

User Guide MC727



Digital LCD Color Monitor Single view (7")

Please read this manual thoroughly before operating the unit, and keep it for future reference. V1711.01

> 1.855.730.5555 www.nbs-cam.com

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1. PRECAUTIONS

Storage and keeping

- 1. Do not expose the monitor to excessive heat or cold. The storage temperature of this device is $-30\sim+80^{\circ}$ C, and the operating temperature is $-20\sim+70^{\circ}$ C. The humidity is RH90%
- 2. Never use this device near a bathtub, wash basin, kitchen, damp basement, swimming pool or similar places.
- 3. Never use this device in environments with excessive moisture, dust or smoke.
- 4. Avoid dropping or striking this device.
- 5. Avoid using this device in enclosed spaces, areas with excessive vibration or subject to severe impacts.
- 6. Never puncture, scratch or use abrasive cleaning materials on this device.
- 7. Do not place cables where they may be pinched or stepped on.
- 8. Leave at least a 2" space between the monitor and walls, cabinets or other objects to allow adequate air circulation around the device.
- 9. The monitor is not designed to be waterproof.

Operating precautions

- 1. The device may be powered by a 12 or 24 volt automotive battery or vehicle electrical system.
- 2. Make sure all cables are connected properly. Observe polarity. Improper cable connections may damage the monitor. Remove the power cable connections when you do not intend to use the unit.

WARNING!

- 1. High voltage is present within the monitor. The opening of the case should be by professionals.
- 2. Do not watch the video while driving unless you are monitoring the rear view camera display.

SPECIAL NOTICE

Occasionally, a few highlights or dark spots may occur on the LCD screen. This is a very common phenomenon in active matrix display technology, and doesn't necessarily indicate any defects or faults. Never try to repair this device by yourself. In case of any problems, please turn off the display at once and notify our company or authorized dealer. The monitor is a complex device. Any disassembly or modification may lead to damage and void the warrantee.



1. PRECAUTIONS

Maintenance

- 1. Remove all the cable connections from the monitor before cleaning the device.
- 2. Use a mild household detergent and clean the unit with a slightly damp, soft cloth.
- 3. Never use strong solvents such as thinner or benzine, as they might damage the finish of the device.



CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,

DO NOT REMOVE COVER (OR BACK).

NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol 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 risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



This symbol is intended to alert the user not to dispose of electrical and electronic equipment.

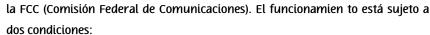
CAUTION

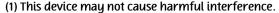
You are cautioned that any changes or modifications not expressly approved in this manual could void your warrantee and necessitate expensive repairs.

Declaration of conformity



This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:





(2) This device must accept any interference received, including interference that may cause undesired operation.







2. PRODUCT FEATURES

- 1. TFT LCD monitor with wide angle view and high resolution display.
- 2. Select from 8 languages for user operation.
- 3. Multiple video formats: PAL/AUTO/NTSC.
- 4. 1 camera input, 1 reversing trigger wire.
- 5. Power supply to camera.
- 6. Operates from 10 -32V. Supports 12V or 24V.
- 7. Picture image may be adjusted for Horizontal, Vertical, Mirror and Normal viewing.
- 8. On-board speaker.
- 9. Full-function remote control.
- 10. Automatic brightness control.
- 11. The scale can be adjusted for left, right, up and down.

3. TECHNICAL SPECIFICATIONS

1. Monitor: 7" TFT-LCD Color monitor with digital panel.

2. Audio output: 1.5 W.

3. Loudspeaker: one 15x24mm round loudspeaker.

4. Power supply: Automobile storage battery (DC / 10-32V).

5. Power consumption: about 6W.

6. Outer dimension: Without flush mount with flush mount

182mm (W) 198mm (W) 122mm (H) 138mm (H) 26mm (T) 31mm (T)

7. Dot pitch: 0.0642(W) x 0.1790(H).
 8. Resolution: 800×3 (RGB) × 480.

9. Contrast: 500:1.

10. Brightness: 400cd/m2.

11. Viewing angle: U: 50° D: 70°, R/L: 70°/70°.

12. Operating temperature: -20~+70°C, RH90%.
13. Storage temperature: -30~+80°C, RH90%.

SPECIAL NOTICE

All specifications are subject to change without notice.



4. ACCESSORIES

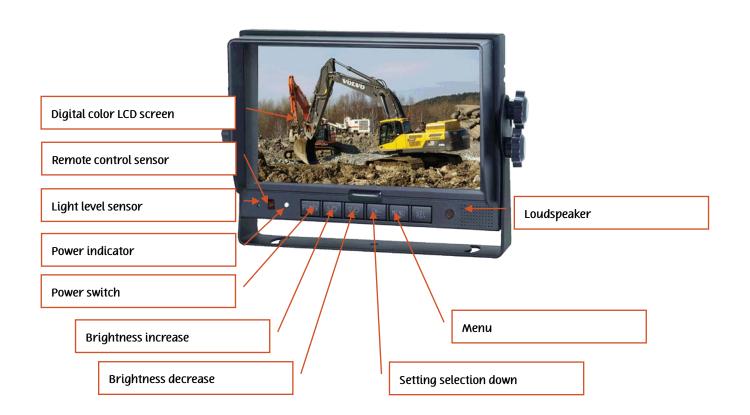


SPECIAL NOTICE

Accessory supply may be different for different application.



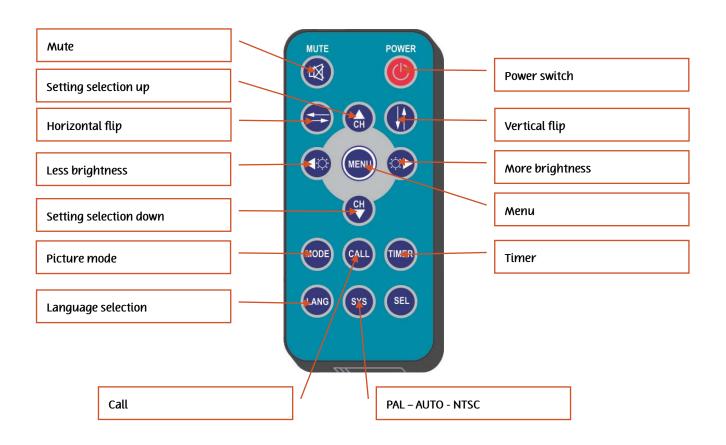
5. MONITOR COMPONENTS



Mounting bracket installation







NOTICE

- 1. Please align the remote control with the infrared-receiving window on the monitor to operate.
- 2. Never disassemble the remote control or allow it to drop, or become wet.
- 3. Press the control buttons firmly. Allow 2 seconds for the picture to change.



MUTE (Mute):

Press to select ENABLE/MUTE sound.

POWER (Power switch):

Press to turn on/off the monitor.

\$\square\$ (Horizontal turning of picture):

Press to turn picture horizontally.

• \bigvee (Vertical turning of picture):

Press to turn picture vertically.

CH+ (Channel selection up):

Press to select the upper setting.

CH- (Channel selection down):

Press to select the lower setting or to display the scale.

■ 40:

Press to decrease Brightness.

O ▷:

Press to increase Brightness.

MENU:

Press to show menu.

MODE (Picture mode):

Press to select different picture modes (PERSONAL / STANDARD / SOFT / VIVID / LIGHT).

CALL (Call)

Press to display video channel source.

TIMER:

Press to set the timer to shut down monitor (10, 20, 30, 40 and max 90 minutes).

LANG (Language selection):

Press to select language of display: English, German, French, Spanish, Portuguese, Italian, Dutch or Russian.

SYS:

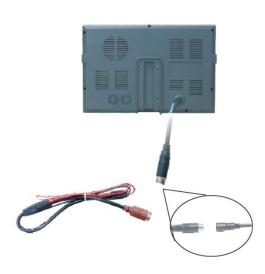
Press to select; PAL / AUTO / NTSC.



Connection of AV adaptor and controller cable

Hold the cable, align the side of jack marked with \Longrightarrow on the female 6-pin connector with the male 6-pin connector marked with \leftrightarrows then firmly plug together.

- 1 Brown 4 pin male for Camera1.
- 2) Single red wire to power wire of DC / 10-32V
- ③ Single black wire to GND.
- 4) Single brown wire to positive power wire of the back-up light.



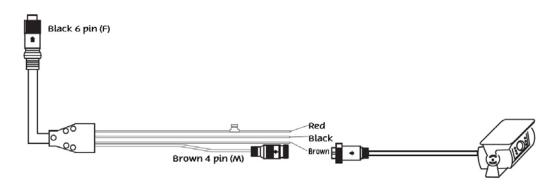


Brown 4 pin male for Camera 1.

Single red wire to positive power supply of DC / 10-32V.

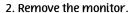
Single black wire to GND.

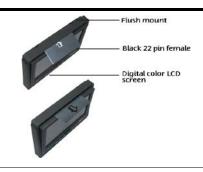
Single brown wire to positive power wire of back-up light.



Removing the monitor

1. Insert the detaching piece as indicated by the white arrow. Press in and lift up, the monitor will be released from the flush mount.

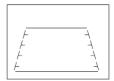






Reversing display

1. When the brown wire is connected to the positive wire of back-up light, the monitor automatically switches to CAM 1 (back-up camera) when the back-up light is turned on. The distancing grid will also be displayed.



8. MENU

Press MENU to display the following options and settings:

- 1. Picture
- 2. Option
- 3. System

Picture

VOLUME, BRIGHT, CONTRAST, COLOR, AUTO DIM and SCALE ADJUST options will display on the screen as illustrated below:

Press CH-to select BRIGHT.

PICTURE	
BRIGHT	50
CONTRAST	50
COLOR	50
VOLUME	50
AUTO DIM	OFF
SCALE ADJUST	OFF

Press $\triangle \bigcirc / \nabla \bigcirc$ to adjust the brightness level.



8. MENU

When auto dim is turned on in dark environment, OSD turns into dim mode for dim setting. When auto dim is turned on / off in bright environment, OSD displays normal mode.

Dim Mode		
PICTURE		
BRIGHT	40	
CONTRAST	45	
COLOR	40	
VOLUME	50	

ON

OFF

Normal mode		
PICTURE		
BRIGHT	50	
CONTRAST	50	
COLOR	50	
VOLUME	50	
AUTO DIM	ON	
SCALE ADJUST	OFF	

Press CH- to select SCALE ADJUST.

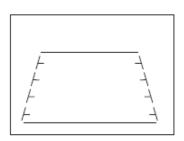
AUTO DIM

SCALE ADJUST

PICTURE	
BRIGHT	50
CONTRAST	50
COLOR	50
VOLUME	50
AUTO DIM	ON
SCALE ADJUST	OFF

Press $\triangle \bigcirc / \nabla \bigcirc$ to select $\uparrow \downarrow$ or \leftarrow for sacle adjust.

Exit menu and again press CH- to display the grid line.



If $\uparrow \downarrow$ is selected, press $\triangle \circlearrowleft / \nabla \circlearrowleft$ to adjust the scale up/down. If $\stackrel{\leftarrow}{\rightarrow}$ is selected press $\stackrel{+}{\rightarrow}$ to adjust the scale left/right.



8. MENU

Option

LANG, SCALE, CAM1 options display on the screen as illustrated below:

Press CH- to select LANG

OPTION	
LANG	ENGLISH
SCALE	ON
CAM1	Normal

Press $\triangle \circlearrowleft / \nabla \circlearrowleft$ to select: English, German, French, Spanish, Portuguese, Italian, Dutch or Russian.

Press CH- to select SCALE

OPTION	
LANG	ENGLISH
SCALE	ON
CAM1	Normal

Press CH- to select CAM1

OPTION	
LANG	ENGLISH
SCALE	ON
CAM1	Normal

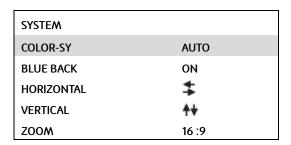
Press $\triangle \bigcirc / \nabla \bigcirc$ To select ON/OFF. Scale refers to the reversing distance indicator displayed on the monitor.

Press $\triangle \bigcirc / \ \nabla \bigcirc$ to select NORMAL / MIRROR.

System

COLOR-SYS, HORIZONTAL, VERTICAL, ZOOM functions will display on the screen as illustrated below:

Press CH- to select COLOR-SYS.



Press △ O / ∇ O to select PAL / AUTO / NTSC.



8. MENU

Press CH- to select BLUE BACK.

SYSTEM	
COLOR-SY	AUTO
BLUE BACK	ON
HORIZONTAL	\$
VERTICAL	↑ ₩
ZOOM	16:9

Press △ O / ∇ O to select ON/OFF.

Press CH- to select ZOOM.

SYSTEM	
COLOR-SY	AUTO
BLUE BACK	ON
HORIZONTAL	\$
VERTICAL	↑ ↓
ZOOM	16:9

Press $\triangle \bigcirc / \nabla \bigcirc$ to select 16:9 or 4:3.

9. TROUBLESHOOTING

The symptoms described below do not necessarily mean a failure within the display. Please check the following items before you initiate request for repair.

PROBLEMS	POSSIBLES CAUSES / SOLUTIONS
No picture, no sound	Improper connection of automobile adapter. Use of un-authorized power supply. Power switch is on OFF position.
No picture	Check whether AV cable is properly connected.
No sound	Check whether audio wire is properly connected or the sound volume is turned off or set too low.
Dark picture	Check whether brightness and contrast are adjusted correctly; Check whether the environments temperature is too low.
No color	Adjust the color settings.
Upside down or lateral inverted picture	Use the remote control horizontal /vertical selection switch to set proper orientation.
No reversing function (i.e. Picture)	The black wire of the monitor AV cable to the reversing light may be loose. The red wire from the monitor may be loose.

