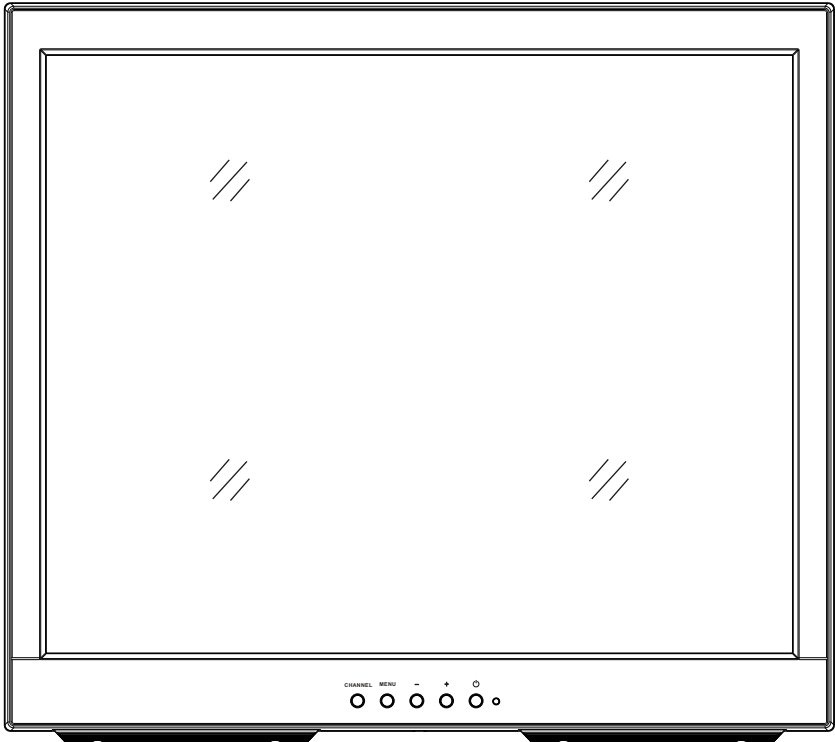


# OPERATING INSTRUCTIONS

MODEL-HCD-19MAH/HCD-17MAH/HCD-15MAH



**HUNT**  
ELECTRONIC

# Introduction

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## **WARNING:**

Do not leave any stationary images, patterns, PIP box, or letterbox images on the screen for an extended period of time. Also, do not display the same stationary patterns frequently. This may result in permanent ghost images on the display unit. This type of damage is not covered under warranty. Examples of this type of situation can be but not limited to the following: side bar images, stock market report bars, video game patterns, closed captioning, shopping channel logo, price display, and letterbox black bars. To prevent this type of damage, display constant moving images that fill the screen as often as possible.

According to the industrial standards, there are a certain number of defective pixels both bright and dark that are acceptable. Although we produce panel with more than 99.99 percent active cells, there still may be some cells that do not produce light or remain lit. For more information, please contact sales or the technical support.

## **SAFETY PRECAUTIONS:**

1. **Cleaning:** Unplug the power cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.
2. **Water and moisture:** Do not use the product near water, such as bathtub, washbasin, kitchen sink and laundry tub, swimming pool and in a wet basement.
3. **Heat sources:** Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).
4. **For added protection** if this equipment is unused for long periods of time, unplug it from the wall outlet. This will prevent damage from power-line surges.

5. Stand: Do not place the product on an unstable Cart, stand, tripod or table. Placing the product on an unstable base can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. Use only mounting hardware recommended by the manufacturer.
6. Use care when moving the product on a rolling cart. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.
7. Ventilation: The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation opening. This product is not designed for built-in installation, do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.
8. The LCD panel used in this product is made of glass. Therefore, it can break when the product is dropped or struck. Be careful when cleaning up broken glass pieces if the LCD panel breaks.
9. The LCD panel is a very high technology product, giving you fine picture details. Occasionally, a few non-active pixels may appear on the screen as a fixed point of blue, green or red. This many non-active pixel are considered acceptable.

# INTRODUCTION

## Product Description

Congratulations on purchasing your new 15"/17"/19" monitor. Your LCD monitor incorporates a high quality display into a small light weight module. It has less power consumption, heat generation and emits no X-ray radiation.

This LCD monitor incorporates 15"/17"/19" color active matrix thin-film transistor (TFT) liquid crystal display to provide superior display performance. The panel display resolution 1024x768 SXGA is ideal for displaying complex graphics and high definition images. Additional features that enhance this LCD monitor's performance are Plug & Play compatibility, audio system, and OSD (On Screen Display) controls.

## Package Contents

- 15"/17"/19" TFT LCD monitor
- 15 pin D-sub signal cable
- US type power cable
- User's manual

## Product Features

- High contrast color TFT LCD display supports resolution up to 1024x768 SXGA
- Compatible with IBM, VGA, VESA, and Macintosh standards.
- Embedded audio system provides high performance.
- BNC video input and Loop through output
- DIN S-Video input and output
- RCA Audio inputs and outputs

## **CLEANING**

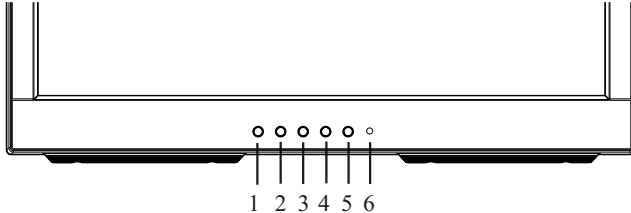
- Gently wipe your screen with a clean camel hair brush or a soft, clean, lint-free cloth
- Gently apply pressure to the screen surface to clean display
- Do not spray ANY liquid directly on the screen or casing of the LCD monitor
- Chemical cleaners have been reported to damage the screen or the LCD monitor

## **PRECAUTIONS**

- Do not block vent holes with any objects
- Do not insert sharp objects or spill hazardous material onto the LCD (may cause fire, electric shock, or failure)
- Disconnect the power plug from the AC outlet if you anticipate infrequent use
- Do not attempt to service this product yourself. Opening or removing casing may expose you to dangerous voltage points or other significant risks
- Avoid touching the screen directly with your fingers as the oils from your skin may be difficult to remove from the LCD
- Do not apply direct pressure on the screen
- Do not remove or modify any prongs from the power cord
- Disconnect the power plug from the AC outlet when the power cord or plug is damaged
- If the monitor case is damaged or the monitor malfunctions, do not try to repair yourself. Un-authorized repair will void your product warranty
- Do not allow any object to rest on the power cord
- Do not place this product in a high traffic environment where cord is exposed
- Always use the proper power cord with the correct plug adapter. If the power source is 120V AC, use a power cord that has UL and C-UL approvals. If the power source is 240V AC, use the tandem (T-blade) plug with a grounding that meets European country safety regulations (such as VDE for Germany)
- Do not overload wall outlets or power cords. Ensure total units plugged into wall does not exceed 10 amperes
- Ensure total current plugged into the extension cord does not exceed cords current rating
- Place monitor in a well ventilated environment
- Do not place monitor directly under sunlight or in cold, humid environments
- Keep monitor in a dust-free environment and away from strong electro-magnetic fields

## CONTROL FUNCTION

### Front View



1:Channel:Selects input mode: VGA>VIDEO1>VIDEO2>S-VIDEO>VGA

2:OSD Menu: Selects OSD control options on the screen

3:Decrease: Decreases the value of selected OSD control option and decreases the volume

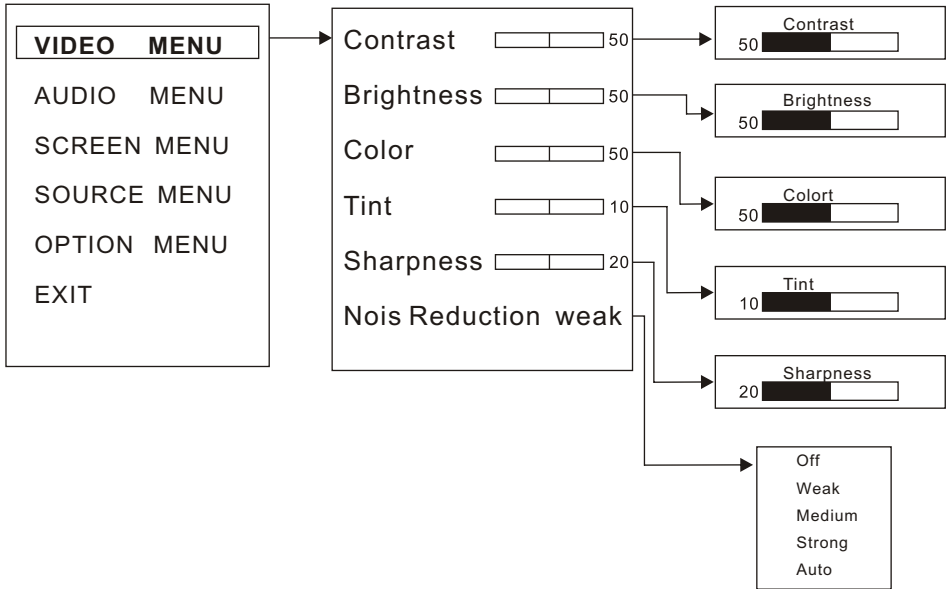
4:Increase: increases the value of selected OSD control option and increases the volume

5:Power switch: Turns power on/off

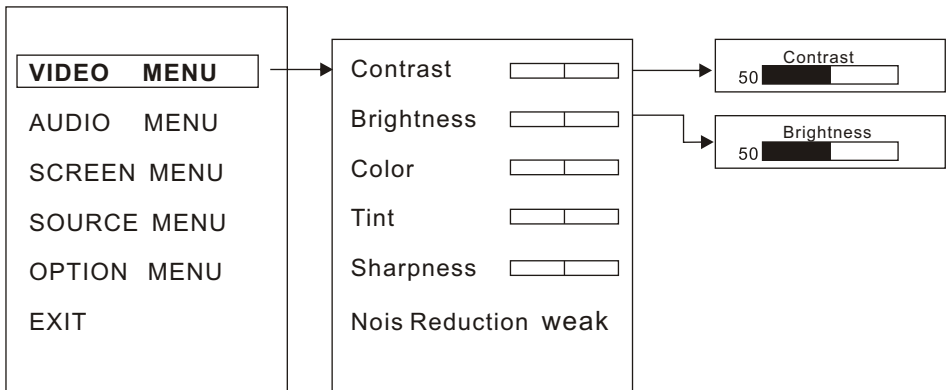
6:Power LED: Indicates different status when unit operates in different modes

# OSD CONTROL

## 1.VIDEO ADJUST(VIDEO MODE)

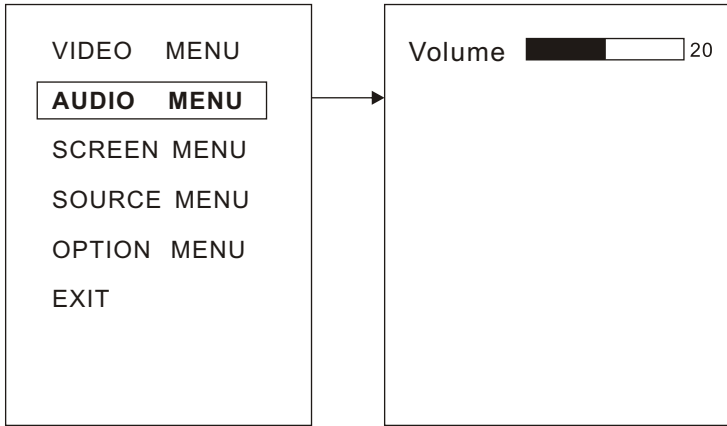


## 1.1 VIDEO ADJUST (VGA MODE)

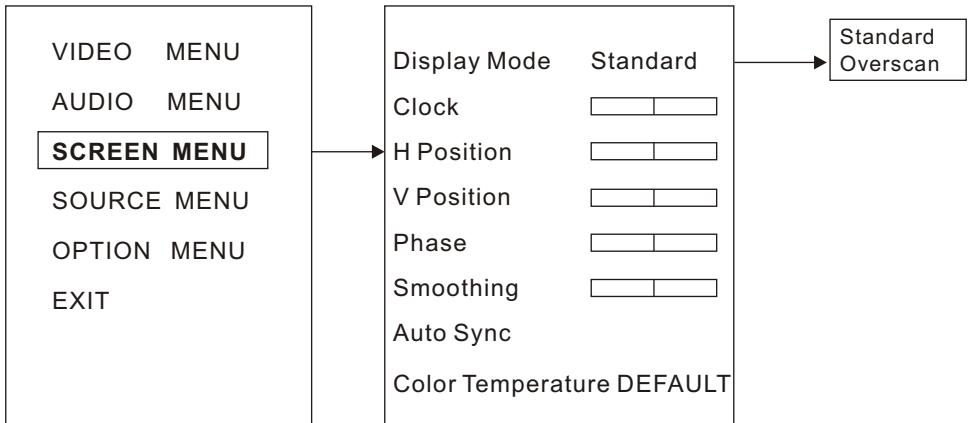




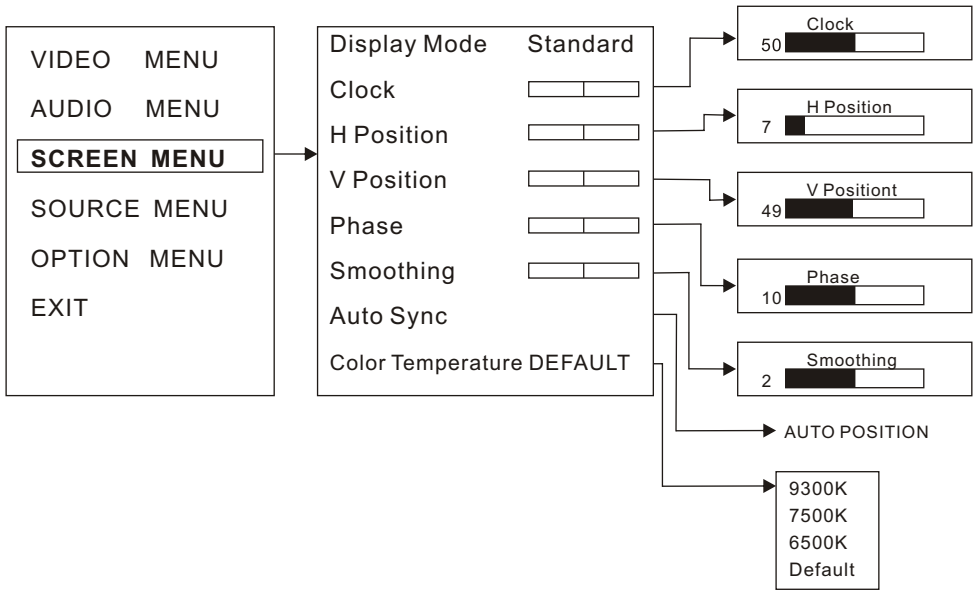
## 2. AUDIO ADJUST



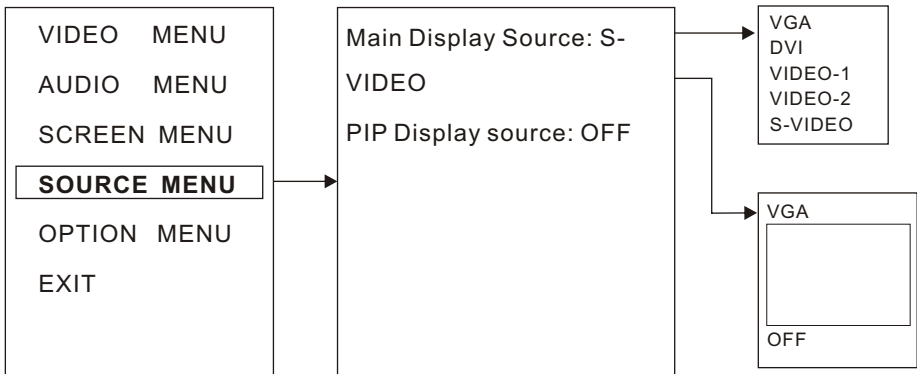
## 3. SCREEN ADJUST(VIDEO MODE)



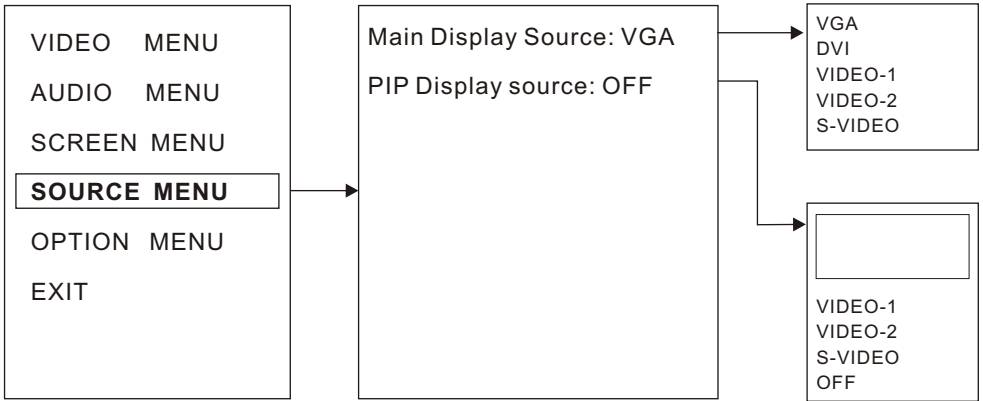
### 3.1 SCREEN ADJUST(VGA MODE)



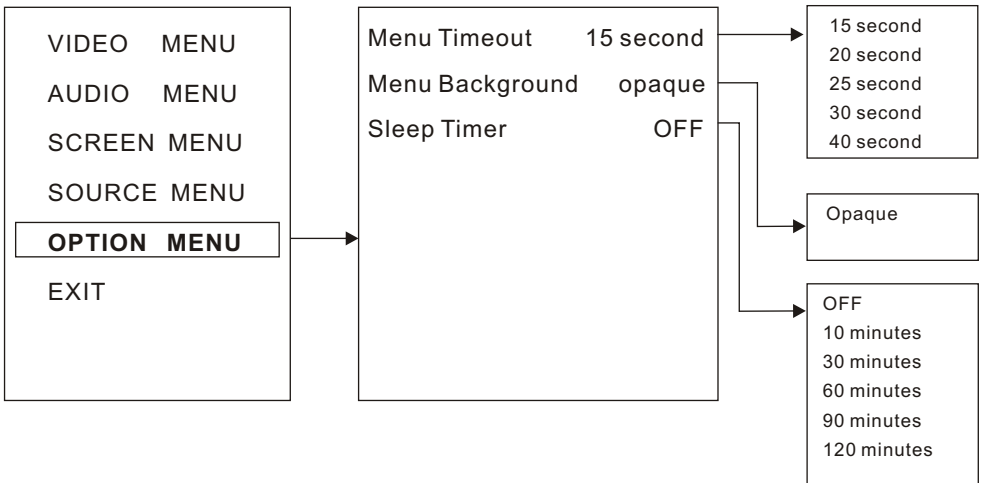
### 4. SOURCE SELECT(VIDEO MODE)



#### 4.1 SOURCE SELECT(VGA MODE)



#### 5. OPTION ADJUST



## **OSD CONTROL**

### **1.VIDEO MENU (Video Mode) :**

CONTRAST: Adjusts fore ground white level of the video screen image

BRIGHTNESS: Adjusts back ground black Level of the video screen  
image

COLOR: Adjusts the color saturation of the video signal

TINT: Adjusts the color saturation of the video background

SHARPNESS: Adjusts the picture softer or sharper

NOISE REDUCTION: Adjusts the background noise of the video signal

#### **1.1 VIDEO MENU(VGA Mode):**

CONTRAST: Adjusts fore ground white level of the video screen image

BRIGHTNESS: Adjusts back ground black level of the video screen  
image

**2.AUDIO ADJUST:** Adjusts the volume level

### **3.SCREEN MENU(Video Mode):**

Display Mode:You can select Standard or overscan mode

#### **3.1. SCREEN MENU(VGA Mode):**

CLOCK: Adjusts image horizontal size of the screen image

H. Position: Moves the screen image left or right

V. Position: Moves the screen image up and down

Phase: Adjusts image distortion appearing to horizontal “noise” on the  
screen.

Smoothing: Enhance picture quality

Auto Sync: Automatics to adjust the screen image for best

Color Temperature:Select among four 9300K and 7500K and  
6500K and Default

#### **4. SOURCE MENU(Video Mode):**

1. MAIN DISPLAY SOURCE: Select VGA, DVI, VIDEO-1, VIDEO-2, S-VIDEO signal input
2. PIP DISPLAY SOURCE: Select VGA, signal input or OFF mode

#### **4.1 SOURCE MENU(VGA Mode):**

1. MAIN DISPLAY SOURCE: Select VGA, DVI, VIDEO-1, VIDEO-2, S-VIDEO signal input
2. PIP DISPLAY SOURCE: Select VIDEO-1, VIDEO-2, S-VIDEO signal input

#### **5. OPTION MENU:**

MENU TIMEOUT: Selects 15 second, 20 second, 25 second, 30 second, 40 second for OSD Menu display.

MENU BACKGROUND: Selects opaque or transparent for OSD Menu display

SLEEP TIMER: Selects OFF, 10 minutes, 30 minutes, 60minutes, 90 minutes, 120 minutes for the sleep time.

#### **HOT KEY CONTROL**

##### **1.VGA HOT KEY :**

UP KEY <----> BRIGHTNESS

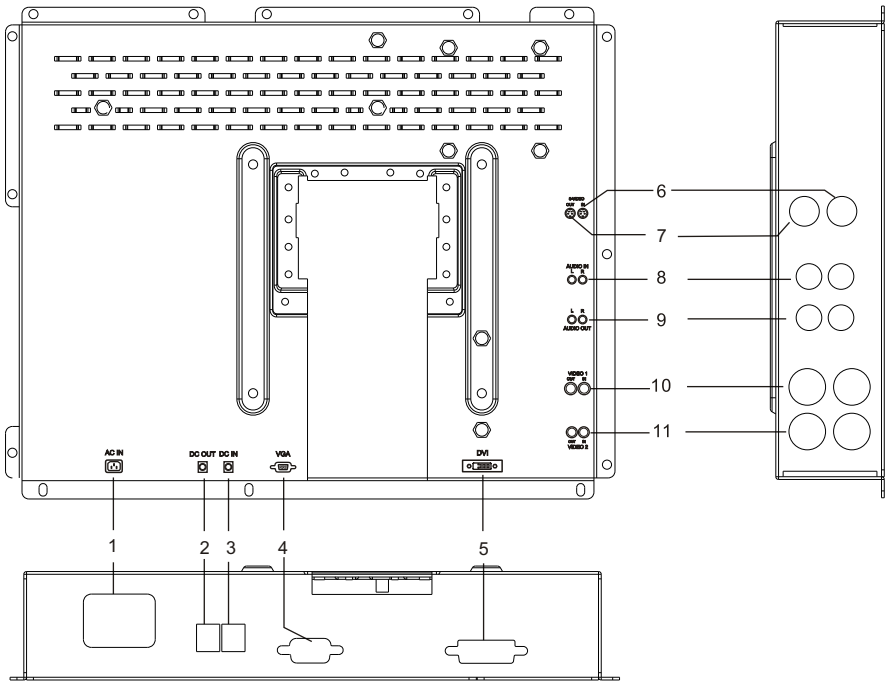
DOWN KEY <----> CONTRAST

##### **2:VGA+A HOT KEY**

UP KEY <----> VOLUME INCREASE

DOWN KEY <---->VOLUME DECREASE

## REAR INPUTS



1:AC IN: This can be connected to AC 100~240V 50/60Hz

2:DC OUT: Output DC 12V 0.5Amp

3:DC IN: This must be connected to DC power 12V/5A

4:VGA IN: This is to be connected with the digital signal connector

5:DVI IN: This is to be connected with the digital signal connector

6:S-Video In: Inputs S-Video signal by DIN socket

7:S-Video Out: Outputs S-Video signal by DIN socket

8:Audio In: These RCA sockets can be connected to audio outputs  
(L---White terminal, R---Red terminal)

9:Audio Out: These RCA sockets can outputs sound to other speakers

10:Video-1 In: This BNC socket can be connected to composite video output

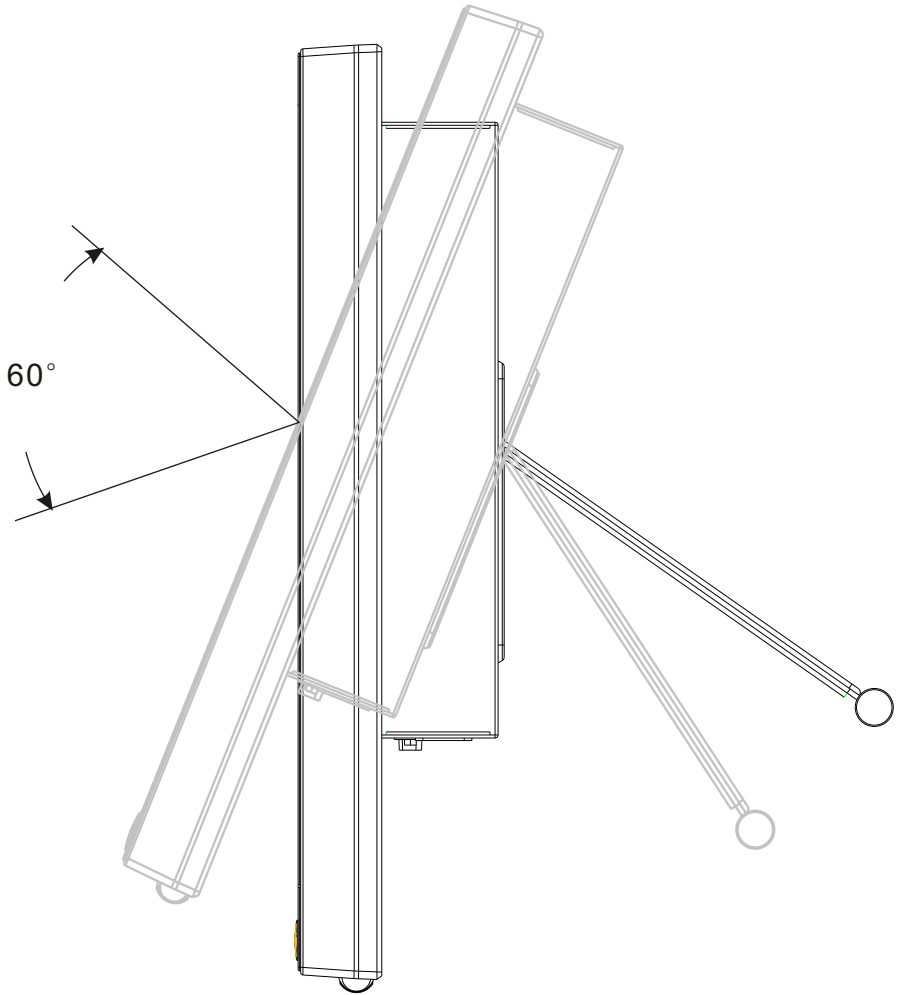
Video-1 Out: This BNC socket is the loop-through output with auto-termination from above video inputs

11:Video-2 In: This BNC socket can be connected to composite video output

Video-2 Out: This BNC socket is the loop-through output with auto-termination from above video inputs

## DISPLAY ANGLE

The 15"/17"/19" can be manually adjusted to desirable angles.



## Product Specification

Model	HCD-15MAH
Spec	
TV system	NTSC/PAL auto detection
Scan Frequency	NTSC: 15750 Hz $\pm$ 500Hz/60Hz PAL: 15625 Hz $\pm$ 500Hz/50Hz PC: H: 30~60KHz V: 60~75Hz
LCD Display	15" active matrix TFT LCD panel
Pixel pitch	0.297(H)*0.297(V) mm
Display Resolution	1024(H)*768(V)
Contrast Ratio	700:1(Typ)
Brightness	250cd/m2(Typ)
Response Time	12 ms
Display Color	16,777M
Viewing Angle Left/Right	75°/75°
Up/Down	65°/60°
PC Input signal	Analog RGB 0.7Vp p
Display Mode	VGA/SVGA/XGA
PC input connector	15 pin D- sub
Video input signal	Composite & Y/C 1Vpp 75 ohm
Video input connector	1 in DIN-4 for Y/C & 2 in BNC for Composite, 1 loop through out DIN-4 2 loop through out BNC
DVI input connector	DDWG compliant TMDS, 30 pins female connector
Audio input signal	Analog stereo; 0.7Vpp at 1KHz
Audio input connector	2 in and loop through out RCA
Speaker output	2 x 1.0 Watt built in
Front Control	Power on/off with LED, + -, Menu, Channel
OSD Menu	Contrast, Brightness, Tint, Color, Sharpness (CVBS mode)
Power Input	AC 100~240V OR 12VDC /5ADC ( TUV approval adapter source )
Operating Consumption	52 W max.
Operating Conditions	Temperature: 0°C -40°C Humidity: 20%-80%
Storage Conditions	Temperature:-20°C -60°C Humidity: 10%-90%
Safety Compliance	UL, CUL , CCC
EMI compliance	FCC, CE
Dimensions	347(W)x74(D)x299(H)mm
Packing Dimensions	452(W)x180(D)x400(H)mm
Weight	N/W: 4.5Kgs G/W: 5.5Kgs



## Product Specification

Model	HCD-17MAH
Spec	
TV system	NTSC/PAL auto detection
Scan Frequency	NTSC: 15750 Hz <del>±500</del> Hz/60Hz PAL: 15625 Hz ± 500Hz/50Hz PC: H: 30~60KHz V: 60~75Hz
LCD Display	17" active matrix TFT LCD panel
Pixel pitch	0.264(H)*0.264(V) mm
Display Resolution	1280(H)*1024(V)
Contrast Ratio	700:1(Typ)
Brightness	300cd/m2(Typ)
Response Time	12 ms
Display Color	16,777M
Viewing Angle Left/Right	75°/75°
Up/Down	70°/60°
PC Input signal	Analog RGB 0.7Vp p
Display Mode	VGA/SVGA/XGA
PC input connector	15 pin D- sub
Video input signal	Composite & Y/C 1Vpp 75 ohm
Video input connector	1 in DIN-4 for Y/C & 2 in BNC for Composite, 1 loop through out DIN-4 2 loop through out BNC
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Audio input signal	Analog stereo; 0.7Vpp at 1KHz
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Power Input	AC 100~240V OR 12VDC /5ADC ( TUV approval adapter source )
Operating Consumption	52 W max.
Operating Conditions	Temperature: 0°C-40°C Humidity: 20%-80%
Storage Conditions	Temperature:-20°C-60°C Humidity: 10%-90%
Safety Compliance	UL, CUL , CCC
EMI compliance	FCC, CE
Dimensions	382(W)x342(D)x78(H)mm
Packing Dimensions	497(W)x195(D)x463(H)mm
Weight	N/W: 5.9 Kgs G/W: 7.1 Kgs

## Product Specification

Model Spec	HCD-19MAH
TV system	NTSC/PAL auto detection
Scan Frequency	NTSC: 15750 Hz $\pm$ 500Hz/60Hz PAL: 15625 Hz $\pm$ 500Hz/50Hz PC: H: 30~60KHz V: 60~75Hz
LCD Display	19" active matrix TFT LCD panel
Pixel pitch	0.294(H)*0.294(V) mm
Display Resolution	1280(H)*1024(V)
Contrast Ratio	500:1(Typ)
Brightness	300cd/m2(Typ)
Response Time	12 ms
Display Color	16,777M
Viewing Angle Left/Right	75°/75°
Up/Down	70°/60°
PC Input signal	Analog RGB 0.7Vp p
Display Mode	VGA/SVGA/XGA
PC input connector	15 pin D- sub
Video input signal	Composite & Y/C 1Vpp 75 ohm
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Front Control	Power on/off with LED, +, -, Menu, Channel
OSD Menu	Contrast, Brightness, Tint, Color, Sharpness (CVBS mode)
Power Input	AC 100~240V OR 12VDC /5ADC ( TUV approval adapter source )
Operating Consumption	52 W max.
Operating Conditions	Temperature: 0°C~40°C Humidity: 20%-80%
Storage Conditions	Temperature:-20°C~60°C Humidity: 10%-90%
Safety Compliance	UL, CUL, CCC
EMI compliance	FCC, CE
Dimensions	420(W)x81(D)x374(H)mm
Packing Dimensions	535(W)x195(D)x495(H)mm
Weight	N/W:6.9 Kgs G/W: 8.6 Kgs

## **SUPPORTED INPUT MODES**

Mode	Resolution	H Freq(kHz)	V Freq(Hz)
0	720*350	31.469	70.087
1	640*480	31.469	59.940
2	640*480	35.000	66.667
3	640*480	37.861	72.809
4	640*480	37.500	75.000
5	720*400	31.469	70.087
6	800*600	35.156	56.250
7	800*600	37.879	60.317
8	800*600	48.077	72.188
9	800*600	46.875	75.000
10	1024*768	48.363	60.004
11	1024*768	60.023	75.029



## **HUNT ELECTRONIC USA INC.**

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