

Brief Introduction

Thanks you for your purchase of 14" and 15" Car TFT LCD Monitor, this product can be used in all kind of big, middle and small size car as well as bus and other vehicle, TFT panel used are all famous brand, with high resolution, super wide, light and slim characters. Single or more pieces monitors can be installed in a car, design is safe and easy installation. It is the best choice for car monitor.

Catalogue

1.Product introduction	2
2.Technique data	3
3.Installation method.....	4
4.Electro-motion connection	6
5.Use method	7
6.Precautions	9
7.Trouble Shooting	10
8.After service	11

1. Product introduction

Both 14" and 15" roof mounted TFT LCD Monitor outer side and function are the same. Only the TFT Panel and related data is different, power supplier is 12V or 24V, signal input including AV, TV, PC and S jack are optional.

Installation methods including: Roof mounted, Back mounted and Ceiling Hooking-up

1). Roof mounted:

It is suitable for installing in passenger bus to provide more enjoyments. The monitor can be opened and fixed by remote controller, and also close it automatically. When closing, the total thickness is only 6.5cm, it keeps the distance from people and staff.

There are 3 ways to open the monitor: Hand operation, Electro motion Operation, Full function remote control. (See attached picture 1)

A. Hand operation: pull down the monitor by hand and fix a proper direction. It will not bumping when driving. When not use the monitor, just close it by hand, it will then lock automatically. It is very easy and practice way.

B. Electro-motion operation: with the precised mechanical electro-motion system, press "Turn on" button, the monitor will be opened and TFT Panel works automatically. When turn off, the monitor stop working and close automatically.

C. Full function remote control operation: The working system is similar like Electro-motion, but whole operation can be controlled by remote controller, only press "On" and "Off", it does not have the direction, both driver and passenger can operate it. It is more advanced and convenient.



Fig 1- Top-Attached Monitor

2). Back mounted :

It is simplified from the roof mounted installation, without the big outer cover, only the monitor. With 3 steel rings, monitor can be fixed by 2pcs steel tubes. It suits for city bus, like the back of the driver's position and the back door. (See attached picture 2).



Fig 2-1. Back Attached Monitor(Front)



Fig 2-2. Back Attached Monitor(Back)

3). Ceiling Hooking-up:

It is also simplified from the roof mounted installation, it can be fixed by a "7" shape ceiling steel stand, it suit for some allowance positions and some special car. (See attached picture 3).

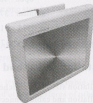


Fig 3. Top Attached Monitor

2. Technique data:

Screen : 14" & 15" TFT LCD Panel

Panel Model and data: <LG-PHILIPS>, LC 150X01(A3K2)
or <TORISAN>, TM150XG-71N08

View area : 304.1(H) × 228.1 (V) mm

Pixel Dot : 0.297 (H) × 0.297 (V)

Best resolution : 1024 × 768

Max. color : 167000 kinds

Brightness : 450cd/m²

Contrast : 400:1

View angle : 170 degree (H), 170 degree (V)

Response time : 10-20 ms

Working temperature : 0-55 degrees

(PS: Above panel data for reference only. It is subject to the real products)

Power supply: DC 12V (if use 24V, please equipped DC-DC adaptor)

Currency: 3-5A

Power consumption: 25-33w

Signal input : Video (CVBS), S jack, TV, PC (RGB)

System: AV : NTSC/PAL auto-change,

TV : PAL/SECAM and PAL/NTSC

Menu : Chinese, English (complex Chinese, Russian and French is selectable)

Panel control method: Key on the monitor or IR

Operation method: Hand, Electro-motion, and full function remote control

Product outer size : close : 480×380×65mm

open : 480×380×350mm

monitor : 375×310×42mm

Back mounted size : 375×310×42mm

Ceiling Hooking-up size : 375×310×42mm

3. Installation method :

Installation size : (see attached picture 4)

Installation and cable connection is simple. The power connection has been improved to one single power supply for both monitor and turn on/off. As well as the improving for avoiding short cut and low voltage. It can avoid the damage when user put the two power supply jack together. Due the environment in car is not stable in different type car, if not install properly, it will effect on the monitor display and result in damage. So it is very important to install properly.



Fig.4. Size of Top Attached Monitor

Roof mounted type installation :

- 1). This product has 4pcs diameter 5mm screw holes, put diameter 5mm screw to fix the monitor on the ceiling board's metal stand. Normally install it in the middle of car' front ceiling. If car is long enough or condition allowed, it could be installed in alleyway's ceiling, and even install few pieces.
- 2). For new car, Find the proper position before installation and keep the fix hole and stand. Put all power cable and signal cable properly, preferably built-in car in order to look better.
- 3). For old car refit, Put all power cable and signal cable properly, preferably built-in car in order to look better. If no suitable installation size and stand, just make one stand which can hold the monitor, and make the fix hole.
- 4). Do not dig any hole on the monitor outer cover, it does not look good, and it will damage when close the screen.
- 5). No mater new or old car installation, try to put direct cable, not inter connection. Try to avoid impulse and other interferes of other staff.
- 6). The power cable must be section area above 1.5mm multi soft cable or car power cable, used signal cable 5mm with 75Ω single axes or car signal cable. Use signal 75Ω -1pp output car VCD & DVD or other signal source.
- 7). The electro-motion on-off button select stand in the driver and passenger can easy used. This product power supply+12V. If need +24V power supply, must add DC-DC adaptor. If environment is very bad, then equipped with power sieve waver, if one signal source needs to provide more than 2 monitors, then equipped with video modulator (PS: we also produce 9-36V adaptor and 1to 4 output signal video modulator, if need, please contact us).

Back mounted and Ceiling Hooking-up type installation :

According to the exact situation, when install the monitor in a car; the installation position and cable connection are the same like Roof mounted type installation

4. Electro-motion connection (please see attached pictures 5,6,7)

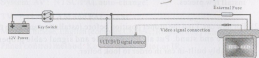


Fig. 5. Hand or Remote Top-Attached Electric Connection

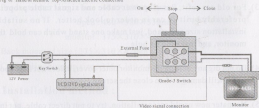


Fig. 6. Electric Top-Attached Electric Connection

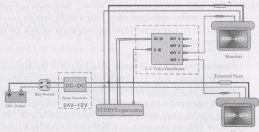


Fig. 7. Electric Connection Using 24V Power and Installing More than 2 Monitors

5. Use method

When turn on audio & video system, it provide power supply to the monitor, under the normal situation, set up the menu, it will work long time normally.

- 1). If hand operation, the monitor will be controlled by the power supply switch (or remote control), if turn off the monitor by the power supply switch (or remote control), then it should re-press power supply switch (or remote control) next time when open the monitor. If the monitor is turning on by the audio & video system, the monitor will auto working, it suits Back mounted and Ceiling Hooking-up both.
- 2). Electro-motion operation, when pull the button "down", the monitor will be come down and screen displays. When pull the button "up", the monitor will goes up and turns off automatically. When pull the button in the middle "Stop", monitor will remain the same position and display turn off automatically. When pull "down" or "up", monitor repeats.
- 3). Full function remote control, when press "on", monitor will come down and display works, when press "off", monitor will go up and display turn off. If power been cut off, the monitor will remain the same position while display will turn off automatically.
- 4). When monitor turn on, and with signal input, the indicating light will change to green color from red, it works normally. If no signal, display will show "no signal" and will turn off within few seconds. The indicating light will change to red. When the signals resume, the indicating light change to green, it works normally. (Under TV mode, no signal input, display only with blue color, monitor will not turn off)
- 5). This product is single video input (CVBS), if with other signal input modes, it can be changed by press "input" key, it will show: video (CVBS), S-VVIDEO, TV, PC (RGB) in turn.
- 6). Under video (CVBC), can only set up brightness, contrast, saturation, language, color only work under NTSC system. Some functions can only be adjusted under PC mode. If no selection for the menu function within 10 seconds, it will go back automatically.
- 7). Menu function setting, when monitor turn on; it can be set up by key on the monitor or by remote control. Press "Menu" and select, press "VOL+" or "VOL-" key, it turn to the next page, then press "Menu" to next sub-page.

- 8). After select the function, press "Menu" again to sub-menu function, press "VOL+" or "VOL-" to select, then confirm. Press "ESC" for going back
- 9). Ex-work setting: 50/contrast, 50/saturation, 60/menu language, English / menu position, middle / menu stop; 10 seconds.
- 10). The key on the monitor operation is the same as the remote control. Namely: "POWER", "INPUT", "MENU", "VOL+" "VOL-" "ESC", and "VOL+", "VOL" it can adjust the voice under audio system, the other keys on the remote control works when TV mode.
- 11). TV mode menu setting (only for remote control): press "input" turn to TV mode, press "MENU", screen display menu: "brightness/contrast/saturation/auto-search/system/language" 6 options (please see attached picture 8). When press "menu" it will to each option in turn, and press "VOL+" and "VOL-" to select. Press "Menu" to "auto-search", and then press "VOL+" . It will search from low TV channel to the higher one. And the searched channel content cannot be seen, only display the progress and the number of channels. When finish search, it will play the first TV programmer content, then press "CH+" or "CH-" or digital key "0-9" to select the ideal TV channel.

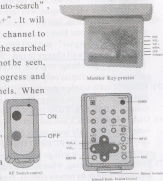


Fig.8. Infrared Remote Control.

- 12). "System" option is for selecting TV picture and voice system, before searching, go to "system" to select the TV picture and voice system, Currently this product support picture system: PAL/SECAM and PAL/NTSC And voice system: PAL-I, PAL-DK, PAL-BG, SECAM-L, SECAM-DK, SECAM-BG, NTSC3-M, and NTSC 4-M
- 13). Go back menu: "VOL+" and "VOL-" works on the voice volume.

6. Precautions :

- 1). If need to replace components or accessories, please provide the repairing person with related original electronic components and accessories from the manufacturer. Improper uses will result in fire accident, getting an electric shock and damaging the monitor, etc.
- 2). Please turn off the power supply first when thunder storm day or when you want to clean it. Do not put any staff on the enlaced wire; damaged wire will result in fire accident. Do not put the product on unstable stand, desk, handcart and tripod.
- 3). Please keep air flowing where the product installed, the air hole can not be jammed, do not install the products on sofa or carpet or similar fabric material. Too warm or less air flowing will minimize the product lifetime.
- 4). Do not scratch the TFT Panel, it is fragile. In case the monitor drop down or be crashed, the TFT Panel may be fragile, then please do not use the product and avoid the glass.
- 5). Do not install the product to a place where sunshine lays or any heat place. Do not fix this product randomly, inside structure and other fragile components will affect damage on the product. Only profession person do fixing if needed.

7. Trouble Shooting

If any problem when use this product, please analyze the situation carefully and refer to below trouble shooting sheet to see if it work or not. Please contact manufactures for help if you can not solve it at you side.

Trouble Situation	Trouble Shooting
Monitor can not be opened	Check power supplier connection, and check if fuse burnt out, remotecontrol has battery or not
Menu on the monitor (remote control) does not work	Some of the key on the monitor no real uses, only for remote control. if the key on remote control does not working, check the distance and angle between the remote control and the monitor
When turn on, the indicating light display	Check if the power supply has not connected well, anode and cathode connect right or not, outer fuse burnt or not, (Hand operation with 3A fuse, electro-motion and remote control operation with 5A fuse)
No display (indicating light is red, screen display white letter "no signal", background is blue)	Check power switch and ignition switch are not turned on, loose connecting wires Check signal input, refer to uses method No. 4 and 5, re-select input signal.
When turn on, no display on the screen, the indicating light is gree	If the indicating light is green, then the signal input is correct, only the high-press light tube does not work, check if the power voltage is too low, normal working voltage no less than 9V.
After turn on, display shows " No Signal " indicating light change from green to red	Mainly due to lack power currency, check the power supply connection, connection joint fix or oxidation. If power cable is too long and slim (Hand operation with 3A fuse, electro-motion and remote control operation with 5A fuse)

8. After service

- 1). One year after sale service when the date of shipping (exception for special occasion)

Within one year when user buy this product with properly install and use, due to the quality problem and damage (TFT panel not included), we are responsible for free repairing and replacement.

- 2). Quality problem after using one year, we are responsible fore repairing, but need to charge for the repairing material cost.
- 3). The TFT panel is produced by famous company abroad, it belong to high sensitive glass products, if there are dark, dot, crash, line up during installation and uses, they are not included in warranty range
- 4). If problem or damage cause by user, or by accident, war, natural disaster, they are not included in warranty range.
- 5). If without manufacture permission, user tear up seal label and repair and refit, an result in any problem and damage, they are not included in warranty range, we can only provide repairing with charge service.
- 6). If product need to be turned to us for repairing, user can contact local dealer or contact us directly, provide problem details and warranty card, and pack well the product and use the safe method of shipping. If returned product is damaged during transportation, it is not belong to warranty range.

Note: Due to technical improvement, specification and design are subject to change without notice. Our company reserves the rights for this notice.