

# 7 TFT DIGITAL LCD Monitor for MXN-HD7DMQ- Owner's Manual

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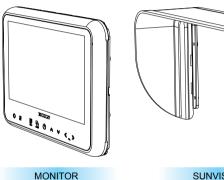
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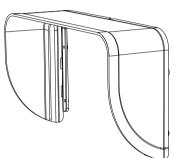
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## PACKAGE CONTENTS







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CABLE CLIP

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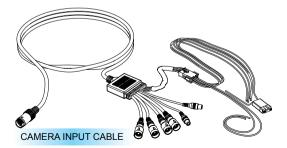
**BRACKET SCREWS** 





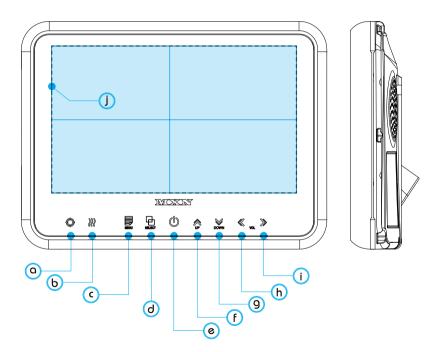
STAND BRACKET

MANUAL



ITEM	Q'TY	
MONITOR	1	
SUNVISOR	1	
SUNVISOR SCREW	4	
STAND BRACKET	1	
BRACKET SCREW	3	
CABLE CLIP	2	
CAMERA INPUT CABLE	1	
MANUAL	1	

# **OPERATION**



### A. DAY/NIGHT SENSOR (CDS)

Automatic brightness control sensor.

### **B. HEATER LAMP**

Orange color will be illuminated in case heater function is activated.

### C. MENU

Press [MENU] button for system setting.

### D. SELECT

Press [SELECT] button to select the respective channel. ICAM1 - CAM2 - CAM3 - CAM4 - AUX - SPLIT - TRIPLE - QUAD - CAM1...1

### E. POWER

Press [POWER] button to turn on/off the monitor.

### F. UP

Press [UP] button to select split screen channel. [SPLIT - TRIPLE - QUAD - SPLIT...]

Use [UP] button to navigate the menu upward for system setting.

### G. DOWN

Press [DOWN] button to select camera AUX channel [CAM1 - CAM2 - CAM3 - CAM4 - AUX - CAM1...] Use [DOWN] button to navigate the menu downward for system settina.

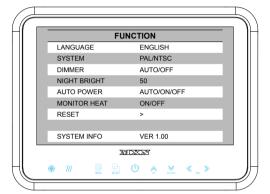
### H. LEFT

Press [LEFT/RIGHT] button to adjust monitor volume. I. RIGHT Use [LEFT/RIGHT] button to change OSD setting during system setting.

### J. VIEW AREA



## SYSTEM SETTING



### RESET

Press >> button to go the factory default setting.

### SYSTEM INFO.

Refers to system information of the monitor.

### **FUNCTION**

### LANGUAGE

Provide 6 Multi-lingual OSD [ENGLISH, SWEDISH, DANISH, NORWEGIAN, DUTCH, FINNISH1.

Select the preferred LANGUAGE.

### SYSTEM

Select NTSC/PAL

### **DIMMER (Automatic Brightness Control)**

Select AUTO or OFF to have Automatic or Manual brightness of the monitor.



REMARK: By activating DIMMER AUTO function, the monitor adjusts the brightness according to the environment.

### **NIGHT BRIGHT (Brightness during night conditions)**

Select the DIMMER to FAUTO and adjust the value of the backlight into the required setting. During night conditions the backlight will automatically perform brightness according this setting.

### **AUTO POWER**

Select monitor activation function as below.

[AUTO] Monitor keeps the last setting in memory.

[ON] Monitor starts up [Power-ON] mode automatically.

[OFF] Monitor starts up [Stand-By] mode automatically.

### MONITOR HEATER

Select MONITOR HEATER FON to have automatic heating function in order to enable fast picture start during extreme cold weather condition.



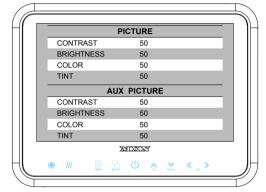
### Remark: During MONITOR HEATER ON mode,

Heating activates automatically when the temperature of inside monitor is below 0 degree Celcius.

When the temperature of inside monitor is over 0 degree Celcius, heating stops automatically.



## SYSTEM SETTING

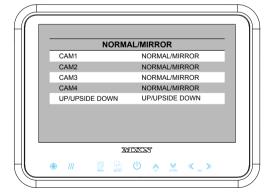


### **PICTURE**

Press [LEFT/RIGHT] button to adjust preferred PICTURE of the monitor.

PICTURE MENU adjust PICTURE of CAM1, CAM2, CAM3, CAM4, SPLIT, TRIPLE, QUAD MODE

**AUX PICTURE MENU adjust PICTURE of AUX MODE** User can adjust picture setting value for **CAMERA CHANNELS**, and **AUX** CHANNEL seperately.



### **NORMAL/MIRROR**

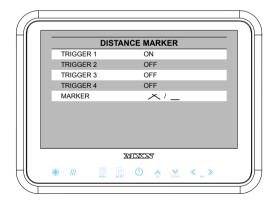
### NORMAL/MIRROR

Each camera picture (CAM1/CAM2/CAM3/CAM4) can be switchable as NORMAL/MIRROR image.

### **UP/UPSIDE DOWN**

Camera pictures can be switchable as **UP/DOWN** image.

### **CAMERA TRIGGER** TRIGGER 1 CAM1-QUAD TRIGGER 2 CAM1-QUAD TRIGGER 3 CAM1-QUAD CAM1-QUAD TRIGGER 4 TRIG 1. DELAY 2 (0-9) 2 (0-9) TRIG 2. DELAY TRIG 3. DELAY 2 (0-9) TRIG 4. DELAY 2 (0-9) ROSOM Ů <u>≈</u> × « »



### CAMERA TRIGGER

TRIGGER 1/2/3/4 (Trigger source selection)

Select the required trigger source at CAM1/CAM2/CAM3/CAM4/AUX/SPLIT/TRIPLE/QUAD



### REMARK

TRIGGER PRIORITY: TRIGGER 1 > TRIGGER 2 > TRIGGER 3 > TRIGGER 4

### **TRIG. DELAY**

When a **TRIGGER** wire is connected to a pulse DC power signal (e.g.direction indicator lights) then the [**TRIGGER DELAY**] function avoids repeating **ON/OFF** of the monitor.



### **DISTANCE MARKER**

Select ON to have DISTANCE MARKER for CAM1, CAM2, CAM3, CAM4. DISTANCE MARKER is displayed as the trigger signal is activated.

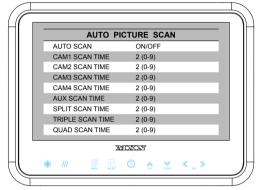


### **MARKER**

Select of **DISTANCE MARKER**. × or \_



## SYSTEM SETTING



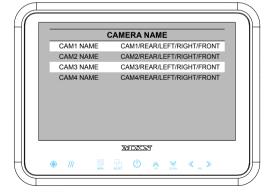


Each scanning time of CAM1/CAM2/CAM3 /CAM4/AUX/SPLIT/TRIPLE/QUAD can be selected.

### REMARK

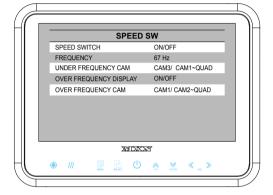


If the SCAN TIME is set as[0], monitor skips its channel during the scanning. Press [UP] button for 4 seconds to ACTIVATE/INACTIVATE auto scanning function.



### **CAMERA NAME**

CAMERA NAME can be selected as CAM1, 2, 3, 4/REAR/LEFT/RIGHT/FRONT.



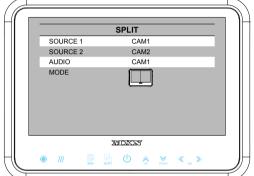
### **SPEED SWITCH**

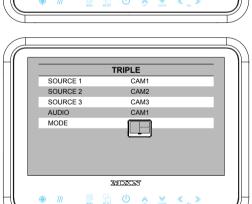
The orange wire needs to be connected with the vehicle's tacho signal and via MENU the SPEED SWITCH needs to be selected ON. At FREQUENCY 67Hz setting(and most common used tacho signal) the selected camera will be displayed during a speed of 0~33km/h. Select the concerning camera via FUNDER FREQUENCY CH: (At different type tacho signals the FREQUENCY needs to be adjusted into higher or lower value than this example)

Over 33km/h(72Hz) the selected camera will be switched OFF automatically. When the speed slows down, then the selected camera will be switched ON automatically again at 30km/h. Instead of automatic switch OFF at a speed over 33km/h it is also possible to activate another video source, such as a navigation picture from an optional navigation computer. In this case user needs to select "OVER FREQUENCY DISPLAY: ON and user needs to select "OVER FREQUENCY CH: J

In case of TRIGGER activation during "SPEED SWITCH ON mode, then TRIGGERS 1~ 4 will overrule "SPEED SWITCH function.

# MENU





### **SPLIT**

### **SOURCE 1**

Select S1 Camera(CAM1~CAM4).

### **SOURCE 2**

Select S2 Camera(CAM1~CAM4).

### **AUDIO**

Select SPLIT of Audio(CAM1~CAM4).

### MODE

Select SPLIT MODE





**S1** 









### **TRIPLE**

### **SOURCE 1**

Select S1 Camera(CAM1~CAM4).

### **SOURCE 2**

Select S2 Camera(CAM1~CAM4).

SOURCE 3 Select S3 Camera(CAM1~CAM4).

### **AUDIO**

Select TRIPLE of Audio(CAM1~CAM4).

### MODE

Select TRIPLE MODE



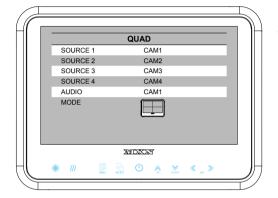












### **QUAD**

SOURCE 1 Select S1 Camera(CAM1~CAM4).

SOURCE 2 Select S2 Camera(CAM1~CAM4).

SOURCE 3 Select S3 Camera(CAM1~CAM4).

SOURCE 4
Select S4 Camera(CAM1~CAM4).

**AUDIO** 

Select QUAD of Audio(CAM1~CAM4).

MODE Select QUAD MODE





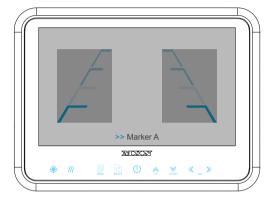


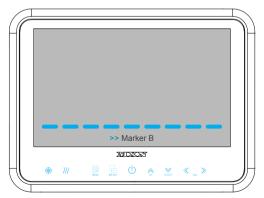












### **DISTANCE MARKER ADJUST**

User can adjust location of distance marker.

### Marker A- Parking line

At Power ON mode, select distance marker by pressing [UP/DOWN] buttons.

When color of distance markers is seen as RED color, user can adjust the lines UP/ DOWN or LEFT/RIGHT

When both color of distance markers are seen as RED color, both lines can be adjusted LEFT/RIGHT.

When left color of distance marker is seen as RED color, left line of distance marker can be adjusted LEFT/RIGHT.

When right color of distance marker is seen as RED color, right line of distance marker can be adjusted LEFT/RIGHT.

### Marker B- Horizontal line

User can adjust the UP/ DOWN of the lines.

User can adjust horizontal line by pressing [UP/DOWN] buttons.



### **LOCK ON/OFF FUNCTION**

### LOCK ON/OFF FUNCTION

The set up menu can be locked as prevention against unauthorized users.

### **LOCK ON mode**

At Power-ON mode, hold [DOWN] button pressed for 10 seconds to set up LOCK ON function.

When [LOCKED] is displayed on the screen, user can use [POWER, SELECT, VOLUME] buttons only and use can do setting for PICTURE menu.

### LOCK OFF mode

At Power-ON mode, hold [DOWN] button pressed for 10 seconds to set up LOCK OFF function.

When [UNLOCKED] is displayed on the screen, user can use all functions of the set up menu.

### **SCAN ON/OFF FUNCTION**

At Power-ON mode, hold [UP] buttons pressed for 4 seconds to activate Auto Scan Picture function. During the auto scanning mode, press [UP] button for 4 seconds to inactivate Auto Scan Picture function.

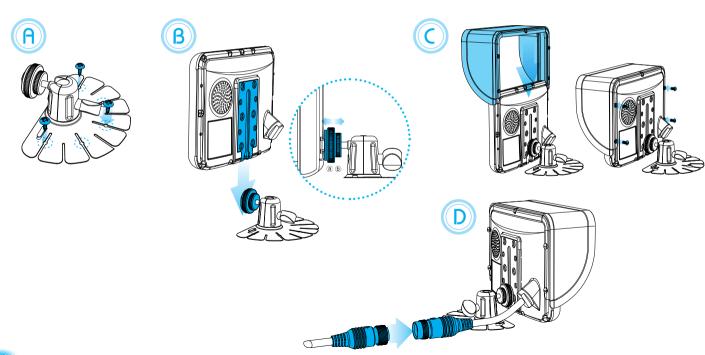




## INSTALLATION

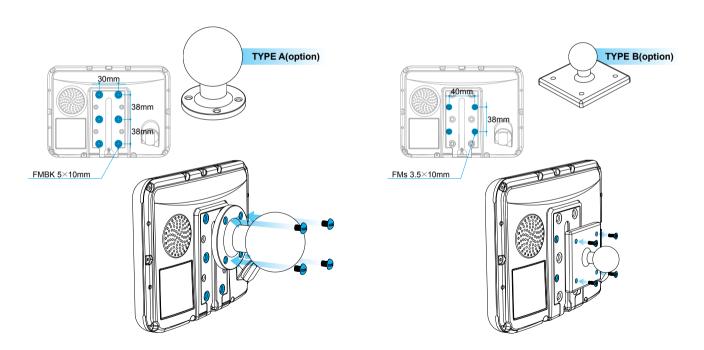
### **MONITOR installation with STAND BRACKET & SUNVISOR**

- A Remove a protection tape and attach STAND BRACKET into stand place, then fix it with the supplied screws.
- **B** Connect **STAND BRACKET** with monitor and adjust height/angle.
- C Attach SUNVISOR to the MONITOR and fix it with the supplied screws.
- D Connect CAMERA INPUT CABLE to the MONITOR.



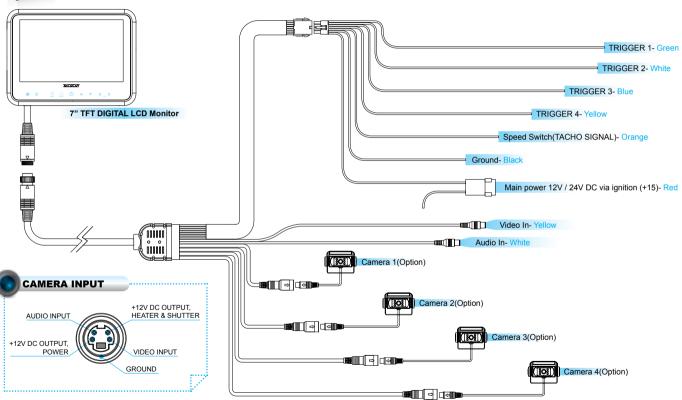
### Installation of HEAVY DUTY MOUNTING BRACKETS

MONITOR can be connected with different type of heavy duty mounting brackets. Please check the compatibility in advance, then please follow installation as described below.





## CONNECTION





## SPECIFICATION

ITEM	SPECIFICATION	
LCD Screen Size	7" Wide Diagonal	
Dimensions	190(W) × 142(H)× 42.85(D)mm	
Display dimensions	152.4 × 91.44mm	
Power Input	DC 12 to 30 Volt Free Input	
Power Consumption	15 Watt Max.	
Video System	NTSC / PAL	
Sync. System	Internal	
Brightness	500 cd/m <sup>2</sup>	
Display Resolution	800  imes 480 pixel	
Viewing Angle	Top: 50. Bottom: 60. Left: 65. Right: 65.	
Color Configuration	RGB Stripe	
Dimmer	Automatic / Manual	
Speaker Impedance	8 ohm, 0.3 Watt Max.	
Operating Temp.	-25°C ~ +75°C	
Storage Temp.	-30°C to + 85°C	
Impact Rating	4G	
Camera Connector	4-pin mini DIN (MXN configuration)	
Housing	Soft black(Al12)	
ON-Screen Display Control Functions	Volume · Brightness · Color · Contrast · Tint · CAM Screen 1/2/3/4 SPLIT TRIPLE QUAD · CAM Trigger 1/2/3/4 · Heater · Speedswitch · Auto Power · Distance marker · Auto Picture Scan · Dimmer · Language · Direction · Reset.	
Supplied Accessory	Die-Cast Mounting Bracket / 1 pce, Screw Kit / 1set, Manual, Sun Shield / 1 pce, Power cable / 1 set	
Weight	790g	

## MEMO

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# 7"TFT DIGITAL LCD Monitor for MXN-HD7DMQ - Owner's Manual

MXN<sup>®</sup>