7 inch In-dash car monitor

INSTRUCTION MANUAL

DEAR CUSTOMERS

Thank for your purchasing 7 inch In–dash car monitor.
This product adopts international new integrate circuit and high quality TFT & TFD modules. It has not only display for all–region DVD/VCD/CD/MP3/CD–R, but also TV tuner, VGA input,and Optional Touch Screen. So order any of our VGA car monitor, you will have got yourself a system in–vehicle entertainment, it is designed to display for CATV，computers, DVD players, game system, GPS system and digital cameras. Applications as following:

1. With VGA input, connecting directly to PC, as a personal computer
2. With AV input. connecting directly to DVD player, as a car entertainment system
3. With AM/FM function, can receive timely information in car.
4. With touch screen operation, can as a GPS System on the car, Just Simple to Plug in GPS Receiver and Run the Software.

To insure the best use of the unit, please read this handbook carefully beforehand.

NOTICE

1. Please adopt the matched AC adapter.
2. Do not remove the rear panel of this product. If in need of service please call a qualified technician.
3. Keep off strong light while using this product so as to obtain the clearest and the most colorful picture.
4. Avoid heavy impact or drop onto the ground.
5. Do not use chemical material to clean this unit. Please simply wipe with a clean soft cloth to keep the brightness of the surface. For a longer use life, please press "∧" or "∨" to change the view angle of monitor, don't turn the unit by manual.

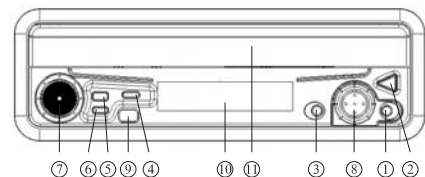Upgrade the driver for touchscreen, please visit our website: www.lilliput.com.cn & www.gdsun.com

CONTENTS

FEATURE

1. Monitor

① Power: Press this key to open the unit, it will be in the mode that you turned off last time. Sauch as you turned off the unit in radio mode last time, it will keep the radio mode when you turn on it again.

② ▲ : ON/OFF the TFT screen. Press this key in off state, it will expand and enter AV1/AV2/VGA/TV mode, that recorded last time, except radio.

③ ⏱: Show the time, please adjust the time when the unit is off state. Press "⏱" key to postpone for 2 seconds, and press multi–function key ⑧ at the same time to adjust the time of clock.

④ Radio: Controll radio on/off, press the key when off state, it will enter only radio mode. If press it when the unit is at AV1/AV2/VGA/TV any mode, the unit will fold the screen, then enter the radio mode. You also can press the key to change AM/FM when the unit is radio mode.

⑤ Mute: Volume on/off

⑥ Loud: Accentutation of the audio

⑦ Volume: Rotate this button to adjust the volume. Press this button to active the setting of low tone, high tone or the balance of sound, after selected one of the

⑧ functions, you can rotate this button to adjust the value.

⑨ M: Multi–function key keep pressing this to auto search at the mode of radio.

⑩ IR Sensor

⑪ Mode display window: Display the current working mode
TFT LCD Screen: Screen at folding state

2. TFT LCD Screen

⑨ ⑧ ⑦⑥⑤ ③②④ ①
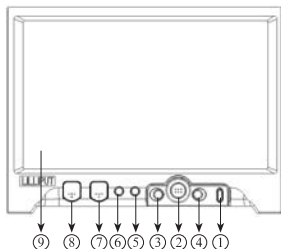
① PC/AV: VGA/AV Switch
② MENU: Display Menu Key
③ "<" : Menu selection key, to adjust the phase in VGA mode also program selection
④ ">" : Menu selection key, to adjust the brightness at VGA mode also program selection
⑤ "+" : Increase the number in OSD
⑥ "−" : Decrease the number in OSD
⑦ "∧" : Adjust the view angle of screen upward
⑧ "∨" : Adjust the view angle of screen downward
⑨ Screen: If need USB touch screen function, there will be two pieces of screen

REMOTE CONTROLLER

① POWER: Power ON/OFF to control the unit ON/OFF
② OPEN: The screen of unfold/fold
③ MUTE: Volume ON/OFF, press this key to close the sound, press it again to return the sound
④ RADIO: AM/FM switch in radio mode
⑤ LOUD: Accentuation of the audio
⑥ FINE+: Increase the fine tune at radio mode
⑦ FINE−: Decrease the fine tune at radio mode
⑧ RECALL: Press this button go back to tv channel that you choose first
⑨ PC/AC: PC/AV switch
⑩ DISPLAY: Pressing this button to display the current channel in TV mode
⑪ SCAN+: Search the frequency lead to upper at radio mode
⑫ SCAN−: Search the frequency lead to lower at radio mode
⑬ VOL+: Increase the volume
⑭ VOL−: Decrease the volume
⑮ DOWN: Select the channel to down
⑯ MENU: Display menu key
⑰ UP: Select the channel to up
⑱ −: Decrease the number in OSD
⑲ +: Increase the number in OSD
⑳ NUMBER KEY: 0 ~ 9 to select the channel in TV or radio mode
㉑ −/−−: Unit/Decimal/Percentile (select the channel together with number keys)

MATCHED CABLE SERIES

〈一〉 System connection (figure 1)

Note:

③ ④ ⑤   ⑥   ⑦
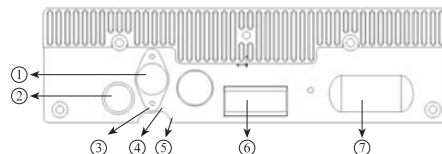
① Radio antenna jack
② S−video jack of rear view camera
③ The jack for audio input, output, and TV antenna.
④ Audio intput jack

⑤ CD player interface (optional)
⑥ 14P SKS of VGA input jack
⑦ Power input and power amplifer output interface.

〈二〉 Down-lead
(figure 2)

VCC: Anode cable for car electric switch   BATT: Connect to car power anode
GND: Connect to car power cathode   NE: Hang in the air(no use)
POUR: Back a car controller cable   AUTO ANT: antenna
FR + : Prepositive right sound channel+   FR – : Prepositive right sound channel–
RR + : Post positive right sound channel+   RR – : Post positive right sound channel–
FL + : Prepositive left sound channel+   FL – : Prepositive left sound channel–
RL + : Post positive left sound channel+   RL – : Post positive left sound channel–

〈三〉 Fixed Iron bracket
(figure 3)

Installation method:
Firstly, put the iron bracket into the hole that reserved for car Video in every car, then fixed them.
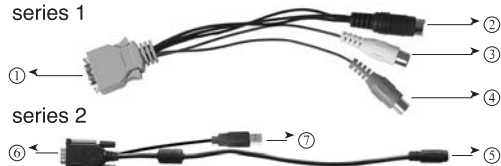Secondly, put the monitor into, then match it with the frame.

〈四〉 Cable connection (figure 4)
4-1

Put the down lead head into the power input jack in the back of monitor (power input and power amplifier jack), then connect the matched circuit in car according the figure2.

4-2   series 1

series 2

Connect the SKS jack of matched A/V cable series 1 into the SKS input jack at the back of the monitor, and the opposite jack of A/V cable series 1 should be connected with related signal input as following:

A. Black Nine poles Jack ② of series 1 is connected to the nine poles jack of cable ⑤ (note the right direction of arrowhead), the VGA signal input jack ⑥ of series 2 will be connected to the VGA jack at the back of computer, then tighten the screws.
B. The RCA input jack of White jack ③ and Red jack ④ is the audio input of the left and right sound channel in VGA signal.
C. VGA signal input jack ⑥ is connected directly with the VGA signal output jack of car PC.
D. USB driver jack ⑦ is connected with the USB jack of car PC when need the touch screen works.

4-3 Camera connection (Optional accessories)

① S–video jack with four poles   ② camera

Put the S–video jack ① of camera into the camera input jack at the back of monitor, and fix the camera directly in the reserved hole of car back.

MENU

After connecting, press the button "MENU" on the unit or remote controller, the "MAIN MENU" will appear on the screen, by pressing " < / > " button on the unit or "UP/DOWN" on the remote controller to choose the subject demanded, confirm it by pressing "MENU" again, then adjust the number of selected function in OSD by pressing " + / – " button on the unit or " + / – " on the remote controller.

1. Main menu:

2. Secondly menu:

Image station adjustments (In line): Automatic 、horizontal、vertical、phase、clock and current information input、exit.

Image adjustments (In line): Contrast、brightness、RGB、exit.

OSD control (In line): Horizontal、vertical、exit.

Other parameter (In line): Volume、mute、language、default setting、input source、exit.

Video (In line): Brightness、contrast、hue、color、color system、exit.

Exit the main menu.

OPERATION

1. Menu Operation

After connecting the power and related cable as above, the unit will be at standby state. Press "POWER" button on the unit, the unit begins to work. Press the same buttons again, the unit will return to its standby state.

### 1-1. The menu operation of VGA input in PC MODE

When the unit works, by pressing "AV" button the unit or on the remote controller to select VGA mode, then press "MENU" button, the screen will display OSD menu as following image:

VGA MONITOR

Press "MENU" to confirm. Secondly, select the object you need to adjust by pressing " < / > " button on the unit or "UP/DOWN" on the remote controller, then press "MENU" button to confirm. At this time, you may adjust the number of selected function by pressing "+/ −" on the unit or "+/ −" button on the remote controller. If you want to exit the OSD menu, please select the ⊞ in main menu, later press "MENU" button to confirm. If no further operation, the main menu will disappear after 10 seconds.

①. Image station adjustments
In main menu, please select function, then confirm by pressing "MENU" button, later the screen will display it next layer menu as following image:
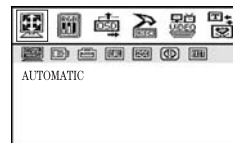
AUTOMATIC

In the next layer menu, there are seven functions as following image, you may select them freely by pressing " < / > " button on the unit or "UP/DOWN" on the remote controller.

: Adjust image station in screen automatically
: Adjust image station in horizontal (left and right) direction
: Adjust image station in vertical (up and down) direction
: Adjust the beginning point and end point of image station
: Adjust the range of image station
: Display present input information
: Exit the next layer menu

When you select a object demanded, you may adjust the number by pressing " + / − " on the unit or " + / − " button on the remote controller. If you want to exit the menu, please select ⊞ , then confirm it by pressing "MENU".

②. Image effect adjustments

In main menu, please select 🖼, then press "MENU" to confirm, later the unit will enter the next layer menu of 🖼 as following image:

IMAGE ADJUSTMENT

Secondly you may select the function such as contrast, brightness, RGB to adjust the number by pressing " < / > " on the unit or "UP/DOWN" button on the remote controller, then adjust ti by pressing "+/−" on the unit or " + / − " on the remote controlleer. If you want to exit the menu, please select 🖼 , then confirm it by pressing "MENU".
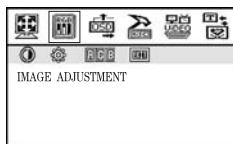
③. OSD adjustments

The OSD adjustments is used to adjust the station of OSD menu on screen, when you need to adjust it, firstly please select 🖥 in main menu by " < / > " button on the unit or "UP/DOWN" on the remote controller, then confirm it by "MENU" button, later the screen will display related information as following image:

OSD ADJUSTMENT

At this time, you may select any function to adjust by " < / > " button on the unit or "UP/DOWN" on the remote controller，then adjust them as your demand by " + /−" on the unit or " + /−" button on the remote controller.

🖾 : Adjust OSD station in horizontal (left and right) direction

🖾 : Adjust OSD station in vertical (up and down) direction

🖾 : Exit present menu

④. Other parameter (it is valid in AV Mode)

In main menu, please select ⤳ , then press "MENU" to confirm,

later the unit will enter the next layer menu of ⤳ as following image:

At this time, you may select any function to adjust by " < / > " button on the unit or "UP/DOWN" on the remote controller, to select the following items, then adjust them as your demand by " + /−" on the unit or " + /−" button on the remote controller.

OTHER PARAMETER
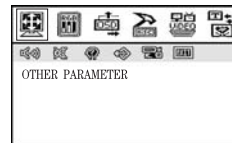
🔊 Language: OSD menu English/Chinese/Japanese and so on

🔄 Default Setting: Get over the default setting

🎥 Input Selection: AV1/AV2/VGA optional

🖾 : Exit present menu

1-2. The menu operation of video input (in AV mode)

When the unit works, by pressing "PC/AV" button on the unit unit or on the remote conttroller to select VIDEO1(video input working mode), then press "MENU" button, the screen will display OSD menu as following image:

VIDEO

To select 🎥 function by " < / > " button on the unit or "UP/DOWN" on the remote controller, confirm it by pressing "MENU", then you will enter the next layer menu, you can adjust the image by selecting the next menu. As your demand to active these functions, firstly select one by " < / > " button on the unit or "UP/DOWN" on the remote controller, secondly you may adjust the number by pressing " + /−" on the unit or " + /−" button on the remote controller

to finish your perform. If you select
[icon] , it will go back the main menu.
Note: The adjustment method of volume,
language in AV mode is the same as VGA
mode.

BRIGHTNESS
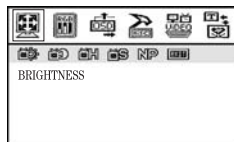
1-3. the menu operation in AV2 mode(rear view camera input)

when car is in reverse gear, the monitor will begin to work automatically,
and active rear view camera, the monitor will recover original state
after finishing backing the car, also you operate it by pressing "PC/AV"
key on the unit or remote controller. Keep pressing "LOUD" key for 5
seconds, "R OFF" will appear on the window, and the automatic backing
display function will shut down: To turn on the function, repeat above
operation, "R ON" will appear on the window.

2. TV Function (it is valid when the unit with TV tuner)

After connected, press the button "M" on the unit or "MENU" on the
remote controller, the "MAIN MENU" will appear on the screen, please
use " < / > " button on the unit or "UP/DOWN" on the remote controller
to choose TV function (also you may enter the TV menu after pressing
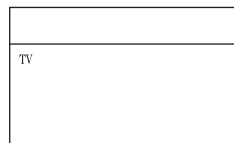"MENU" key directly in the TV situation) then press button "M" again
to confirm as image.

Once the selection is confirmed, the next
layer menu will display, you can use " <
/ > " button on the unit or "UP/DOWN"
button on the remote controller to choose

TV

the Object required, then use " + / − " on the unit or " + / − " button on
the remote controller to adjust. To return to the main menu, please
choose "EXIT" by pressing " < / > " on the unit or "UP/DOWN" on the
remote controller, then confirm by pressing "MENU" button again.

2-1. Auto-search Function

The auto−search function searches and records automatically.
Pressing "MENU" button to select the TV Function item, then
confirm by pressing "MENU" button, press " + / − " key on the
unit or " + / − " on the remote controller to search automatically
and the auto−search function will turn red, please confirm

it by pressing "MENU" button, then
the unit will begin to search the TV
singal from downward channel to
upward channel. and save the TV
signal one by one.

AUTO SEARCH

CHANNEL   0
VL   0

2-2. Manual Search Function

The users can store their favorite program channel to their
favorite number by using the manual search system, it also can
prevent the cross interference.

In the next layer TV function, press
" < / > " button or "UP/DOWN" button
on the remote controller to choose
the function, then press "MENU" to
confirm, Screen will display as image.

MANUAL SEARCH

SAVL CHANNEL   0
VL   0

At this moment, Press " + / − " key on the unit or " + / − " on the
remote controller to select the promgram numbers (0~199) that
would be preserved. Press " − " key on the unit or "−" key on the
remote controller to search the channel upwards. It will search
the TV signal in a wide range,once finding a new TV signal, the
searching one will turn green. Repeat above operrations until
finish searching all TV programs.

2-3. PG Exchange

The program exchange function is for transferring the stored

program to new number, that is to say the users may adjust the channel order according to their favorite.

In the next layer TV function, press " < / > " button or "UP/DOWN" button on the remote controller to choose the function, screen will display as image:

CURRENT CHANNEL: display the number of current channel.

```
PG EXCHANGE

CURRENT CHANNEL        0
CHANGL TO              0
```

CHANGL TO: you can input the new number of current channel. Press " + / − " or " + / − " button on the remote controller to choose new number, then press "MENU" to confirm, then you select ▣ by pressing " < / > " on the unit or "UP/DOWN" on the remote controller and confirm by pressing "MENU" to exit the setting.

2-4. Fine Tune function

The fine tune function is for correcting the weak signal and the nonstandard TV signal that may be stored. In the next layer TV function to choose the function, then press " + " key on the unit or " + " key on the remote controller to fine tune

```
FINE TUNE

CURRENT CHANNEL        0
VH                     0
```

upward channels. Press " − " key on the unit or " − " key to fine tune downward channels.

2-5. Color System

Because different color system and sound system is adopted in different countries, you have to choose the right system to match your country state. If the search results are bad in "AUTO" condition, you can operate as mentioned above

```
COUNTRY SYSTEM

AUTO
```

to enter the color system and then press " < / > " on the unit or "UP/DOWN" on the remote controller again to choose the color system which match your country.

For Instance In China: please choose. PAL—4.43 60HZ

In America: please choose NTSC M

2-6. Sound System

In the next layer TV function, Press " < / > " key or "UP/DOWN" on the remote controller to choose sounds system, then press " + / − " or " + / − " button on the remote controller to choose the sound system which matched with your color system.

```
SOUND

D/K
```

For Instance In China: please choose D/K

In America: please choose M/N

To a best TV effect, please select the right color system and matched sound system that used in your country.

3. Radio Function

When press "RADIO" button on the monitor or on remote controller, the monitor will enter Radio mode. If the monitor is in PC/AV/TV mode when last are closed, by pressing "RADIO" button, the screen will fold and hide into drawer automatically, then the monitor will be adjusted into radio mode.

3-1. Press directly "SCAN+" on the remote controller, the radio will begin to search the frequency from down to up, till get a efficient signal. After press it once, the monitor will search the frequency from down to up automatically, then record all efficient frequency for you.

3-2. Press directly "SCAN−" on the remote controller, the radio will begin to search the frequency from up to down, once get a efficient signal, it will record it for you.

PARAMETER

TFT LCD Screen	TFT LCD 177mm （7"）1152000Pixels
High Resolutions	800 × 480（VGA）
Brightness	400cd/m^2
Contrast Ratio	200 : 1
Viewing Angle	130°/105° （H/V）
Color System	PAL−4.43 NTSC−3.58
Audio Output	45W × 4
Radio Frequency	FM/AM
Input Voltage	DC10.8−13.8V
Input Signal	PC . AV1 . AV2 . RADIO . TV（optional）
Color System	PAL . NTSC . SECAM（optional）
Sound system	BG/DK/I/M

ACCESSORIES

NO.	description	amount	remark
1	monitor	1pc	
2	14P SKS cable	1pc	PC & AUDIO
3	9 poles VGA transfer cable	1pc	VGA 、USB
4	Power input, poweer amplifier output conector jack	1pc	
5	Remote controller	1pc	
6	Outer Iron Frame of monitor	1pc	
7	Plastic shroud of monitor	1pc	
8	Operation Manual	1pc	
9	Camera with S−video jack	1pc	
10	Driver Disk	1pc	

RIGHT USING RESOLUTION FOR MONITOR: 640 × 480 (VGA)

TROUBLE SHOOTING

1. AV MODE

Case (condition)	Possible causes	Countermeasures
Only black and white picture	1. the number of "color" function in Video menu is zero. 2. the present program have only black and white picture.	Adjust the number by "+/−" on the unit or "⊖/⊕" button on the remote controller
NO Picture	1. check power connection. 2. misuse the pole.	1. Check power input. 2. correct the pole.
The remote controller can't work or insensitive	1. check battery install method. 2. The battery is used out. 3. The signal are influenced.	1. correct the install method. 2. adopt new battery. 3. apart away signal disturbance.

2. PC MODE

① Image excursion

According to the operation of image station adjustments to adjust:

A. Press "<" key to select automatic function

B. Adjust by manual as per the menu operation

C. Select correct refurbish and resolution rate

② lose color

Please check the VGA cable if connect correctly, or what is the matter with the VGA cable, if the cable was bent or broken, please adopt new VGA cable.

③ NO picture

A. After connect the power, the red indicate light will turn on, then press "POWER" button, the unit will work, if the screen display "NO SIGNAL", that is to say no any signal input, at this time, you should open your computer for VGA signal input; if the screen display "OVERRANGE", that is to say signal mode input beyonds the range of display, please adjust the refurbishment rate of unit.

B. The red light on the monitor is on, it means the power management mode is activated. Press any key on PC. The power of the machine also has the power management mode. If it is void after pressing the key board of PC. Please press "POWER" key on the monitor.

C. If the indicate light turn off, please check the power connection.

④ NO clear or really image, shaky picture.

please select correct resolution rate, renew the refurbishment rate

⑤ If there are still any problems, you can contact with the related dealers.

Remark:

∗ If happen image interruptive, it is possible that the VGA signal frequency isn't matched with normal standard.

∗ It is normal condition that, some bright lines appear on the screen when you turn off the unit.

∗ To ensure a longer use, please make Power management function of PC active.