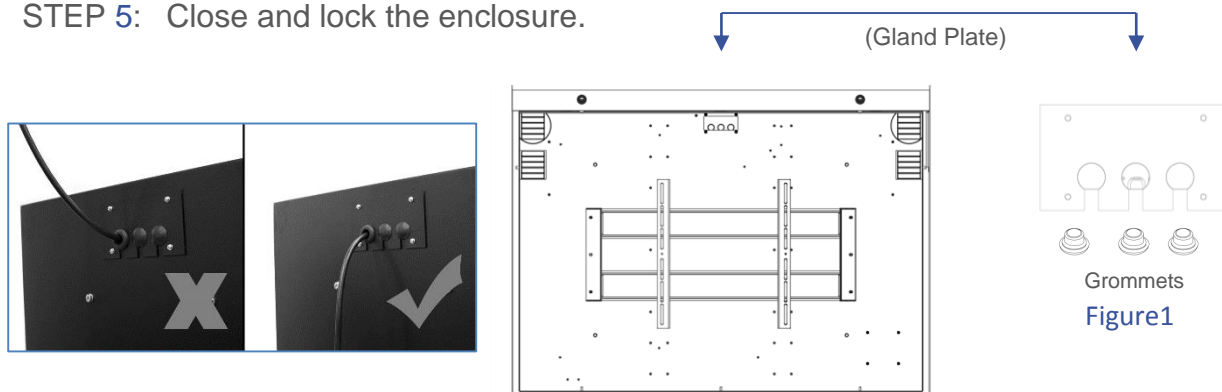
**STEP 2:** Decide the area you want to position your media player (size of media player and display will affect location), securing any cables from the media player and display into the mains power extension.

**STEP 3:** Carefully raise the enclosure up (Figure1) remove the gland plate and feed the appropriate power cable from the mains extension out through the back of the unit.

**STEP 4:** Replace the gland plate if necessary, using either open or closed grommets to fill the gland plate holes until it's fully sealed and water tight.

**NOTE:** Make sure any cables feed into the gland come from below, and do not come down into the enclosure from above. Cables from above allow liquids to follow this path into the unit (Figure 1).

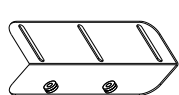
**STEP 5:** Close and lock the enclosure.



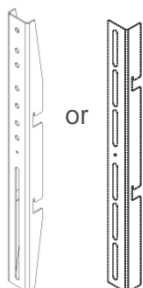
## DISPLAY BRACKETS

**NOTE:** Depending on the situation, customer discretion is best used to determine when and how to mount their display.

**STEP 6:** Check all apparatus for the installation is correct (Figure2)



REVERSIBLE  
BRACKET X2



LCD MOUNTING  
BRACKET X2

**Note:** Bracket design will vary

Figure2

(NOTE: Screws not provided – depends on display type) 4-6 needed, customer supplied

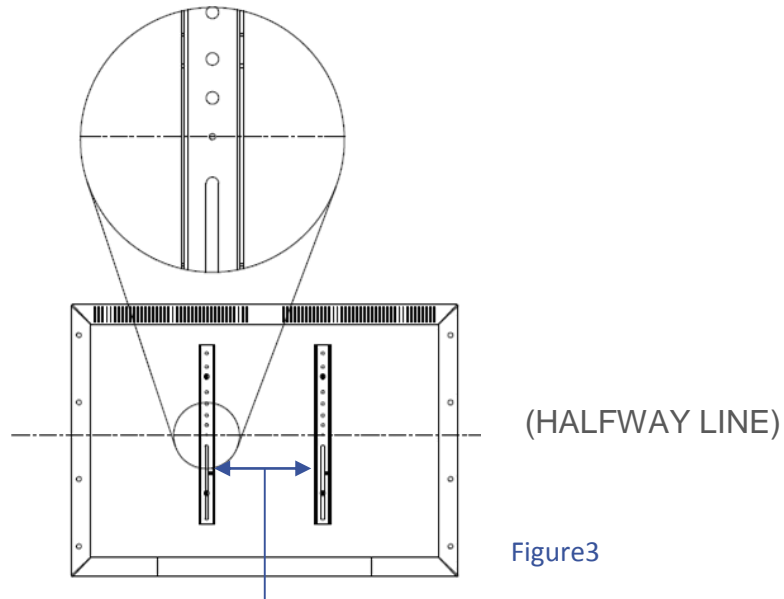
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## DISPLAY BRACKETS

- STEP 7:** Prepare a surface area to turn your display over, using appropriate covers to prevent any damage being caused to its frontage.
- STEP 8:** Turn your display over and using measuring tape, determine the halfway line of the unit.
- STEP 9:** For a balanced unit, align the centre hole of the bracket with the halfway line of your display (Figure3) and determine equally spaced screw fittings, taking into account the size of your display (adjustment may be required depending on screen type).



(NOTE: Make sure the mounting slots are fitted to the lower half of the unit)

- STEP 10:** Using the diagram shown in Figure4, fasten the brackets with the 4 or 6 screws suited to your LCD Display type. Note: Bracket design will vary; follow the pictures below depending on your setup.

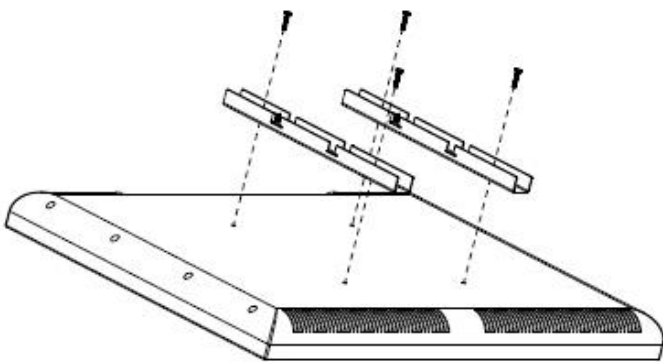
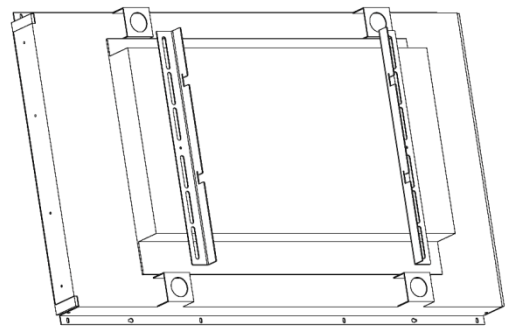


Figure4



(NOTE: All cabling should now be complete; access to the back is limited once the display is secured)

## DISPLAY BRACKETS

**STEP 11:** Unlock the door and position the enclosure on its back, securing the door stays within the side pins. (For the Samsung Hi-Bright Screen, proceed to Step 14)

**STEP 12:** Then safely place your display into the enclosure using the interior mounting plate (Figure5).

**STEP 13:** A gap of 15mm must exist between the air curtain and the enclosure window, any less and you risk insufficient cooling to keep the display working (Figure6)

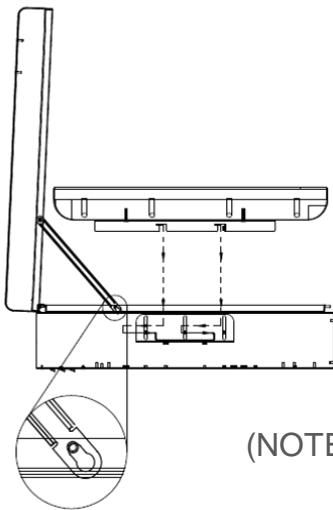


Figure5

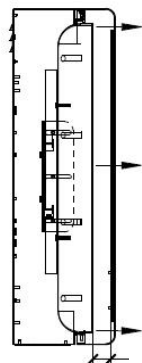


Figure6

(0.59 INCHES)

(NOTE: For screen adjustment continue to STEP 16)

### Samsung Hi-Bright Display

**STEP 14:** The Samsung Hi-Bright screen uses special side mounting to secure. Locating the fixture holes located at both sides of the display; fasten side brackets using at least 3 of the holes to secure the screen (Figure7).

**STEP 15:** Making sure all cables have been connected, lower the display into the enclosure and secure with drill (Figure8), proceed to Step 18.

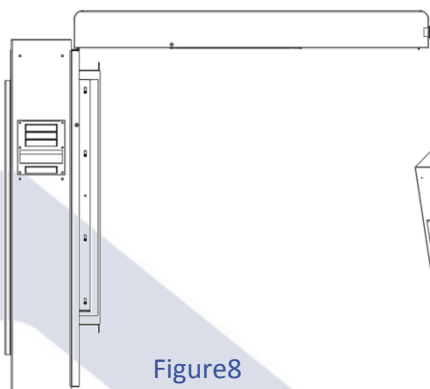
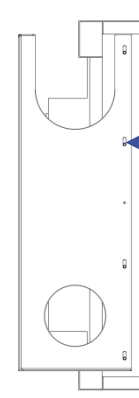
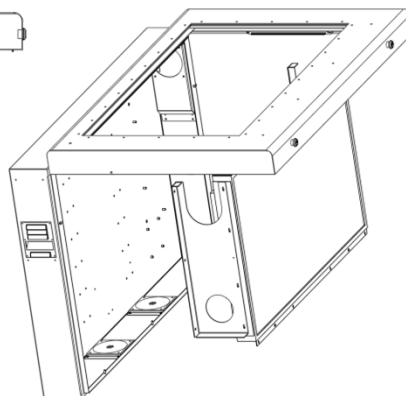


Figure8



Fixture Holes

Figure7

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## DISPLAY BRACKETS Depending on Design Type

STEP 16: Adjustment instructions for the interior mounting plate (2x Designs)

- TO LOWER: Loosen the screws and lower the interior bracket downwards to increase the distance from the LCD enclosure screen then fasten (Figure9).
- TO RAISE: For thinner display types - replace interior brackets with the additional supplied reversible brackets, using the bolts and washers from the installed bracket to bring forward the position of the screen (Figure10).

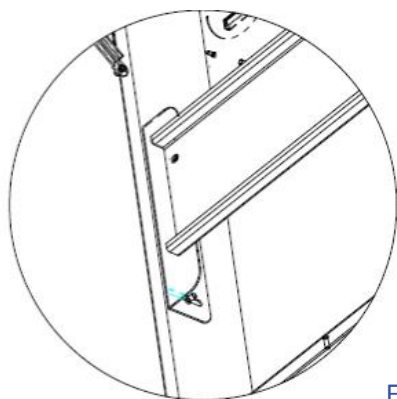


Figure9

INSTALLED BRACKETS  
- TO LOWER

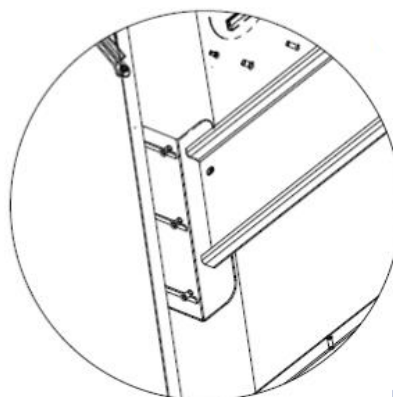


Figure10

REVERSIBLE BRACKETS  
- TO RAISE

- For the alternate bracket type, simply loosen the fittings and rotate the bracket depending on whether you want to increase and decrease distance (Figure11&12)

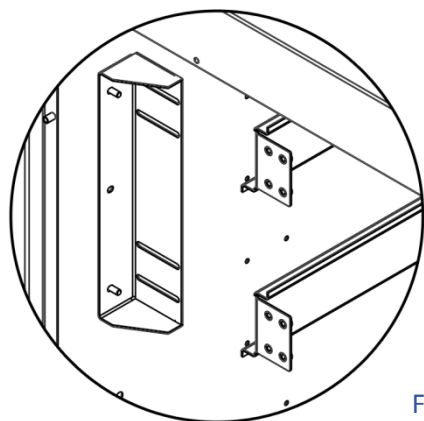


Figure11

ROTATE BRACKETS-  
TO LOWER

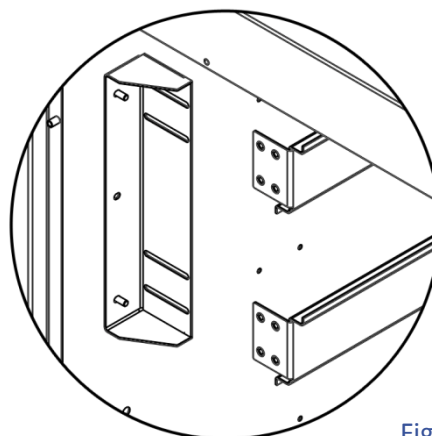


Figure12

ROTATE BRACKETS-  
TO RAISE

## FINISHING UP

- **STEP 17:** Once the LCD fits correctly, remove the display, set down in a safe area and then lock the enclosure
- **NOTE:** Armagard recommend that all enclosures should be securely attached to the wall before fitting the display, to avoid any damage during lifting.

## PROCEED TO WALL MOUNTING

NOTE: For maintenance advice, see page 11 for filters, thermostats and display cleaning.

## PARTS LIST

## WALL MOUNTING

1. Wall Plate x1
2. Flat Wall Brackets x2 (**or**)
3. 15 Degree Wall Brackets x2
4. Locking Bar
5. Bolts and Washers
  - M8 x 16 Bolts x6
  - M8 Washers x6
  - M6 x 25 Screws x2



M6 x 25 Screws x2



M8 x 16 Bolts x6  
(Fitted on Enclosure)



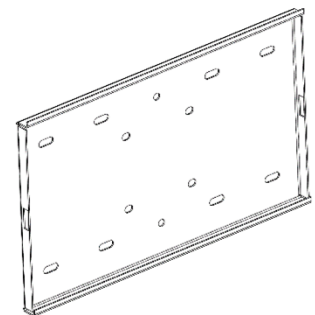
M8 Washers x6  
(Fitted on Enclosure)



Standard enclosure wall bracket x2



15 deg enclosure wall Bracket (handed) x2



Wall Bracket x1



Locking Bar x1



## ENCLOSURE BRACKETS

STEP 18: Check all apparatus for the installation is present and correct (Figure13) – Depending on your setup you will have either **(2)** flat or **(2)** 15 degree wall brackets.

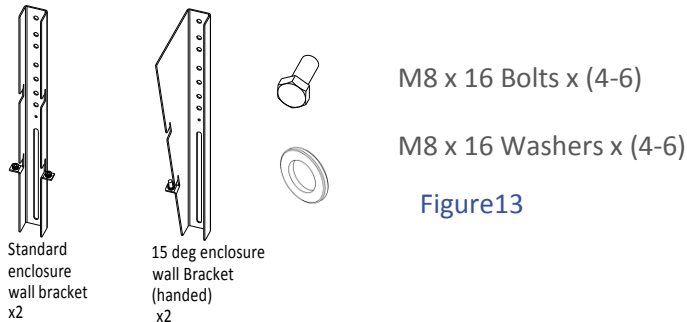


Figure13

STEP 19: Position your enclosure for clear access to its back panel and remove the fitted washer and bolts.

STEP 20: Using a measuring tape, determine the halfway line of the unit from top to bottom.

STEP 21: For a balanced unit, align the centre hole of the bracket with the halfway line of your display (Figure14). Making sure the mounting slots are fitted to the lower half of the unit, then equally space and secure the brackets with M8 washers and bolts.

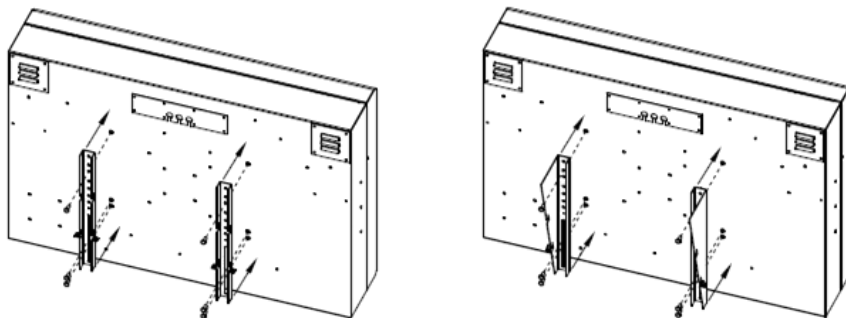
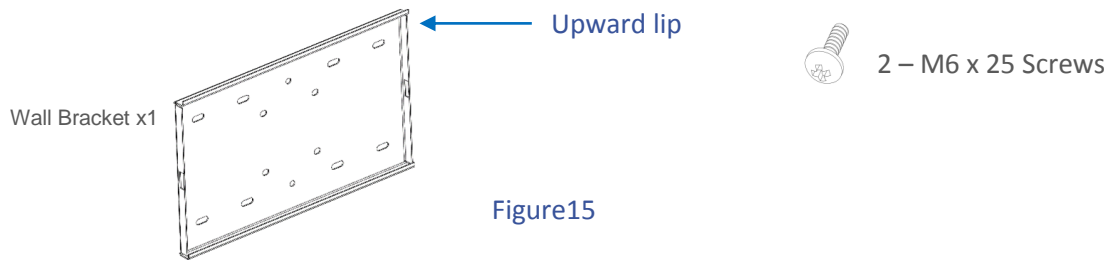


Figure14



## WALL PLATE

STEP 22: Check all apparatus for the installation is present and correct (Figure15)



(NOTE: Wall Plate fixtures not provided – depends on surface type) **minimum of 6 bolts, customer supplied.**

STEP 23: Mark the chosen area for the wall plate making sure it's completely level then secure the plate with the lip facing upwards (figure15), using appropriate fixtures capable of supporting the load (*M8 bolts and suitable wall plugs*).

STEP 24: After making sure the enclosure brackets and wall plate are securely tightened, steadily lift the enclosure onto the wall plate and fit ensuring the brackets are slotted over the wall plates top lip and the enclosure doesn't touch the wall (Figure16) – If necessary, reposition the bracket arms to accommodate more room.

STEP 25: Finally use both M6 x 25 screws on the outward facing sides of both enclosures brackets then tighten with a Phillips screw driver until the bracket and wall plate are clamped together tightly (Figure17).

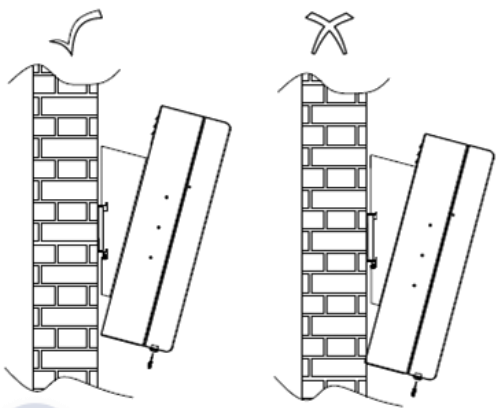


Figure16

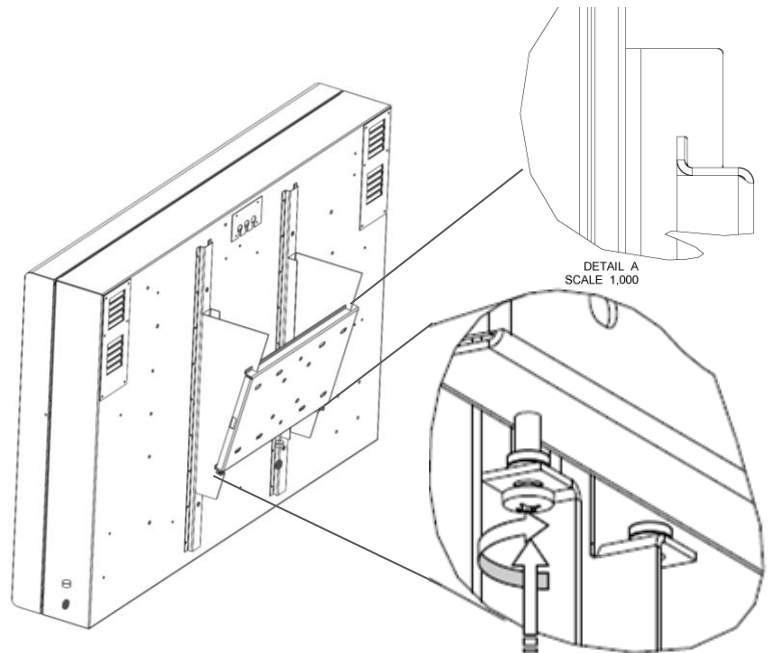


Figure17

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## LOCKING BAR

STEP 26: Check all apparatus for the installation is present and correct (Figure18)



Figure18

STEP 27: Check the enclosure over to make sure it's correctly attached to the wall.

STEP 28: To fully secure the unit to the wall and prevent issues of theft, take the locking bar and feed it through the slots on the mounting brackets and plate (Figure19)

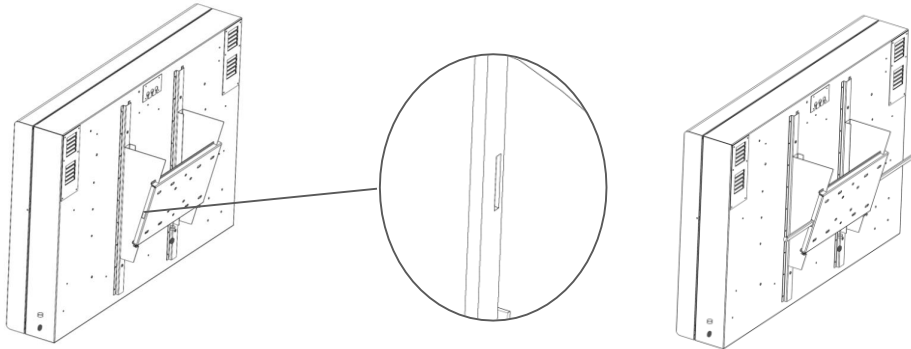


Figure19

STEP 29: Attach a padlock (Not Supplied) and once the locking bar is secure, open the enclosure and secure the cables then display, then lock up and power up.

## CONTROLLER BOARD SETUP

*NOTE: Not all units are equipped with a controller board. If your unit is not equipped with a controller board, then it will use automatic thermostats instead. Details on how to use the thermostat are found in the maintenance section (11-12).*

The printed circuit board (PCB) automatically manages the on-off commands for an enclosures air curtains, fans, heaters, power outlet and door switch. To reconfigure the controller board, you'll need the setup kit which is provided by Armagard as an optional extra.

### Kit Needed:

- Armagard USB Cable
- Armagard USB Drivers
- Windows 7 Laptop
- Phillips Screwdriver

### Directions:

1. Locate your Armagard USB cable and terminal software, and have them placed to one side.
2. To configure the PCB you'll need a computer (ideally a laptop) which will be close enough for the USB cable to reach.
3. Place the terminal software on your computer, if you're running a Windows 7 computer then the drivers should be automatically installed. If not, then install the CP210x drivers and select the appropriate 32bit or 64 bit driver. Make note of the 'Terminal' icon which we'll come back to later.
4. Once the drivers are installed, you then need to locate the controller board within your enclosure (figure 1). **NOTE: Make sure the enclosures power is switched off and unplugged before removing the cover to avoid a risk of an electric shock.**



Figure 1

5. Use a Philips screwdriver to remove the steel lid that covers the PCB board and place to one side.

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- Connect the USB cable to your computer and the 3-pin internal connection to the setup port (highlighted red) on the controller board; located on the left hand side, third from the top (figure 2).

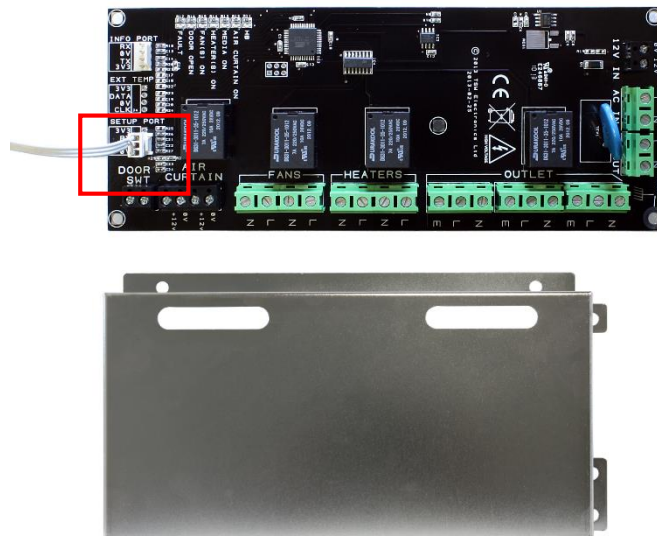


Figure 2

- Open up the terminal program mentioned from earlier and locate the setup port which will appear as a COM port. Select the correct COM port from the drop down menu as shown in figure 3 box 1. The correct COM port should be the last one on the list from the drop down menu.

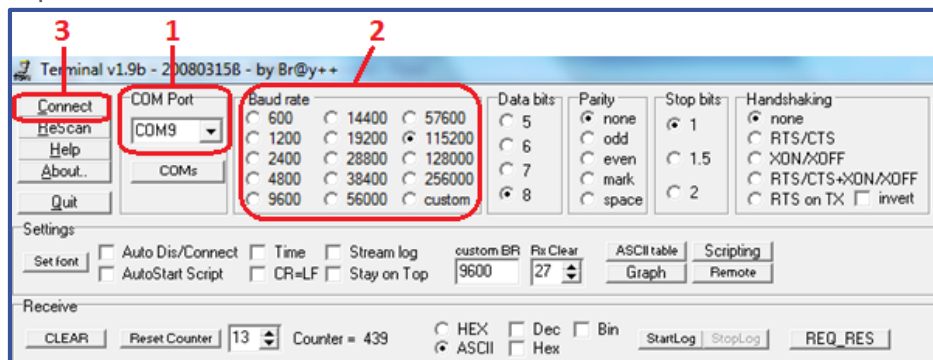


Figure 3

The default BAUD rate for setup is 115200 and the BAUD rate for info is 19200. These can be selected from the pre-set figures shown in figure 3 box 2 above. *Note - A BAUD is a unit used to express the speed of transmission of electronic signals, corresponding to one information unit or event per second.*

- Now click connect, highlighted in figure 3 box 3 above.
- Once connected, press enter and the enclosures system will be switched off and a menu will be displayed on the terminal.

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program in box 5, the current settings will be displayed for all the components just above the menu shown in box 4 below.

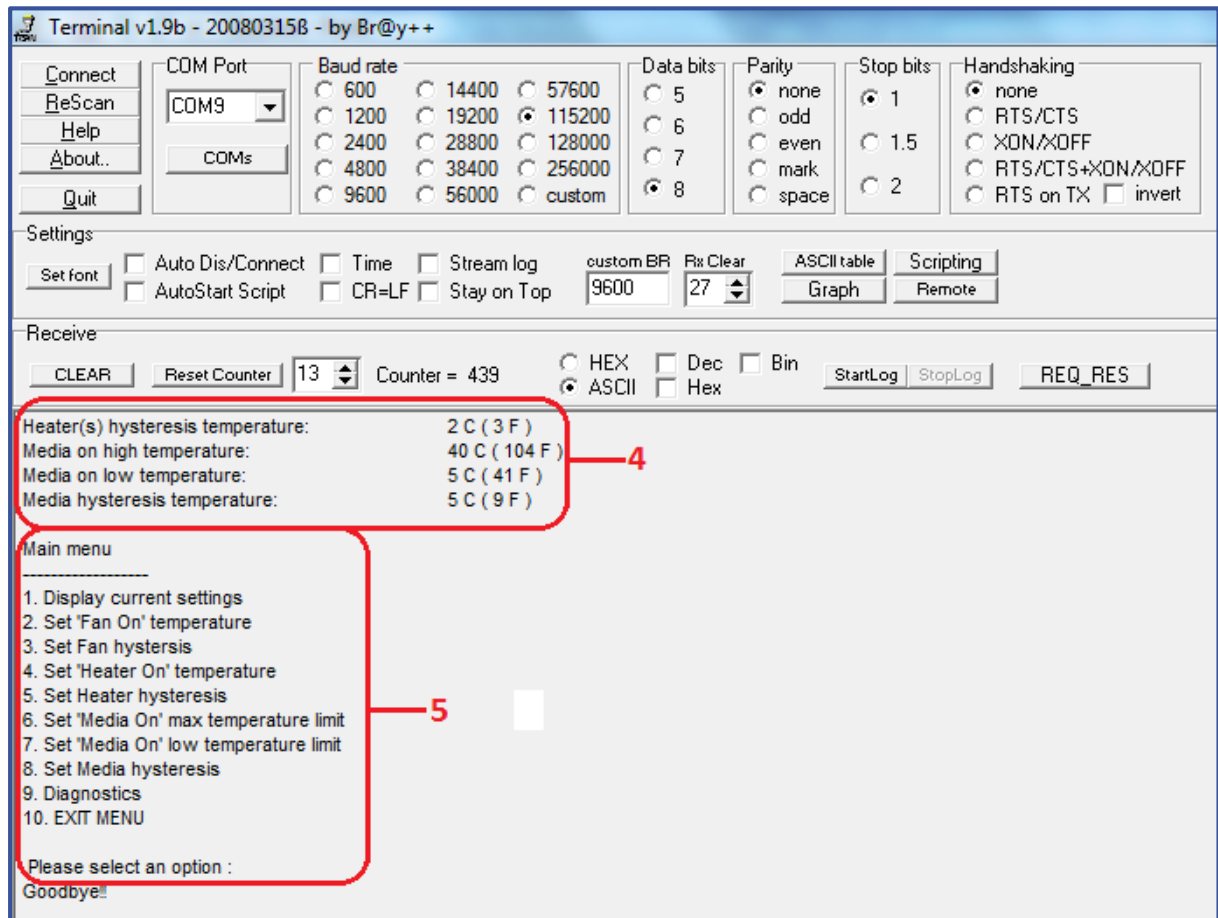


Figure 4

**10.** The settings for each component can then be changed by selecting the appropriate option from the menu in box 5.

For example, to change the temperature at which the heater comes on enter '4' followed by the return key. Then enter the new value followed by the letter 'C' (for Centigrade) or 'F' (for (Fahrenheit) followed by the return key, such as 40C.

**NOTE:** The menu will time out after 30 seconds if no commands are received and the system will switch back on.

## MAINTENANCE

### FAN MAINTENANCE & INTEGRITY

To ensure your unit lasts as long as possible, take the following precautions.

- Fan Filters – Every 6 months check and replace used fan filter pads and clean bug screens if necessary.
  - *Replacement Filters are available in packs of 3*
- Check Enclosure Integrity – In an outside environment, make sure the enclosure and its mounting bracket haven't been damaged or moved.

**THERMOSTAT CONTROL INSTRUCTIONS** – To access enclosure thermostats firstly unlock the enclosure (*fixing the support arms*), remove the display and manually adjust the thermostat dials. Repeat process until fully optimised for your environment.

- We recommend 25°C/77°F for cooling and 10°C/50°F for heating. Simply turn the thermostat dial to the temperature you wish the component to turn on at – if the fans are set to 40°C, the fans will activate once the internal temperature reaches this heat, and then deactivate when the temperature recedes to a lower temperature.
- *Be aware, these temperatures are just suggestion and the individual must take into account all environmental factors before setting the thermostat. In addition the heat given off by the LCD display will depend on whatever the customer chooses.*

### ENCLOSURE STABILITY

To ensure your unit lasts as long as possible, take the following precautions.

- Check Enclosure Integrity – In an outside environment, make sure the enclosure and its mounting bracket haven't been damaged or moved by adverse weather conditions.
- Screws & Padlock – Check the safety screws are tight and padlock if the locking bar is secure and not been tampered with.

### STAINLESS STEEL CLEANING

Depending on the finish required, there are several methods to effectively clean stainless steel.

1. Using warm water and a cloth thoroughly clean the enclosure then dry with a towel and polish with a microfiber cloth (involves very little risk).
2. For a better clean use detergent, warm water and a cloth, making sure to thoroughly rinse all soap off the unit which avoids staining and polish with a microfiber cloth.
3. Stainless Steel Cleaner is readily available from most hardware stores; this specialised cleaner helps to reduce stains, scratches and provides an excellent polished finish.

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### Screen Cleaning – Polycarbonate and Anti-Reflective Polycarbonate

In order to maintain your polycarbonate in a good condition it is recommended that the sheet be cleaned periodically using suitable household cleaning agents.

The recommended cleaning instructions are as follows:

- Use lukewarm water to rinse and soften dirt.
- Make up a solution of lukewarm water and ordinary household cleaner or mild soap and use this to wash the sheet.
- A sponge or soft cloth should then be used to gently remove dirt and grime and for large areas a pressure washer may be used in a suitable outdoor area.
- Ethyl alcohol or white kerosene used sparingly can be used to remove paint and other such substances.
- The cleaning process should then be repeated and the sheet rinsed with clean water and dried with a soft cloth.

**Warning** - The following precautions should be observed:

- Do not scrub the sheet with brushes or sharp implements.
- Do not use squeegees.
- Avoid solvents, other than those listed, or any abrasive cleaners.
- Avoid cleaners of a highly alkaline composition.
- Avoid cleaning in the hot sun or high temperatures.

### SCREEN CLEANING – GLASS DISPLAY

- For high toughed glass and anti-reflective glass.

#### Procedure 1

1. On a mild temperature day, use hot soapy water and wash down the glass to eliminate all traces of debris and marks.
2. When the window has been washed, rinse it thoroughly and using a clean cloth, dry the screen to eliminate streaks and blemishes.
3. Alternatively you can use a glass cleaner detergent to get it thoroughly clean.
4. Note: Make sure you work as quickly as possible to avoid streaks appearing during the process.

#### BEST PRACTICE USE & WARRANTY

1. Mount the enclosure using the recommended brackets to ensure integrity. Do not drill or penetrate any additional holes into the enclosure for mounting, as breaking the surface will reduce the ingress rating, and void the warranty agreement.
2. Do not block air vents around the enclosure, obstructions to air circulation will cause overheating and void the warranty agreement.
3. Do not use enclosures in environments or sheltered areas where the average ambient temperature is higher than the operating temperature of your display without an air-conditioning module.



For additional support, visit [www.Armagard.com](http://www.Armagard.com) or call

**Free (US):** 1-866-434-0807

**Call Free (UK):** 0121-608-7210

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