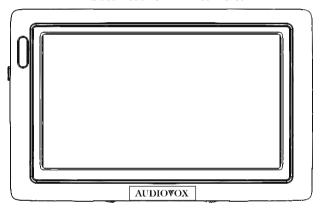




4.5" Wide Screen Color LCD Monitor

Model: LCM45NB

Installation Manual



Features:

- 4.5" Widescreen (16:9) TFT Color LCD Display
- Rearview Camera Input
- Interior Camera Input
- Audiovox Navigation Input
- NTSC/PAL Camera Compatible

Specifications

General

Power Supply DC12V
Power Consumption <10W
Current Draw <800 mA

Audio Power Output $0.5W \times 1 (16\Omega)$ Operating Temperature Range 0° C to 50° C

Display System

Screen 4.5" TFT Color LCD

Brightness 400 cd/m²
Contrast ratio 150:1

Backlight Life10000 hoursResolution 960×234 Video FormatNTSC/PAL

Display Format 16:9

Troubleshooting

Symptoms	Solutions
The Monitor is not on after the vehicle is started?	 Check the installation-wiring diagram. Ensure that the parallel red and black line is connected properly.
No video signal appears while reversing the vehicle?	 Check the rearview Camera lens. Check the rearview Camera wiring and connection. Check that the cable from the control box is connected properly to the monitor.
Video image is not sharp enough?	Clean the lens of the camera.

Cautions

The product is intended to assist in safe driving and to allow the driver to have a broader rearview while the vehicle is in reverse. You, as the driver, are solely responsible for the safe operation of your vehicle and the safety of your passengers according to the country and their local traffic regulations. Do not use any features of this system to the extent it distracts you from safe driving. Your first priority while driving should always be the safe operation of your vehicle. Audiovox Electronics Corporation cannot accept any responsibility whatsoever for accidents resulting from failure to observe these precautions or safety instructions.

- This product utilizes high voltage. Any unauthorized modifications or damage to the products may result in electrical shock. Handle all components with care. Inspect regularly for damage to components and cabling.
- 2. You shall be responsible to ensure that the installation of this product does not void or affect the vehicle manufacturer's warranty. Audiovox Electronics Corporation or its branches are not liable in full or in part for improper installation resulting in loss or damage to your property, or for voiding all or part of the vehicle manufacturer's warranty.
- 3. Do not apply excessive force to any of the components contained within this kit. Excessive force used before, during or after installation that results in a damaged or non-functional part shall void all warranties.
- 4. Please follow the procedure from this installation manual. Improper installation or modification of this product shall void all warranties.

PACKING LIST

The LCM45NB consists of the following items:

- 1. LCD Monitor-1
- 2. Control Box-1
- Power Harness-1
- 4. Camera Cable-2
- 5 Monitor Extension Cable-1
- 6. Mounting screws-4

Preface

This video monitor can display up to 3 different video inputs. The inputs are Navigation, Rear observation camera and Interior observation camera.

INSTALLATION INSTRUCTIONS

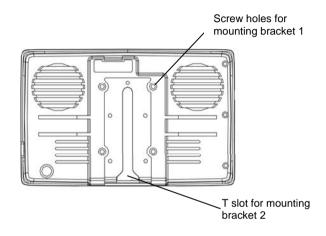


Figure 1. Backside of Monitor

The monitor can be mounted by two different methods.

- AMPS compatible mounting pattern for bracket or gooseneck
- T-slot for Fan Bracket.

Select the appropriate mounting location that is visible to the driver and does not obstruct the drivers view thru the windshield.

1. Installation using mounting bracket method.

- Use the 4 screws to tighten the selected AMPS hole pattern bracket onto the back of the monitor display.
- Attach the mounting bracket to the selected mounting location.

2. Installation using mounting T slots.

- Slide the T-bolt into the T- slot on the back of monitor display.
- Tighten the T-nut until snug with the T-slot on the back of the monitor
- Remove the protective plastic from the doubled sided tape on the fan bracket. Then place the fan bracket on the chosen location.

Illustration of Connections

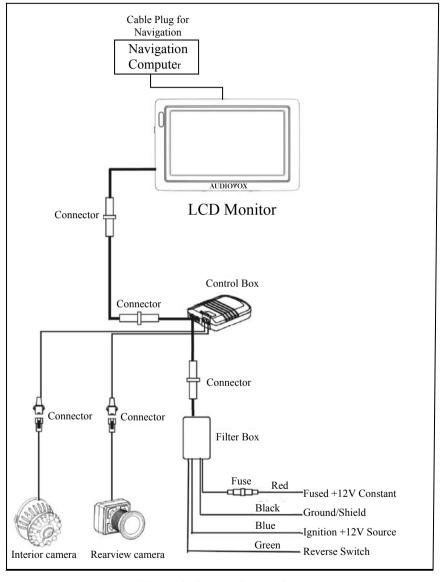


Figure 4. System Connections

Maintenance

Though your monitor requires little care, you can still maintain its condition and performance by following the procedures below.

- Keep your system away from excessive moisture, extreme heat or cold, and magnetic fields.
- Keep liquids away from the display.
- To avoid damage, do not place external devices or other objects on the top of the monitor.
- Occasionally wipe the monitor with a soft, damp cloth.

3. Installing the Control box:

- Monitor: Connect the 8-pin female monitor extension cable connector to the monitor 8-pin male cable connector. Route the monitor extension cable to the under dash area. Connect the 8-pin male monitor extension cable connector to the control box 8-pin female connector. Secure the control box.
- Power harness: Connect the power 4-pin connector to the control box 4-pin connector. Attach the 4 wires in the harness as listed below.

4. Electrical Connections:

Attach the 4 wires to the appropriate power source as listed below.

- a) **Red wire -** 12 volt constant (positive)
- b) **Black wire -** Chassis ground (negative)
- c) **Blue wire -** 12-volt ignition (12 volt with ignition on)
- d) **Green wire -** Reverse light (12 volt when vehicle is in the reverse gear)

WARNING: Observe polarity when connecting the wires.

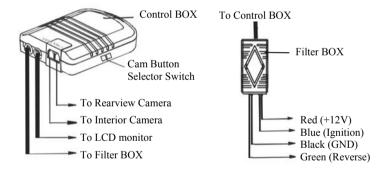


Figure 2. System Connections

5. Video Inputs

The video input connections for the system are as follows:

- a) Rear Camera (optional): Plug the camera RJ 11 cable end into the control box (AVin-1 location). Set the Cam Button selector switch on the control box to the AV-1 position. Route the camera cable to the rear camera and plug the 4-pin male connector into camera 4 pin female connector. The monitor will display the rearview camera image when the vehicle is shifted into reverse.
- b) **Interior Camera** (optional): Plug the camera RJ 11 cable end into the control box AVin-2. Set the Cam Button selector switch on the control box to the AV-2 position. The monitor will display the interior camera image when the camera button on the left side of the monitor is pressed and held
- c) Navigation (optional): Plug the Audiovox navigation monitor cable connector directly into the rear of the monitor. The navigation image will be displayed whenever the vehicle is turned on.

CONTROLS AND INDICATORS

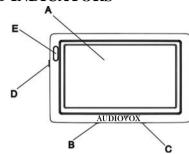


Figure 3. LCM45NB Monitor Controls and Indicators

A: 4.5" TFT color LCD

B: Speaker volume control: adjusts the rearview camera volume only when the vehicle is in reverse.

C: LCD brightness control: adjusts the brightness of display.

D: Camera switch (see below).

E: Remote IR Sensor for Audiovox Navigation only.

CAMERA SWITCH

- 1). When switch D is pressed and the vehicle is shifted into reverse gear:
- No function
- 2). When switch D is pressed and vehicle is in any other gear:
 - Will display the interior camera image if the optional Interior camera is installed.
 - Will display the rearview camera image if only rearview camera is installed.
 - No function if the optional navigation is the only input.