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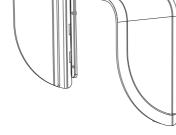
PACKAGE CONTENTS	03
OPERATION	04
SYSTEM SETTING	05
FUNCTION	05
PICTURE	06
CAMERA SET UP	06
NORMAL/MIRROR	07
AUTO PICTURE SCAN	07
CAMERA TRIGGER	80
AUDIO	09
TRIGGER AUDIO	09
DISTANCE MARKER ADJUST	10
SCAN ON/OFF FUNCTION	11
LOCK ON/OFF FUNCTION	11
INSTALLATION	12
MONITOR INSTALLATION WITH STAND BRACKET & SUNVISOR	12
INSTALLATION OF HEAVY DUTY MOUNTING BRACKETS	13
CONNECTION	14
CAMERA INPUT	14
SPECIFICATION	15

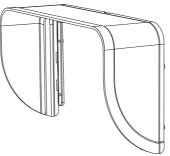




# PACKAGE CONTENTS











CABLE CLIP

m

**BRACKET SCREWS** 



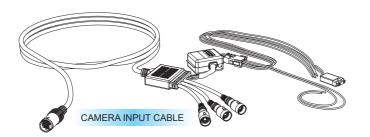


m

SUNVISOR SCREWS



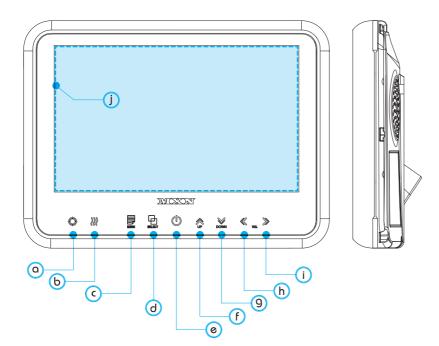
MANUAL



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 camera channel. (CAM1-CAM2-CAM3-CAM1..)

#### E. POWER

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

#### F. UP

Press [UP/DOWN] button to navigate the menu for

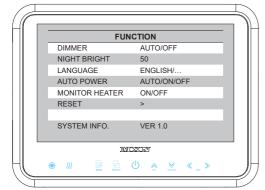
### G. DOWN system setting.

## H. LEFT

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

#### J. VIEW AREA





#### RESET

Press >> button to go the factory default setting.

#### SYSTEM INFO.

Refers to system information of the monitor.

### **FUNCTION**

#### **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.

#### LANGUAGE

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

Select the preferred LANGUAGE.

#### **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.

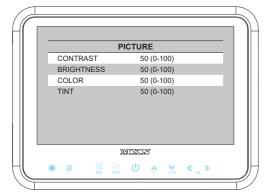


#### Remark: During MONITOR HEATER ON mode,

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

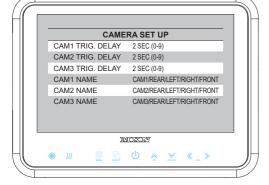
When the temperature of inside monitor is over 0 degree Celcius, heating stops automatically.





### PICTURE

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



### **CAMERA SET UP**

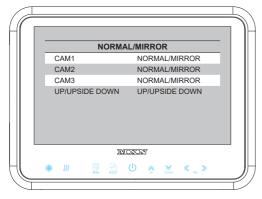
#### **TRIG. DELAY**

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.

#### **CAMERA NAME**

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

# 7" TFT DIG ALLED



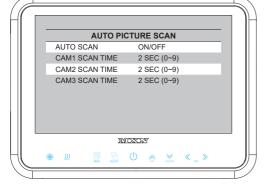


#### NORMAL/MIRROR

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

#### UP/DOWN

Camera pictures can be switchable as UP/DOWN image.



### **AUTO PICTURE SCAN**

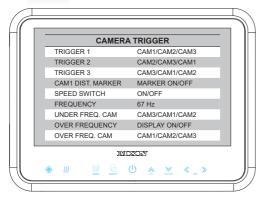
Each scanning time of CAM1/CAM2/CAM3 can be selected.



**REMARK**: If the **SCAN TIME** is set as  $\lceil 0 \rfloor$ , monitor skips its channel during the scanning.

Press [UP] button for 4 seconds to ACTIVATE/INACTIVATE auto scanning function.





### CAMERA TRIGGER

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

Select the required trigger source at CAM1/CAM2/CAM3.



#### REMARK

TRIGGER PRIORITY: TRIGGER 1 > TRIGGER 2 > TRIGGER 3

#### CAM1 DIST. MARKER

Select ON to have distance marker (parking line) for CAM1.

Distance marker is displayed as soon as TRIGGER 1 signal is activated.

#### 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 FOVER FREQUENCY DISPLAY: ON and user needs to select FOVER FREQUENCY CH:

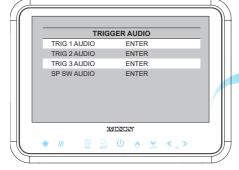
In case of TRIGGER activation during "SPEED SWITCH ON, mode, then TRIGGERS 1~3 will overrule "SPEED SWITCH, function.





Audio MUTE Mode in normal mode.

When the mode is [ON], audio will be on (activated) When the mode is [OFF], audio will be off (mute).



### **TRIGGER AUDIO**

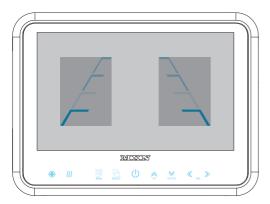
Audio MUTE Mode in Trigger mode.

Choose the trigger and then push [ENTER]. The Audio setting menu will be shown as below.



When the mode is [ON], audio will be on (activated). When the mode is [OFF], audio will be off (mute). The user may adjust the volume.





### **DISTANCE MARKER ADJUST**

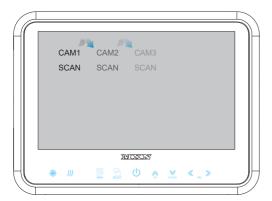
User can adjust location of distance marker.

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.

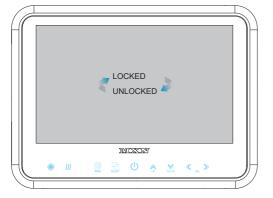
When right color of distance marker is seen as RED color, right line of distance marker can be adjusted LEFT/RIGHT.





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



### **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.

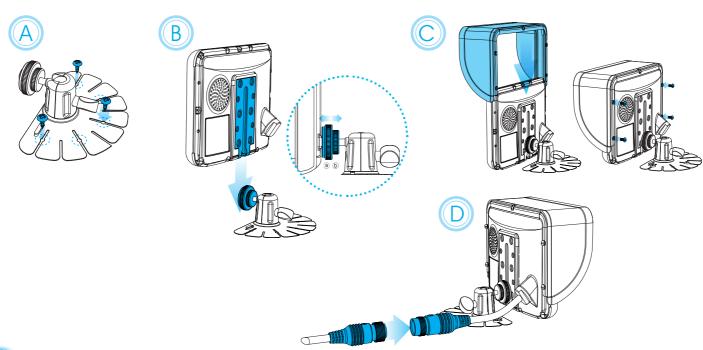
When [UNLOCKED] is displayed on the screen, user can use all functions of the set up menu



# INSTALLATION

#### **MONITOR INSTALLATION WITH STAND BRACKET & SUNVISOR**

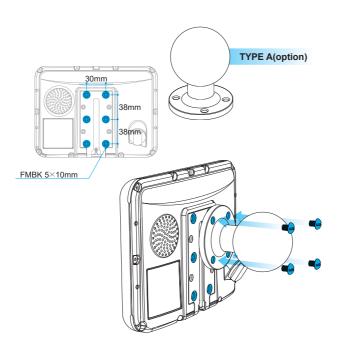
- A Remove a protection tape and attach STAND BRACKET into stand place, then fix it with the supplied screws.
- **B** Connect **STAND BRACKET** with monitor and adjust height/angle.
- C Attach SUNVISOR to the MONITOR and fix it with the supplied screws.
- D Connect CAMERA INPUT CABLE to the MONITOR.

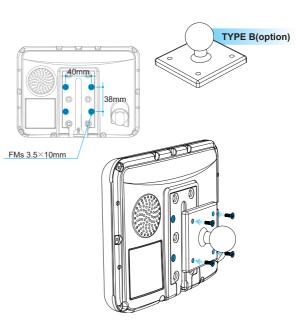


### **INSTALLATION OF HEAVY DUTY MOUNTING BRACKETS**

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

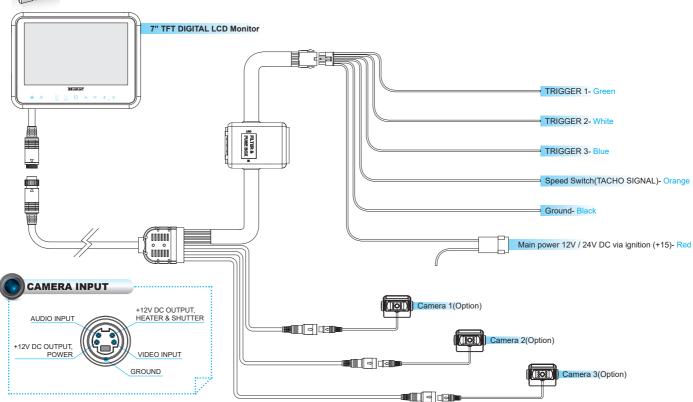
Please check the compatibility in advance, then please follow installation as described below.







# 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	12 Watt Max.
Video System	NTSC / PAL / SECAM Auto Detection
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 · CAM Trigger 1/2/3 · 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











**TFT DIGITAL LCD Monitor** for MXN-HD7DM - Owner's Manual

NXN<sup>®</sup>