OWNER'S MANUAL
PLEASE READ CAREFULLY BEFORE
USING THIS PRODUCT.



## 7" DIGITAL 2-DIN TFT LCD ALL ROUND VISION MONITOR



Model: MXN9500DD

### • I • N • D • E • X

PACKAGE CONTENTS O						
	1	<b>e</b> n	CONTENT	ACE	ACK	

#### OPERATION 04

#### SYSTEM SETTINGS 05

FUNCTION 05

PICTURE MENU 06

NORMAL/MIRROR 06

AUDIO 07

TRIGGER AUDIO 07

CAMERA TRIGGER 08

DISTANCE MARKER 08

MARKER 08

AUTO PICTURE SCAN 09

CAMERA NAME 09

SPEED SWITCH 10

#### MENU 11

SPLIT 11

TRIPLE 11

QUAD 12

MANUAL SELECTION 12

DISTANCE MARKER ADJUSTMENT 13

MENU LOCK ON/OFF FUNCTION 14

AUTO PICTURE SCAN ON/OFF FUNCTION 14

### CONNECTIONS

CAMERA INPUT 15

#### INSTALLATION 10

IN-DASH INSTALLATION 1

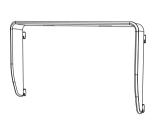
REMOVAL OF INSTALLED MONITOR 16

ON-DASH INSTALLATION WITH BRACKET 17

INSTALLATION OF HEAVY DUTY MOUNTING BRACKETS 18

**SPECIFICATIONS 19** 

## ACKAGE CONTENTS







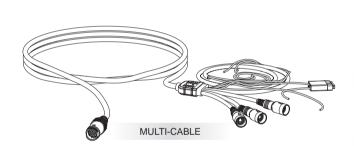




SUNVISOR

MONITOR

**BRACKET** 





REMOVER



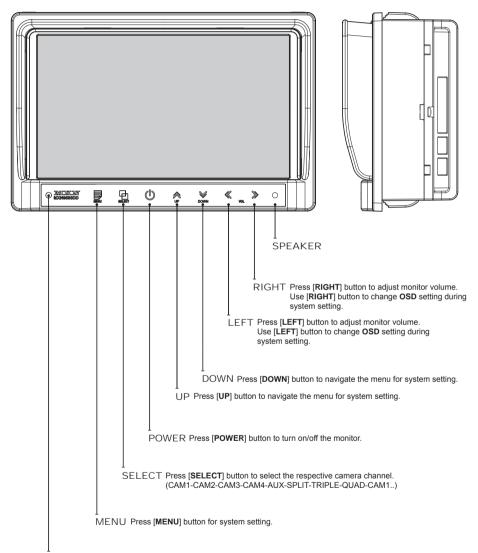
CABLE CLIP



#### BRACKET SCREWS

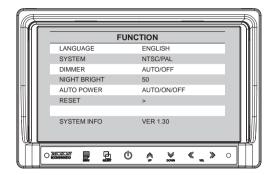
ITEM	Q'TY	
MONITOR	1	
SUNVISOR	1	
REMOVER	2	
BRACKET	1	
BRACKET SCREW	3	
CABLE CLIP	2	
MULTI-CABLE	1	
MANUAL	1	





DAY/NIGHT SENSOR (CDS) Automatic brightness control sensor.





#### **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 and button illumination according to the environment's light conditionst.

#### **NIGHT BRIGHT**

Select the **DIMMER** to **FAUTO**<sub>3</sub>, set the value of backlight on **NIGHT** mode.

#### LANGUAGE

Total 6 OSD languages can be selected: [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, after vehicles ignition OFF and ON.

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

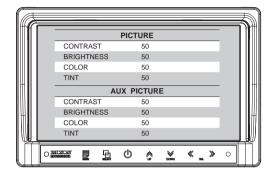
[OFF] Monitor starts up "Stand-By mode automatically."

Press >> button to go the factory default settings.

#### SYSTEM INFO.

Refers to system information of the monitor.



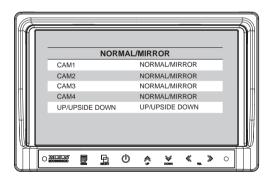


#### PICTURE MENU

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

User can adjust picture setting values for **CAMERA CHANNELS** and **AUX CHANNEL** individually. Via **PICTURE MENU**, the picture of CAM1, CAM2, CAM3, CAM4, SPLIT, TRIPLE, QUAD MODE can be adjusted.

Via AUX PICTURE MENU, the picture of aux channel can be adjusted.



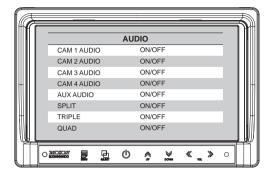
#### NORMAL/MIRROR

#### NORMAL/MIRROR

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

#### UP/UPSIDE DOWN

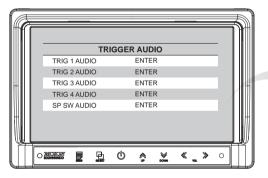
Camera pictures can be rotated 180 degree as UP/DOWN image.



#### **AUDIO**

During manual channel select the audio per channel can be selected **ON** or **OFF** individually.

When the mode is **[ON]**, audio will be on (activated) during manual camera selection. When the mode is **[OFF]**, audio will be off (mute) during manual camera selection.



#### TRIGGER AUDIO

Audio ON or OFF during Trigger mode.

Choose the trigger and then push [ENTER] via SELECT button. The Audio setting menu will be shown as the drawing next to this text.

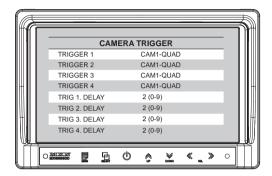
Choose the required volume level per trigger.



When the mode is **[ON]**, audio will be on (activated) during Trigger mode.

When the mode is **[OFF]**, audio will be off (mute) during Trigger mode (user can not adjust the volume manually during Trigger activation).





#### CAMERA TRIGGER

TRIGGER 1/2/3/4 (Trigger source selection) Select the required trigger source: CAM1/CAM2/CAM3/CAM4/AUX/SPLIT/TRIPLE/QUAD

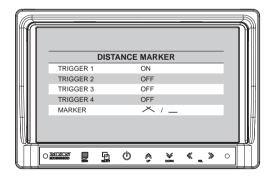


#### REMARK

TRIGGER PRIORITY: TRIGGER 1 > TRIGGER 2 > TRIGGER 3 > TRIGGER 4 In case DC power at all triggers at the same time, then Trigger 1 has highest priority.

#### 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 the monitor flashing ON-OFF, ON-OFF, etc..

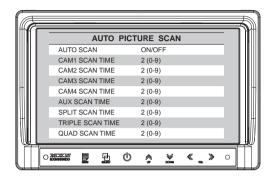


#### DISTANCE MARKER

Select **ON** to have **DISTANCE MARKER** for CAM1, CAM2, CAM3, CAM4 during Trigger Mode. The **DISTANCE MARKER** is displayed only when the trigger is activated.

#### **MARKER**

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



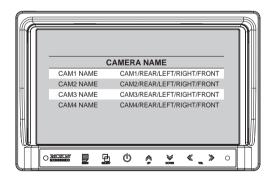
#### **AUTO PICTURE SCAN**

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



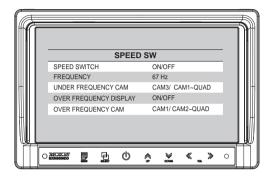
#### REMARK

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.



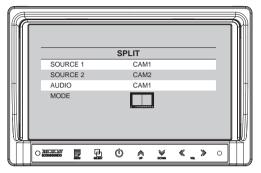
#### SPFFD SWITCH

The orange wire needs to be connected with the vehicle's analogue tacho signal and via MENU the SPEED SWITCH needs to be selected ON. At FREQUENCY 67Hz setting (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 vehicle's 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: J

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





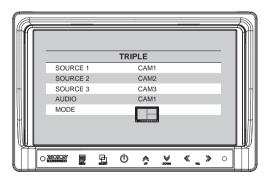
#### **SPLIT** configuration:

SOURCE 1 Select S1 Camera (CAM1~CAM4).

SOURCE 2 Select S2 Camera (CAM1~CAM4).

AUDIO Select Audio (CAM1~CAM4).

MODE Select the preferred SPLIT MODE.



### **TRIPLE** configuration:

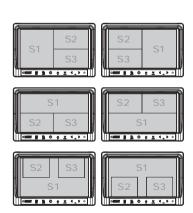
SOURCE 1 Select S1 Camera (CAM1~CAM4).

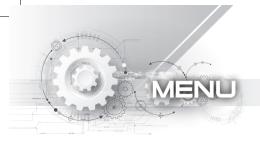
SOURCE 2 Select S2 Camera (CAM1~CAM4).

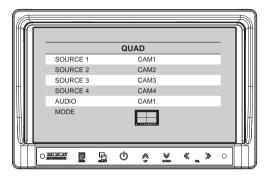
SOURCE 3 Select S3 Camera (CAM1~CAM4).

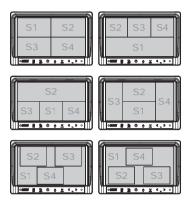
AUDIO Select Audio (CAM1~CAM4).

MODE Select the preferred TRIPLE MODE.



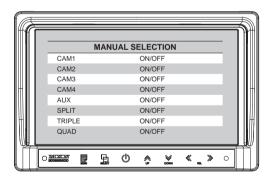






#### **QUAD** configuration:

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 Audio (CAM1~CAM4). MODE Select the preferred QUAD MODE.



#### MANUAL SELECTION

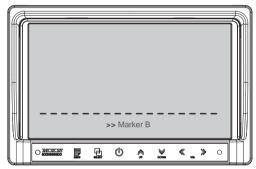
Only the **ON** selected cameras and the **ON** selected Display modes (SPLIT/TRIPLE/QUAD) will be visible when manually pushing the channel SELECT button.

The OFF selected cameras and the OFF selected Display modes (SPLIT/TRIPLE/QUAD) will be skipped when manually pushing the channel SELECT button.



Triggers neglect the MANUAL SELECTION settings. In case of Trigger activation these ON/OFF settings will be overruled.





#### DISTANCE MARKER ADJUSTMENT

User can adjust position 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.

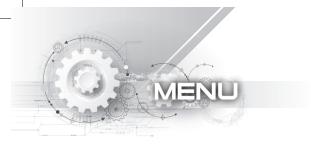
When both color of distance markers are seen as RED color, both lines can be adjusted LEFT/ RIGHT.

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 horizontal line's position by pressing [UP/ DOWN] buttons.



#### MENU 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 user can adjust settings in the **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 adjust all menu settings.

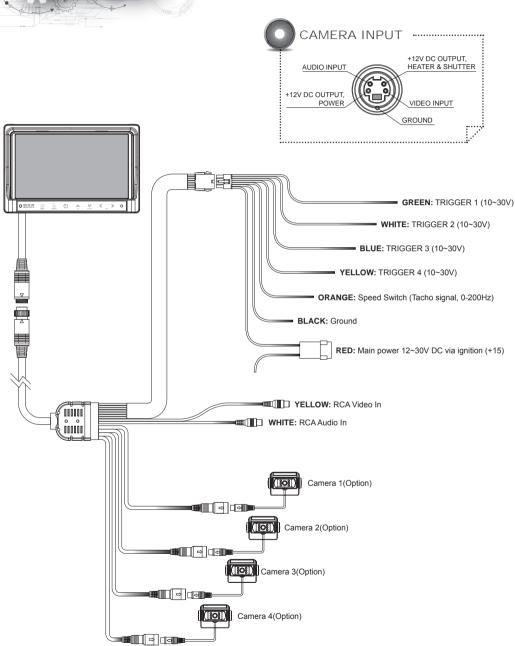
#### AUTO PICTURE SCAN ON/OFF FUNCTION

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.



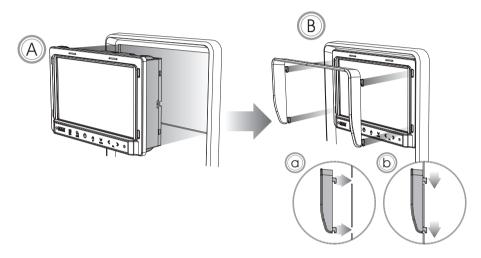
## ONNECTIONS





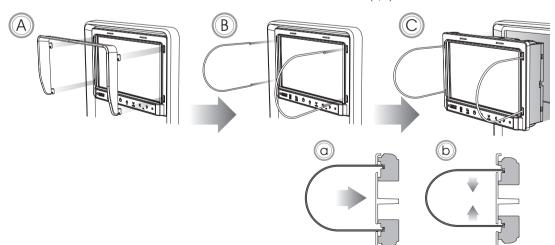
#### IN-DASH INSTALLATION

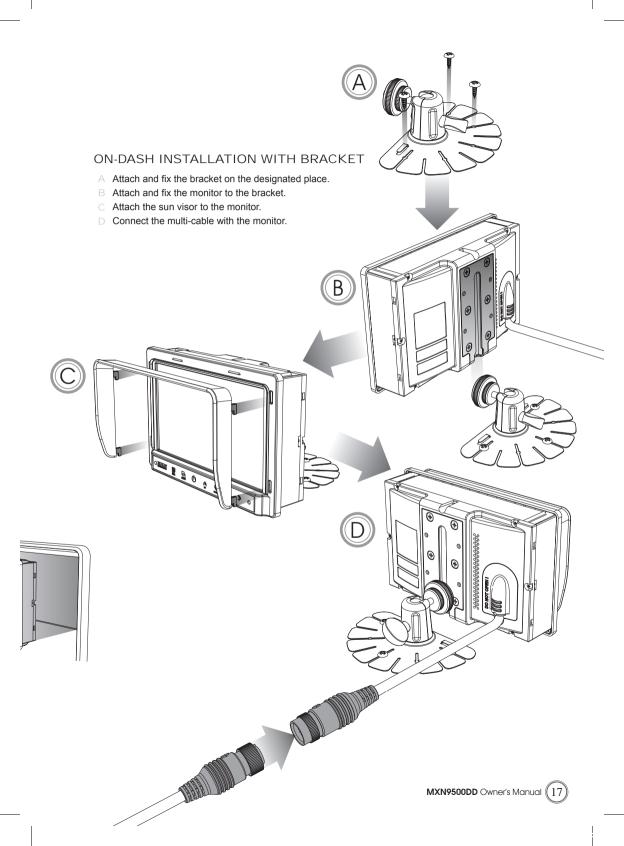
- A Insert the monitor into 2DIN size hole in the vehicle's dashboard.
- B Connect the sun visor with the monitor at insert holes as shown below. (a, b)



#### REMOVAL OF INSTALLED MONITOR

- A Remove the sun visor from the installed monitor.
- B Insert the removers in the holes in the installed monitor.
- C Push the removers to withdraw the installed monitor from the dashboard (a, b).

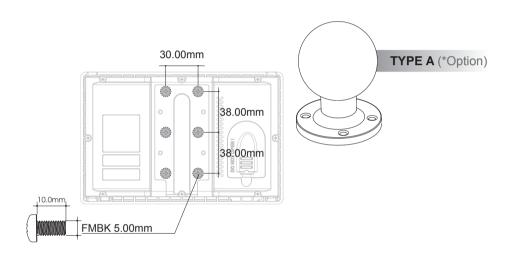


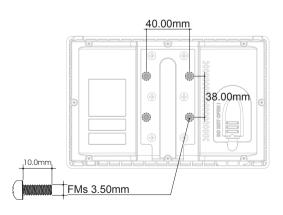


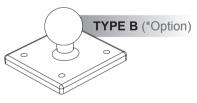


#### INSTALLATION OF HEAVY DUTY MOUNTING BRACKETS

MONITOR can be connected with different type of optional HEAVY DUTY MOUNTING BRACKETS. Please check the compatibility in advance, then please follow installation as described below.











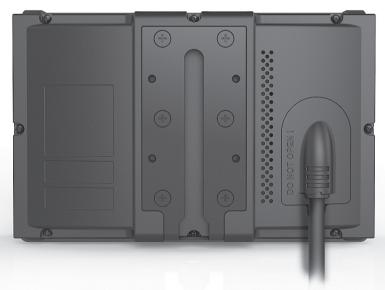


ITEM	SPECIFICATIONS		
LCD SCREEN SIZE	7" Wide Diagonal		
DIMENSIONS	188.07(W) × 123.57(H) × 71.33(D)mm		
DISPLAY DIMENSIONS	154.08 × 85.92mm		
POWER INPUT	DC 12V ~ 30V		
POWER CONSUMPTION	15 Watt Max.		
VIDEO SYSTEM	NTSC / PAL		
SYNC. SYSTEM	Internal		
BRIGHTNESS	400 cd/m <sup>2</sup>		
DISPLAY RESOLUTION	800  imes 480 pixel		
VIEWING ANGLES	Top: 50° Bottom: 70° Left: 70° Right: 70°		
COLOR CONFIGURATION	RGB Stripe		
DIMMER	Automatic / Manual		
SPEAKER IMPEDANCE	8Ω. 0.3 Watt Max.		
OPERATING TEMP.	-25°C to + 75°C		
STORAGE TEMP.	-30°C to + 85°C		
IMPACT RATING	4G		
CAMERA CONNECTOR	4-Pin mini DIN (MXN configuration)		
HOUSING	Light Black (ABS)		
ON-SCREEN DISPLAY CONTROL FUNCTIONS	Volume · Brightness · Color · Contrast · Tint · CAM 1/2/3/4 · Split · Triple · Quad · CAM Trigger 1/2/3/4 · Speedswitch · Auto Power · Distance marker · Auto Picture Scan · Dimmer · Language · Reset.		
SUPPLIED ACCESSORIES	Bracket-1 pce / Screw Kit-1set / Manual / Sun Shield-1 pce / Multi-cable-1 set / Remover-1 set		
WEIGHT	± 610g (excluding bracket)		

OWNER'S MANUAL
PLEASE READ CAREFULLY BEFORE
USING THIS PRODUCT.



# 7" DIGITAL 2-DIN TFT LCD ALL ROUND VISION MONITOR



Model: MXN9500DD

Design and specifications are subject to change without notice.