

Introduction

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Please read this instruction before installation and operation.

Thank you for choosing our professional vehicular LCD monitor LED backlight series. It is designed specially for vehicle, ship and train. To ensure you using this monitor correctly, please do read this user manual carefully before installation. Also please take notice of the safety items, and keep this user manual for reference.

WARNING

To prevent injury, this apparatus must be securely attached to the ceiling in accordance with the installation instruction. Read, heed and follow all instructions to ensure correct and safe installation and interconnection of the apparatus.

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

Notice:

We keep the rights of improving and changing the design of our products without notifying.

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Safety Items

- ▲ Please do not prize or sway the LCD by hand or other appliance!
- ▲ The operation power voltage is DC 24V, do not connect to home use electric supply AC 220/110V directly!
- ▲ Do avoid being caught in or exposing in watery place!
- ▲ High voltage inside! The case only can be opened by professional person!
- ▲ The place for installation must be strong enough to support the monitor weight and suffer jolt!
- ▲ Avoid sun light and other heat source!
- ▲ Turn off the power first when something or liquid fall into the monitor, send to professional mechanic to repair!
- ▲ Please do not scratch the screen of LCD!
- ▲ When you want to clean the screen of LCD, please remember to turn off the power first, use soft cotton fabric to wipe it. Do not use any organic or inorganic solvent to clean the screen!



Features

- ◇ 16:9 Display Aspect Ratio
- ◇ LED backlight
- ◇ Wide range of supply voltage, 16~32V DC.
- ◇ Wide view angle, high brightness and resolution.
- ◇ Small size, light weight, low power consumption, easy installation.
- ◇ Composite video signal input, PAL/NTSC auto (VGA Input optional)

Specifications

- 15.6 inch: CM1561 CM1563 CM1568**
- ◇ Screen size: 359.8×210mm , 15.6 inch
- ◇ Display system: a-Si TFT active matrix
- ◇ LED backlight
- ◇ Display dot: 1366×768
- ◇ Respond speed: 8ms
- ◇ Panel brightness: 220cd/m²
- ◇ Contrast: 600: 1
- ◇ View angle: Left:45° Right:45° Up:15° Down:35°
- ◇ Power supply: DC 24V±20%
- ◇ Power consumption: Normal: ≤ 30W
- ◇ Color system: PAL / NTSC Auto
- ◇ Operation temperature: -10°C-60°C
- ◇ Gross weight: ≤ 4 Kg
- ◇ Dimensions: 389×236.5×41 (mm)

18.5 inch: CM1905 CM1915 CM1916

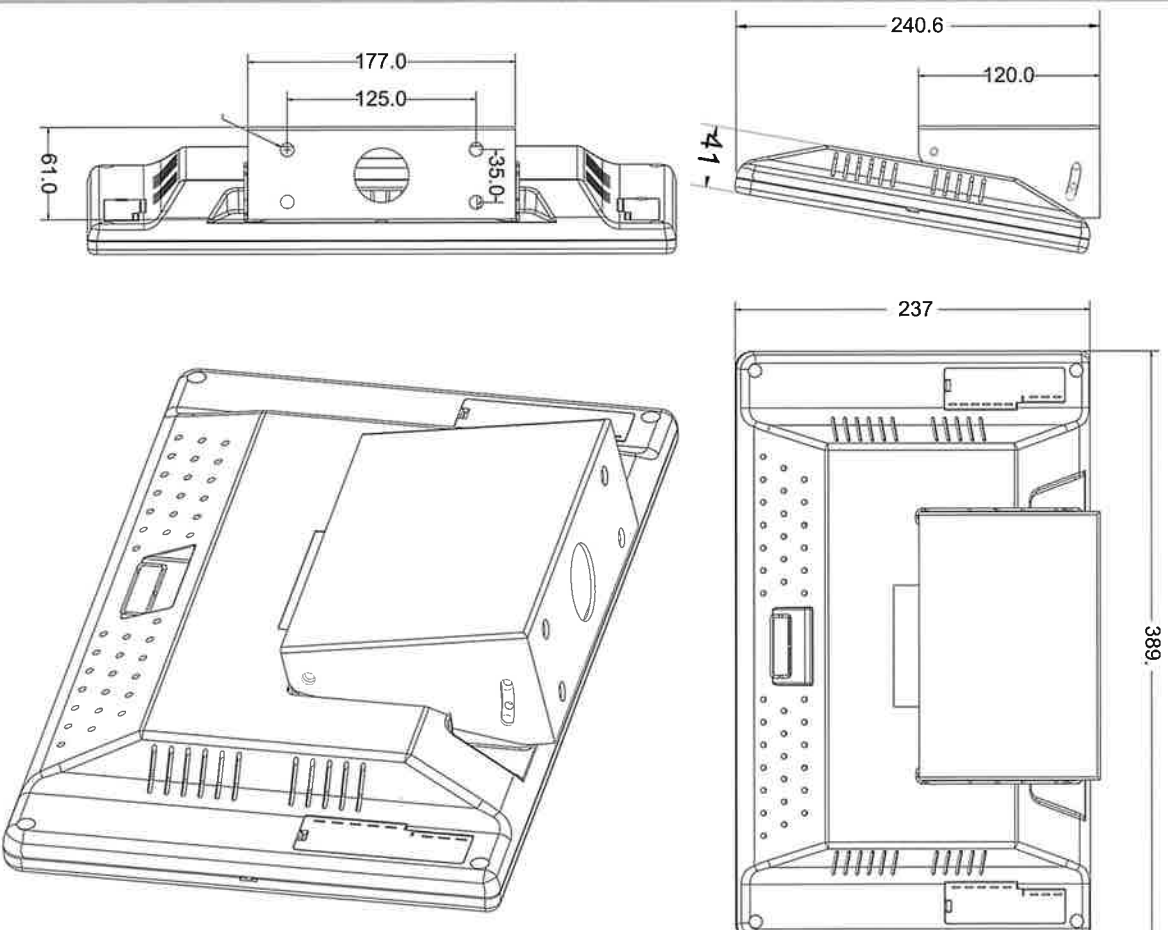
- ◇ Screen size: 430.4×254.6mm , 18.5 inch
- ◇ Display system: a-Si TFT active matrix
- ◇ LED backlight
- ◇ Display dot: 1366×768
- ◇ Respond speed: 5ms
- ◇ Panel brightness: 250cd/m²
- ◇ Contrast: 1000: 1
- ◇ View angle: Left:85° Right:85° Up:80° Down:80°
- ◇ Power supply: DC 24V±20%
- ◇ Power consumption: Normal: ≤ 30W
- ◇ Color system: PAL / NTSC Auto
- ◇ Operation temperature: -10°C-60°C
- ◇ Gross weight: ≤5 Kg
- ◇ Dimensions: 463×283×46 (mm)

21.5 inch: CM2205 CM2215

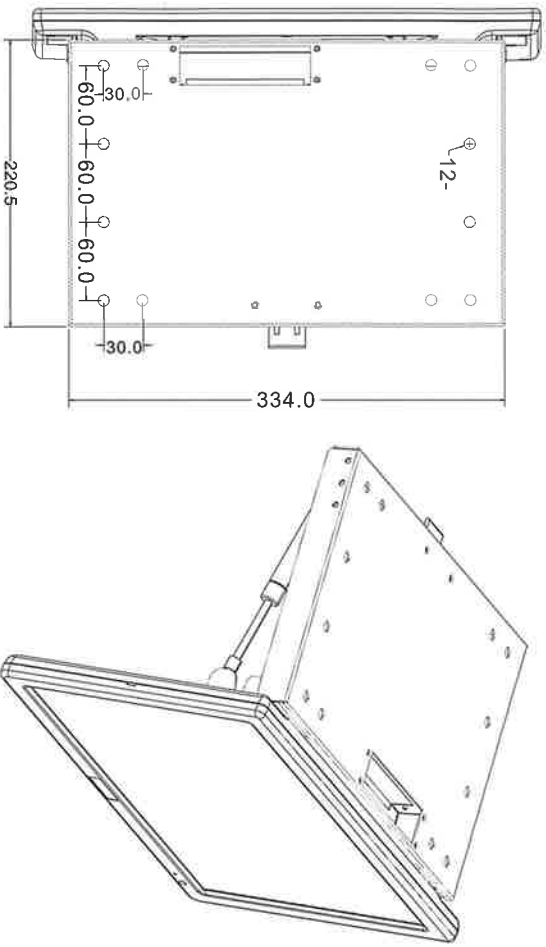
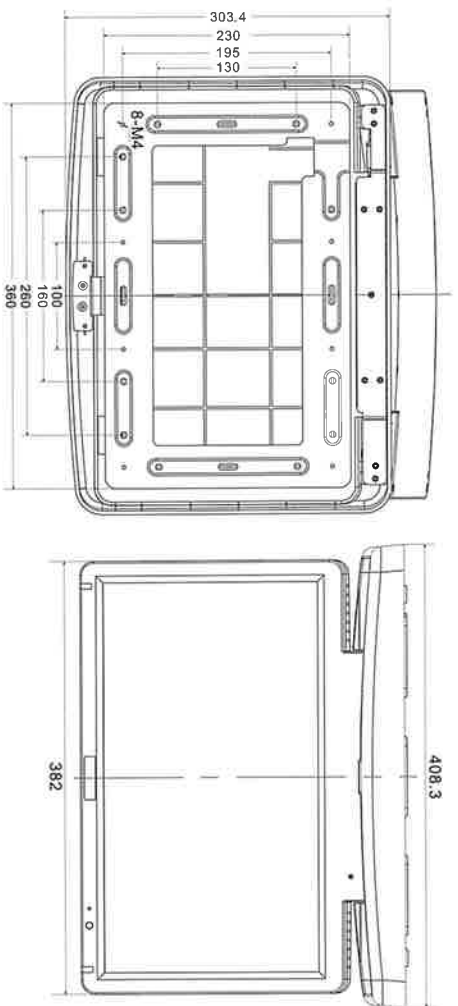
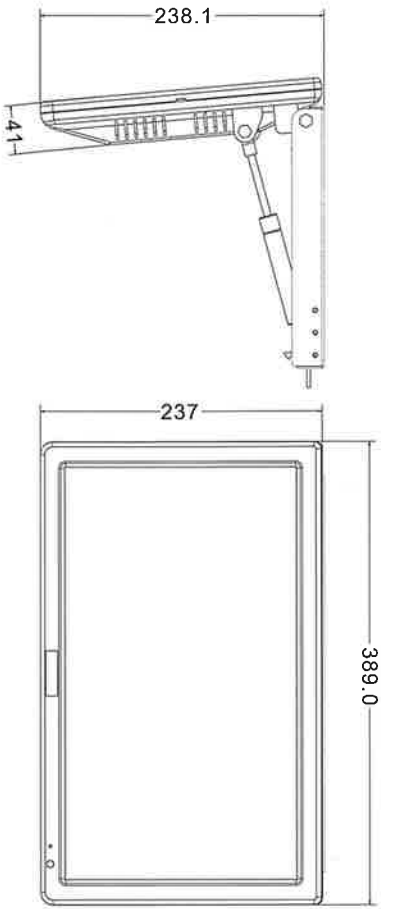
- ◇ Screen size: 495.6×292.2mm , 21.5 inch
- ◇ Display system: a-Si TFT active matrix
- ◇ LED backlight
- ◇ Display dot: 1920×1080
- ◇ Respond speed: 5ms
- ◇ Panel brightness: 250cd/m²
- ◇ Contrast: 1000: 1
- ◇ View angle: Left:85° Right:85° Up:80° Down:80°
- ◇ Power supply: DC 24V±20%
- ◇ Power consumption: Normal: ≤ 30W
- ◇ Color system: PAL / NTSC Auto
- ◇ Operation temperature: -10°C-60°C
- ◇ Gross weight: ≤6 Kg
- ◇ Dimensions: 530×321×47 (mm)

Installation

Please install according to the steps and drawings.

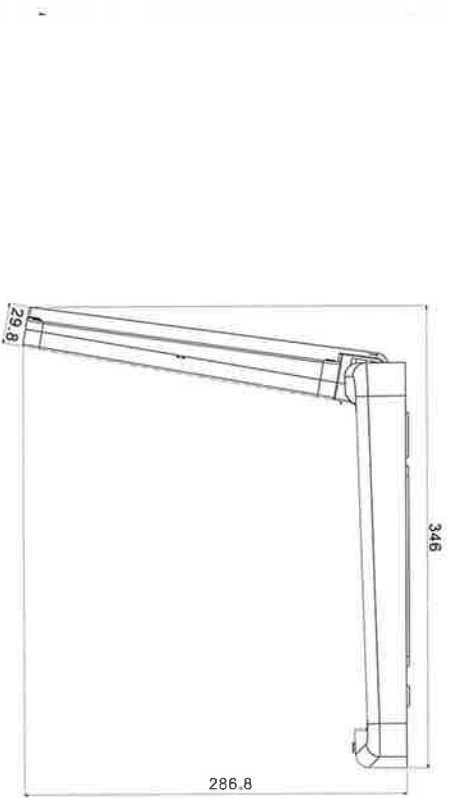


Installation Drawing for Fixed Monitor



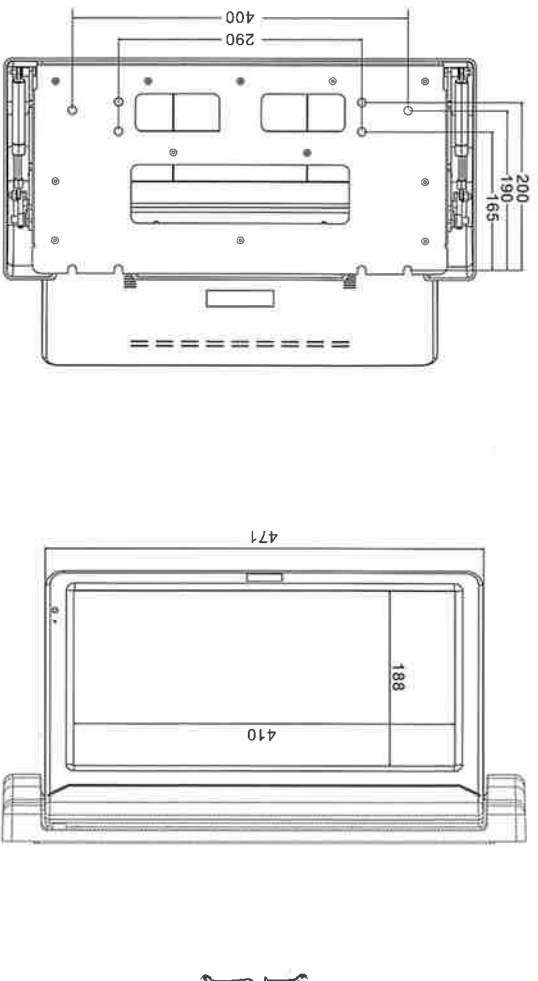
Installation Drawing for Manual LCD Monitor

Make sure that the thickness of the screw head should be under 7mm.



Installation Drawing for Manual LCD Monitor

Make sure that the thickness of the screw head should be under 7mm.



Installation Steps:

1. As shown in above drawing, broach 4 round holes in the roof steel girder
2. Insert the 4 screws (M5×40) to the hole and mount the monitor on the roof by fastening the 4 screws on monitor bracket to vehicle roof.
3. Do not connect the mount to bus iron structure. That will influence the picture quality since there are power separate units in monitor.

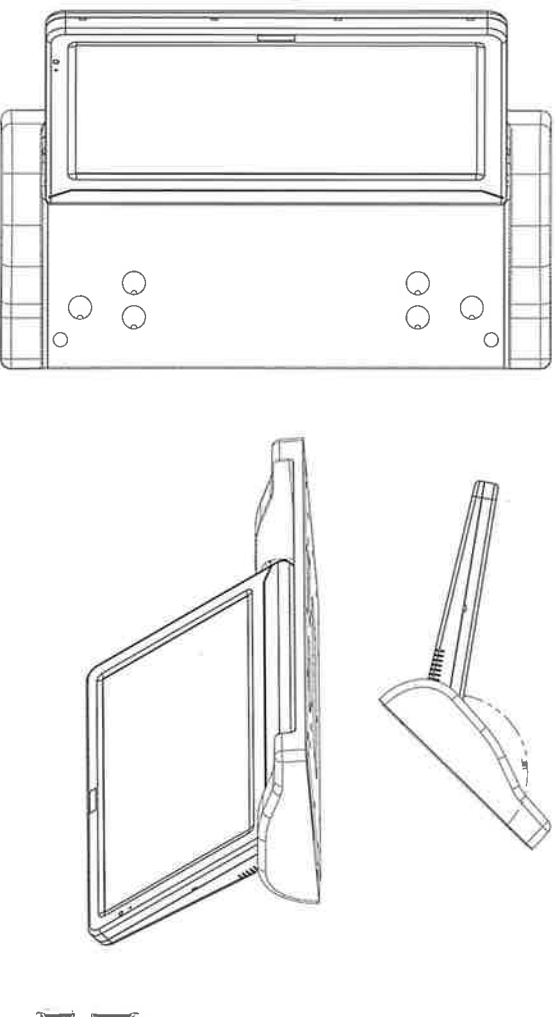
After turn on the monitor power, it will display the input video or blue screen when no signal input. The power light is green.

Remark:

The installation of 18.5 and 21.5 monitors are the same.

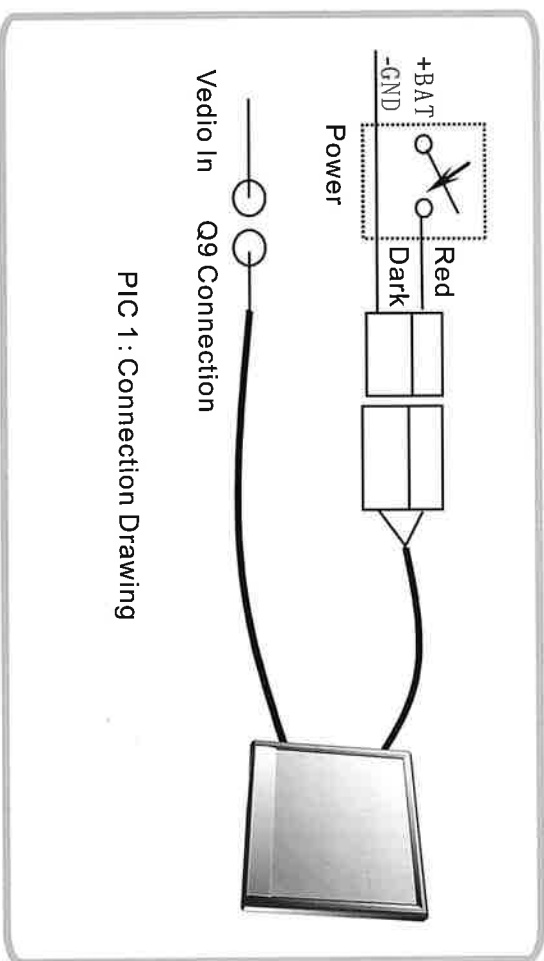
Installation Notice Items:

1. Please do not damage the interconnection lines and plastic case or scratch LCD
2. The release length of interconnection line is better to be no less than 50mm, to avoid damaging when flip up and down frequently
3. Ensure the ceiling is flat for fixing the monitor, or otherwise the mount will be distorted after being fixed, this will influence on the monitor's normal flipping operation
4. Please do not sway the LCD strongly
5. Please make sure the monitor and the vehicle roof reliable and good insulation. The connecting point of the signal plug must be wrapped with the insulation adhesive tape.



Installation Drawing for Manual LCD Monitor

Make sure that the thickness of the screw head should be under 7mm.



PIC 1 : Connection Drawing

Connection Instruction:

Please look at the above connection drawing (See PIC 1)

1. Power connection: LED backlight monitor adopts auto DC24V power supply. Red line is positive "+", and dark line is ground "-". If the vehicle power is DC12V, please use power converter (12-24V) larger than 50W.

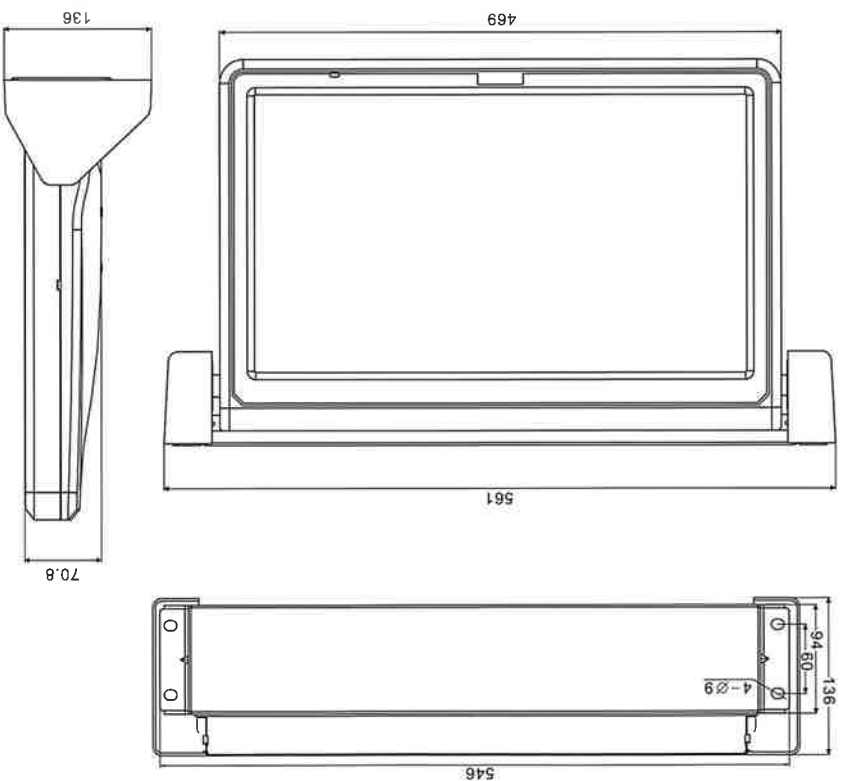
Note: Please do not connect LED backlight series LCD monitor directly with home power AC 220V or AC 110V!

2. AV Input Connection: Connect AV cable with LED backlight monitor AV input socket; make sure the connection is tight

18.5inch : CM1925

Installation Steps:

1. As shown in above drawing, broach 4 round holes on the roof steel girder, $\phi 7$ (tap screw M8) or $\phi 9.5$ (welded with M8 nut).
2. Use 4 screws of M8x40, inserting through $\phi 8$ spring gasket and $\phi 8$ gasket one by one, and mount the monitor on the roof by fastening the 4 screws on monitor bracket to vehicle roof.
3. Use 2 screws (M4x6) to fix the cable cover, do not expose the lines out or block the line.
4. Fix the left and right cover.



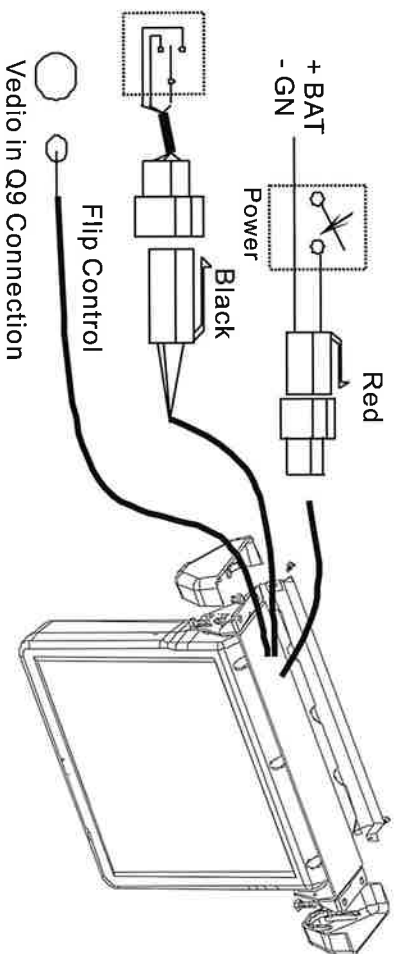
Features:

- ◇ 18.5 inch 16:9 Display Aspect Ratio
- ◇ Smart-Motorized mechanism, manual one optional
- ◇ Smart flipping angle adjustment, flipping angle in memory
- ◇ Against unexpected pulling and pushing actions during flipping
- ◇ Flip controlled by variety of signals: video, low or high voltage
- ◇ Inner isolation power design, good anti-interference ability
- ◇ Composite video signal input, PAL/NTSC auto (VGA Input optional)

Installation Notice Items:

Please do not damage the interconnection lines and plastic case or scratch LCD

1. The release length of interconnection line had better to be no less than 50mm, to avoid damaging the line when flip up and down frequently
2. Ensure the ceiling is flat for fixing the monitor, or else the mount will be distorted after being fixed, this will influence on the monitor's normal flipping operation
3. Please do not sway the LCD strongly



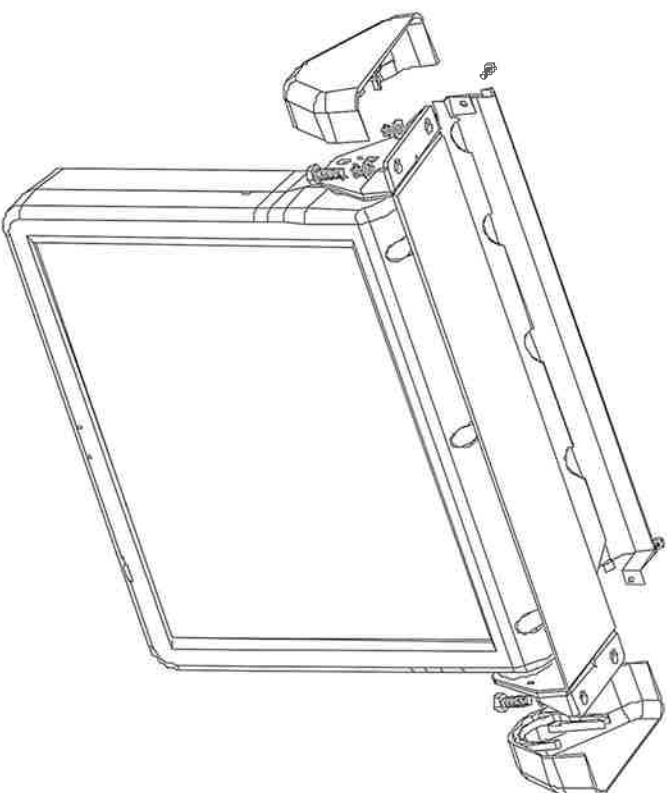
Connection drawing 2

Specifications:

- ◇ Screen size: H430.4×V254.6mm , 18.5"
- ◇ Display system: a-Si TFT active matrix
- ◇ Resolution: 1366(H)X3(RGB)X768 (V)
- ◇ Respond speed: 5ms
- ◇ Panel brightness: 250cd/m²
- ◇ Contrast: 1000: 1
- ◇ View angle: Horizontal: 170o (typ.), Vertical: 160o (typ.)
- ◇ Power supply: DC 24V±20%
- ◇ Power consumption: Normal: 60W
- ◇ Storage temperature: -20°C-75°C
- ◇ Gross weight: ≤8.75 Kg
- ◇ Dimensions: 463×283×72 (mm)

Installation and Connection Instruction :

Please install CM-1925 following steps in the instruction, shown as Drawings

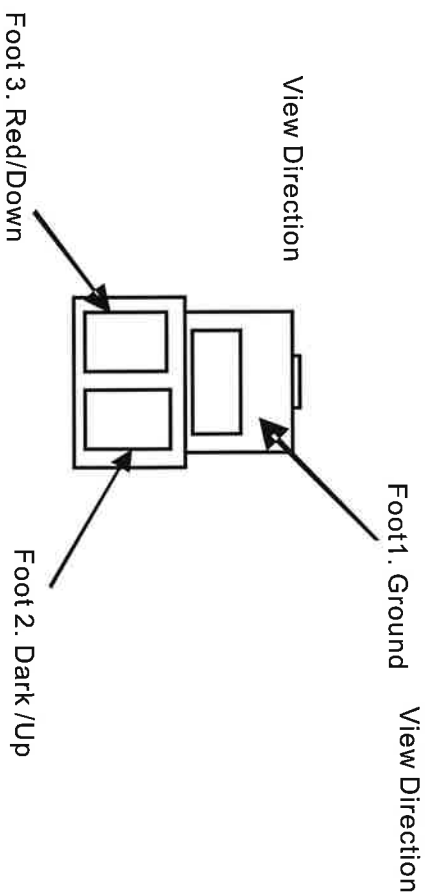


Installation Drawing 1-1

Note:

1. Please do not connect CM-1925 directly with home power AC 220V or AC 110V
2. Video Input Connection: Connect Video cable with CM-1925 input; make sure the connection is close
3. Flip control connection: STP line is ground; red is for flip down control and dark is for flipping up control. (See PIC 3)

When red cable connects ground, the monitor flips down slowly, at the same time, auto turn on the monitor power. When dark line connects ground, monitor will flip up slowly and turn off the monitor power. These three controlling line can be connected with driver control panel.



PIC 3 Flip control connection

Daily Use and Maintenance

To avoid body injury and property loss, please comply with the following safety instructions

Operation:

- Please do not jam the hole of casing
- Please be careful when moving the monitors, don't drop it, it may be broken or body injury.
- When using it, do not let the LCD monitor shock or impact strongly.
- Please do not try to pull cable or signal cable to move the monitor.
- In order to protect the monitor, do not press LCD screen overly, when moving the monitor, scratch the framing and lift it up. When lift it up, pls do not put your hand or finger on the screen of LCD.
- Please do not install the monitor to unstable places, such as sway shelf, not flat place.
- When something or water fall into the monitor, turn off the power first and pull out the plug, then take the things out or wipe the water and send to the professional mechanic for repair.
- Do not use monitor cleaner directly spray on the surface of monitor, or else that maybe cause color fading and structure deformed, screen surface may peel off.
- Only soft cotton fabric and monitor cleaner can be used to clean the monitor. If using cleaner which is not for monitor, please dilute the cleaner according to the rate 1:10 (cleaner/water).
- When clean the monitor, please turn off the power first, use soft cotton fabric to wipe it
- If the monitor emanate bad smell ,unusual noise or smoking, please pull out the plug immediately and contact with the service center.

If the monitor doesn't work well or you still don't know how to operate it correctly after reading our operation instructions, please contact with the service technicians.

Trouble Shooting

The following solutions may help you to deal with some general problems. If the problem still can not be solved, please contact with us or our local agent.

Problem	Solution
The picture is abnormal	<p>Check the connection and polarity of power line.</p> <p>Check the installation of the fuse.</p> <p>Check the connection of Video line and check the station of the program player.</p>