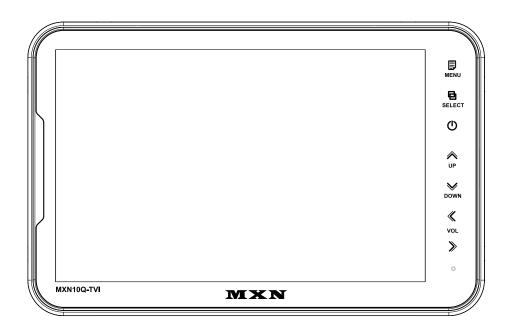
#### **OWNER'S MANUAL**

PLEASE READ CAREFULLY BEFORE USING THIS PRODUCT.

# 10.1" DIGITAL SPLITSCREEN LCD ALL ROUND VISION MONITOR



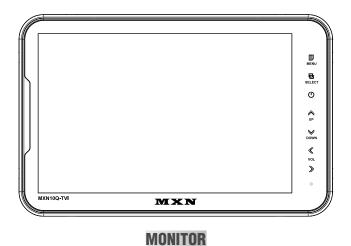
**Model: MXN10Q-TVI** 

Design and specifications are subject to change without notice.

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## **PACKAGE CONTENTS**





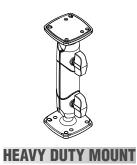
MANUAL



**CAMERA INPUT CABLE** 





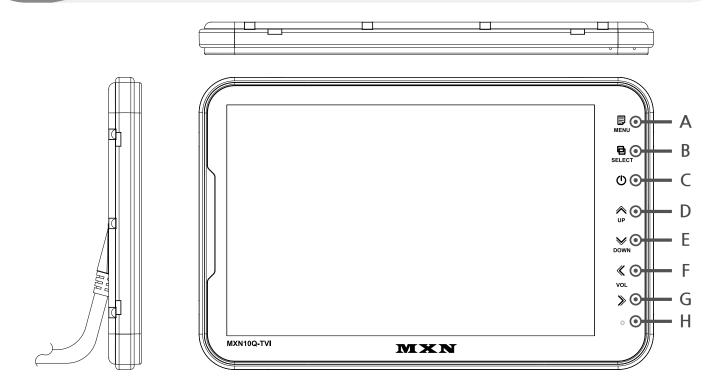


**BRACKET SCREWS** 

**MOUNT SCREWS** 

IIEM	QTY
MONITOR	1
CAMERA INPUT CABLE	1
HEAVY DUTY MOUNT	1
MOUNT SCREWS (Machine Screw, M5 / 12mm) PH M5x12	4
BRACKET SCREWS (Tapping Screw, M5 / 25mm) TH 1, M5x25	4
MANUAL	1

## **OPERATION**



#### A. MENU

Press [MENU] button for system settings.

#### B. SELECT

Press [SELECT] button to select the respective channel.

[CAM1 - CAM2 - CAM3 - CAM4 - SPLIT1 - SPLIT2 - TRIPLE - QUAD - CAM1...].

#### C. POWER

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

#### D. UP

Press [UP] button to navigate the menu for system settings.

#### E. DOWN

Press [DOWN] button to navigate the menu for system settings.

#### F. LEFT

Press [LEFT] button to adjust the monitor volume.

Use [LEFT] button to change OSD setting during system settings.

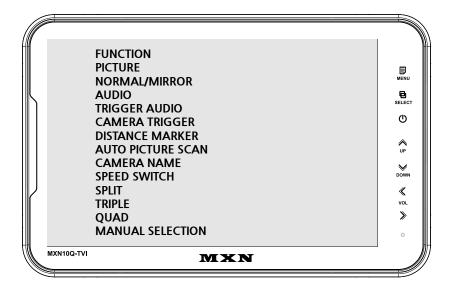
#### G. RIGHT

Press [RIGHT] button to adjust the monitor volume.

Use [RIGHT] button to change OSD setting during system settings.

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

Automatic brightness control sensor



## **MENU STRUCTURE**

Change the setting value by pressing the MENU button.

**FUNCTION** 

Set functions on the monitor.

**PICTURE** 

Set the color and brightness on the monitor.

NORMAL/MIRROR

Input video can be reversed

**AUDIO** 

Set the audio ON/OFF.

TRIGGER AUDIO

Set the audio ON/OFF when entering the TRIGGER signal.

CAMERA TRIGGER

You can adjust the Screen settings with the corresponding TRIGGER signal is on.

DISTANCE MARKER

DISTANCE MARKER can be set according to the TRIGGER signal input.

**AUTO PICTURE SCAN** 

Set the automatic sequence switching time.

**CAMERA NAME** 

Set the camera name.

SPEED SWITCH

By receiving TACHO signal, you can set the operation at the corresponding frequency.

**SPLIT** 

Display the camera video at the set position on the SPLIT screen.

**TRIPLE** 

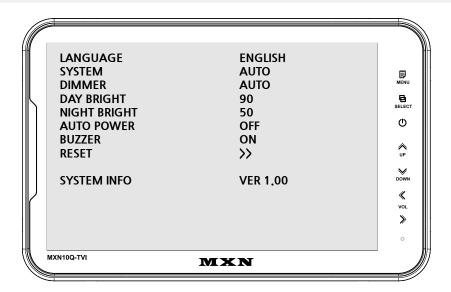
Display the camera video at the set position on the TRIPLE screen.

**QUAD** 

Display the camera image on the QUAD screen at the set position.

MANUAL SELECTION

When the SELECTION button is pressed, the output screen is set.



## **FUNCTION**

#### **LANGUAGE**

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

#### **SYSTEM**

Select AUTO/TVI/AHD/NTSC/PAL

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

Select AUTO or OFF to enable Automatic or Manual brightness control.

REMARK: By activating the DIMMER AUTO function,

the monitor adjusts the brightness according to the environment.

#### **DAY BRIGHT**

Select the DIMMER as "AUTO<sub>4</sub>, set the value of backlight on DAY mode(0~100).

#### **NIGHT BRIGHT**

Select the DIMMER as AUTO, set the value of backlight on NIGHT mode (0~100).

#### **AUTO POWER**

Select monitor activation functions as below.

[AUTO] The monitor remembers the last settings from its memory.

[ON] The monitor is turned on with the Power-ON mode automatically.

[OFF] The monitor is turned on with the TtSand-By mode automatically.

#### **BUZZER**

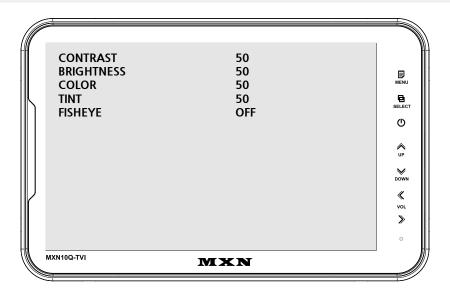
Select BUZZER sound FON and FOFF.

#### **RESET**

Press ">>" button to enter the factory default settings.

#### **SYSTEM INFO**

Refers to the system information of the monitor.

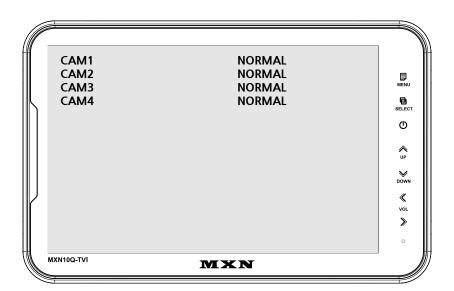


## **PICTURE MENU**

Press [LEFT/RIGHT] button to adjust the PICTURE of the monitor. PICTURE MENU is for the settings of PICTURE from CAM1, CAM2, CAM3, CAM4, SPLIT1, SPLIT2, TRIPLE, QUAD MODE.

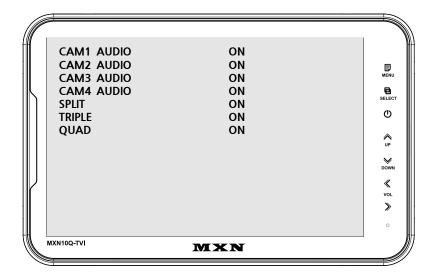
#### **FISHEYE**

When using the FISHEYE camera, FON will calibrate the screen on the FULL screen.



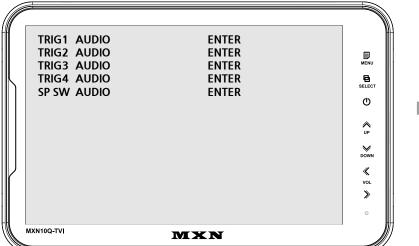
## **NORMAL/MIRROR**

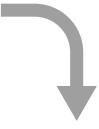
Each camera picture (CAM1/CAM2/CAM3/CAM4) can be switched between NORMAL& MIRROR image.



## **AUDIO**

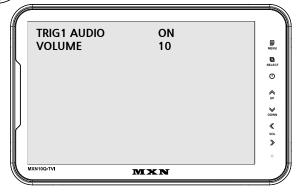
Audio ACTIVATED Mode in normal mode.
When the mode is [ON], audio will be on (activated)
When the mode is [OFF], audio will be off (mute).



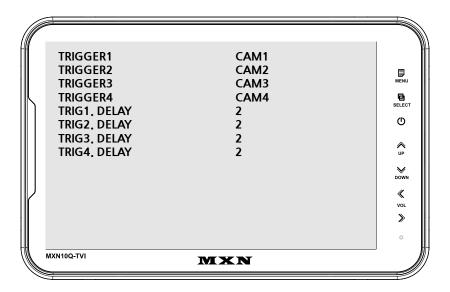


## **TRIGGER AUDIO**

Audio ACTIVATED Mode in Trigger mode. Choose the trigger and then press [ENTER]. The Audio settings 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 can adjust the volume.



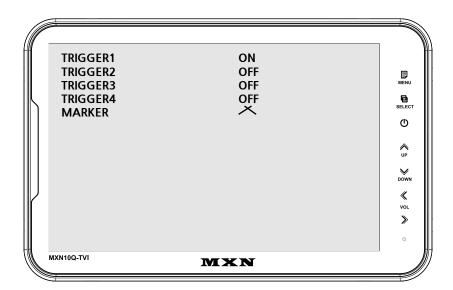
## **CAMERA TRIGGER**

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

Select the required trigger source at CAM1/CAM2/CAM3/CAM4/SPLIT1/SPLIT2/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.

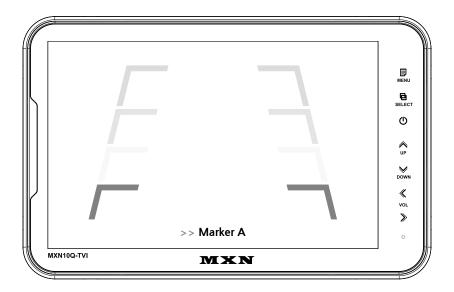


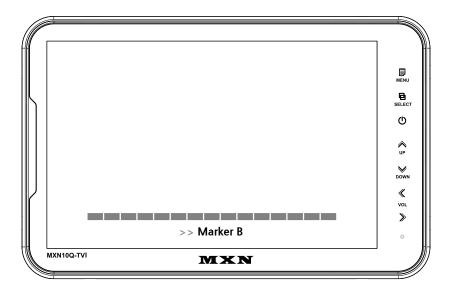
## **DISTANCE MARKER**

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. X or \_\_\_\_





## **DISTANCE MARKER ADJUSTMENT**

Users can make adjustments by pressing the SELECT button in the menu. (It is not available on the split mode screen)

#### Marker A- Parking line

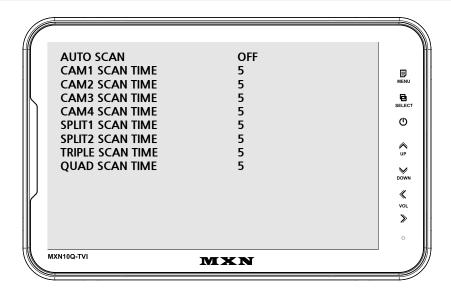
The left/right/both markers will be selected in order each time you press the SELECT button. When the marker is red it can be adjusted UP/DOWN or LEFT/RIGHT.

When both distance markers are RED, you can adjust both markers LEFT/RIGHT/UP/DOWN. When the left distance marker is RED, the left marker can be adjusted LEFT/RIGHT. When the right distance marker is RED, the right marker can be adjusted LEFT/RIGHT.

#### Marker B- Horizontal line

Users can adjust the line UP/DOWN.

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



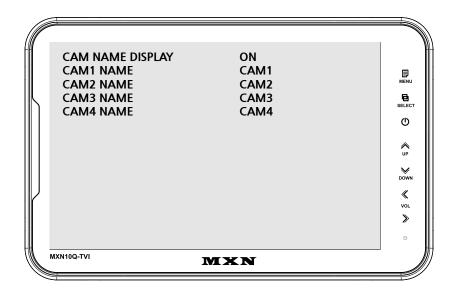
## **AUTO PICTURE SCAN**

Each scanning time of CAM1/CAM2/CAM3/CAM4/SPLIT1/SPLIT2/TRIPLE/QUAD can be managed.

#### **REMARK**

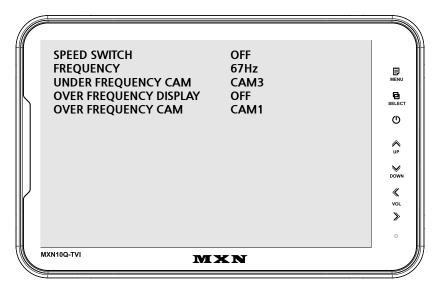
If the SCAN TIME is set as[0], monitor skips its channel during scanning.

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 the 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 CAM (At a different type of tacho signals the FREQUENCY needs to be adjusted higher or lower than the example)

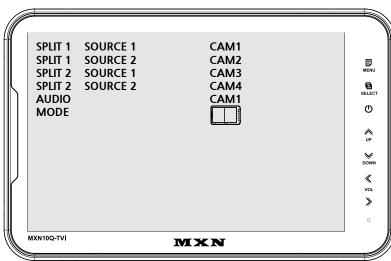
Over 33km/h (72Hz) the selected camera will be switched OFF automatically. When the speed slows down, then the selected camera will be switched ON automatically again at 30km/h. Instead of automatic switch OFF at a speed over 33km/h it is also possible to activate another video source, such as a navigation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

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

SPLIT 2

**S2** 

**S**1



## **SPLIT** configuration

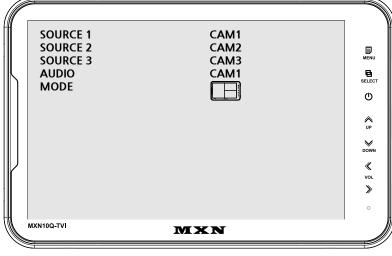
SOURCE 1 Select S1 Camera (CAM1~CAM4). Select S2 Camera (CAM1~CAM4). SPLIT 1 SOURCE 2 SPLIT 2 SOURCE 1 Select S1 Camera (CAM1~CAM4). SPLIT 2 SOURCE 2 Select S2 Camera (CAM1~CAM4). Select SPLIT of Audio (CAM1~CAM4). **AUDIO** MODE Select SPLIT MODE

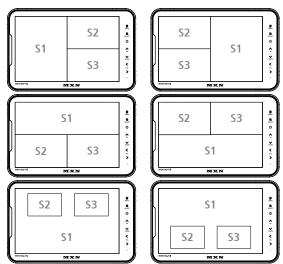


SPLIT 1

**S2** 

**S1** 

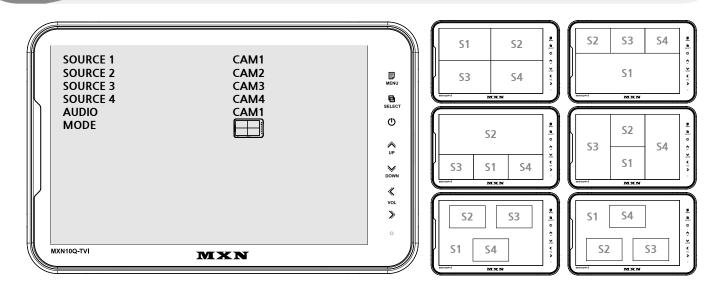




## **TRIPLE** configuration

- SOURCE 1 Select S1 Camera (CAM1~CAM4).
- SOURCE 2 Select S2 Camera (CAM1~CAM4).
- SOURCE 3 Select S3 Camera (CAM1~CAM4).
- **AUDIO** Select TRIPLE of Audio (CAM1~CAM4).
- **MODE** Select TRIPLE MODE

## **MENU**



## **QUAD** configuration

SOURCE 1 Select S1 Camera (CAM1~CAM4).

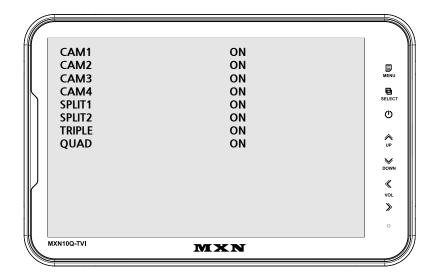
SOURCE 2 Select S2 Camera (CAM1~CAM4).

SOURCE 3 Select S3 Camera (CAM1~CAM4).

SOURCE 4 Select S4 Camera (CAM1~CAM4).

AUDIO Select QUAD of Audio (CAM1~CAM4).

MODE Select QUAD MODE



## **MANUAL SELECTION**

When you manually press the channel select button, only the camera selected ON and the display mode selected ON are displayed.

Manually pressing the channel select button skips the camera selected OFF and display mode selected OFF.

#### [NOTE]

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

MENU 15

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

#### LOCK ON/OFF FUNCTION

The setup menu can be locked to ban any unauthorized users.

#### LOCK ON mode

At the Power-ON mode, press the [DOWN] button for 10 seconds to activate the LOCK ON function. When [LOCKED] is displayed on the screen, the user can use only [POWER, SELECT, VOLUME] buttons and the user can edit settings for the PICTURE menu.

#### LOCK OFF mode

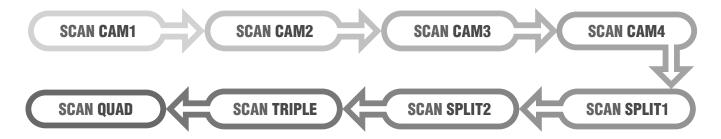
At the Power-ON mode, press [DOWN] button for 10 seconds to activate the LOCK OFF function. When [UNLOCKED] is displayed on the screen, the user can use all the functions of the setup menu.

## **SCAN ON/OFF FUNCTION**

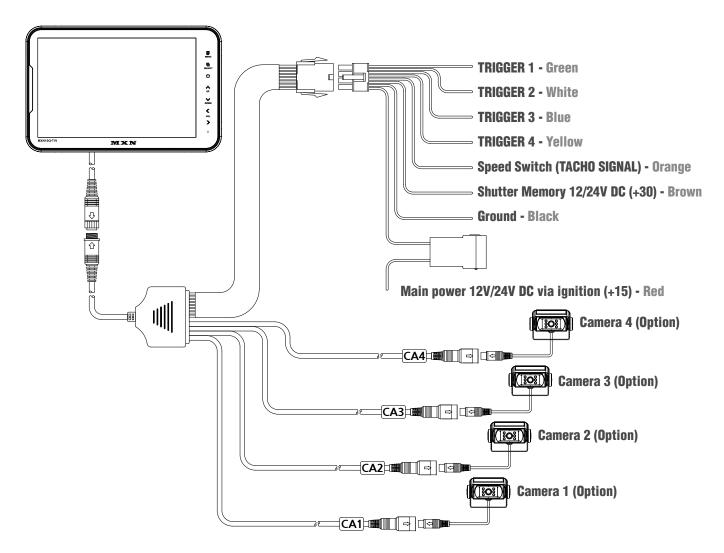
At the Power-ON mode,

press the [UP] button for 4 seconds to activate the Auto Scan Picture function. During the Auto Scan Mode,

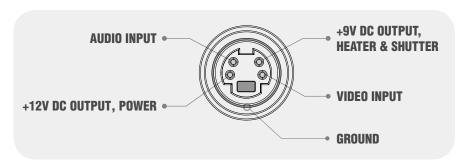
press the [UP] button for 4 seconds to deactivate Auto Scan Picture function.



## **CONNECTIONS**



## **CAMERA INPUT**



## **SHUTTER MEMORY FUNCTION**

The function of "Shutter Memory" wire (brown wire) is to close the shutter of shutter camera when Main +DC Power (+15) at the monitor's red wire is disconnected while the camera's shutter is OPFN.

The "Shutter Memory" wire does not drain any current from the vehicle's battery within several seconds after the camera's motorized shutter(s) are closed.

## INSTALLATION

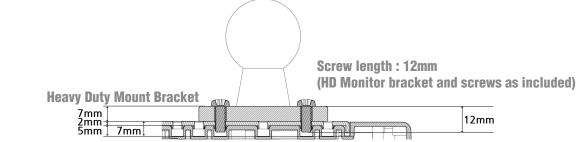
## **MONITOR** installation with Standard Heavy Duty Mount Bracket

Fix the supplied Heavy Duty Mount Bracket into the monitor with the included screws. Heavy Duty Mount Bracket's angle fixation can be adjusted by tightening knobs.

#### [NOTE]

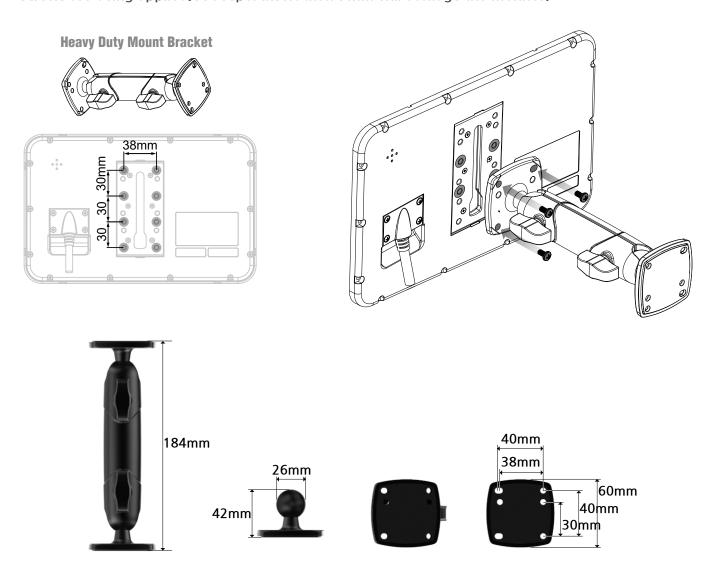
- The screw type: Mount-screw type, M5 (diameter of 5mm).
- The length of screw: Max. 12mm.
- Screw thread: 0.8mm.

Please make it sure to use the proper screws in order to avoid any damage into the monitor.



#### [NOTE]

Maximum 7mm insert of screw into the monitor in case another type bracket and/or screws are being applied. A deeper insert than 7mm will damage the monitor.



## INSTALLATION

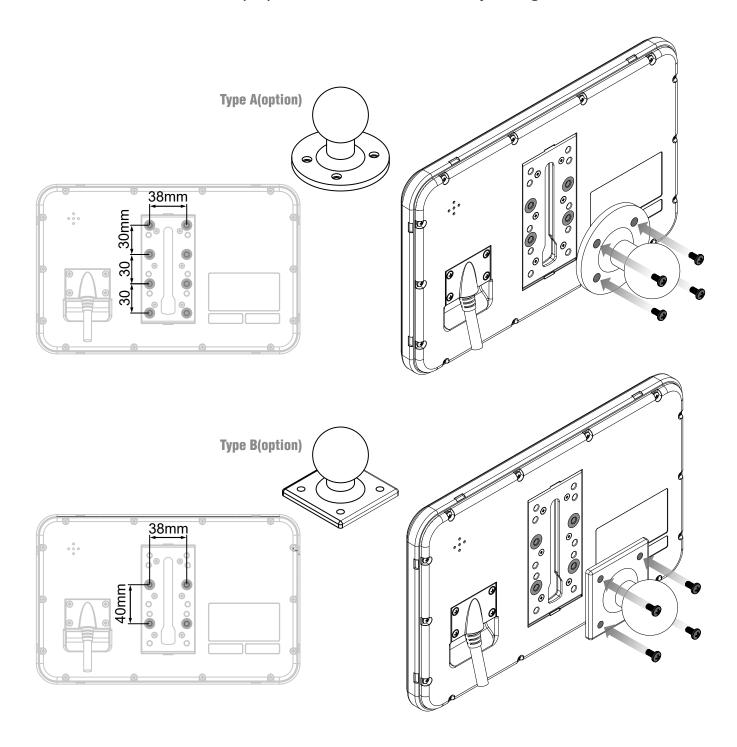
## **Installation of Heavy Duty Mount Bracket**

The MONITOR can be used with different types of HEAVY DUTY MOUNTING BRACKETS. Please check the availability in advance, then please follow the instructions as below.

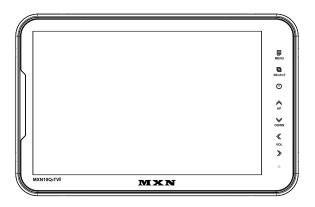
#### [NOTE]

- The screw type: Mount-screw type, M5 (diameter of 5mm).
- The length of screw: Max. 12mm.
- Screw thread: 0.8mm.

Please make it sure to use the proper screws in order to avoid any damage into the monitor.



## **SPECIFICATIONS**

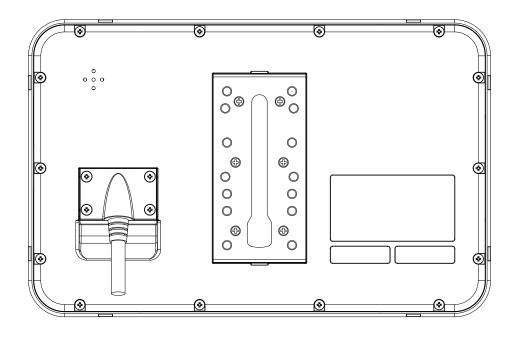


ITEM	SPECIFICATIONS
LCD SCREEN SIZE	10.1 Inch Wide IPS Digital TFT LCD Panel
DIMENSIONS	270(W) x 174(H) x 20(D) mm
DISPLAY DIMENSIONS	216.96 X 135.6 mm
POWER INPUT	DC 10V ~ 32V
POWER CONSUMPTION	Max. 24W
VIDEO SYSTEM	HD-TVI (25fps, 30fps, 50fps, 60fps), AHD (25fps, 30fps) CVBS-PAL, CVBS-NTSC
SYNC. SYSTEM	Internal
BRIGHTNESS	350cd/m2
DISPLAY RESOLUTION	WXGA, 1280 X (RGB) X 800
VIEWING ANGLES	178° horizontal / 178° vertical
COLOR CONFIGURATION	RGB Stripe
DIMMER	Automatic / Manual
SPEAKER IMPEDANCE	Max, 8Ω / 1W
OPERATING TEMP.	-20°C to + 70°C
STORAGE TEMP.	-30°C to + 80°C
IMPACT RATING	5G
CAMERA CONNECTOR	4-Pin mini DIN (MXN configuration)
HOUSING	Light Black (ABS)
ON-SCREEN DISPLAY CONTROL FUNCTIONS	■ Volume ■ Color ■ CAM 1/2/3/4, Split, Triple,Quad ■ Speed Switch ■ Distance Marker ■ Dimmer ■ Reset ■ Brightness ■ Contrast Tint ■ CAM Trigger 1/2/3/4 ■ Auto Power ■ Auto Picture Scan ■ Language
SUPPLIED ACCESSORIES	Bracket -1 pce / Screw Kit -1set / Manual / Multi-cable-1 set
WEIGHT	± 850g (excluding bracket)

#### **OWNER'S MANUAL**

PLEASE READ CAREFULLY BEFORE USING THIS PRODUCT.

## 10.1" DIGITAL SPLITSCREEN LCD ALL ROUND VISION MONITOR



**Model: MXN10Q-TVI** 

Design and specifications are subject to change without notice.