



**20-INCH
TFT-LCD MONITOR RACK MOUNT
ADMNLCD20RK**

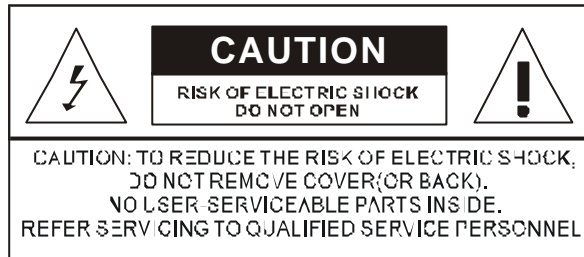
INSTRUCTION MANUAL

Please read this manual thoroughly before use, and keep it handy for future reference.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.
DO NOT INSERT ANY METALLIC OBJECT THROUGH VENTILATION GRILLS.

CAUTION:



Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

Precautions

Safety -----

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

Installation -----

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust or mechanical vibration.

The unit is not designed to be waterproof. Exposure to rain or water may damage the unit.

Cleaning -----

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

FCC COMPLIANCE STATEMENT

INFORMATION TO THE USER: THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS B DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE IN A RESIDENTIAL INSTALLATION. THIS EQUIPMENT GENERATES, USES AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. HOWEVER, THERE IS NO GUARANTEE THAT INTERFERENCE WILL NOT OCCUR IN A PARTICULAR INSTALLATION. IF THIS EQUIPMENT DOES CAUSE HARMFUL INTERFERENCE TO RADIO OR TELEVISION RECEPTION, WHICH CAN BE DETERMINED BY TURNING THE EQUIPMENT OFF AND ON, THE USER IS ENCOURAGED TO TRY TO CORRECT THE INTERFERENCE BY ONE OR MORE OF THE FOLLOWING MEASURES :

- REORIENT OR RELOCATE THE RECEIVING ANTENNA
- INCREASE THE SEPARATION BETWEEN THE EQUIPMENT AND RECEIVER.
- CONNECT THE EQUIPMENT INTO AN OUTLET ON A CIRCUIT DIFFERENT FROM THAT TO WHICH THE RECEIVER IS CONNECTED.
- CONSULT THE DEALER OR AN EXPERIENCED RADIO/TV TECHNICIAN FOR HELP

CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS PRODUCT COMPLIES WITH VARIOUS OTHER REGIONAL AND SAFETY REGULATIONS SUCH AS: FCC, CE.
THESE CERTIFICATIONS ARE NOTED ON THE PRODUCT LABEL.

IMPORTANT SAFEGUARDS

1. **READ INSTRUCTIONS** -- All the safety and operating instructions should be read before the appliance is operated.
2. **RETAIN INSTRUCTIONS** -- The safety and operating instructions should be retained for future reference.
3. **CLEANING** -- Unplug video monitor or equipment from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
4. **ATTACHMENTS** -- Do not use attachments not recommended by the video monitor or equipment manufacturer as they may result in the risk of fire, electric shock or injury to persons.
5. **WATER AND MOISTURE** -- Do not use video monitor or equipment near water -- for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, or the like.
6. **ACCESSORIES** -- Do not place video monitor or equipment on an unstable cart, stand or table. The video monitor or equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.
- 6A. Video monitor or equipment and cart combinations should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the equipment and cart combination to overturn.
7. **VENTILATION** -- Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the video monitor or equipment and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the video monitor or equipment on a bed, sofa, rug, or other similar surface. Video monitor or equipment should never be placed near or over a radiator or heat register. Video monitor or equipment receiver should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.
8. **POWER SOURCES** -- Video monitor or equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your video monitor or equipment dealer or local power company. For video monitor or equipment designed to operate from battery power refer to the operating instructions.
9. **GROUNDING OR POLARIZATION** -- This video monitor may be equipped with a polarized alternating - current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

Alternate Warnings - This video monitor is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
10. **POWER CORDS** -- Do not allow anything to rest on the power cord. Do not locate video monitor or equipment where the cord will be abused by persons walking on it.
11. **HEED WARNINGS** -- Follow all instructions marked on the video monitor or equipment.
12. **LIGHTNING** -- For added protection for video monitor or equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.
13. **OVERLOADING** -- Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
14. **OBJECT AND LIQUID ENTRY** -- Never push objects of any kind into video monitor or equipment through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
15. **SERVICING** -- Do not attempt to service video monitor or equipment yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
16. **DAMAGE REQUIRING SERVICE** -- Unplug video monitor or equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - A. When the power-supply cord or the plug has been damaged.
 - B. If liquid has spilled, or objects have fallen into the video product.
 - C. If the video product has been exposed to rain or water.
 - D. If the video product does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.
 - E. If the video product has been dropped, or the cabinet damaged.
 - F. When the video product exhibits a distinct change in performance -- this indicates a need for service.
17. **REPLACEMENT PARTS** -- When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.
118. **SAFETY CHECK** -- Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.
19. **FIELD INSTALLATION** -- This installation should be made by a qualified service person and should conform to all local codes.

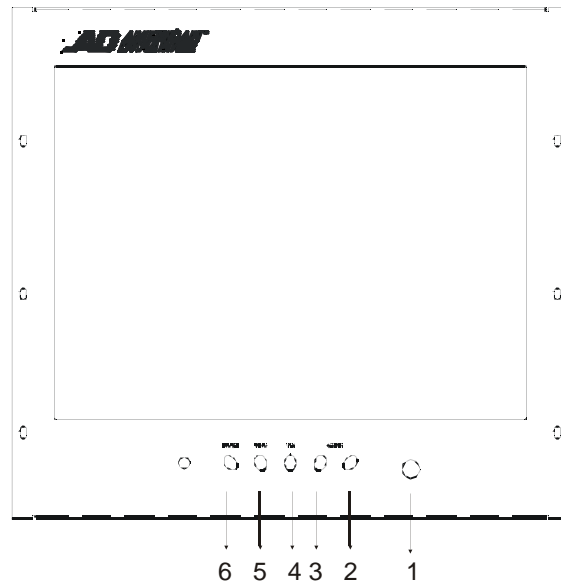
TABLE OF CONTENTS

● Warning.....	2
● FCC Compliance Statement.....	3
● Important Safeguards.....	4
● Table Of Contents.....	5
● Features.....	6
● Operating Instructions-Controls.....	7
● Backside Connections.....	8
● Remote Control.....	9
● OSD Architecture.....	12
A. Audio Function.....	12
B. Video Function.....	13
C. Image Function.....	16
● LCD Monitor Mounting guide.....	19
A. Rack Mount.....	19
● Connecting Device.....	20
● Specification.....	21
● Appendixes	22
● Memo.....	23

Features

- 20-inch LCD monitor with multiple inputs (Composite video, Y/C (SVHS) and D-sub computer)
- High brightness of 500 cd/
- High contrast of 480 :1
- Wide viewing angle of 160 degrees, both vertically and horizontally
- Fast LCD response time of 16ms, allowing excellent rendering of motion
- Latching power supply automatically restores power after interruption or remote switching
- Built-in power transformer with standard AC cord
- Remote control for ADMNLCD20RK, adding flexibility and easy control
- Simple OSD Menu User Interface
- European and North American power cords for easy installation
- Video input supports both NTSC / PAL / SECAM standards
- User selectable 6500K / 9300K color temperature settings
- Auto termination (75 Ohms)
- Standard AC power supply ranges from 100V ~ 240V

Operating Instructions-Control



1. Power

Monitor power ON / OFF. At OFF mode, monitor will be at standby status.

Green Light – Power On

Red Light – Standby mode

2. 3. Adjust

Increase or decrease the value on OSD menu.



Increase value or turn ON / OFF function



Decrease value or turn ON / OFF function

4. Item

Chose sub menu from Audio / Video / Image.

5. Menu

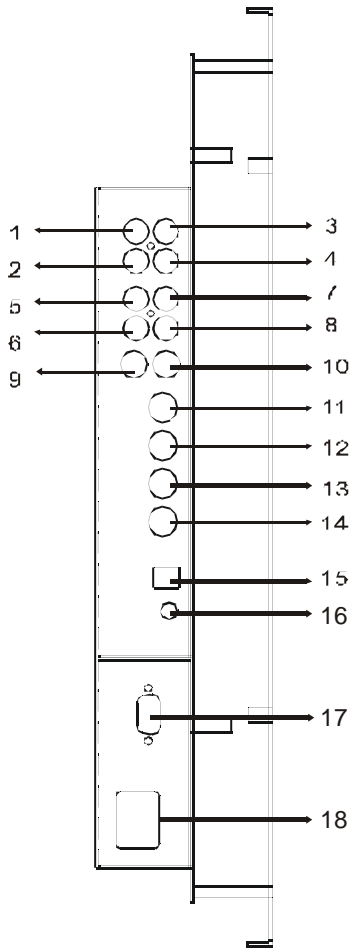
OSD menu ON / OFF control.

6. Source

Select input signal from AV1, AV2, S-Video or PC.

Backside Connections

A. BACK PANEL CONTROL



NOTE :

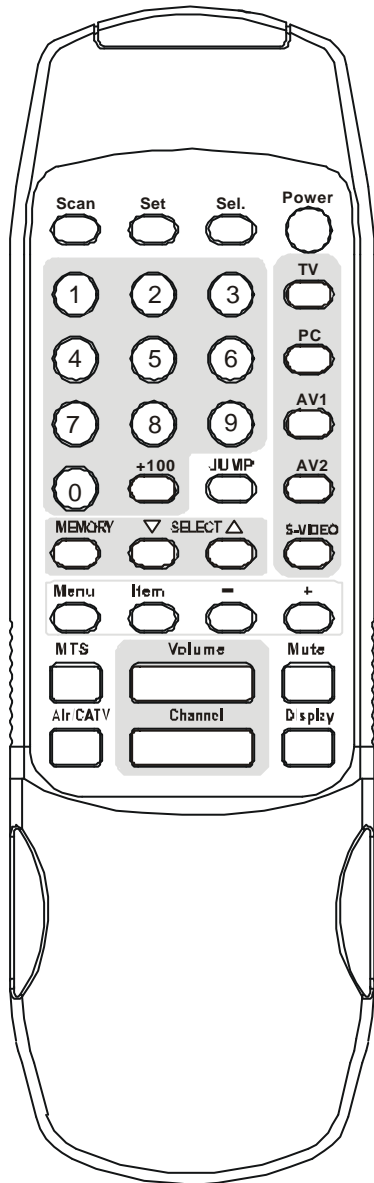
Audio Connections

	Audio 1	Audio 2
PC		V
AV 1	V	
AV 2		V
S-Video	V	

- 1, 2 AUDIO 2 IN (L, R)**
Stereo Audio Signal Input, this input is for AV2 or PC (refer to Note below)
- 3, 4 AUDIO 2 OUT (L, R)**
Audio looping outputs for AUDIO 2
- 5, 6 AUDIO 1 IN (L, R)**
Stereo Audio Signal Input, this input is for AV1 or Y/C (refer to Note below)
- 7, 8 AUDIO 1 OUT (L, R)**
Audio looping outputs for AUDIO 1
- 9 Y/C IN (SVHS)**
Y/C separated signal input
- 10 Y/C OUT (SVHS)**
Y/C separated signal looping output
- 11 VIDEO 2 OUT**
Video looping output for VIDEO 2
- 12 VIDEO 2 IN**
Composite signal Input for VIDEO 2
- 13 VIDEO 1 OUT**
Video looping output for VIDEO 1
- 14 VIDEO 1 IN**
Composite signal Input for VIDEO 1
- 15 REGULATED DC12V POWER OUTPUT (500mA)**
- 16 AUDIO LIVE OUT**
- 17 PC VGA IN**
- 18. AC POWER CORD**

Remote Control

Key Function



Power

Turn ON / OFF monitor. At OFF mode monitor will be standby status.

Scan

Inactive for rack mount model

Set (Restricted Channel Setting)

Inactive for rack mount model

Sel. (Restricted Channel Setting)

Inactive for rack mount model

TV

Inactive for rack mount model

PC

Select PC monitor mode.

AV1

Select display to Video1.

AV2

Select display to Video2.

S-Video

Select display to S-Video

Note: All TV/CATV functions are inactive for rack mount model

Remote Control

Jump

Return to previous channel.



Memory

Inactive for rack mount model

Select

Inactive for rack mount model



Menu

OSD menu ON / OFF and selection.

Item

Chose sub menu from Audio / Video / Image list.

+ / -

Increase or decrease the value on OSD menu.

+ Increase value or turn ON / OFF function

- Decrease value or turn ON / OFF function

MTS :

Inactive for rack mount model

Air/CATV

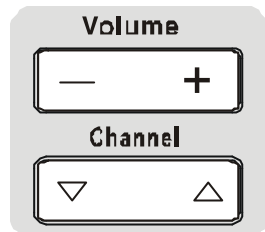
Inactive for rack mount model

Mute

The button controls audio volume to mute.

Display

Displays video source title.



Volume

Used adjust +/- to increase / decrease volume..

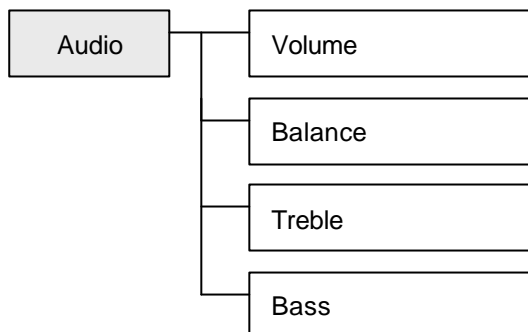
- + Increase volume value
- Decrease volume value

Channel

Inactive for rack mount model

OSD Architecture

A. Audio Function



Press the MENU button will bring up the OSD Menu.

Press MENU again to select AUDIO. Then, press ITEM to choose functions that require proper adjustments.

As shown, press   key to adjust.

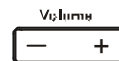
Note: In remote control, press   key to adjust.

(After adjustment, the monitor will store new settings)

Volume

Controls built-in speakers' output volumes.

Note: Volume control can also be adjusted by hot key.



Balance

Controls built-in speakers' LEFT / RIGHT volume balance.

Treble

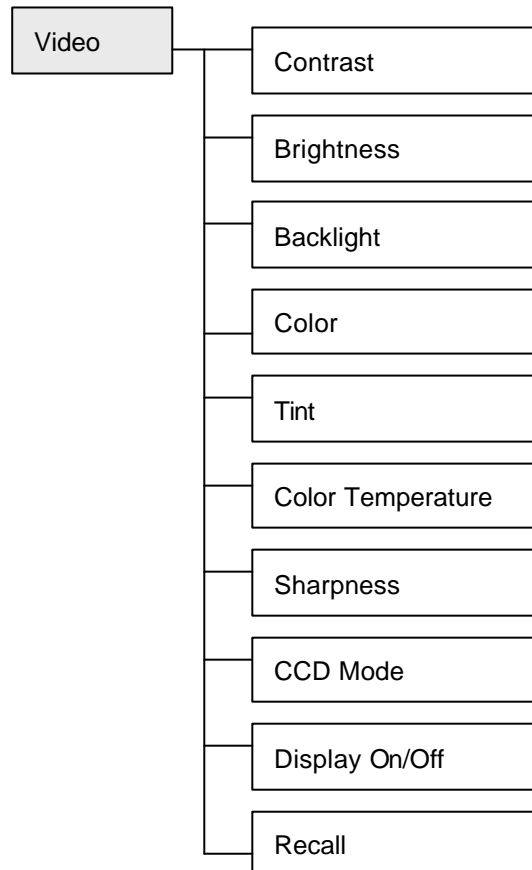
Audio treble adjustment.

Bass

Audio bass adjustment.

OSD Architecture

B. Video Function



Under AV1, AV2, S-Video mode:

Press the MENU button will bring up the OSD Menu.

Press MENU again to select VIDEO. Then, press ITEM to choose functions that require proper adjustments.

As shown, press   key to adjust.

Note: In remote control, press   key to adjust.

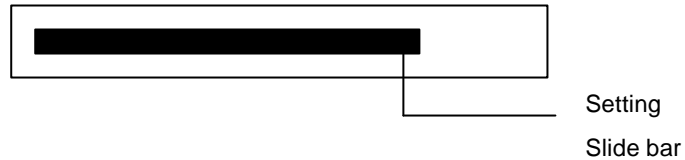
(After adjustment, the monitor will store new settings)

OSD Architecture

Contrast

Permits adjustment of contrast between light and dark areas of the picture.

Example:



Brightness

Adjusts the overall picture shade and brightness.

Tip: Use the **Brightness** to make details in the dark areas of the picture to be just visible, and **Contrast** to “brighten” the picture without causing noises and foreheads to turn white.

Back Light

Adjusts panel backlight luminance.

Color

Adds coloring to the black and white picture content (of a color signal), and is usually set for viewer' s preference in color saturation.

TINT

Adjusts all the colors on the screen, but is most noticeable to the eye in reds and yellows, and is also usually set for pleasing face tones.

Note: Appears in NTSC mode only.

Sharpness

Sets the desired sharpening enhancement to the picture.

Color Temperature

Selects color temperature of either 6500K

OSD Architecture

CCD Mode

If video signal source directly comes from CCD camera, using CCD Mode is suggested to obtain better picture performance.

Display

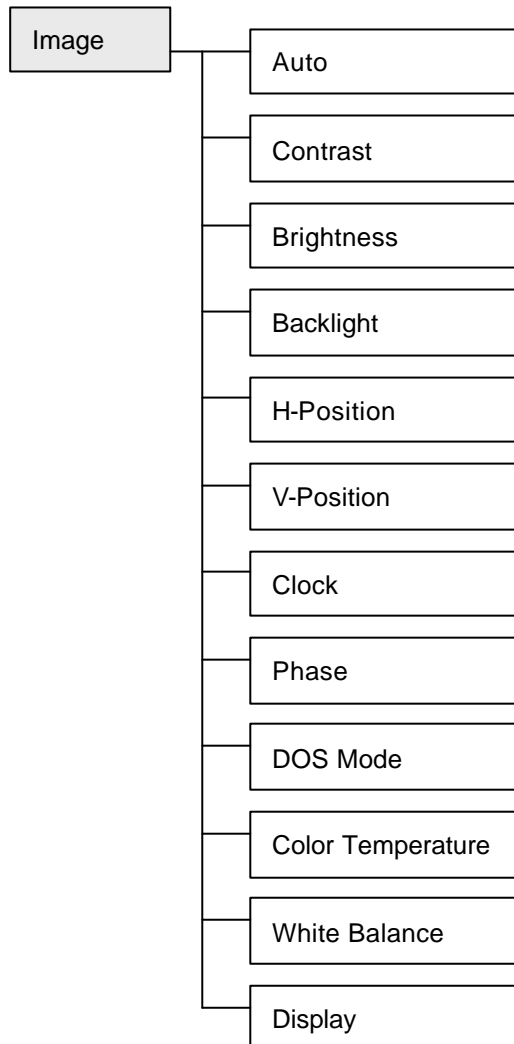
Displays video source title.

RECALL

Sets monitor to the original factory setting.

OSD Architecture

C. Image Function



Under Image mode:

Press the MENU button will bring up the OSD Menu.

Press MENU again to select IMAGE. Then, press ITEM to choose functions that require proper adjustments.

As shown, press   key to adjust.

Note: In remote control, press   key to adjust.

(After adjustment, the monitor will store new settings)

OSD Architecture

Auto

Auto detect screen detail data such as clock and phase.

Contrast

Permits adjustment for contrast between light or dark areas of the picture.

Brightness

Adjusts the overall picture shade and brightness.

Tip: Use the Brightness to make details in the dark areas of the picture to be just visible, and Contrast to “brighten” the picture without causing noises and foreheads to turn white.

Back Light

Allows to adjust panel backlight luminance.

H-position

Allows adjustment for horizontal position.

V-position

Allows adjustment for vertical position.

Clock

Is used to adjust best picture quality. It adjusts the numbers of the pixel clock across one line time. Therefore it can affect the picture position and size.

Note: improper adjustment will caused image failure.

Phase

Is used to adjust best picture quality. It adjusts the sampling phase across one pixel time. When the phase is not adjusted properly, the picture will be unclear. Therefore this value should be carefully adjusted.

Note: improper adjustment will cause image failure.

OSD Architecture

Dos Mode

Supports picture enhancement when using under DOS mode.

Color Temperature

Selects 9300K or 6500K color temperature for display.

White Balance

Allows the picture white balance adjustment.

Display

Displays video source title.

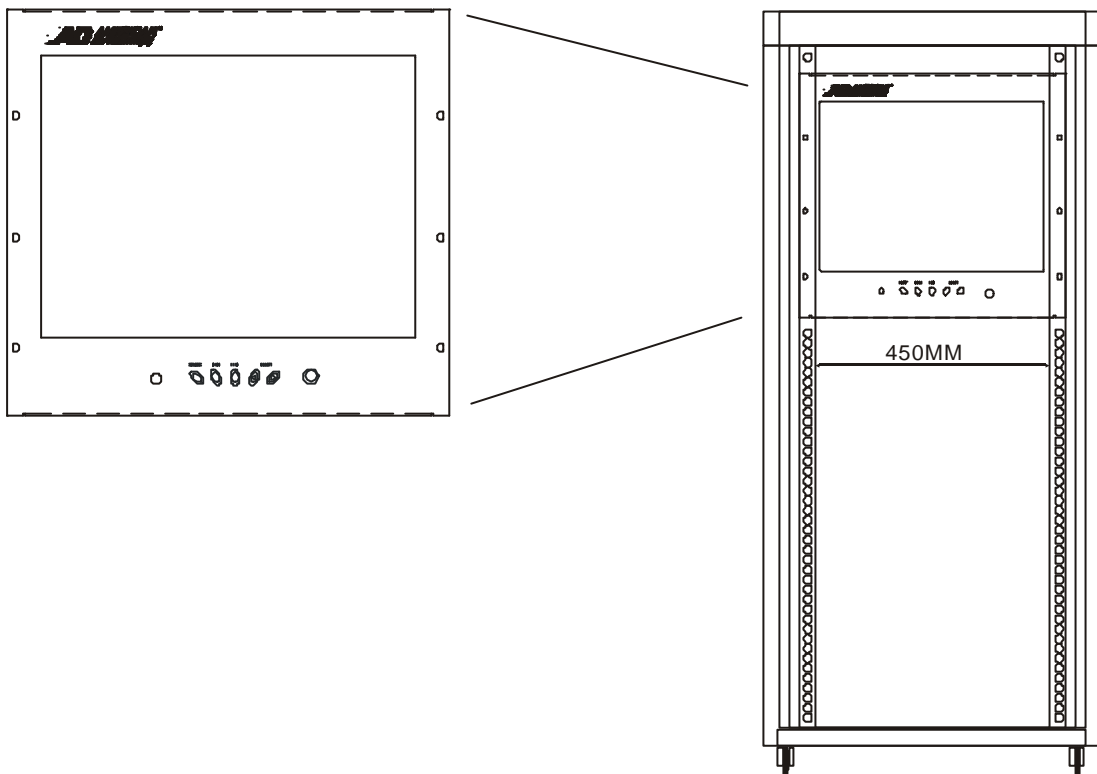
Recall

Sets monitor to the original factory setting.

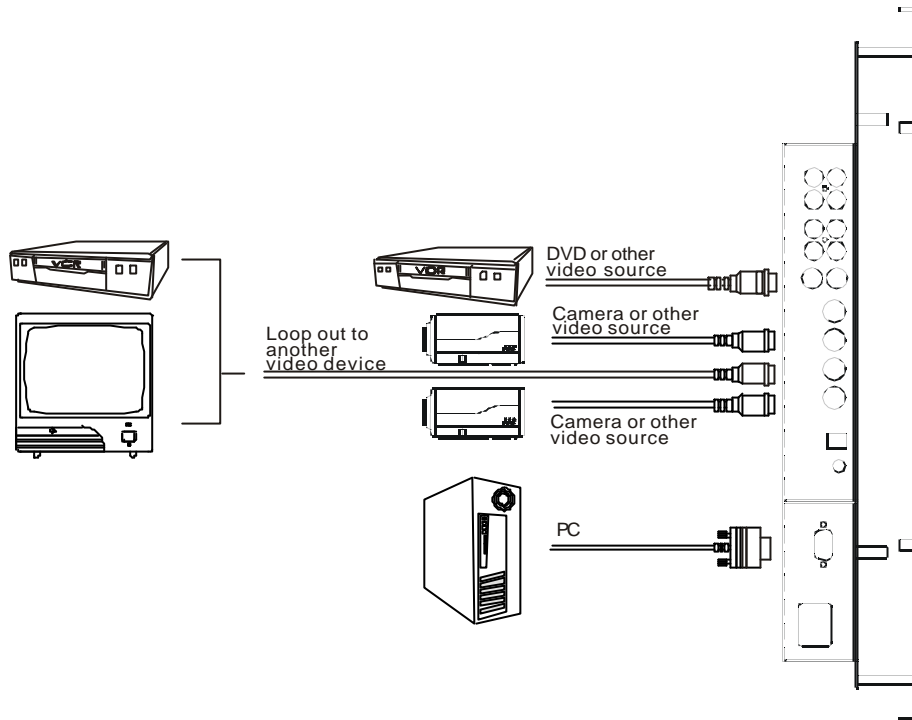
LCD monitor Mounting Guide

A. Rack mount

The ADMLLCD20RK fits into a standard 19-inch rack. Follow the mounting guide to install the monitor.



Connecting Device



- Connect PC to Monitor through VGA connector as shown on the above picture
- Connect External device such as DVD or Game Player to Monitor as shown on the above picture
- Connect CCD Camera 1 and 2 to Monitor through Video Input 1 and 2 (BNC Connector) as showing on the above picture
- PC resolution supported

640 x 480 60Hz	800 x 600 56Hz
640 x 480 72Hz	800 x 600 70Hz
640 x 480 75Hz	800 x 600 72Hz
	800 x 600 75Hz

Note: Please refer to page 17 for auto detection after changing resolution setting.

Specification

Model	ADMNLCD20RK	
LCD Panel	20.1 inch" TFT, TN Mode	
Display Mode	3D De-interlace	
Input Filter	3D Comb filter	
Display area	408 x 306mm	
Resolution	800 x 600	
Brightness	500 cd/m ² @6mA	
Contrast ratio	480:1	
Response Time	16ms typ.	
View angle	L/R	80(left),80(right),60(up),60(down) CR=10
	U/D	80(left), 80(right), 80(up),80(down) CR=5
Input Signal	BNCx2 in BNC x2 out (Auto Termination) D-Sub 15pin Y/C x1 in Y/C x1 out	
Audio In/Out	RCA(R/L) x 2 set in RCA(R/L) x 2 set out	
Operating Controls	OSD	
Power Supply	AC 96~256V 50/60Hz	
Power Consumption	52W	
Dimension	420x406.5x85.2mm	
Weight	6.8kg	
Temperature	10~60 degrees C	
Humidity	20%~80%	

Appendixes

A. TROUBLE SHOOTING

Problem:

1.No power

2.No video or audio

3.Bad video or audio

4.Image not stable

5.Ab-normal line

6.Ghost image

7.Desired video disappears

Checking:

Power-cord connecting Power-on?

Change to right input channel?

Check signal cable?

Any interrupt from other devices?

Adjust video control on OSD?

Adjust video source?

B Package List

A. ADMNLCD20RK 20" LCD Monitor	x 1
B. American Power Cord	x 1
C. Europe Power Cord	x 1
D. User Manual	x 1
E. Accessory Kit	x 1

Memo

Please visit our website for more information

www.americandynamics.net

©2003 Sensormatic Electronics Corporation.

Product specifications subject to change without notice.

Certain product names mentioned herein may be trade names
and/or registered trademarks of other companies.