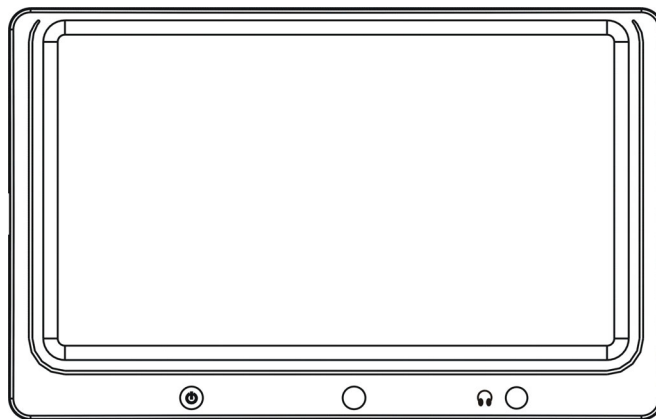


# HM-708S

TFT-LCD HEADREST MONITOR

***OWNER'S MANUAL***



Before operating the unit, please read these instructions carefully.

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## **WELCOME**

Thank you for the purchase of the TFT-LCD HEARDREST MONITOR.

We are grateful for your support.

Please read this user's manual in its entirety before operating the unit.

After reading this manual, be sure to keep it in a handy place for future reference.

Check the contents of the enclosed warranty card and keep it carefully with this manual.

## **FEATURES**

- 7-inch TFT LCD color monitor
- Panel removable
- Headrest Monitor
- PAL/NTSC compatible
- High Brightness: 450cd/m<sup>2</sup>
- Pixel: 1440x234
- Adjustable Color/Contrast/Brightness/Tint and Volume
- Display Mode: Full/Normal
- Adjust up/down 8° (5 positions)
- Automotive startup protection
- IR Remote Control
- OSD Display
- Mini headphone jack for stereo output
- 2X Video input
- 1X Audio input

## **General Specifications**

Power Source:	Car Battery (DC 10.5-16V)
Operating Voltage:	DC 12V
Operating Current:	< 1A (Typical)
Operating Temperature:	0°C to 70°C
Storage Temperature:	-30°C to 80°C
Dimensions:	L194 x W132 x H34mm

\*Specifications and design are subject to change without notice.

## **OPERATING INSTRUCTIONS**

Please read all of these instructions regarding your LCD headrest and retain them for future reference.

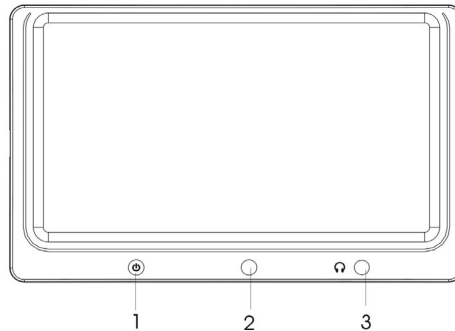
1. Read this manual fully and carefully before operating the unit.
2. Keep this manual handy for future reference.
3. Pay close attention to all warnings in this manual and follow the instructions carefully.
4. Never allow others to use the system until they have read and understood the operation instructions.

## **SAFETY PRECAUTIONS**

1. The unit is designed for using in DC12V ,negative ground battery .
2. Do not disassemble or alter the unit in any way . Failure to do so can cause damage to the unit and invalidate your warranty .
3. Be careful not to run down the car battery while using the unit with the car engine stopped.
4. Never clean the surface of the screen with chemical solvent or corrosive detergent ,which may cause permanent damage to TFT LCD screen .
5. Please note that the normal working temperature of the unit is between 0°C to 45°C . If the internal temperature of the vehicle is extremely high, a short cooling down period is necessary before operating the unit.
6. If the inside of the car is very cold and the monitor is used soon after switch on the heater ,moisture may form on the unit .Turn off the unit immediately !Failure to do so may cause the internal components to short .Allow the unit to rest for about one hour to allow the condensation to disappear before continue operation.
7. In extremely cold temperatures ,the movement of the picture may be slow and the picture may be dark .It is not a malfunction .The unit will work normally once it reaches its operating temperature .
8. Small black and shiny dots inside the liquid crystal panel are normal for liquid crystal panel are normal for liquid crystal product .
9. Do not drop or hit the LCD panel with a hard object ,as it may cause permanent damage to the LCD panel .If you come into contact with the fluid, do flush and clean effect areas with plenty of water and seek medical attention immediately .
10. Kindly refer to authorized dealers if you get any questions.

## Introduction of LCD Monitor

**CAUTION!** The material of display area is made by glass with a protector film attached on it. Do not use hard or sharp objects to strike or scratch the surface of the display area. Otherwise it may cause the picture distorted or have scars forever.



### Button/Jack Functions on Monitor

#### 1. POWER

Press this button shortly can power on the Monitor. Hold this button for 1~2 seconds to power off the monitor. When in Power on mode, press the button shortly, the unit will change mode from AV1 to AV2, or from AV2 to AV1.

#### 2. IR Receiver Sensor

Receiving the signal transmitted from the remote control.

#### 3. Mini Headphone Jack

Mini headphone jack for stereo output.

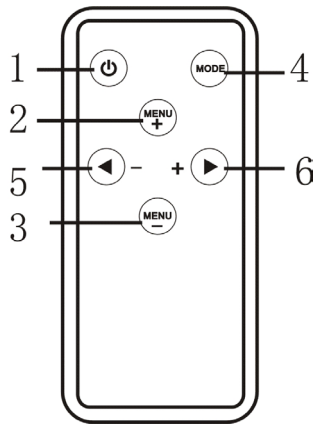
### LCD Angle Adjustment

Push the LCD front panel to adjust the viewing angle. Adjust UP/DOWN : 8° (5 position)



Note: Do not push the LCD surface to adjust the viewing angle.

## Remote Control Button Functions



1. POWER (Monitor ON/OFF Button) ⏻

2.MENU UP BUTTON

3.MENU DOWN BUTTON

4.MODE BUTTON

5.REDUCE BUTTON ◀/-

6.INCREASE BUTTON ▶/+

### 1)POWER ⏻

At first, make sure the engine is running. To press the power switch, the LCD monitor turn on. Pressed again, the monitor is switched off .

### 2)Menu Up

When the monitor is turned on, the MENU button can be used for switching and selecting the item of COLOR / CONTRAST / BRIGHTNESS / TINT/DISP / SYSTEM for adjustment. Press MENU button continuously or just hold it to select the function under menu. Values can be changed by pressing button “+” and “-“ continuously or keep on it, “0~30” adjustable.

The button can also be used to select menu option.

### 3) Menu Down

The button can also be used to select menu option as down choice.

### 4) MODE (Auxiliary Input)

Select input signal **AV 1** or **AV 2** with **MODE** button.

### 5) ◀/- (Reduce Button)

Under “MENU”, it is for decreasing the system value.

## 6) ▶/+ (Increase Button)

Under "MENU", it is for increasing the system value.



### PICTURE ADJUSTMENTS

To adjust the picture, use the menu+/- buttons to select the menu features you would like to adjust. Adjustment selections are as follows. The values of selected feature can be adjusted by pressing the "+" and "-" button on the remote control

COLOR\_ \_ \_ \_ \_ 22  
CONTRAST\_ \_ \_ \_ 18  
BRIGHTNESS\_ \_ 18  
TINT\_ \_ \_ \_ \_ 18  
DISP\_ \_ \_ \_ \_ FULL  
SYSTEM\_ \_ \_ \_ AUTO  
RESET

COLOR: Color adjustment  
CONTRAST: Contrast adjustment  
BRIGHTNESS: Brightness setting  
TINT: Adjustment to color saturation  
DISPLAY MODE: 16:9 and 4:3 picture Selection  
SYSTEM: Select NTSC, PAL or AUTO format  
RESET: Reset menu to default value

### Display Mode

Display Mode	Display	Note
Full		Input video signals 16:9 picture is fully displayed on screen.
Normal		When 4:3 picture is played on wide screen, black bands appear on both side of the picture.

## LCD PANEL MAINTENANCE

- Wipe off any dust gently with a soft, dry cloth.
- The surface is easily scratched; do not rub it with hard objects.
- Do not use any chemical solvent, cleaning agent or corrosive detergent to clean away dirt on the surface of the screen.

## REMOTE CONTROL

Inside the vehicle, simply aim the IR Remote Control directly at the unit, or video source with an IR input and press any desired button for better effects.

Notes:

- λ Put the IR Remote Control from no further than 3 Meter on either side of the sensor.
- λ Direct sunlight or very bright light reduces sensitivity to the IR remote signal commands. Be sure the display is not located in direct sunlight.
- λ Obstruction between the remote sensor and remote control may disrupt reception.

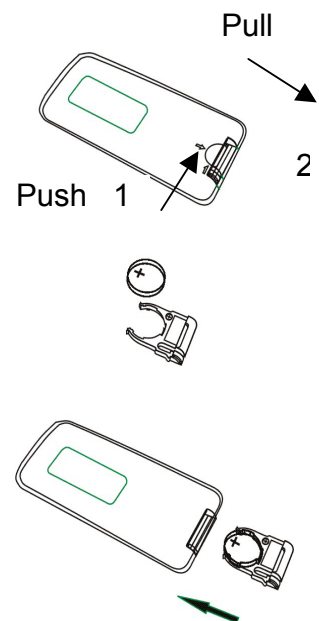
## BATTERY REPLACEMENT

If the remote control does not function correctly or the operating range shortened, please replace the old battery with a new one.

1. Press the hole on the backside of remote control with a tool and keep it as arrow 1. Pull out the battery cover as arrow 2 instructed.
2. Replace with a new battery.  
Place a new lithium battery with the (+) side up.
3. Push the cover back.  
Push back the cover until the locking sound is heard.

Notes:

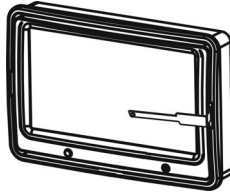
1. *Dispose used battery properly.*
2. *Do not misuse battery by shorting the positive “+” and negative “-” terminal or throw it into fire. Overheating may cause battery to explode and a fire hazard.*
3. *Battery and battery holder can be a choking hazard. Keep the remote control unit away from young children.*



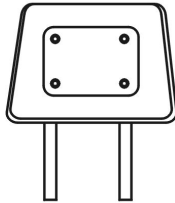
## Installation of monitor and headrest

### Installation procedures

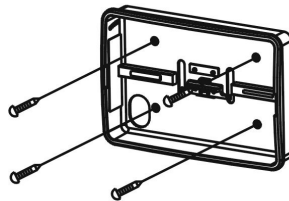
1. Use a removal tool, insert the card in the right or left slot between monitor and mounting tray, and pull out the monitor from mounting tray.



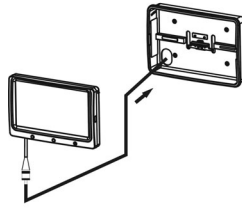
2. Remove the headrest from the vehicle for easiest installation and lay headrest on a flat surface.
3. Center the mounting tray and mark headrest material along the interior of the Mounting Tray.
4. Use the utility knife, cut the headrest material and its foam beneath the material along the marked lines to the proper dimension. Check for fitting, if it does not fit properly, you may need to remove some more foam.



5. Use 4 fixing screws and fix the mounting tray into the headrest.



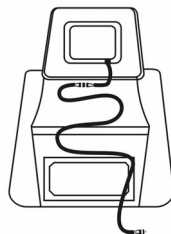
6. Guide the Power/Signal cable from back side of monitor through the side opening of the Mounting Tray.



7. Insert the monitor into the Mounting Tray housing. Snap the monitor into place and make sure the monitor is stable in the Mounting Tray, otherwise it may cause breakdown of the monitor.



8. Connect one plug of 3 meters signal cable with monitor power cable, made another plug of 3 meters signal cable through the inner chair back to bottom, then remain about 30 centimeters cable inside of the chair back.



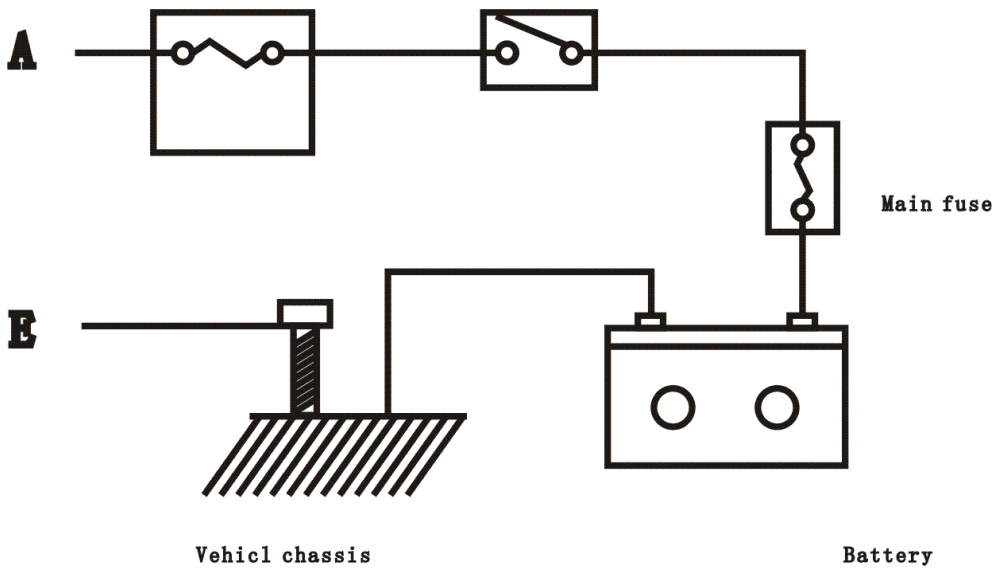
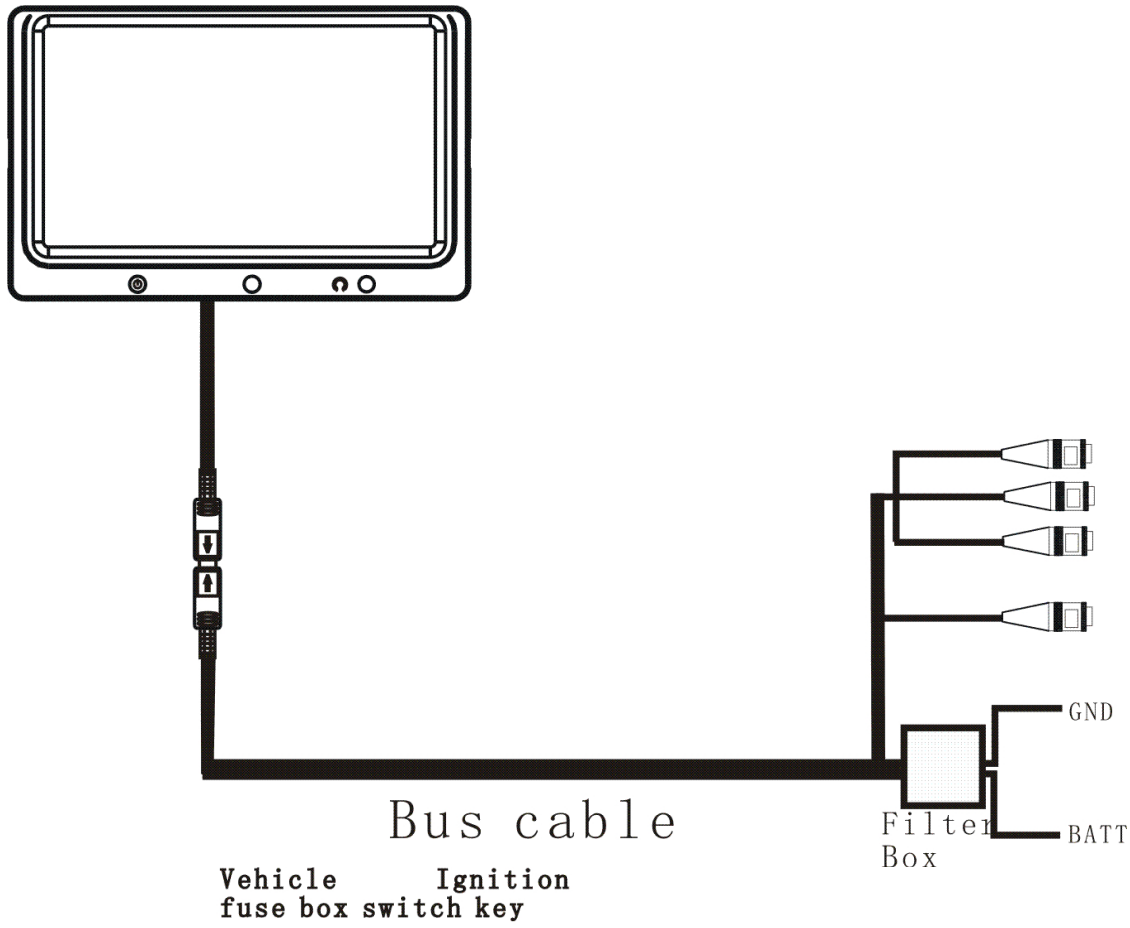
**NOTICE:**

1. Installation will vary with vehicles, as headrests in vehicles are not standard.
2. This unit is intended for installation by professional installers.







**ELECTRICAL CONNECTION**

Color Code	Function	Color Code	Function
Black	Ground	White 1	Audio -L(IN1)
Yellow	+12V	Red 1	Audio -R(IN1)
Yellow 1	Video -In(IN1)		
Yellow 2	Video -In(IN2)		

## Connection Method



## Packing List

Appearance	Parts Name	Quantity
	-----LCD Monitor-----	1
	-----Removal Tool-----	1
	-----3M Signal Cable-----	1
	-----IR Remote Control & Battery-----	1
	-----User Manual-----	1
	-----Screw PM4x8-----	4

The use of any accessories except for those provided might result in damage to the unit. Make sure only to use the accessories shipped together with the unit.

## **Installation Procedures**

1. To prevent short circuits, remove the key from the ignition and disconnected the terminal of the battery.
2. Connect the wiring harness cables in the following order: ground wire, battery wire, ignition wire. Connect the input and output cable correctly to each unit.
3. Connect the wiring harness connector to the monitor unit.
4. Reconnect the terminal of the battery of procedure.

## **Notes for Installation**

- If your vehicle's ignition does not come with an ACC position, connect the ignition cables to a power source that can be turned on and turned off with the ignition key. If you connect the ignition cable to a power source that receives a constant voltage supply, as with battery cable, the battery may be overloaded.
- If the fuse blows, first check whether the cables have caused a short circuit or not, then replace the old fuse with a new one of the same type.
- Do not let unconnected cables or terminals touch the metal on the car or anything else conducting electricity. Besides, to prevent short circuits, do not remove the caps from unused terminals or from the ends of the unconnected cables.
- After the monitor unit is installed, please check whether the brake lamps, blinkers, wipers, etc... on the vehicle can work properly.
- Please cover unconnected cables or terminals with rubberized tape or insulators.

## Troubleshooting

<b>Problems</b>	<b>Possible Cause</b>	<b>Remedy</b>
No picture and sound when the monitor is turned on	<ol style="list-style-type: none"><li>1. Power wire is connected improperly or fuse is blown.</li><li>2. System cable isn't connected or contacts unwell.</li></ol>	<ol style="list-style-type: none"><li>1. Check the power wire and replace the fuse.</li><li>2. Check the system cable or replace a new one.</li></ol>
Blurry picture on the screen	Interfered by short-distanced strong interference(e.g. motorbike, high voltage wire, transformation station or aircraft etc...)	The reception of signal will get better immediately once leaving the interference area.
No function on the remote control (or operation distance is shortened)	<ol style="list-style-type: none"><li>1. The battery of remote control has exhausted.</li><li>2. Remote control is destroyed.</li></ol>	<ol style="list-style-type: none"><li>1. Change a new rating battery.</li><li>2. Contact with the dealer and then change a new remote control.</li></ol>
The picture on the screen is relatively dark.	The equipment locates at a low temperature area.	This is the character of LCD monitor in low temperature, it will restore to normal brightness after powering on the monitor for few minutes.