10.1" DIGITAL SPLITSCREEN LCD ALL ROUND VISION MONITOR

MENU

SELECT

UP

DOWN

VOL

MXN10Q-TVI

MXN

Model: MXN10Q-TVI

Design and specifications are subject to change without notice.

INDEX

MONITOR

MANUAL

10.1" DIGITAL SPLITSCREEN LCD
ALL ROUND VISION MONITOR

Model: MXN10Q-TVI

CAMERA INPUT CABLE

BRACKET SCREWS
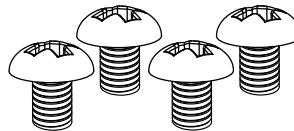
MOUNT SCREWS
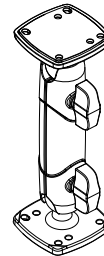
HEAVY DUTY MOUNT

ITEM	Q'TY
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
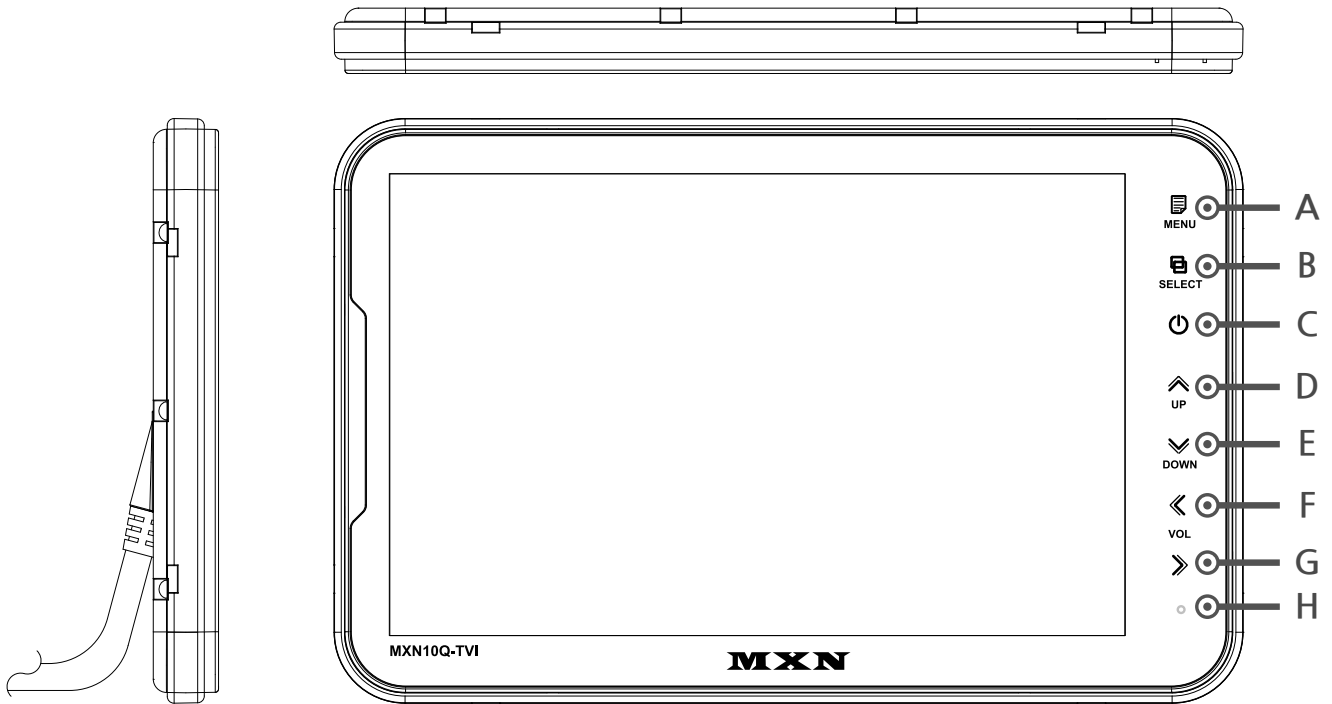
A. MENU

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.
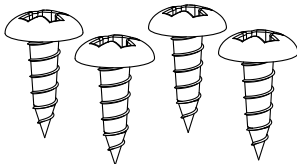
E. DOWN

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

```
┌─────────────────────────────────────────┐
│  FUNCTION                                │  ▤
│  PICTURE                                 │  MENU
│  NORMAL/MIRROR                           │
│  AUDIO                                   │  ▤
│  TRIGGER AUDIO                           │  SELECT
│  CAMERA TRIGGER                          │
│  DISTANCE MARKER                         │  ⏻
│  AUTO PICTURE SCAN                       │
│  CAMERA NAME                             │  ⌄
│  SPEED SW                                │  UP
│  SPLIT                                   │
│  TRIPLE                                  │  ⌄
│  QUAD                                    │  DOWN
│  MANUAL SELECTION                        │
│                                          │  ≪
│ MXN10Q-TVI        MXN                    │  VOL
└─────────────────────────────────────────┘  ≫
```
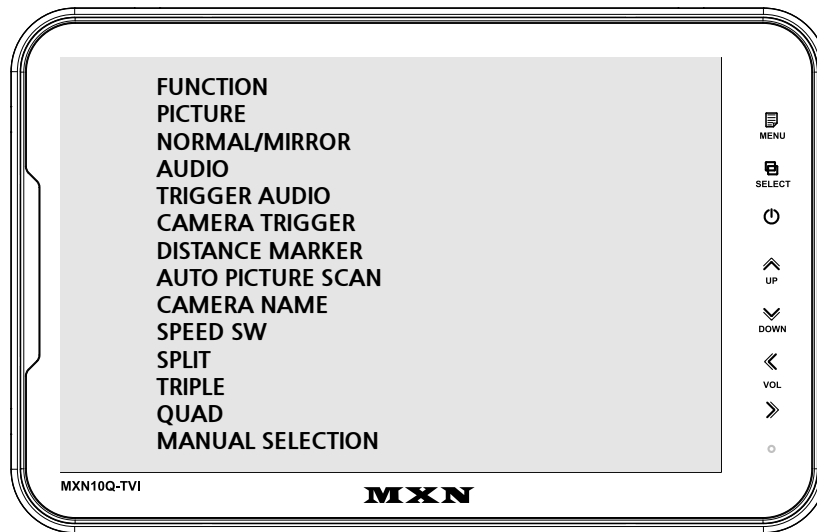
MENU STRUCTURE

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 SW

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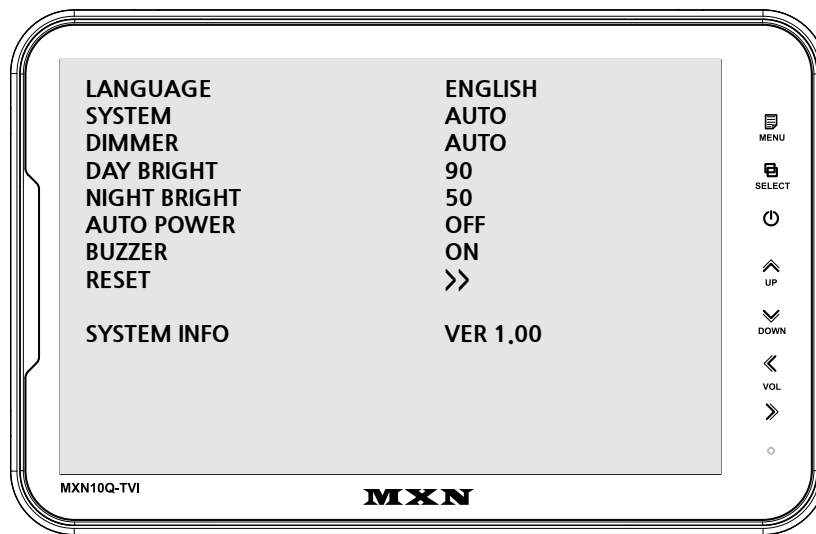
Display the camera video at the set position on the TRIPLE screen.

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.

```
LANGUAGE          ENGLISH
SYSTEM            AUTO
DIMMER            AUTO
DAY BRIGHT        90
NIGHT BRIGHT      50
AUTO POWER        OFF
BUZZER            ON
RESET             >>

SYSTEM INFO       VER 1.00
```

MENU
SELECT
UP
DOWN
VOL

MXN10Q-TVI   **MXN**

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』, 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.
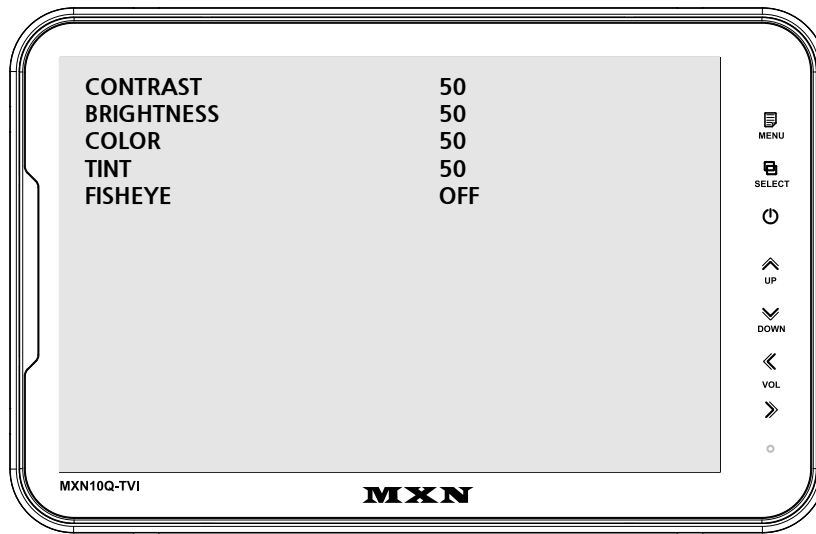 [OFF] The monitor is turned on with the『tSand-By』mode automatically.

BUZZER

Select BUZZER sound 『ON』 and 『OFF』.

RESET

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

SYSTEM INFO

Refers to the system information of the monitor.

```
CONTRAST              50
BRIGHTNESS            50
COLOR                 50
TINT                  50
FISHEYE               OFF

                                    MENU
                                    SELECT
                                    ⏻
                                    UP
                                    DOWN
                                    VOL

MXN10Q-TVI            MXN
```
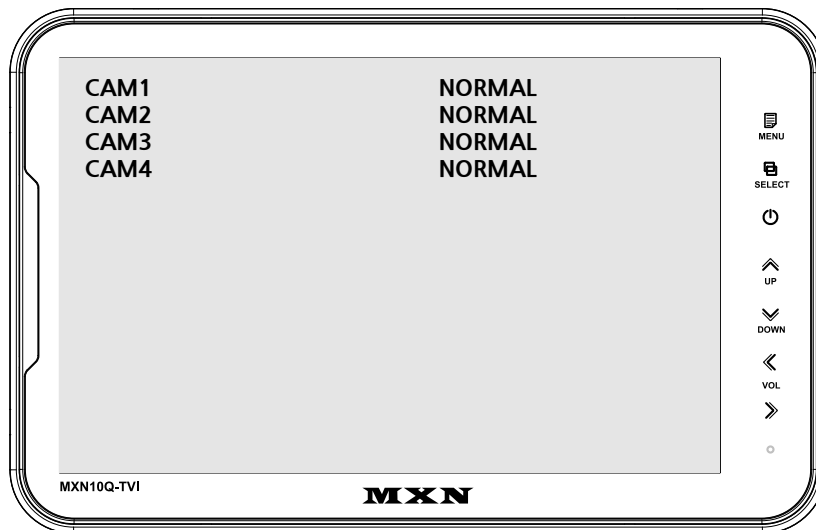
PICTURE MENU

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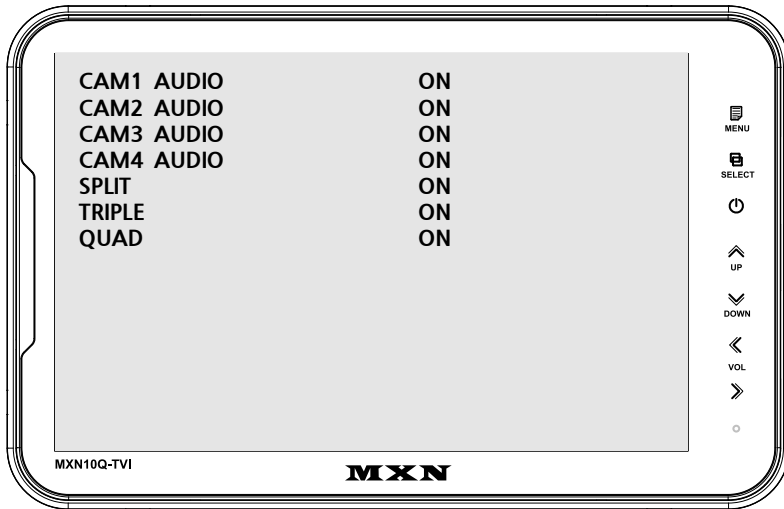SPLIT1, SPLIT2, TRIPLE, QUAD MODE.

FISHEYE

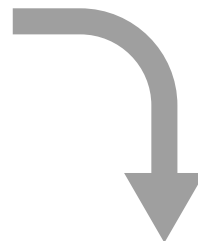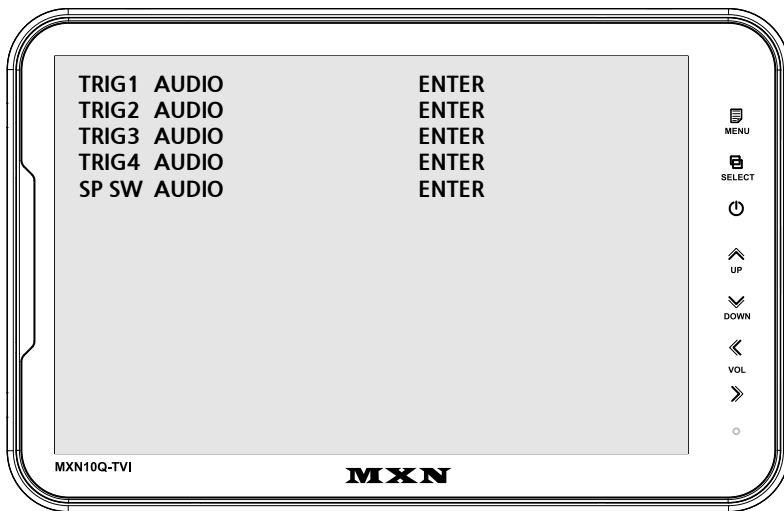When using the FISHEYE camera, 『ON』will calibrate the screen on the FULL screen.

```
CAM1                  NORMAL
CAM2                  NORMAL
CAM3                  NORMAL
CAM4                  NORMAL

                                    MENU
                                    SELECT
                                    ⏻
                                    UP
                                    DOWN
                                    VOL

MXN10Q-TVI            MXN
```

NORMAL/MIRROR

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

```
CAM1 AUDIO          ON
CAM2 AUDIO          ON
CAM3 AUDIO          ON
CAM4 AUDIO          ON
SPLIT              ON
TRIPLE             ON
QUAD               ON

MXN10Q-TVI          MXN
```
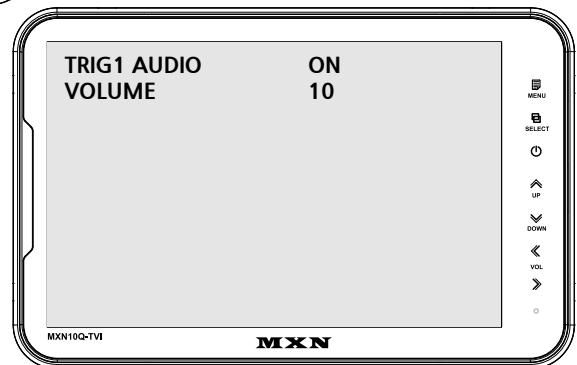
AUDIO

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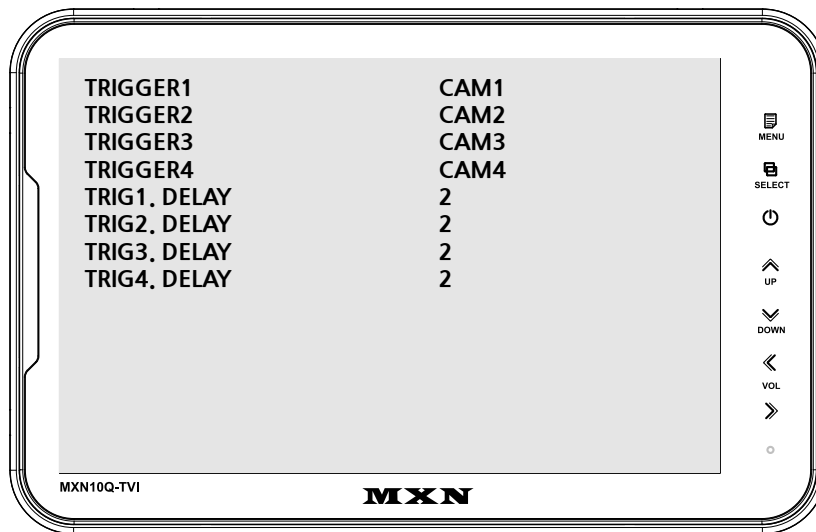When the mode is [OFF], audio will be off (mute).

```
TRIG1  AUDIO          ENTER
TRIG2  AUDIO          ENTER
TRIG3  AUDIO          ENTER
TRIG4  AUDIO          ENTER
SP SW  AUDIO          ENTER

MXN10Q-TVI          MXN
```

TRIGGER AUDIO

Audio ACTIVATED Mode in Trigger mode.
Choose the trigger and then press [ENTER].
The Audio settings menu will be shown as below.

```
TRIG1 AUDIO          ON
VOLUME               10

MXN10Q-TVI          MXN
```

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.

```
TRIGGER1              CAM1
TRIGGER2              CAM2
TRIGGER3              CAM3
TRIGGER4              CAM4
TRIG1. DELAY          2
TRIG2. DELAY          2
TRIG3. DELAY          2
TRIG4. DELAY          2

MXN10Q-TVI            MXN
```

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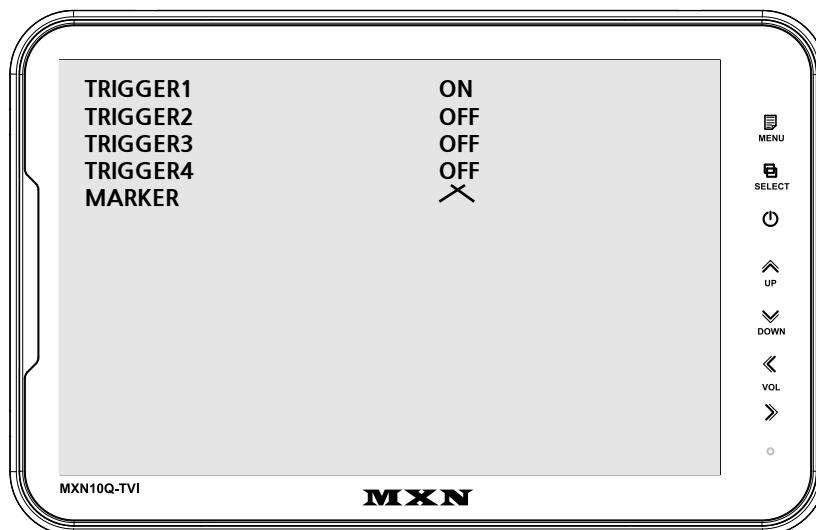
TRIGGER 1/2/3/4 (Trigger source selection)

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.

```
TRIGGER1              ON
TRIGGER2              OFF
TRIGGER3              OFF
TRIGGER4              OFF
MARKER               人

MXN10Q-TVI            MXN
```
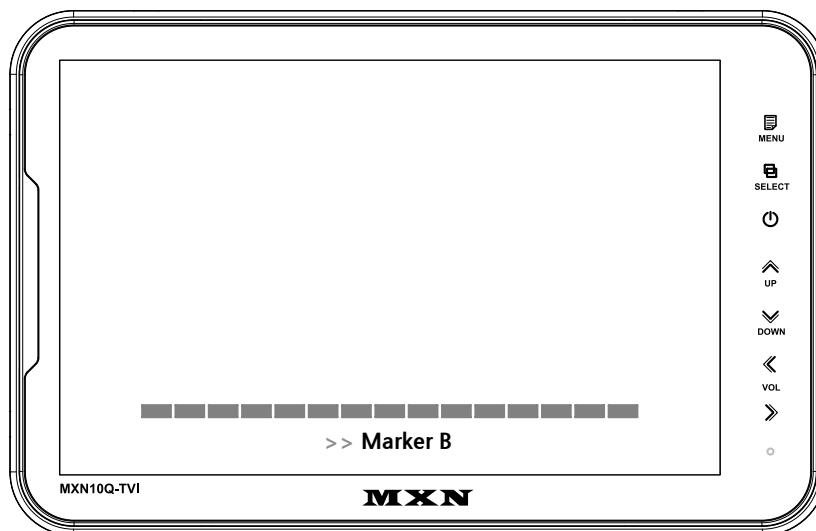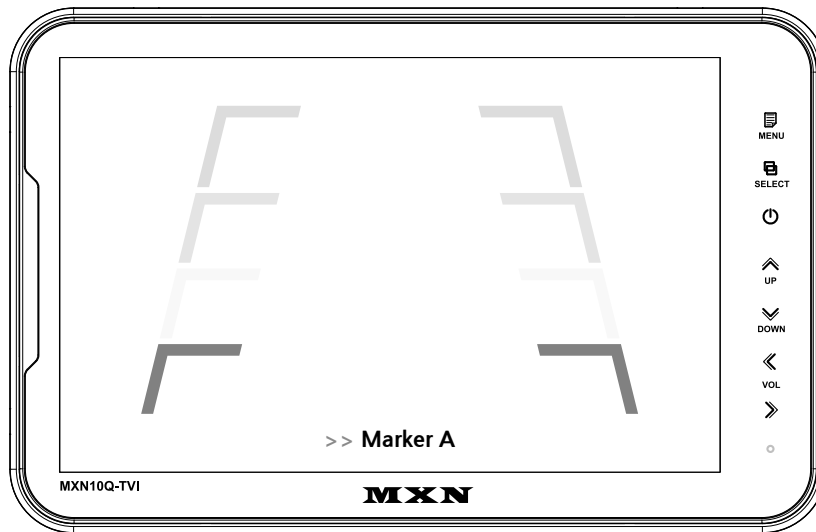
DISTANCE MARKER

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. 人 or ___

>> **Marker A**

MXN10Q-TVI   **MXN**

>> **Marker B**

MXN10Q-TVI   **MXN**

DISTANCE MARKER ADJUSTMENT

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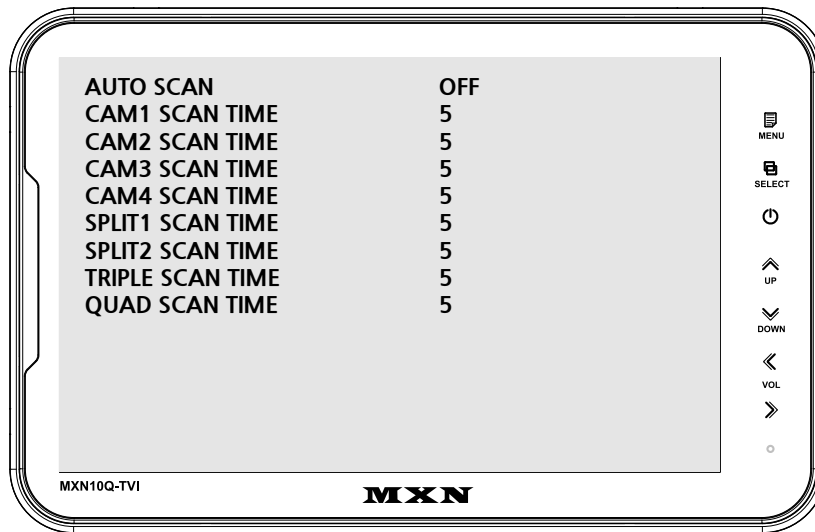(It is not available on the split mode screen)

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 SCAN	OFF
CAM1 SCAN TIME	5
CAM2 SCAN TIME	5
CAM3 SCAN TIME	5
CAM4 SCAN TIME	5
SPLIT1 SCAN TIME	5
SPLIT2 SCAN TIME	5
TRIPLE SCAN TIME	5
QUAD SCAN TIME	5

MXN10Q-TVI

AUTO PICTURE SCAN

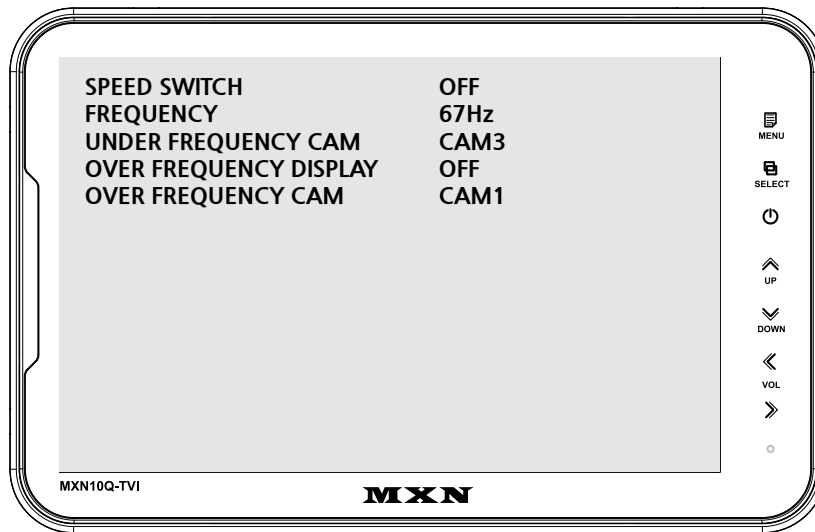Each scanning time of CAM1/CAM2/CAM3/CAM4/SPLIT1/SPLIT2/TRIPLE/QUAD can be managed.

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.

CAM NAME DISPLAY	ON
CAM1 NAME	CAM1
CAM2 NAME	CAM2
CAM3 NAME	CAM3
CAM4 NAME	CAM4

MXN10Q-TVI
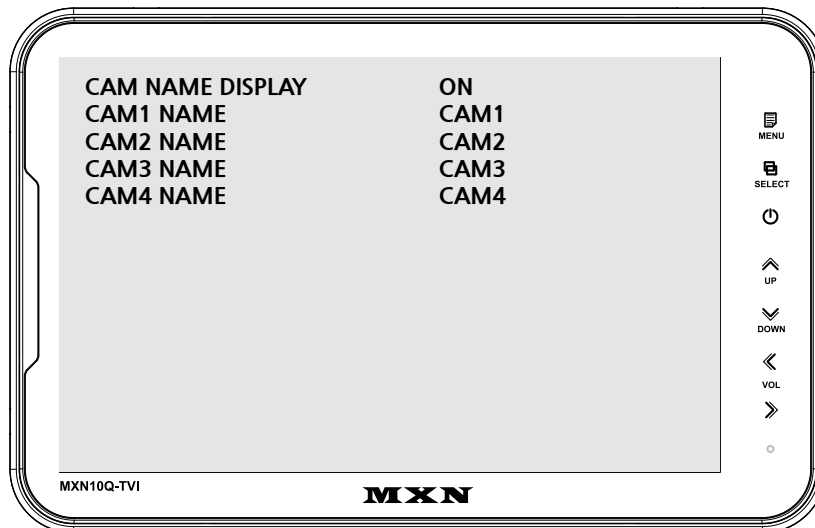
CAMERA NAME

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

SPEED SWITCH	OFF
FREQUENCY	67Hz
UNDER FREQUENCY CAM	CAM3
OVER FREQUENCY DISPLAY	OFF
OVER FREQUENCY CAM	CAM1

MENU
SELECT
UP
DOWN
VOL

MXN10Q-TVI   **MXN**

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,
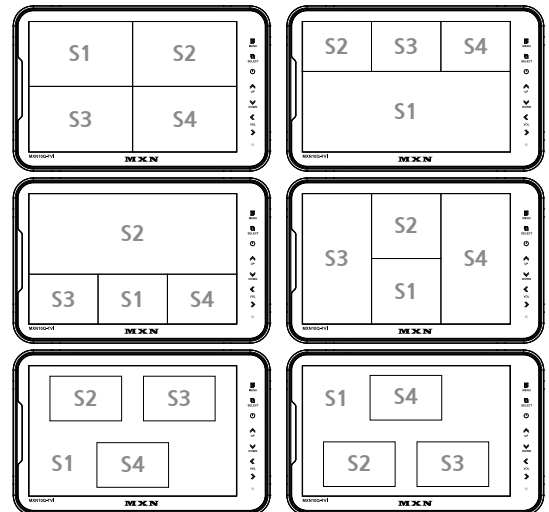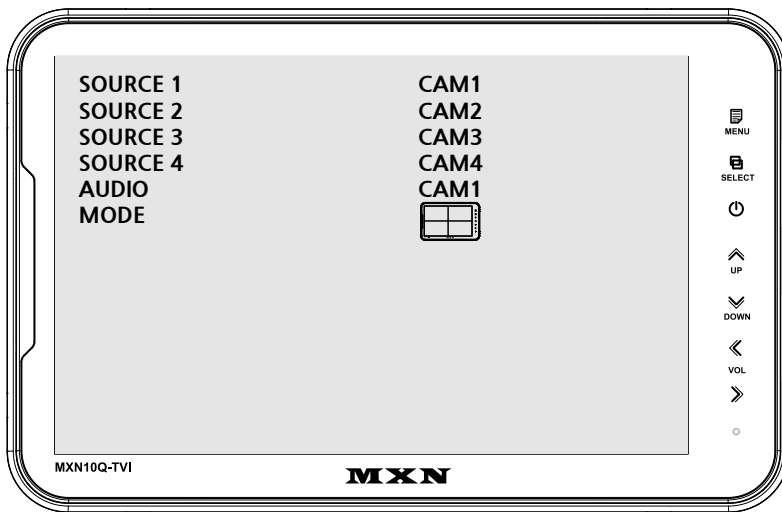then TRIGGERS 1 ~ 4 will overrule the『SPEED SWITCH』function.
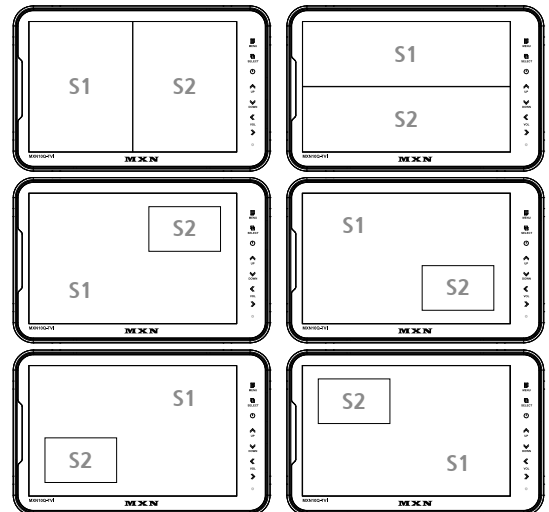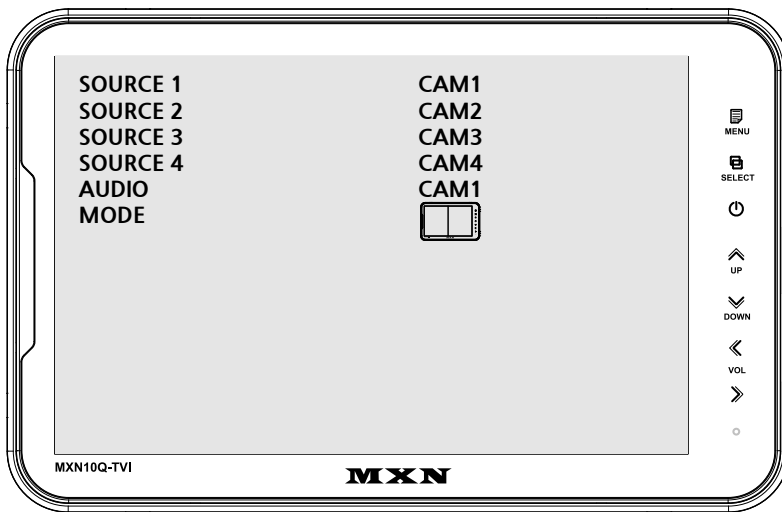
SPLIT configuration

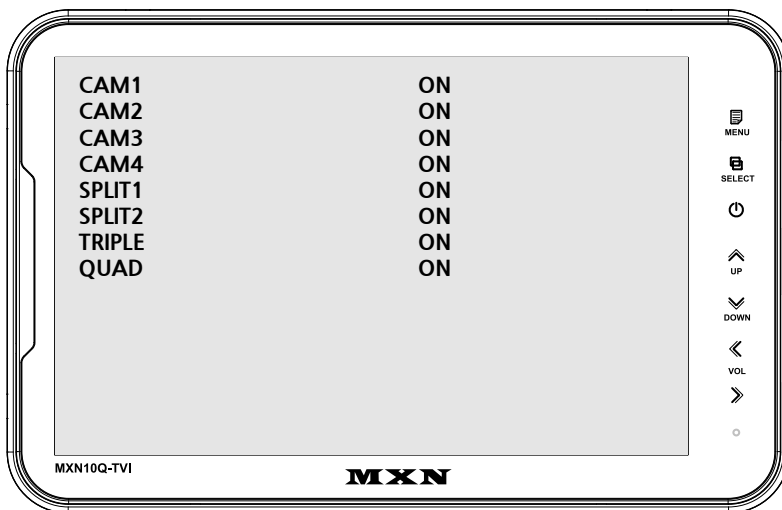|	
SOURCE 1	Select S1 Camera (CAM1~CAM4).
SOURCE 2	Select S2 Camera (CAM1~CAM4).
SOURCE 3	Select S3 Camera (CAM1~CAM4).
SOURCE 4	Select S4 Camera (CAM1~CAM4).
AUDIO	Select SPLIT of Audio (CAM1~CAM4).
MODE	Select SPLIT MODE
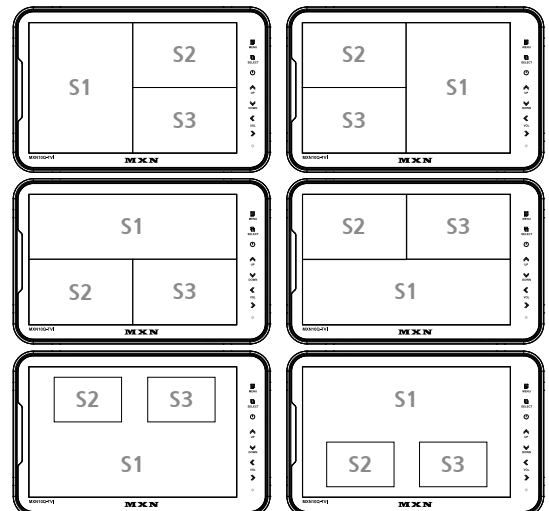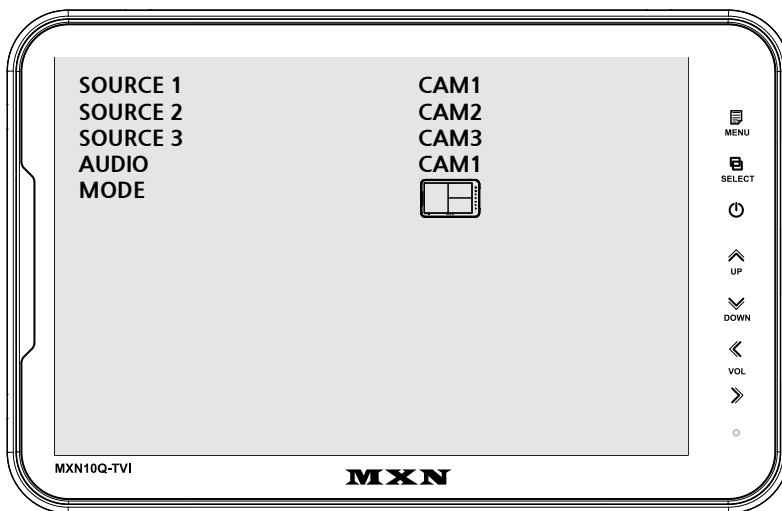
TRIPLE configuration

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

SOURCE 1   CAM1
SOURCE 2   CAM2
SOURCE 3   CAM3
SOURCE 4   CAM4
AUDIO   CAM1
MODE

MENU
SELECT
UP
DOWN
VOL

MXN10Q-TVI

| S1 | S2 |
| S3 | S4 |

| S2 | S3 | S4 |
| S1 | | |

| S2 | |
| S3 | S1 | S4 |

| | S2 | |
| S3 | S1 | S4 |

| S2 | S3 |
| S1 | S4 |

| S1 | S4 |
| S2 | S3 |

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

CAM1   ON
CAM2   ON
CAM3   ON
CAM4   ON
SPLIT1   ON
SPLIT2   ON
TRIPLE   ON
QUAD   ON

MENU
SELECT
UP
DOWN
VOL

MXN10Q-TVI

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 LOCK ON/OFF FUNCTION

LOCK ON/OFF FUNCTION

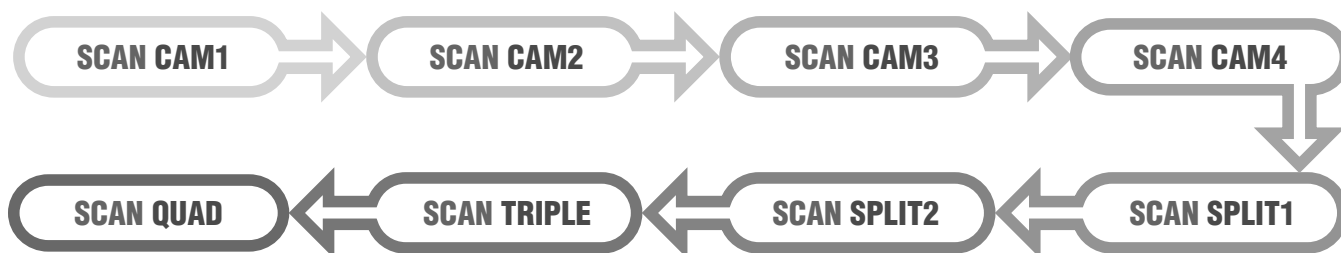The setup menu can be locked to ban any unauthorized users.

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.
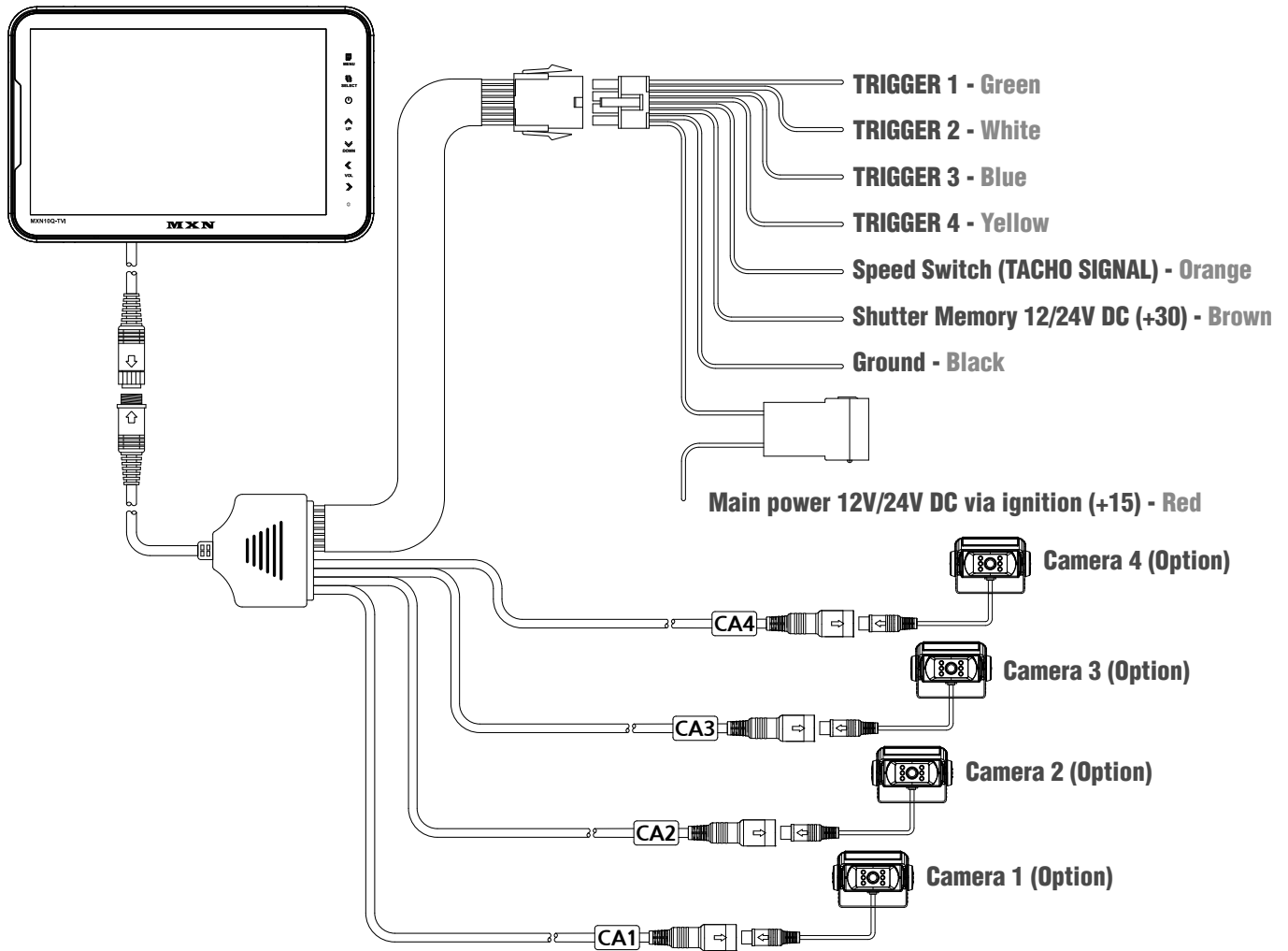
LOCK OFF mode

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.
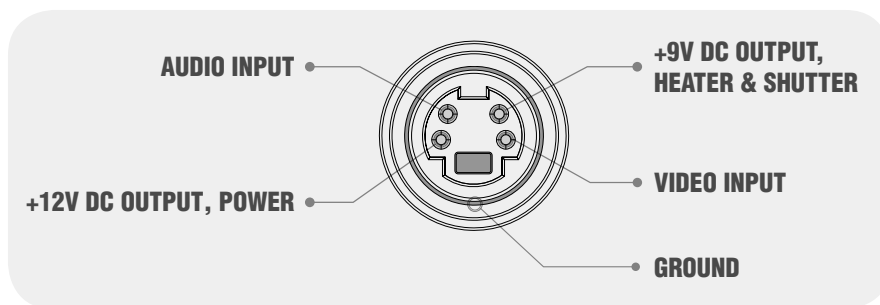
SCAN ON/OFF FUNCTION

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.

SCAN CAM1 → SCAN CAM2 → SCAN CAM3 → SCAN CAM4

SCAN QUAD ← SCAN TRIPLE ← SCAN SPLIT2 ← SCAN SPLIT1

CONNECTIONS

TRIGGER 1 - Green

TRIGGER 2 - White

TRIGGER 3 - Blue

TRIGGER 4 - Yellow

Speed Switch (TACHO SIGNAL) - Orange

Shutter Memory 12/24V DC (+30) - Brown

Ground - Black

Main power 12V/24V DC via ignition (+15) - Red

Camera 4 (Option)

CA4

Camera 3 (Option)

CA3

Camera 2 (Option)

CA2

Camera 1 (Option)

CA1

MXN10Q-TVI

CAMERA INPUT

AUDIO INPUT

+9V DC OUTPUT, HEATER & SHUTTER

+12V DC OUTPUT, POWER

VIDEO INPUT

GROUND

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 OPEN.

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.

MONITOR installation with Standard Heavy Duty Mount Bracket

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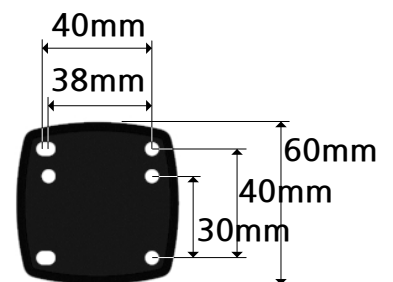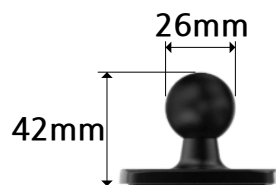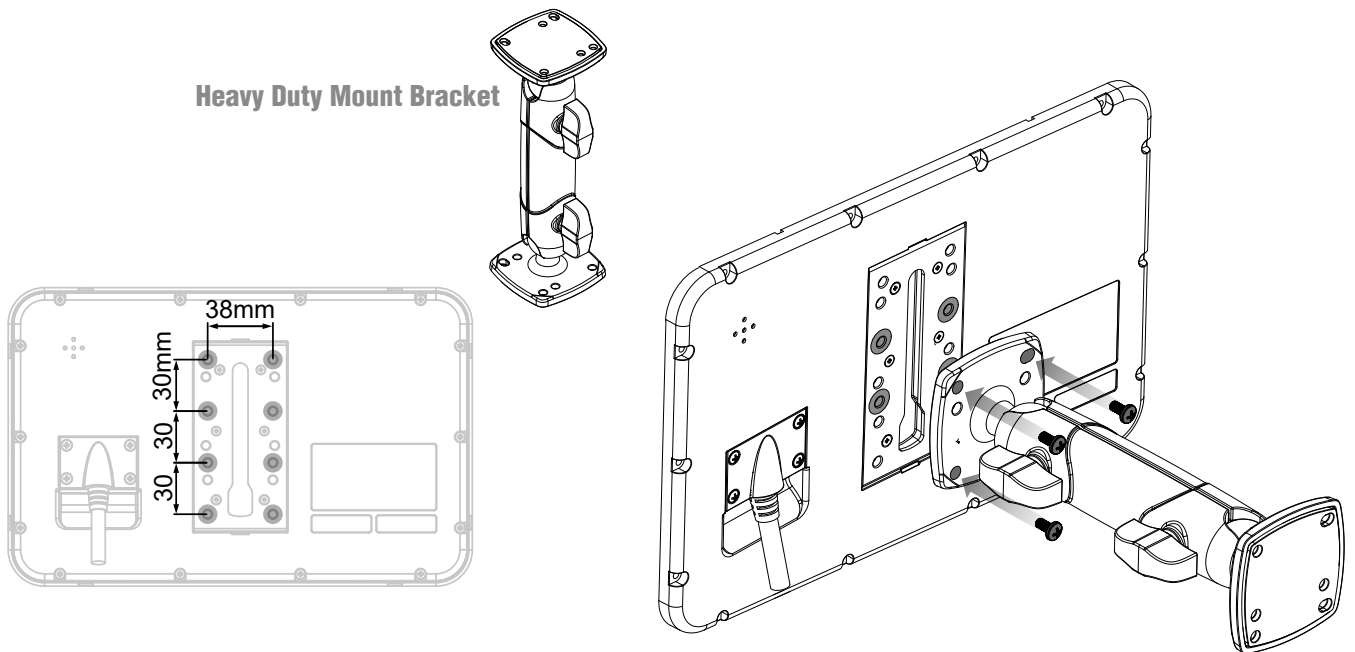Heavy Duty Mount Bracket's angle fixation can be adjusted by tightening knobs.

[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.

Heavy Duty Mount Bracket

38mm
30mm
30
30
30

184mm

26mm
42mm

40mm
38mm
60mm
40mm
30mm

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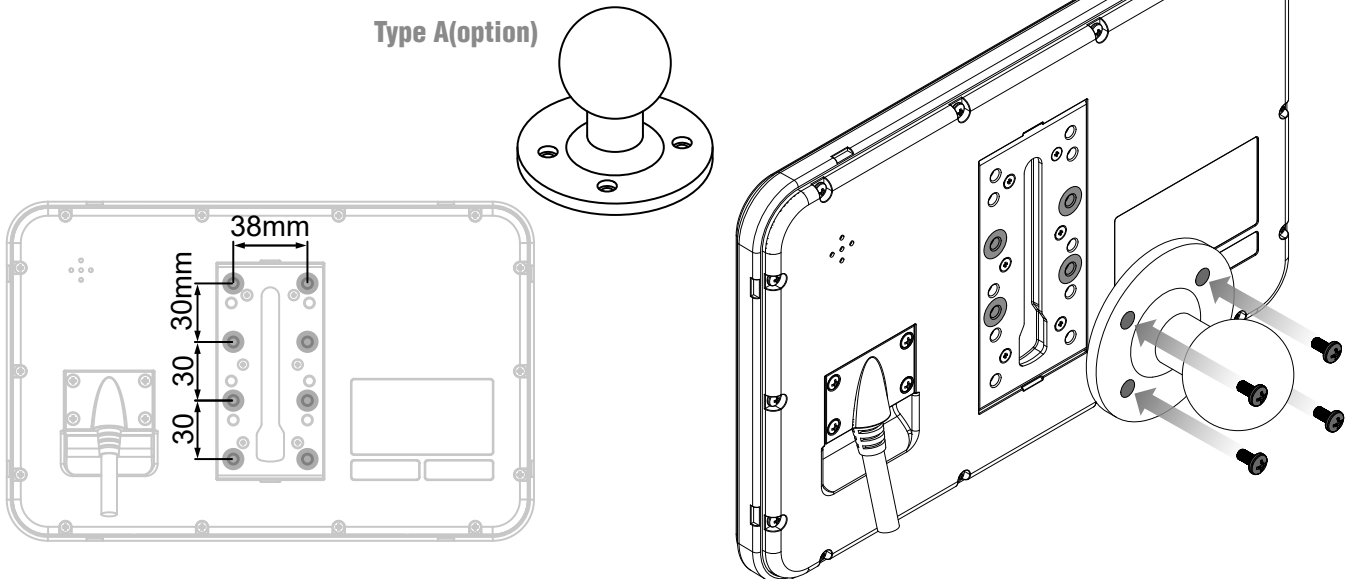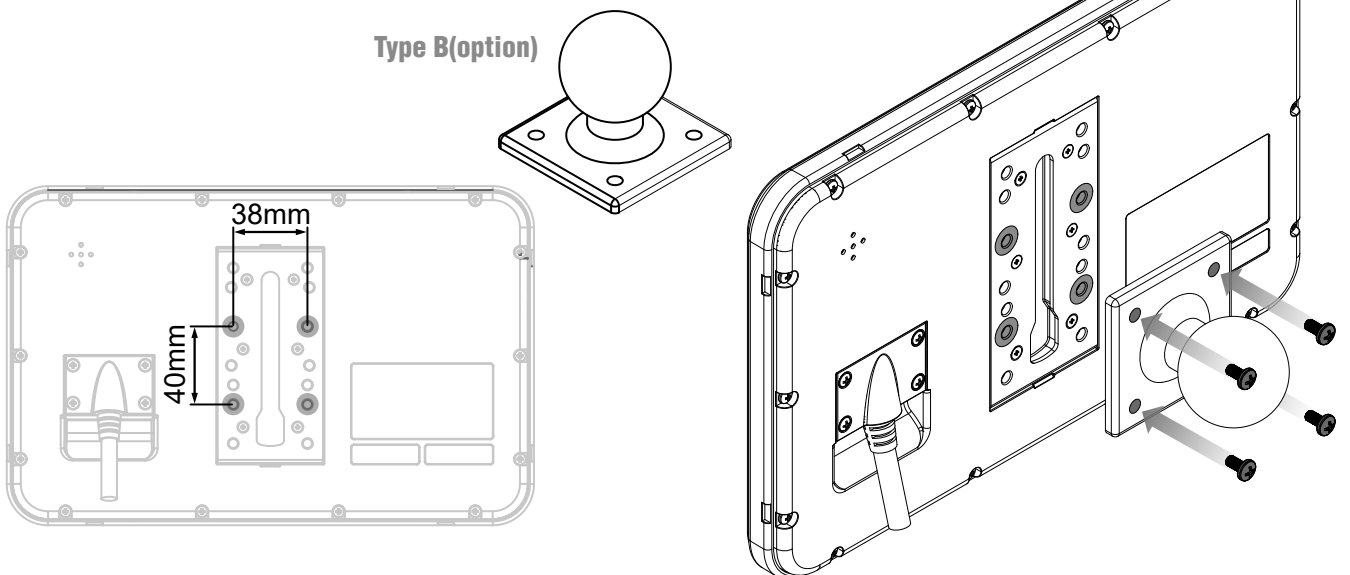
[NOTE]
- The screw type : Mount-screw type, M5 (diameter of 5mm).
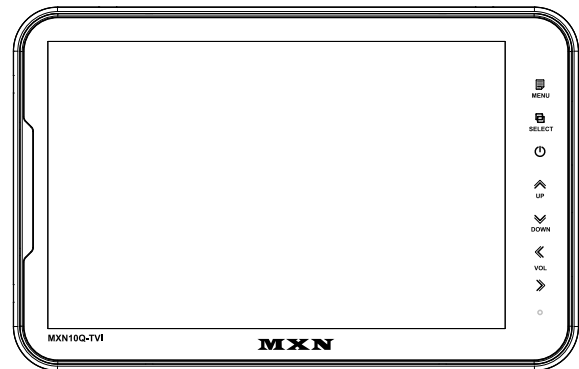- The length of screw : Max. 12mm.
- Screw thread : 0.8mm.

Please make it sure to use the proper screws in order to avoid any damage into the monitor.
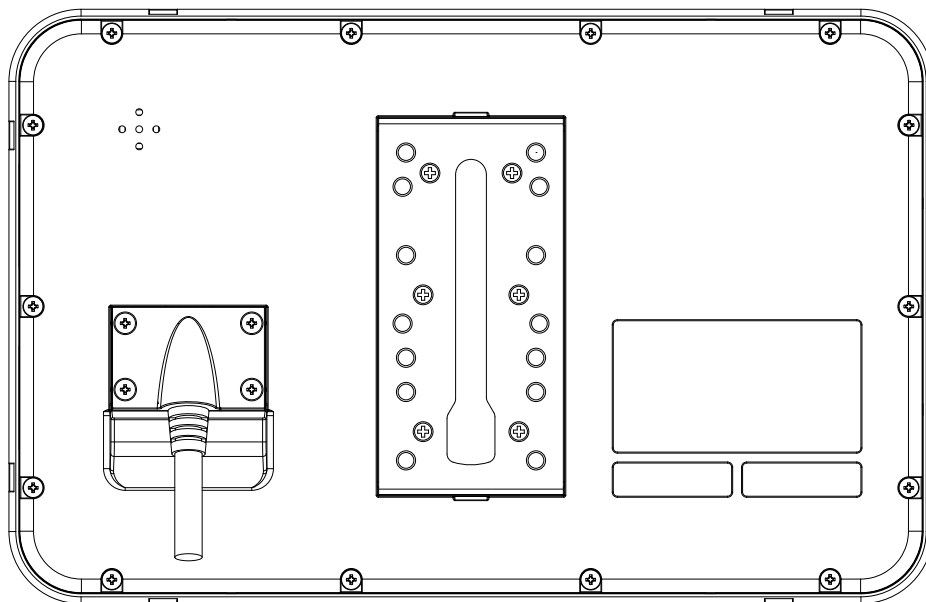
Type A(option)

38mm
30mm
30
30
30

Type B(option)

38mm
40mm

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 ■ 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 / Multi-cable-1 set
WEIGHT	± 850g (excluding bracket)

10.1" DIGITAL SPLITSCREEN LCD ALL ROUND VISION MONITOR

Model: MXN10Q-TVI

Design and specifications are subject to change without notice.