

27" Wide FULL HD High Brightness Color TFT-LCD Chassis Monitor

MODEL: GCHW2700HB2



i-Tech Company LLC

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1. General Description

1-1, Overview

GCHW2700HB2 27" chassis monitor is designed for commercial and industrial applications at outdoors and indoors, such as kiosks, digital signage, military, security, industrial equipment, and instrumentation equipment. This product can provide high brightness / contrast to achieve better viewing effect and good reliability at wide environments conditions.

1-2. Features

- LED backlight
- 1500 nits sunlight readable display.
- WUXGA (1920 x 1080 pixels) Full HD resolution
- VA mode with wide viewing angle
- RoHS Compliance
- 5 keys OSD controls
- VGA / DVI / HDMI Video Input and auto detection video system.

1-3. Application

Industrial Application; especial for outdoor kiosk and digital signage display.

2. Specifications

2.1 LCD specification

The following items are characteristic summary on the table at 25°C condition

| | Item | Specification | Unit | Note |
|-------------|-----------------------|--|--------|------|
| LCD panel | Active screen size | 597.6(H) x 336.15(V) (27 inches diagonal) | mm | |
| | Resolution | 1920 (H) x 1080(V) | pixels | |
| | Pixels pitch | 0.31125(H) x 0.31125 (V) | mm | |
| | Pixel arrangement | RGB vertical stripe | | |
| | Display mode | VA mode, normally black | | |
| | Display colors | 16.7 M (8 bits) | colors | |
| | Brightness | 1500 | nits | 3 |
| | Contrast Ratio | 3000 : 1 | | |
| | Response time | 12 ms (on/off) | | |
| | Aspect Ration | 16 : 9 | | |
| Graphic | Input Connector | D-Sub 15 pins, DVI, HDMI | | |
| Power | Power Input | 100~240 | Vac | |
| Power const | | | | |
| Physical | Weight | | KG | |
| | | | | |
| Environment | Operating Temperature | -10 ~ 50 | °C | 1 |
| | Storage Temperature | -20 ~ 60 | °C | 2 |
| Reliability | Backlight MTBF | 50,000 | hours | |
| | Warranty | 18 | month | |
| | ON / OFF cycle | 36,000 | cycle | |
| DCC | Plug & Play | DDC 2B Compliance | | |
| Function | OSD key | 5 keys(Power ,Enter , ▲ , ▼ ,Menu) | | |
| | Wall mount | VESA standard 100 x 100 (75x75) | mm | |

Note 1: -40°C operation is still OK at system condition.

Note 2: The unit should not be exposed to corrosive chemicals.

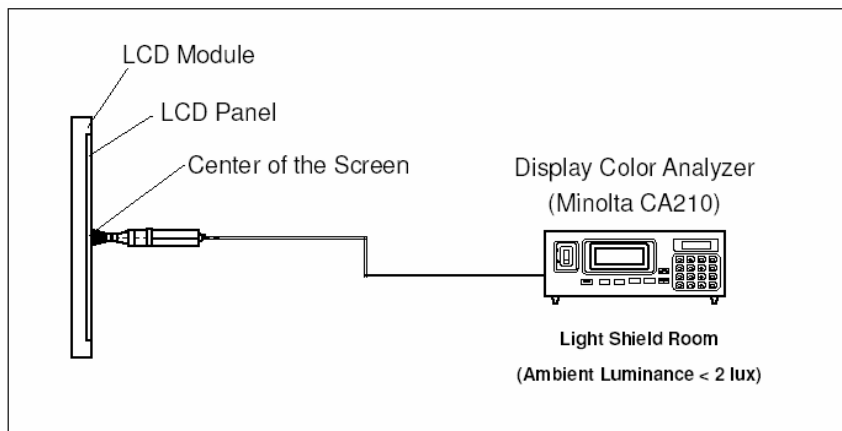
Note 3: Brightness without touch panel

3. Optical characteristics

The relative measurement methods of optical characteristics are shown below.

| Item | Sym | Condition | Min. | Typ. | Max. | Unit | Note | |
|---|----------------------|-------------------------|----------------|-------------------|------------|-------------------------|----------|----------|
| Center Luminance of White | Lc | Normal Direction | 1200 | 1500 | | Cd/m² | 1 | |
| Center Color Chromaticity of White | Red | | Rx | Typ - 0.04 | 0.65 | Typ + 0.04 | | |
| | | | Ry | | 0.33 | | | |
| | Green | | Gx | | 0.32 | | | |
| | | | Gy | | 0.62 | | | |
| | Blue | | Bx | | 0.15 | | | |
| | | | By | | 0.06 | | | |
| | White | | Wx | | 0.31 | | | |
| | | | Wy | | 0.35 | | | |
| Uniformity | 5 points | | δW | 65 | 75 | | | % |
| Contrast Ratio | | CR | 1500 | 3000 | | | | |
| View Angle | Horizontal | θx+ | CR ≥ 10 | 75 | 89 | Deg. | 2 | |
| | | θx- | | 75 | 89 | | | |
| | Vertical | θy+ | | 75 | 89 | | | |
| | | θy- | | 75 | 89 | | | |
| Response time | T_R | Normal Direction | | 7 | | ms | 3 | |
| | T_F | | | 5 | | | | |
| Crosstalk (in 60Hz) | | | | | 1.5 | % | 4 | |

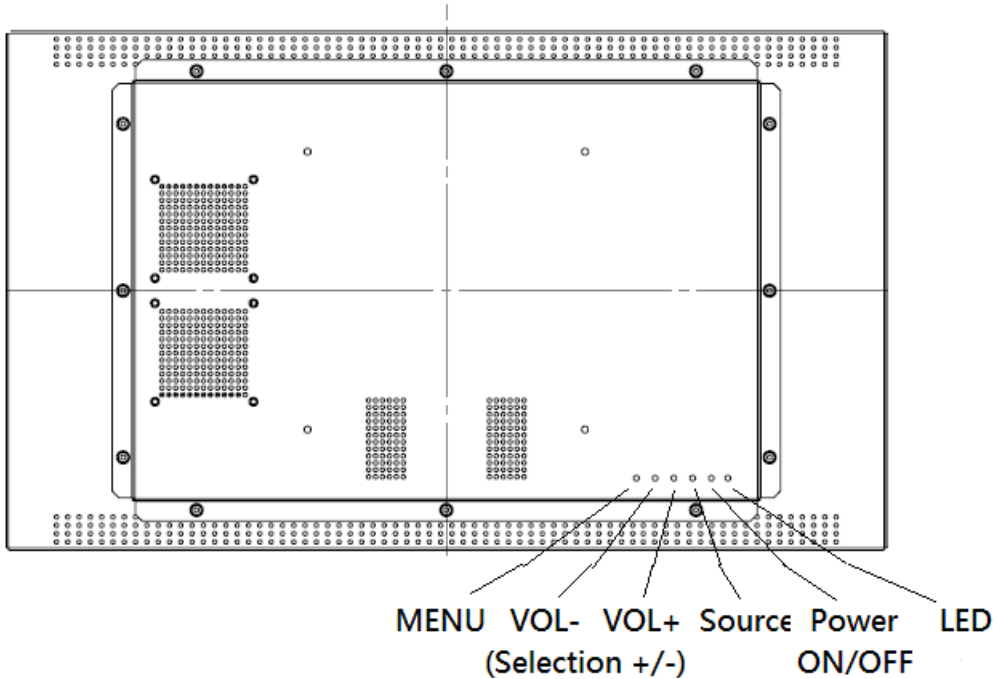
Measurement Setup:




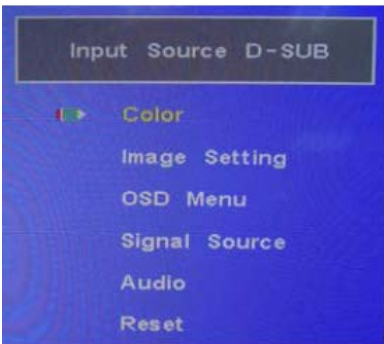
The LCD module should be stabilized at given temperature for 10 min. to avoid abrupt temperature change during measuring.

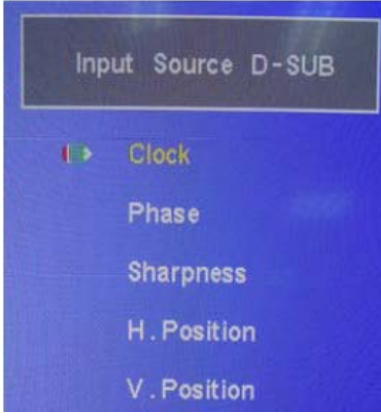
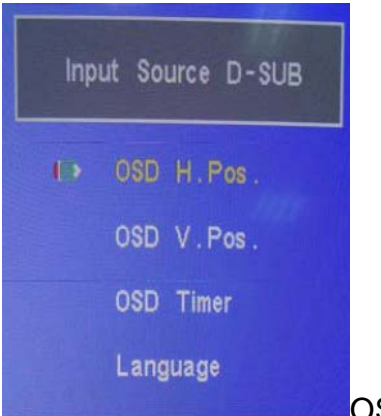
4. OSD Functions:

OSD key instruction



Main menu mode

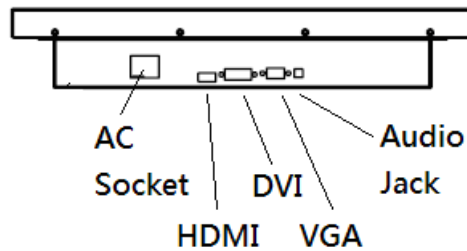
| OSD MENU | Description |
|---|---|
|  <p style="text-align: right;">General</p> | <p>Select the main function below :</p> <ul style="list-style-type: none"> ● Color ● Image setting ● OSD Menu ● Signal source ● Audio ● Reset |
|  <p style="text-align: right;">Color</p> | <p>Setting the value below:</p> <ul style="list-style-type: none"> ● Contrast ● Brightness ● Color adjust ● Color temperature ● Auto setting |

| | |
|--|---|
|  <p>Image setting</p> | <p>Setting the value</p> <ul style="list-style-type: none"> ● Clock ● Phase ● Sharpness ● H & V Position |
|  <p>OSD menu</p> | <ul style="list-style-type: none"> ● OSD position & Timer ● OSD Language: Multi language support 8 languages (English, French, German, Spanish, Italian, Japanese, Russian and Chinese) . |

5. Shipping label and Parking list (TBD)

6. Installing the monitor

Customer ports and instruction as below:



If the computer is turned on, you must turn it off before continuing.

Do not plug-in or turn-on the power to the monitor until instructed to do so.

1. Attach the monitor base (By pass)
2. Connect the PC video cable.
3. Connect the power cable to the monitor.
4. Route the cables via the cable clip.
5. Connect-to and turn-on the power.

Special note:

1. If the video card cannot display or normal display with your setting resolution, please adjust the resolution to 16:9 format (1366X768 or 1920X1080 and so on).
2. When the monitor is operating continuous, the chassis will be “warm”.

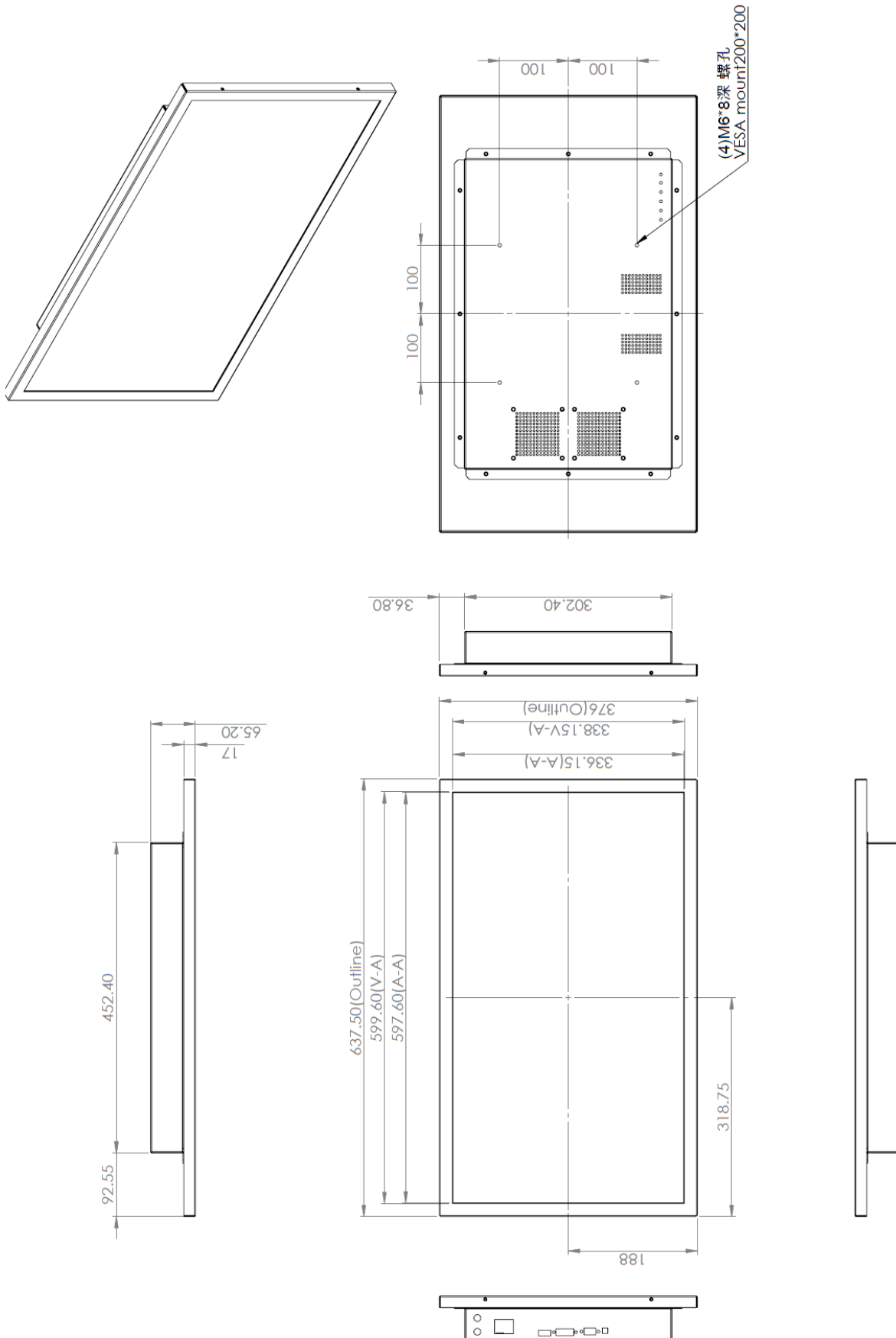
7. Trouble shooting

If experiencing trouble with the monitor, or it fails to operate correctly, please refer to the following instructions before calling for repairs.

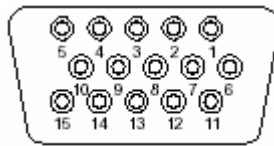
| Trouble | Suggestion |
|--|--|
| 1. The picture does not appear | <ul style="list-style-type: none">● Check to see that all the I/O and power cables is firmly seated in the socket.● Check the Power LED is Lighting When the monitor was turned ON.● Check if the brightness control is at the appropriate position, not at the minimum |
| 2. The screen is not synchronized | <ul style="list-style-type: none">● Check if the I/O signal cable is firmly seated in the socket.● Check if the output level matches the input level.● Make sure the signal timings of the computer system are within the specification of the monitor |
| 3. The position of the screen is not in the center | <ul style="list-style-type: none">● Adjust the H-position, and V-position, or perform the auto adjustment or Memory recall |
| 4. The screen is too bright (too dark). | <ul style="list-style-type: none">● Check if the brightness or contrast control is at the appropriate position. |
| 5. The Screen is shaking or waving | <ul style="list-style-type: none">● Press the Auto adjustment control to adjust. Moving all objects which emit a magnetic field such as motor or transformer, away from the monitor. Check if the specific voltage is applied.● Check if the signal timing of the computer system is within the specification of monitor. |

If you are unable to correct the fault by using this chart, stop using your monitor and contact us

Appendix 1: Mechanical drawing



Appendix 2: D-sub 15pin Connector



D - S U B

| Pin No. | Pin Function | Pin No. | Pin Function |
|---------|--------------------|---------|----------------------------------|
| 1 | Red video input | 9 | NC |
| 2 | Green video input | 10 | Ground |
| 3 | Blue video input | 11 | No connection |
| 4 | NC | 12 | (SDA) |
| 5 | Ground | 13 | Horizontal sync (Composite sync) |
| 6 | Red video ground | 14 | Vertical sync |
| 7 | Green video ground | 15 | (SCL) |
| 8 | Blue video ground | | |