

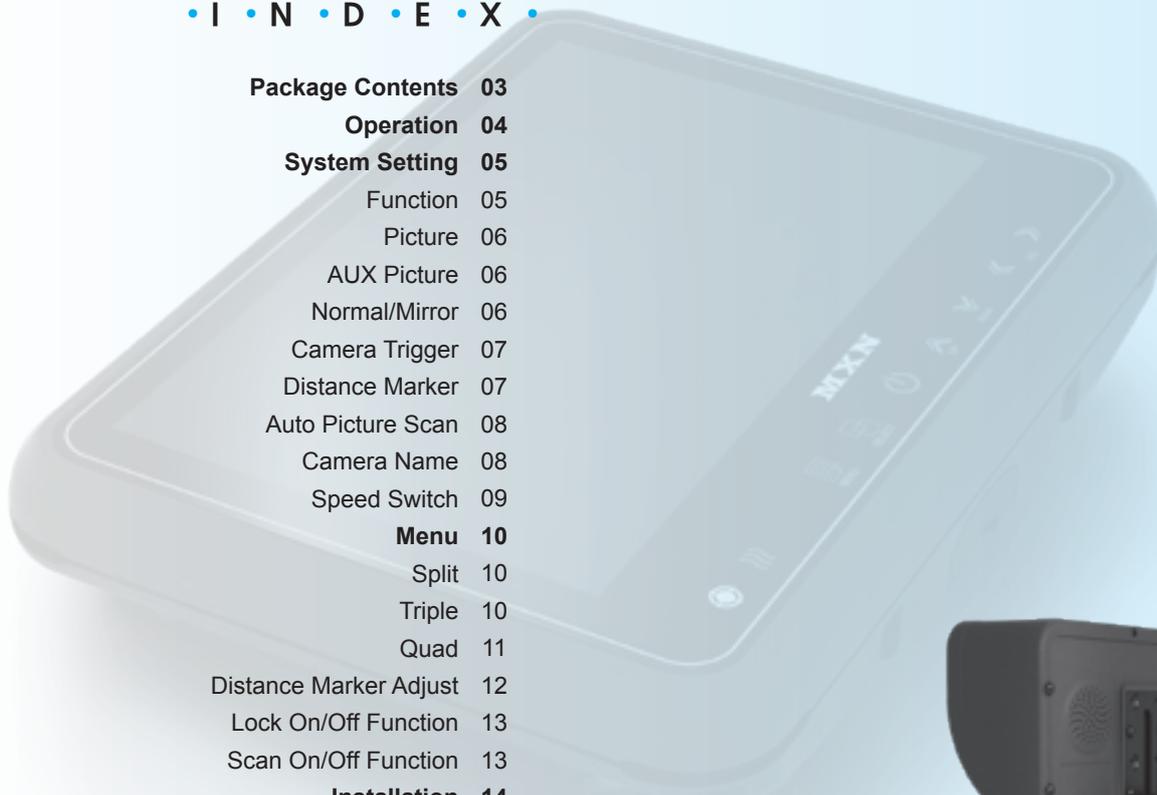


# **7" TFT DIGITAL LCD Monitor**

**for MXN-HD7DMQ - Owner's Manual**

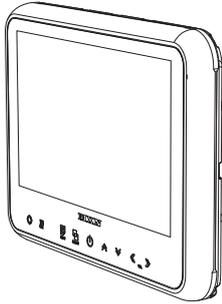
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<b>Package Contents</b>	<b>03</b>
<b>Operation</b>	<b>04</b>
<b>System Setting</b>	<b>05</b>
Function	05
Picture	06
AUX Picture	06
Normal/Mirror	06
Camera Trigger	07
Distance Marker	07
Auto Picture Scan	08
Camera Name	08
Speed Switch	09
<b>Menu</b>	<b>10</b>
Split	10
Triple	10
Quad	11
Distance Marker Adjust	12
Lock On/Off Function	13
Scan On/Off Function	13
<b>Installation</b>	<b>14</b>
<b>Connection</b>	<b>16</b>
<b>Specification</b>	<b>17</b>

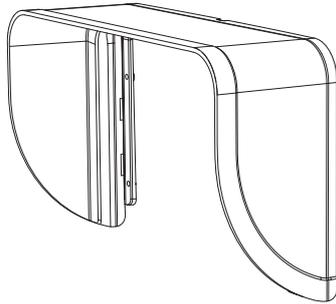




# PACKAGE CONTENTS



MONITOR



SUNVISOR



SUNVISOR SCREWS



CABLE CLIP



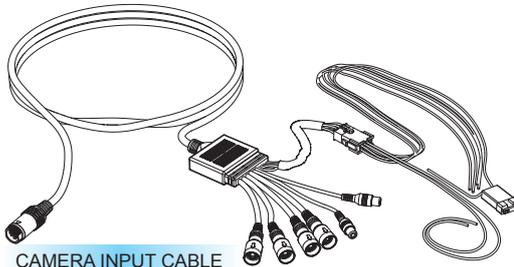
BRACKET SCREWS



STAND BRACKET



MANUAL

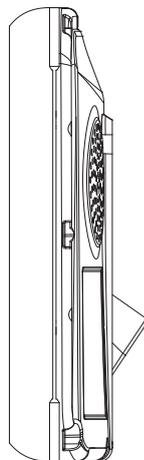
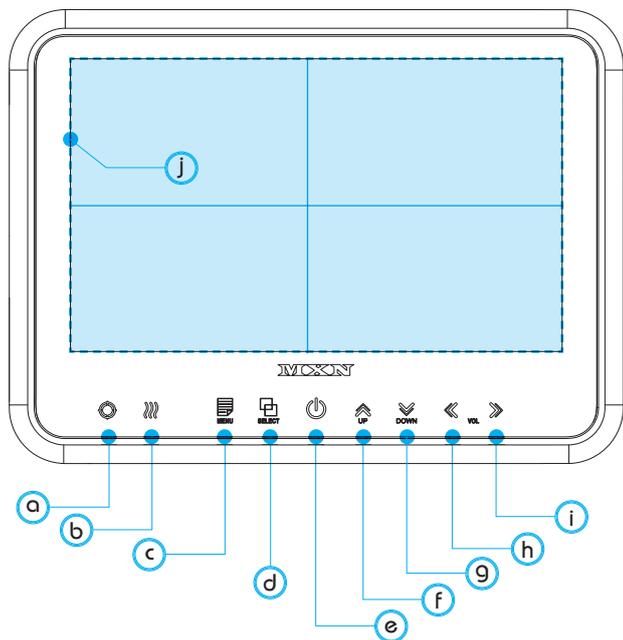


CAMERA INPUT CABLE

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.  
[CAM1 - CAM2 - CAM3 - CAM4 - AUX - SPLIT - TRIPLE - QUAD - CAM1...]

## 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 setting.

## H. LEFT

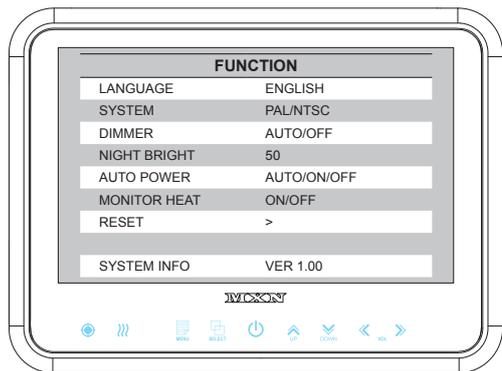
## I. RIGHT

Press [LEFT/RIGHT] button to adjust monitor volume.  
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, FINNISH].

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 『**AUTO**』 and adjust the value of the backlight into the required setting. During night conditions the backlight will automatically perform brightness according to 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** 『**ON**』 to have automatic heating function in order to enable fast picture start during extreme cold weather condition.



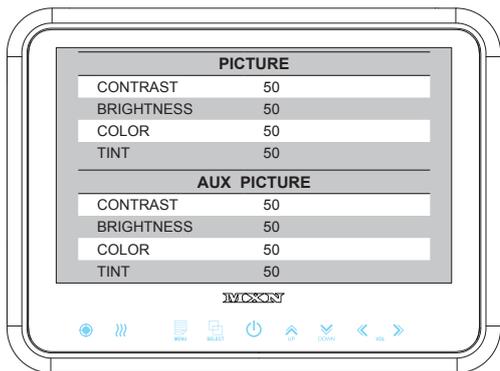
**Remark:** During **MONITOR HEATER ON** mode,

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



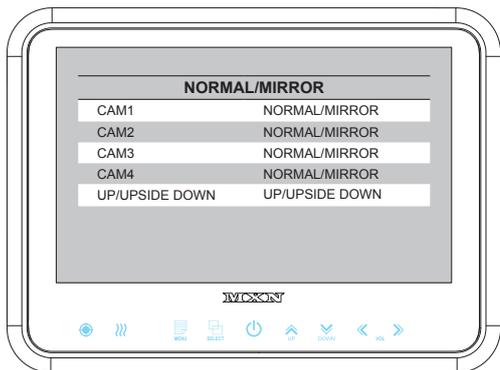
## PICTURE

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 CHANNEL」 and 「AUX CHANNEL」 separately.



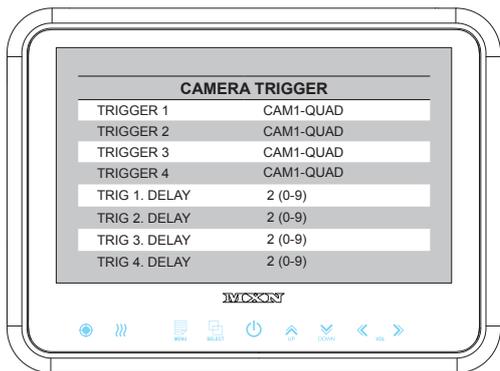
## NORMAL/MIRROR

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

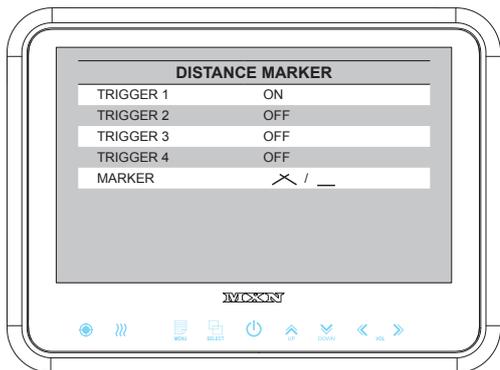
Select the required trigger source at CAM1/CAM2/CAM3/CAM4/AUX/SPLIT/TRIPLE/QUAD

#### 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

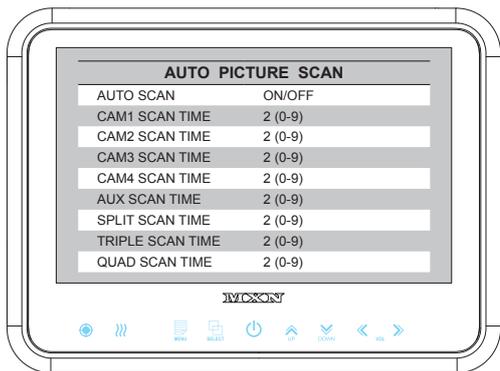
Select **ON** to have **DISTANCE MARKER** for CAM1, CAM2, CAM3, CAM4. **DISTANCE MARKER** is displayed as the trigger signal is activated.

## MARKER

Select of **DISTANCE MARKER**.  or



# SYSTEM SETTING

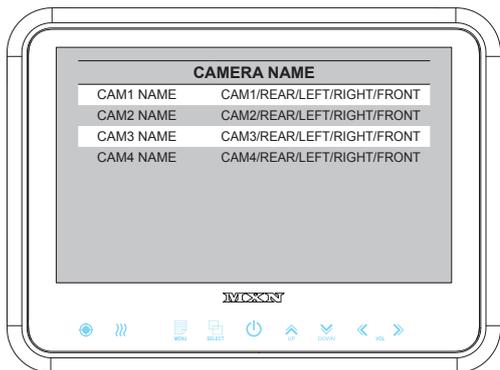


## AUTO PICTURE SCAN

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

### REMARK

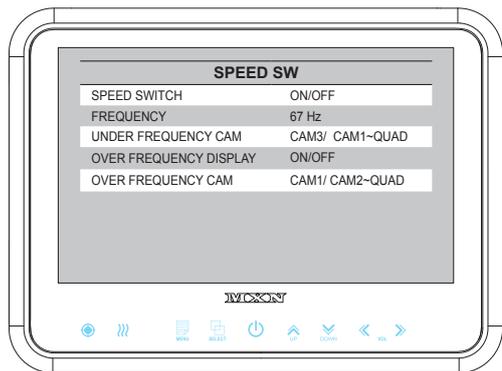
If the **SCAN TIME** is set as [0], monitor skips its channel during the scanning.  
Press [UP] button for 4 seconds to **ACTIVATE/INACTIVATE** auto scanning function.



## CAMERA NAME

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

# 7" TFT DIGITAL LCD



## SPEED SWITCH

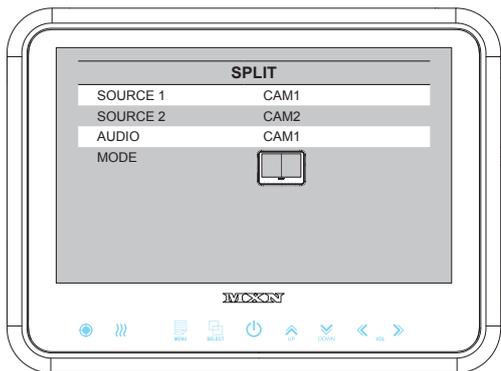
The orange wire needs to be connected with the vehicle's tacho signal and via **MENU** the **SPEED SWITCH** needs to be selected **ON**. At **FREQUENCY** 67Hz setting (and most common used tacho signal) the selected camera will be displayed during a speed of 0~33km/h. Select the concerning camera via 『**UNDER 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:**』

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

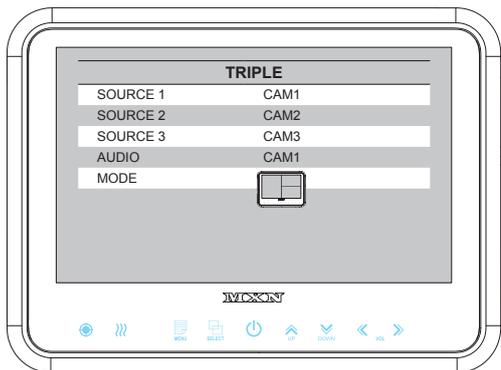
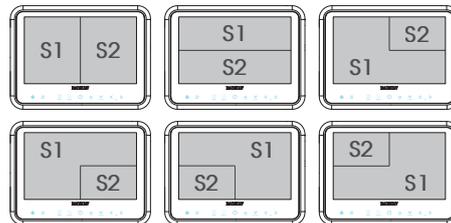
Select S2 Camera(CAM1~CAM4).

### AUDIO

Select SPLIT of Audio(CAM1~CAM4).

### MODE

Select SPLIT MODE



## TRIPLE

### SOURCE 1

Select S1 Camera(CAM1~CAM4).

### SOURCE 2

Select S2 Camera(CAM1~CAM4).

### SOURCE 3

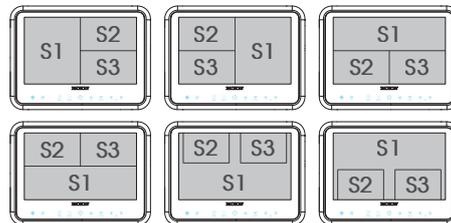
Select S3 Camera(CAM1~CAM4).

### AUDIO

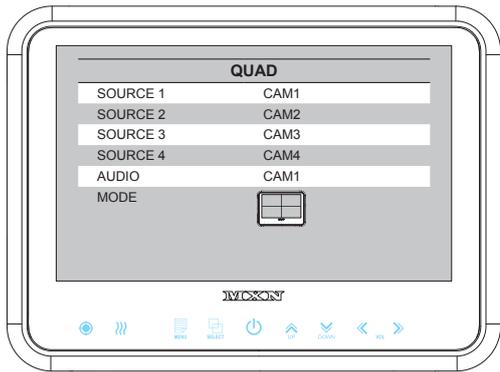
Select TRIPLE of Audio(CAM1~CAM4).

### MODE

Select TRIPLE MODE



# 7" TFT DIGITAL LCD MONITOR



## 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).

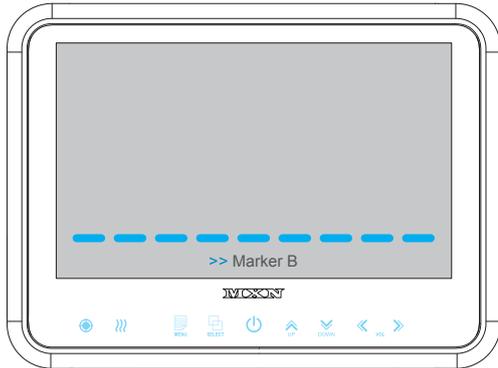
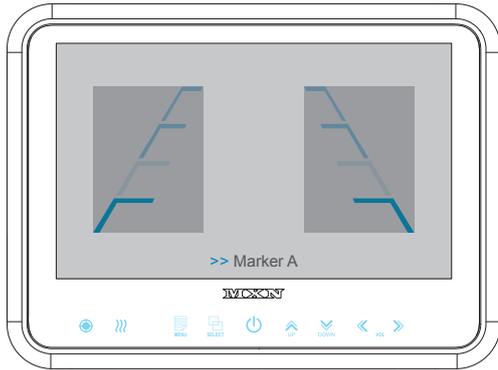
### MODE

Select QUAD MODE





# MENU



## 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.



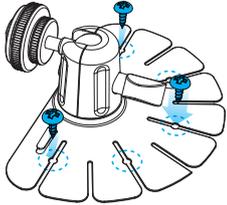


# INSTALLATION

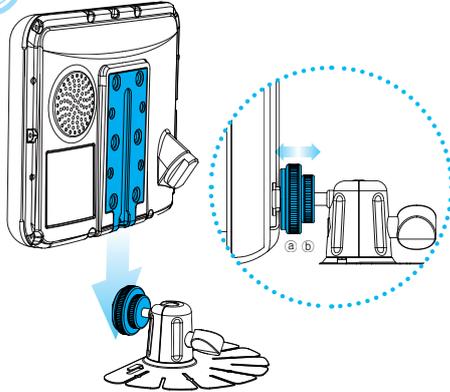
## MONITOR installation with STAND BRACKET & SUNVISOR

- 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**.

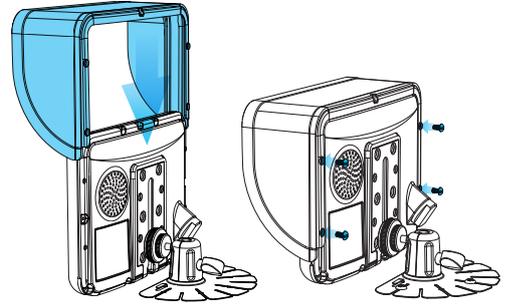
A



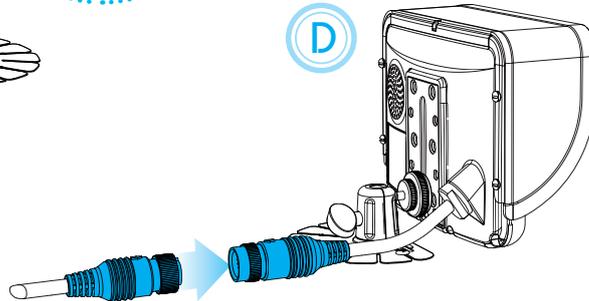
B



C



D

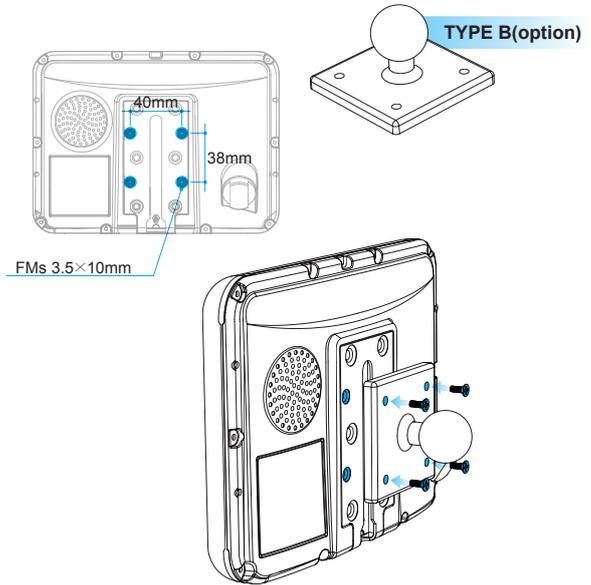
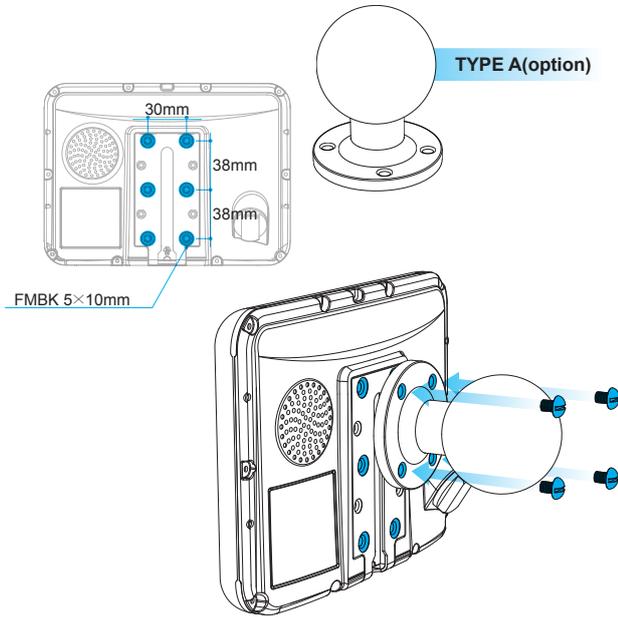


# 7" TFT DIGITAL LCD

## Installation of HEAVY DUTY MOUNTING BRACKETS

**MONITOR** can be connected with different type of heavy duty mounting brackets.

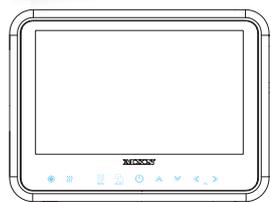
Please check the compatibility in advance, then please follow installation as described below.



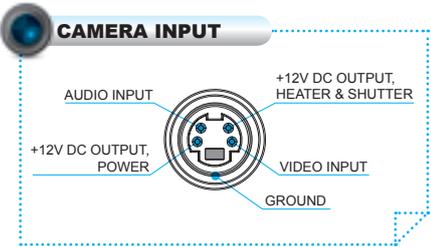
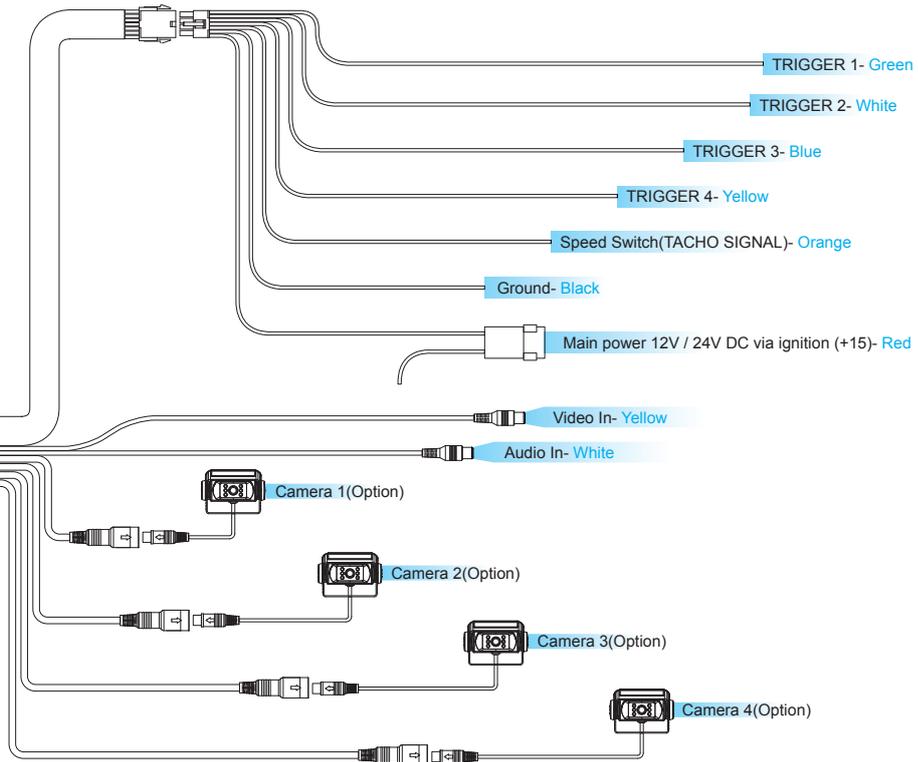
# 7" TFT DIGITAL LCD Monitor



## CONNECTION



7" TFT DIGITAL LCD Monitor





# SPECIFICATION

## 7" TFT DIGITAL LCD



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



# MEMO

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## MEMO

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# 7" TFT DIGITAL LCD Monitor

for MXN-HD7DMQ - Owner's Manual

**MXN**®