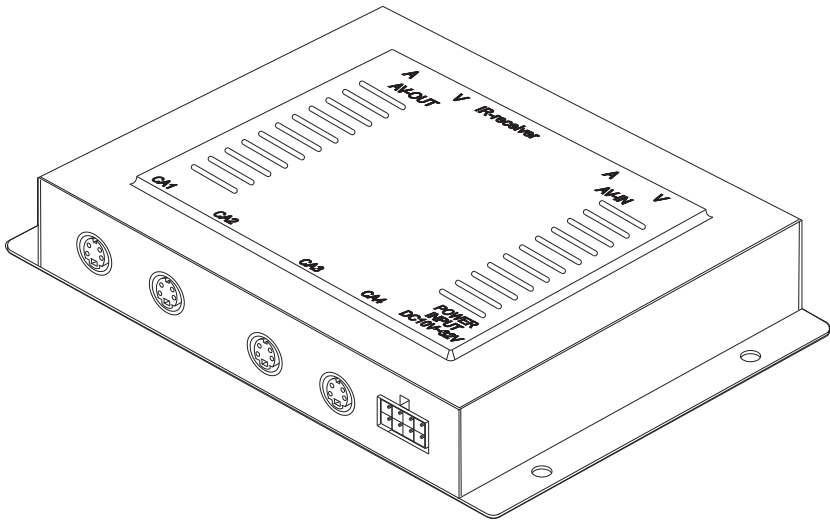


PLEASE READ CAREFULLY BEFORE USING AND KEEP WELL.

# MULTI CAMERA CONTROLLER FOR OBSERVATION MONITOR (MULTIPLE DISPLAY MODE)



Model: Q200

Design and Specifications are subject to change without notice.

# OWNER'S RECORD

The model and serial numbers are located at the rear. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your dealer regarding this product.

**Model No. Q200**

**Serial No. \_\_\_\_\_**

## WARNING

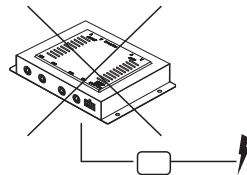
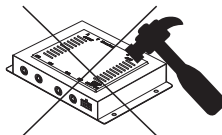
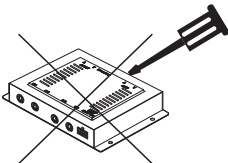
To avoid electric shock, do not open the cabinet. Refer servicing to qualified personnel only.



This symbol is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.



You are cautioned that any changes or modifications which is not expressed or approved in this manual could void your warranty and make this equipment not working.

## SUGGESTIONS

### **MULTI CAMERA CONTROLLER FOR OBSERVATION MONITOR (MULTIPLE DISPLAY MODE)**

#### **① Safety**

Use only DC 10V ~ DC 32V.

If liquid or dust leaks into the case, turn off power to the unit and consult an experienced technician before using.

#### **② Installation**

Do not install the unit in an extremely hot or humid place (radiator, air duct, etc.) or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock. If your vehicle has been parked in direct sun light resulting in a considerable rise in temperature inside the vehicle, allow the unit to cool off before operating.

#### **③ General cleaning information**

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

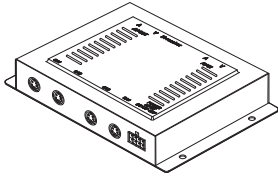
## FEATURES

**Q200 is designed to be compatible with most voyager observation monitors and cameras.**

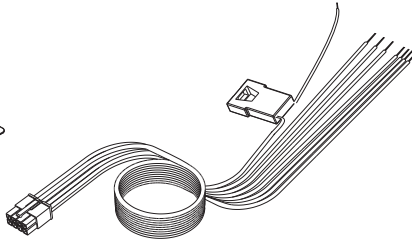
- DC10V ~ DC32V
- NTSC / PAL Standard signal
- 4 camera inputs / 1 AV Input / 1 AV Output
- Multiple display mode (SINGLE, SPLIT, TRIPLE, QUAD, PIP)
- Automatic picture display (5 Triggering Functions)
- Auto scanning function
- OSD

# PACKAGE CONTENTS

Please check that you have the correct contents before using this product. If any items are missing, please contact your dealer.



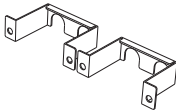
Q200  
CONTROL BOX



POWER CABLE



RCA CABLE



CABLE BRACKET  
(2EA)



T/H  
M4X15L  
STAINLESS  
BK (4EA)



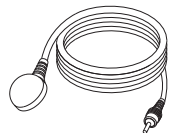
M3X6L  
W/SPRING  
FLATE WASHER,  
BK (4EA)



BATTERY



Remote Controller

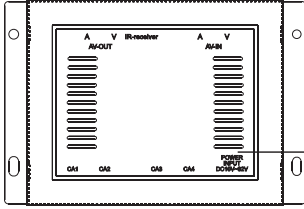


RX Module For  
Remote Controller



INSTRUCTION  
MANUAL

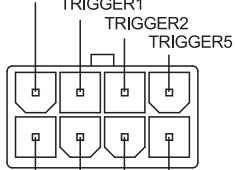
# INSTALLATION



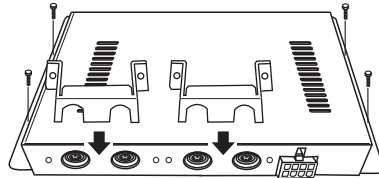
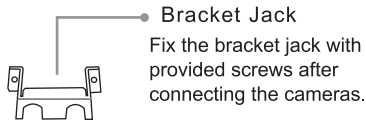
## POWER/TRIGGER WIRE FUNCTIONS

REF #	WIRE COLOR	DESCRIPTION
1	RED	Power IN DC 10V~32V via ignition key
2	BLACK	Ground
3	GREEN	Trigger 1 ( Power IN DC 6V~32V )
4	WHITE	Trigger 2 ( Power IN DC 6V~32V )
5	BLUE	Trigger 3 ( Power IN DC 6V~32V )
6	YELLOW	Trigger 4 ( Power IN DC 6V~32V )
7	BROWN	Trigger 5 ( Power IN DC 6V~32V )
8	ORANGE	Trigger OUT DC 12V OUTPUT : Max. 100mA to switch ON any monitor with Trigger Input

Power IN DC 10V~32V via ignition key (red)

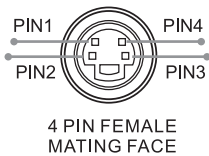
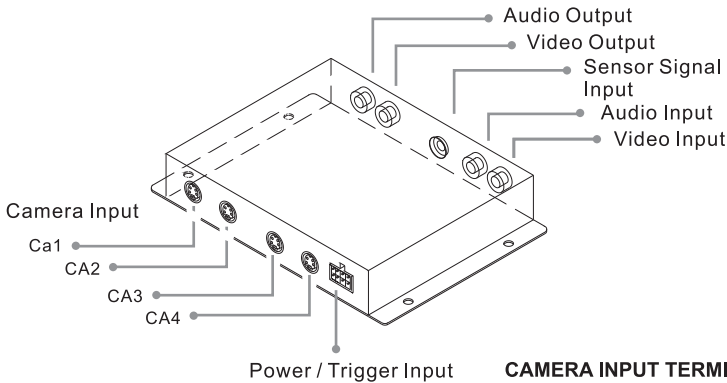


TRIGGER OUT (DC 12V OUTPUT : Max. 100mA to switch ON any monitor with Trigger Input (orange))



Mounting on the floor, console, etc.

- Install the control box on the place which can stand more weight than 5 Kg (11 lb)
- Fix the control box with the provided screws as the drawings below.

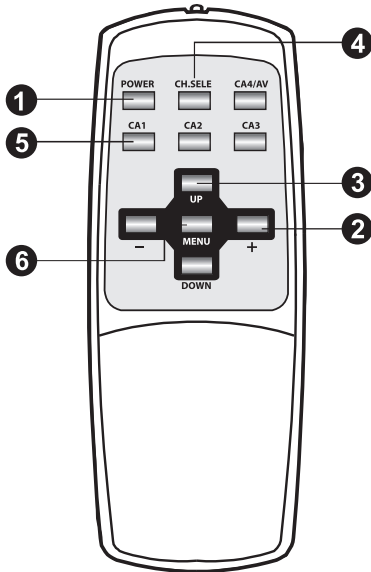


## CAMERA INPUT TERMINAL

PIN#	DESCRIPTION
1	AUDIO
2	B+
3	VIDEO
4	HEATER/SHUTTER FUNCTION(CA4 - N.C)
CASE	GND

# OPERATIONS

## Remote Controller



### 1 POWER button

Press POWER button to turn the control box on or off.

\* When the trigger signal is activated, the selected source's image will be displayed on the monitor screen automatically.  
( Please refer to TRIGGER MODE in MAIN MENU for further information )

### 2 - / + button

Press - / + button to adjust BRIGHT, CONTRAST, COLOR, TINT and setting values.  
Press - / + button to select the content of the selected line in each submenu.

### 3 UP / DOWN button

Press UP / DOWN button to adjust TILT (PAN) camera position upward or downward.

(Available only when TILT (PAN) camera is connected to CA1, CA2, or CA3 input)  
Press UP/ DOWN button to move the cursor up or down in MAIN MENU and each submenu..

### 4 CH.SELE button

Press CH.SELE button to select the display image.

Sequential press shows the image of each camera in turn below.

( CAM1 → CAM2 → CAM3 → CAM4 → AUX → SPLIT2 → SPLIT3 → SPLIT4)

\* OSD indicates which image is displayed on the screen.

Press CH.SELE button to select the items, in which the cursor is in menu.

Press CH.SELE button to start or stop scanning each display mode channel.

Available only when AUTO SCAN in menu is ON.

### 5 CA1,CA2,CA3,CA4/AV button

Press CA1, CA2 or CA3 button to select each camera.

Press CA4 / AV button to select CA4 and press again to select any AV device.

# OPERATIONS

## 6 MENU button

Use MENU button to enter Display Menu(Short key) and Main Menu(Long key).

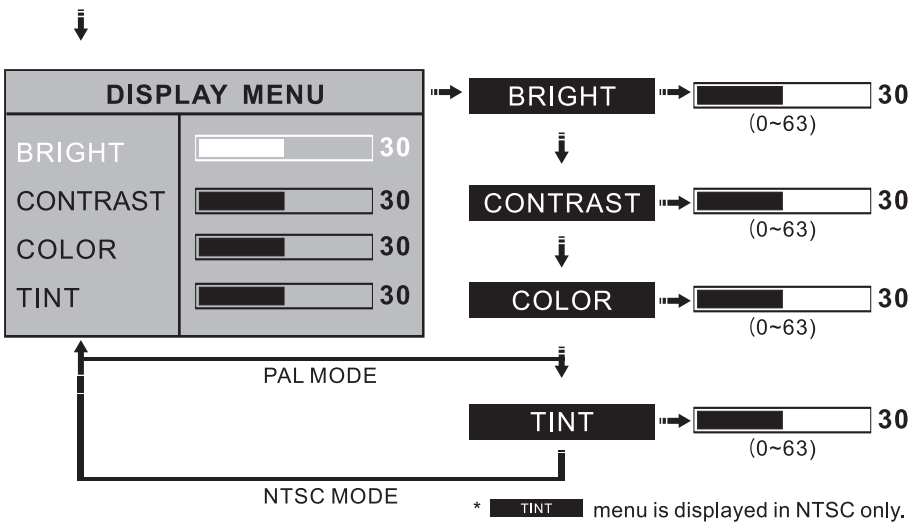
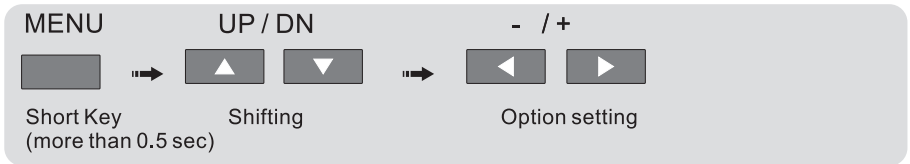
Press once to enter menu mode.

Press again to exit from menu mode.

Selectable OSD Menu Disappears within 10 sec if there's no new button pressed.

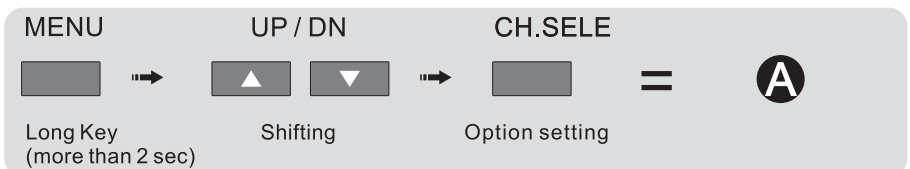
Press menu button over 2 sec to go back to main menu from submenu.

### 1. DISPLAY MENU

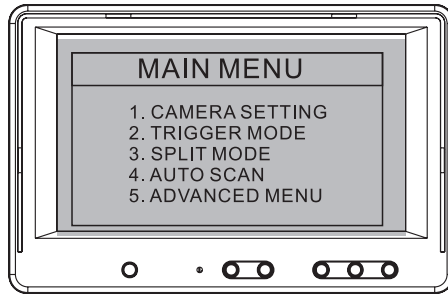


### 2. SET UP MENU

Press MENU button for a while (over 2 sec) to enter MAIN MENU. Selectable OSD MENU disappears within 12sec if there's no new button pressed.



# OPERATIONS



## 1 CAMERA SETTING

1. CAMERA SETTING	
CAM1	NOR/MIR: [MIRROR;NORMAL]
CAM2	UP/DOWN: [UP;DOWN]
CAM3	NAME: [CAM1 ]
CAM4	SORT: [NORMAL;SHUTTER;TILT.AT;TILT.MT]

**NOTE** 1. CAM4 is only available with NORMAL CAMERA.

2. Tilt.AT (Automatic Tilt): When trigger is activated, Tilt CAM automatically turns to downward(-40°). When trigger is off, Tilt CAM automatically turns to upward(0°).

3. Tilt.MT (Manual Tilt): When trigger is activated, Tilt cam turns to the last set position.

4. User can adjust tilt angle manually only in TILT.MT mode .

● NOR/MIR: [MIRROR;NORMAL]

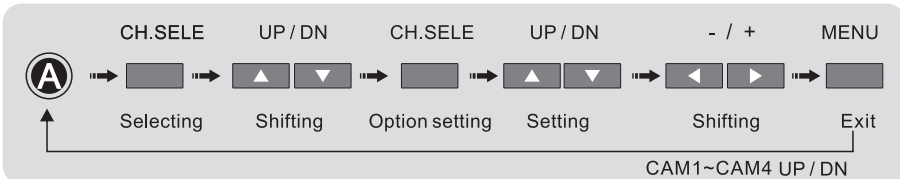
Each camera's Normal/Mirror view can be selected.

● UP/DOWN: [UP;DOWN]

Each camera's converted image can be selected (top and bottom).

● NAME: [CAM1 ]

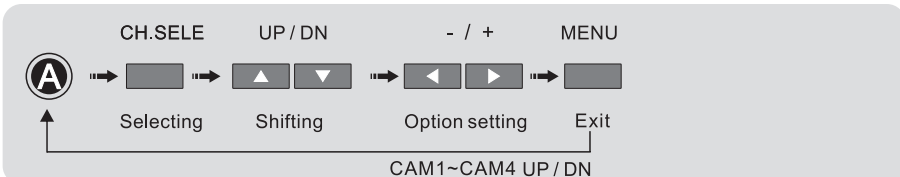
Camera name can be set



● SORT:[NORMAL;SHUTTER; TILT.AT;TILT.MT]

A sort of camera can be selected.

(NORMAL;SHUTTER;TILT.AT;TILT.MT).



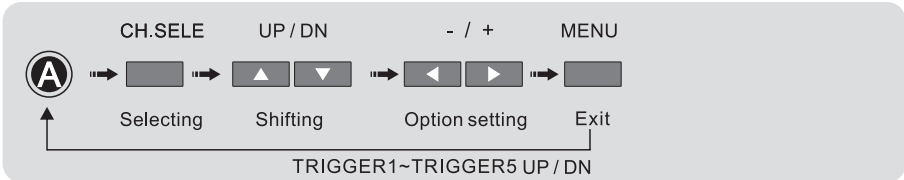


# OPERATIONS

## 2 TRIGGER MODE

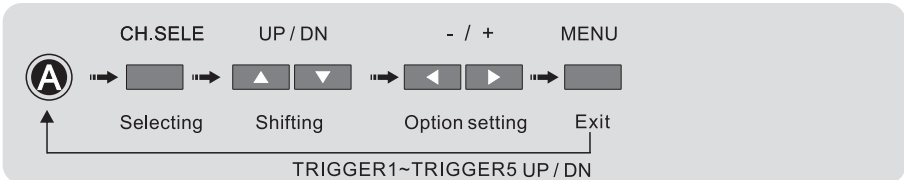
2. TRIGGER MODE	
TRIGGER1	SOURCE:
TRIGGER2	[CAM1~4;AUX1~2;
TRIGGER3	SPLIT1~3]
TRIGGER4	DELAY : [0~20sec]
TRIGGER5	SCALE : [ON;OFF]
	DISPLAY SCALE

- SOURCE: [CAM1~4;AUX1~2;SPLIT1~3]



1. User can use 5 triggers and each trigger source(CAM1~SPLIT3) can be selected.
2. When the trigger is activated, the selected source's image is displayed.

- DELAY: [0~20 sec]



1. Each trigger's delay time is adjustable from 0 sec to 20 sec.

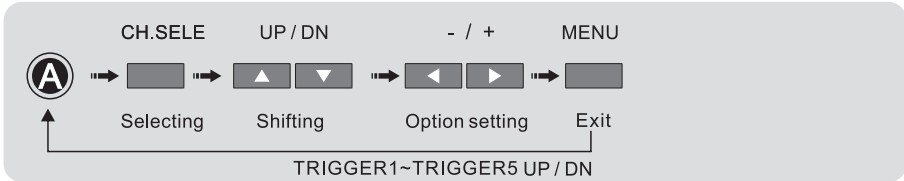
**NOTE** If one camera is activated by an intermittent signal ( e.g. from an indicator light's ) the delay must be activated to prevent the picture from flickering.

### CAUTION

1. Trigger out line(DC 12V:Max 100mA) can be used only for trigger out function.
2. It cannot be used for a main power to other devices.

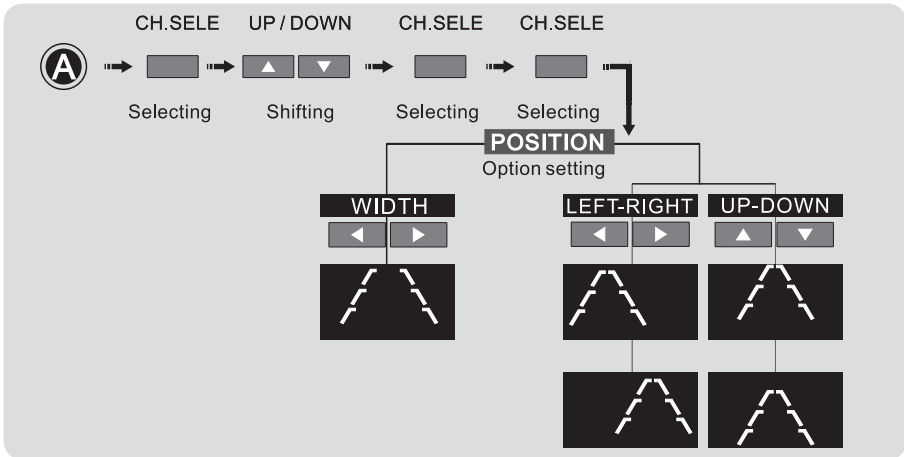
# OPERATIONS

- SCALE:[ON;OFF]



1. ON/OFF setting for distance marker when any trigger is engaged.

- DISPLAY SCALE



1. POSITION & WIDTH setting for distance marker when any trigger is engaged.

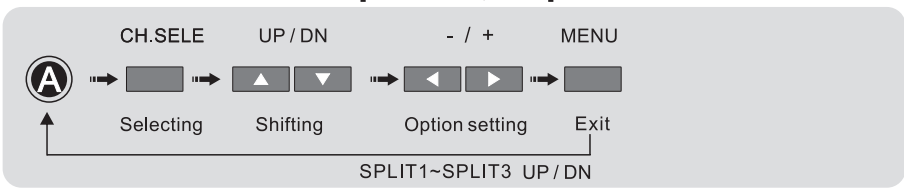
### ③ SPLIT MODE

3. SPLIT MODE	
SPLIT1	SOURCE1:[CAM1~4;OFF]
SPLIT2	SOURCE2:[CAM1~4;OFF]
SPLIT3	SOURCE3:[CAM1~4;OFF]
	SOURCE4:[CAM1~4;OFF]
	AUDIO:[CAM1~4;OFF]
	TYPE:
	[DEFAULT;CUSTOM]

1. Multiple display modes can be selected.

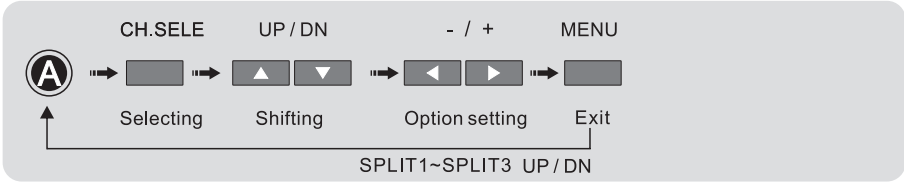
2. Full/Split/Triple/PIP/Quad

- SOURCE1~SOURCE4 : [CAM1~4;OFF]

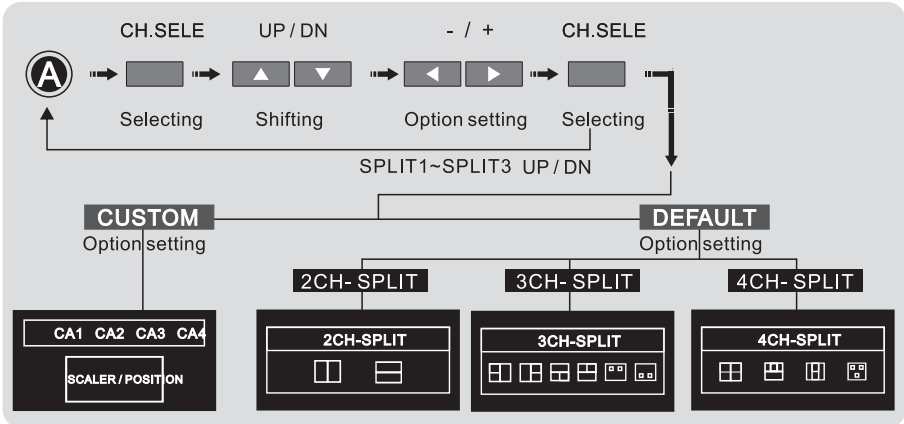


# OPERATIONS

- AUDIO : [CAM1~4;OFF]



- TYPE:[DEFAULT;CUSTOM]



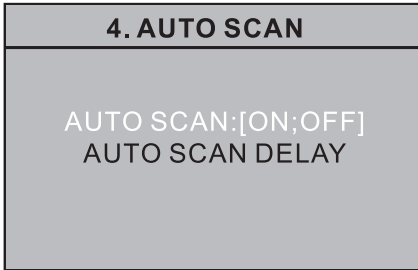
## CUSTOM

- CA1, CA2, CA3, CA4 / AV Button: Select camera which you want to change.
- CH.SELE Button : Select SCALER or POSITION.
- - / + Button : Change the size of SCALER'S right & left.  
Change the position of SCALER'S right & left
- UP / DOWN Button : Change the size of SCALER'S up & down.  
Change the position of SCALER'S up & down.

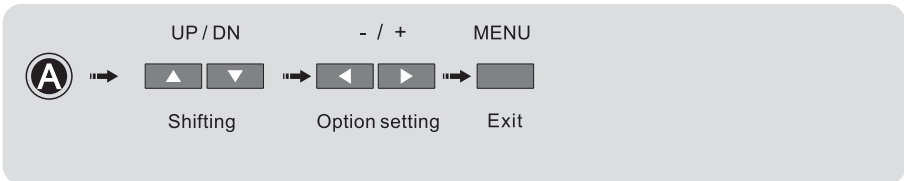
- NOTE** 1. Multiple Display modes is selectable according to the number of selected source.
2. If user select "OFF mode" for all the sources from split 1~3, the monitor skips split 1~3 while scanning monitor channel.
3. If user select only one source or all off mode, **TYPE** is not activated.

# OPERATIONS

## 4 AUTO SCAN

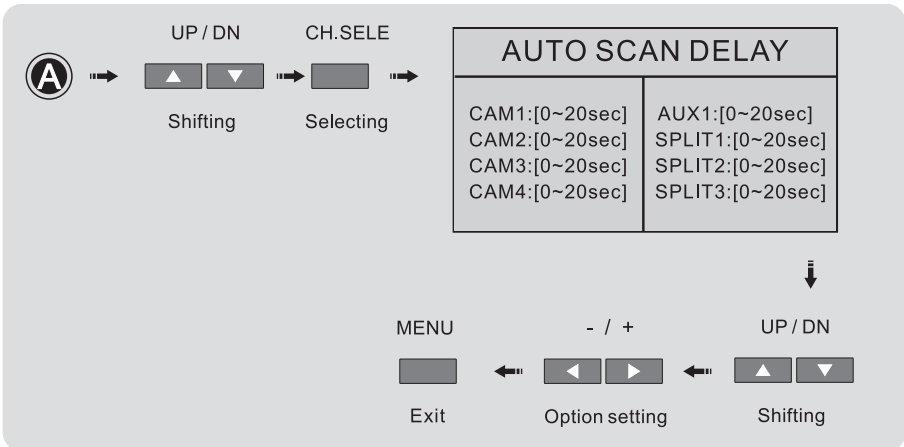


### ● AUTO SCAN:[ON;OFF]



1. ON/OFF setting for auto scan function.

### ● AUTO SCAN DELAY



- NOTE**
1. Auto scanning time of each camera can be adjusted from 0 sec to 20 sec.
  2. Auto scan delay time setting is only available with **SOURCE** .  
To give a pause while scanning, press **SOURCE** .
  3. When user select " 0 sec "for one channel, monitor skip scanning the channel.

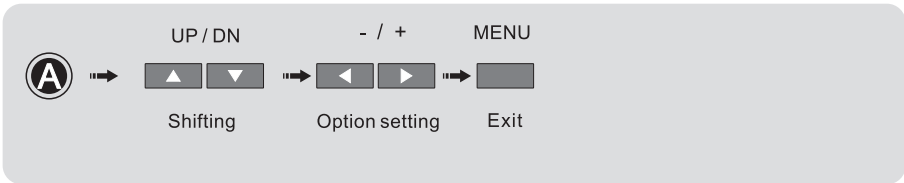
# OPERATIONS

## 5 ADVANCED MENU

**5. ADVANCED MENU**

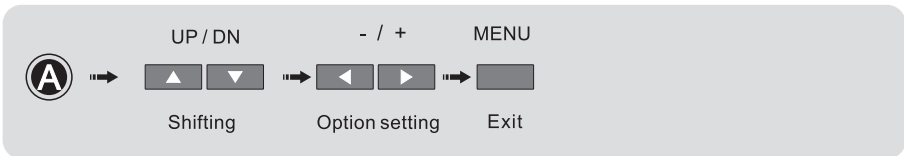
AUTO POWER:[ON;OFF;AUTO]  
12V OUT DURING:  
[ON MODE;TRIGGER IN ONLY]  
FACTORY RESET

### ● AUTO POWER:[ON;OFF;AUTO]



- NOTE**
1. Off Setting: Monitor keeps “Stand- by” mode regardless of the last mode before the ignition key off.
  2. On setting: Monitor will be turned on automatically when ignition key on regardless of the last mode of the monitor before the ignition key off.
  3. Auto Setting: Monitor keeps the last setting in memory: Monitor will start up “Power-on” mode or “Stand- by” mode according to its last mode before the ignition key off.

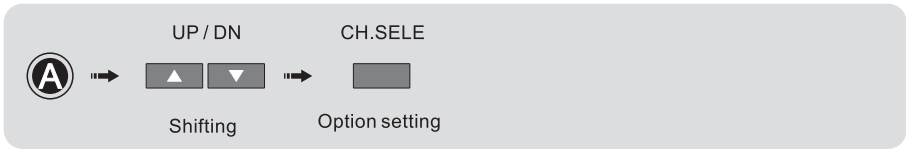
### ● 12V OUT DURING:[ON MODE;TRIGGER IN ONLY]




- NOTE**
- 1) **12V OUT DURING: ON MODE**  
12V DC OUT signal at orange wire when MXN201C is activated manually via the IR remote controller. (Green color LED ON)  
0V DC OUT signal at orange wire when MXN201C is in Standby mode. (Red color LED ON)
  - 2) **12V OUT DURING: TRIGGER IN ONLY**  
12V DC OUT signal at orange wire, only when MXN201C is activated (by 12/24V DC signal at Trigger 1 ~ 5).  
0V DC OUT signal at orange wire, when Trigger 1 ~ 5 are not activated.

# OPERATIONS

## ● FACTORY RESET



 **NOTE** Reset for factory setting.

# □ SPECIFICATIONS

## Model: Q200

Power Input	DC 10V~32V
Power Consumption	Max. 25Watt
Video System	NTSC / PAL compatible
Camera input(4CH)	Mini DIN 4, 1Vp-p 75Ω
A/V Output(1CH)	RCA, Composite Video Signal, 1Vp-p 75Ω RCA, Audio Signal, 150mV RMS, 47K
A/V Input(1CH)	RCA, Composite Video Signal, 1Vp-p 75Ω RCA, Audio Signal, 150mV RMS, 47K
Operating Temp.	-25°C ~ 75°C ( -13°F ~ 167°F )
Storage Temp.	-30°C ~ 85°C ( -22°F ~ 185°F )
Ambient Condition	Indoor use only
Vibration	5 G
Dimension	154(W) X 105(D) X 29(H) mm 6.1(W) X 4.1(D) X 1.1(H) inch
Weight	Approx. 500g
Supplied acc'y	Power Cord 2M (1) RCA Cable (1) Screws Kits (1) Bracket Jack (2) Remote Controller (1) RX Module For Remote Controller (1) Battery (1)



THIS SYMBOL MEANS DO NOT DISPOSE OF AS MUNICIPAL WASTE. RE-USE OR RECYCLE WHEREVER POSSIBLE. ELECTRICAL / ELECTRONIC COMPONENTS MAY CONTAIN SUBSTANCES WHICH ARE HARMFUL TO THE ENVIRONMENT. FOR ENVIRONMENTALLY SOUND METHODS OF DISPOSAL, PLEASE CONTACT YOUR LOCAL GOVERNMENT AUTHORITY.