

User Manual



RA-19-LCD

19 inch TFT LED Arcade Monitor

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WARNING

By using these documents you agree hereto:

1. You are qualified to install the components contained in this package and that any damage to the component, device the component is being installed into, or injury to yourself or others is solely your responsibility.
2. You will install this component according to the supplied instructions inside this package.

NO LIABILITY FOR CONSEQUENTIAL DAMAGES. To the maximum extent permitted by applicable law, in no event shall Holland Computers, Inc. or its suppliers be liable for any damages whatsoever (including, without limitation, damages for loss of business profit, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of, or inability to use, this product, even if Holland Computers, Inc. has been advised of the Possibility of such damages. Because some states/jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages.

Before operating the monitor, please read this manual thoroughly. This manual should be retained for future reference.

FCC Class B Radio Frequency Interference Statement

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 technician for help.

The device complies with Parts 15 of the FCC Rule. Operation is subject to the following two conditions: (1) this device may not cause harmful interference: and (2) this device must accept any interference received, including interference that may cause undesired operations.

CANADA

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulation.

CE:

This device complies with requirement of EMC directive 89/336/EEC with regard to Electromagnetic Compatibility, and 73/23/EEC and 93/68/EEC with regard to Low Voltage directive.

Socket-outlet shall be installed near the equipment and shall be easily accessible.

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Notices, Warnings and Safety

SAFETY NOTICE

1. Changes or modifications not expressly approved by the manufacturer for could void the warranty and expose the user and/or others to hazards that can cause injury or death.
2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibility of the user to correct such interference.

WARNING

To prevent fire or shock hazard, do not expose the monitor to rain or moisture. Dangerously high voltages are present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

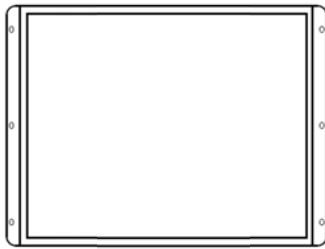
- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool or in a wet basement.
- Do not place the monitor on an unstable cart, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug, or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet unless proper ventilation is provided.
- The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- Unplug the unit during a lightning storm or when it will not be used for long period of time. This will protect the monitor from damage due to power surges.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor by yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to qualified service personnel.
- To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100- 240V AC, Min. SA.
- The wall socket shall be installed near the equipment and shall be easily accessible.

Features

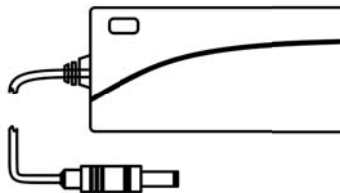
This monitor is a color active matrix thin film transistor (TFT) liquid crystal display (LCD) that uses amorphous silicon TFT as a switching device. This model is composed of a TFT LCD panel, the voltage reference, common voltage, DC-DC converter, column, and row driver circuit. This TFT LCD has a 19-inch diagonally measured active display area with SXGA resolution (1024 vertical by 1280 horizontal pixel array).

- 19" TFT Color LED Monitor
- Crisp Clear Display visible from all directions at the appropriate viewing angles. (See Specifications)
- Recommended Resolution: 1280x1024
- LED Backlight system
- LCD Timing Controller
- Halogen Free
- Last state power – Monitor will return to power on if in that state during a power loss. It will remain off if it was off before a power loss.
- Auto Adjusting based on input

Package Contents



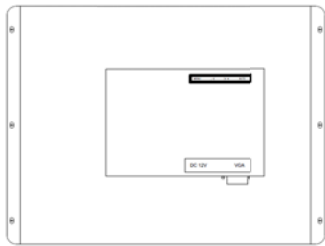
TFT LED Monitor



Power Supply



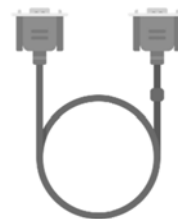
Power Cord



TFT LED Monitor



User Manual



VGA Cable

Installation

Power Source

- Make sure that the power cord is the correct type required in your area.
- This LED monitor has an external universal power supply that allows operation at 100/120V AC voltage converted to 12VDC (No user adjustment is required.)
- Connect the AC-power cord one end to your Power Supply's AC-input socket, the other end to wall-outlet.
- Connect the round 12VDC plug from the power supply to the 12VDC power socket on the monitor.

Video Input

- This monitor accepts only VGA input, any other type of input would need to be converted to VGA before use.
- Connect the VGA cable to the VGA connector on the monitor and the other end to your video source (PC, JAMMA Board, Converter, etc.)
- To connect this monitor to a EGA or CGA arcade you will need a GBS-8200 convertor, sold separately
See part number: RA-CGA-VGA-CONVERT

Mounting

- This monitor is designed to be mounted in a cabinet using the provided flanges with pre-drilled holes. Use the appropriate hardware to secure the monitor to the cabinet.
- Ensure that all cables are secured and that a strain relief is provided to prevent damage to the monitor by loose cables that can pull on and possibly damage the connectors.

Operating Instructions

General

- This monitor features last state power. This means that if the cord is unplugged or there is a loss of power outside of pressing the power switch, the monitor will return to its last power state when power is restored. Using this feature requires no adjustment and is automatic.
- The power indicator led will light when the monitor is on.
- The display panel will remain dark unless there is a VGA input signal.

Controls

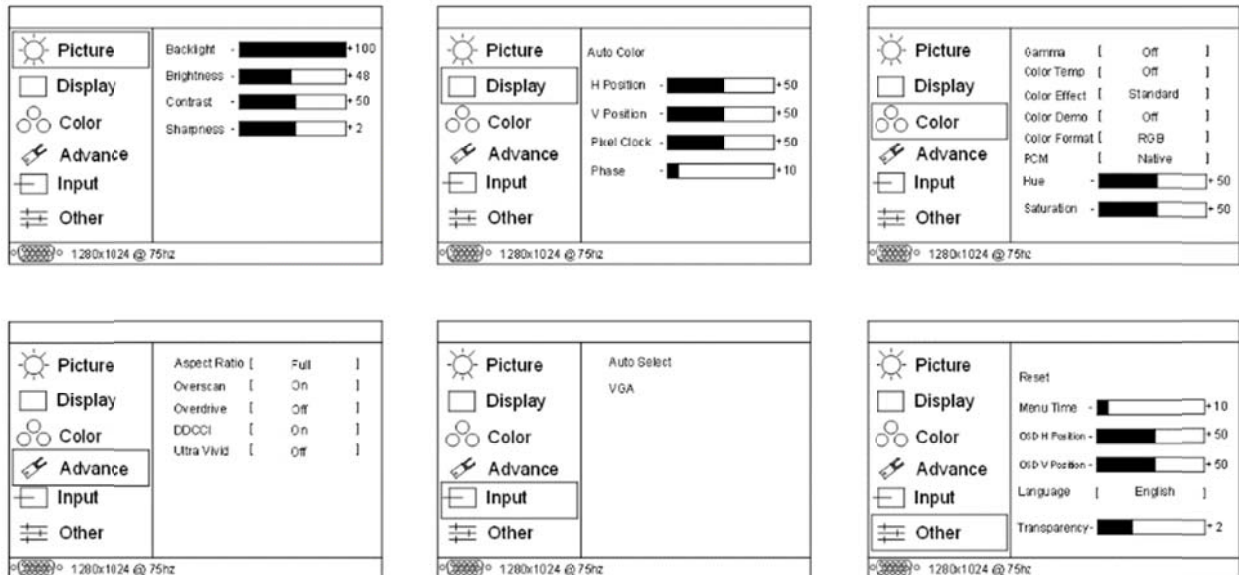
- Adjustments to the picture position, quality and preferences can be made using the 4 buttons on the rear of the monitor to navigate the menu system.
- The menu system is displayed as an overlay, or OSD (on Screen Display) on the TFT panel. You must have an active VGA input to view the menu.



- MENU
 - Activates the OSD
 - Selects menu items
 - Completes the selected action
- -< >+
 - Navigates the OSD menu
 - Adjusts the settings on selected menu items
- AUTO
 - Deselects the menu item when navigating the OSD
 - Causes the monitor automatically adjust based on input to the best default settings
 - OSD must be off and there must be an active VGA input to operate the Auto Adjust function
- LED (Above Power)
 - Red indicates power is on but there is no VGA signal
 - Green indicates that there is power and VGA signal
 - Off indicates no power

OSD (On Screen Display) Menu

The OSD menu is used to configure the monitor in 6 sections, using the control buttons to navigate:





Troubleshooting

Common Problem	Possible Solutions
No display	<ul style="list-style-type: none"> • Push power button • Check that the power led is lit and green (See Power LED is not on below) • Check that the VGA cable is connected • Check that there is a signal on the VGA cable
Power LED is not On	<ul style="list-style-type: none"> • Push power button • Check that the power supply is properly connected • Check that the power cord is securely connected to the power supply • Press the power button, it may be in default off mode.
OSD Menu in wrong Language	<ul style="list-style-type: none"> • Follow these steps to change the language: <ul style="list-style-type: none"> ○ Press the Menu Button ○ Press the - < Button to move to the bottom menu item (Other) ○ Press the Menu Button ○ Press the - < Button to move to the bottom menu item (Transparency) ○ Press the - < Button to move to the previous menu item (Language) ○ Press the Menu Button ○ Press the - < or > + Button to change the language
No display power LED is on	<ul style="list-style-type: none"> • Check the monitor with a notebook or PC to verify that the arcade system is not the problem.
No display and or no power LED	<ul style="list-style-type: none"> • Bad power supply, replace with RetroArcade.us part number: RA-19-LCD-PWR-ADAPT • If the power supply test good (12v DC) and there is no display while hooked up to a known working system, notebook or PC replace video board set. RetroArcade.us part number: RA-MON-BOARD-SET-B • If you have already replaced the video board set then the LED screen is bad and the monitor needs to be replaced.

Specifications

TFT LED Panel	Driving System	TFT Color LCD
	Size	19"
	Pixel Pitch	19" 0.294mm(H) x 0.294mm (V)
	Brightness	270cd/m ² (Typical)
	Contrast	700:1 (Typical)
	Viewable Angle	150° (H) 135° (V)
Input	Video	RGB Analog Interface
	H Frequency	31-80KHz
	V Frequency	55-75Hz
Display Colors		16.2M
Max Resolution		1280x1024 @ 75Hz
Input Connector		0-Sub 15pin
Power Source		12VDC
Environmental	Operating Temperature	5 ⁰ to 40 ⁰ C (41 ⁰ to 104 ⁰ F)
	Storage Temperature	-20 ⁰ to 65 ⁰ C (-4 ⁰ to 149 ⁰ F)
	Operating Humidity	10% to 85%
Dimensions		43.81 x 32.70 x 5 cm (17.25 x 12.875 x 2 in)
Weight		2.77kg (6.1 lb)

These specifications are subject to change without prior notice, ©RetroArcade.us


California Proposition


65 Warning:

Warning: Cables, Cable Assemblies and Printed Circuit board can expose you to chemicals including lead/lead based compounds and DEHP which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information, go to: www.P65warnings.ca.gov