



# VM22TSLCD

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## User's Manual

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## PRECAUTION



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of insulated dangerous Voltage within the product's enclosure that may be sufficient magnitude to constitute risk of electrical shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.



### Precautions

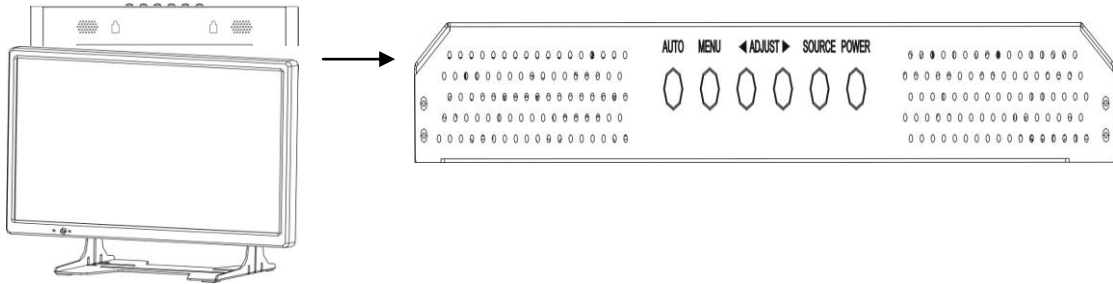
Before using this unit, please read these operating instructions carefully. Take special care to follow the warnings indicated on the unit itself as well as the safety suggestions listed below. Keep them handy for future reference.

1. **Power source** – The unit operates on DC12V 1A of power.
2. **Power cord protection** – AC power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Never take hold of the plug or cord if your hand is wet, and always grasp the plug body when connecting or disconnecting it.
3. **Water and Moisture** – Do not use this unit near the sources of water for moisture will damage the internal parts.
4. **Heat** – Do not install the unit near heat sources such as radiators, stoves, heat registers, or other appliances that produce heat.
5. **Ventilation** – The unit should be situated so that its location or position does not interfere with its proper ventilation.
6. **Foreign Material** – Extreme caution should be taken so that the objects do not fall into the unit.
7. **Surface** – Place the unit on a flat, level surface or the unit may fall causing serious damages to the unit.

8. **Damage Requiring Service** – The unit should be serviced by qualified service personnel when:
- The power cord or the plug has been damaged; or
  - Objects have fallen or liquid has been spilled into the unit; or the unit has been exposed to rain or water; or
  - The unit does not appear to operated normally or exhibits a marked change in performance; or
  - The unit has been dropped, or the enclosure damaged.
9. **Replacement Parts** – Use only manufacturer specified parts. Unauthorized substitutions may result in fire, electrical shock or other hazards.
10. **Service** – Should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to an authorized service personnel.

**Notification: This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: 1)This device may not cause harmful interference and 2) This device must accept any interference received, including interference that may cause undesired operation.**

## Touch Panel LCD: Key define



**AUTO:** Auto-optimize displaying picture under PC mode.

Enter: This “Auto” Button can be either “Enter” function in OSD Menu)

**MENU:** OSD menu ON / OFF control.  
(EXIT Item)

**ADJUST:** Increase or decrease the value on OSD menu.

▶ Up: Increase value or turn ON / OFF function.

◀ Down: Decrease value or turn ON / OFF function

**SOURCE:** Select input signal from AV1, AV2, S-Video or VGA (PC).

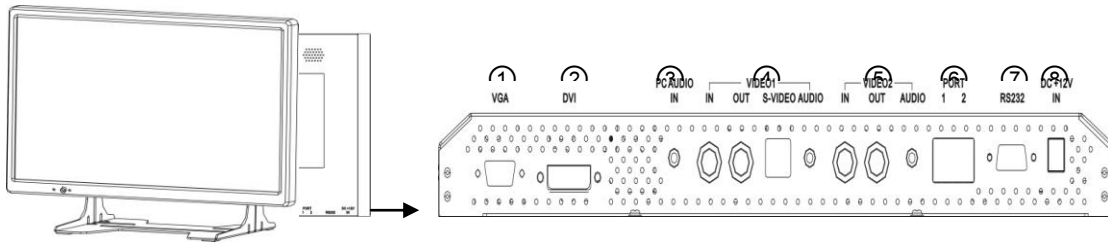
**POWER:** Monitor power ON / OFF. At OFF mode, monitor will be at standby status.

Green Light: ON Mode

Orange Light: Power Saving (Refer to note below)

Red Light: OFF Mode

## Touch Panel LCD: Connection define



1. **VGA input**

2. **DVI input**

3. **PC audio in**

4. **VIDEO1**

In: Video input

Out: Video loop output

S-VIDEO:Y/C input

Audio: Audio input

5. **VIDEO2**

In: Video input

Out: Video loop output

Audio: Audio input

6. **Port 1 / Port 2 (Touch setting)**

RS-485 connector

Single mode – PTZ to port 1 / DVR to port 2

Matrix mode – Matrix to port 2

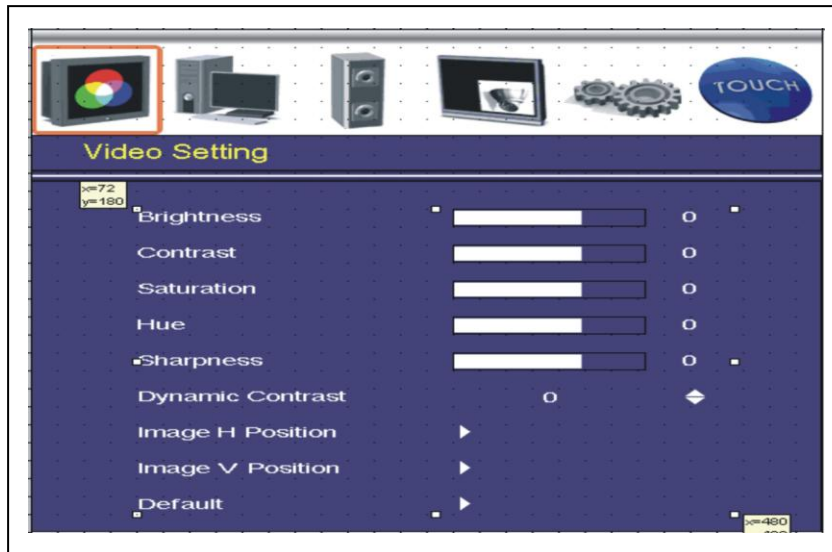
7. **RS-232**

PC control interface

8. **DC12V IN**

Power input

## Touch Panel LCD: OSD-Video Setting



**Brightness:** Adjusts the overall picture shade and brightness.

**Contrast:** Permits adjustment of contrast between light and dark areas of the picture.

**Saturation:** Adjusts the intensity of the color.

**Hue:** To determine the lightness and colorfulness of the picture.

**Sharpness:** Sets the desired sharpening enhancement to the picture.

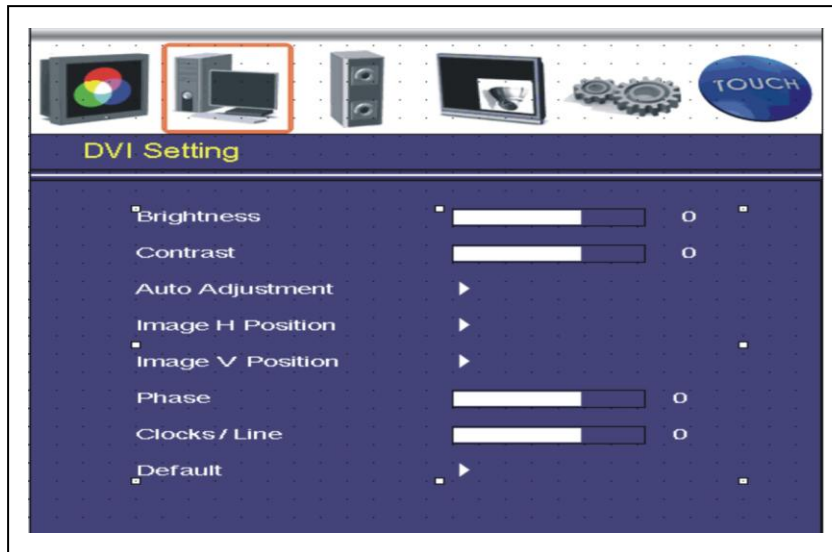
**Dynamic Contrast:** To determine the luminosity of motions of an object

**Image H Position:** Allows adjustment for horizontal position.

**Image V Position:** Allows adjustment for vertical position.

**Default:** Back to factory default

## Touch Panel LCD: OSD-DVI(VGA) Setting



**Brightness:** Adjusts the overall picture shade and brightness.

**Contrast:** Permits adjustment of contrast between light and dark areas of the picture.

**Auto Adjustment:** Picture adjustment automatic correction, like clock and phase.

**Image H Position:** Allows adjustment for horizontal position.

**Image V Position:** Allows adjustment for vertical position.

**Phase:** Is used to adjust best picture quality. It adjusts the sampling phase across one pixel time. When the phase is not adjusted properly, the picture will be unclear. Therefore this value should be carefully adjusted.

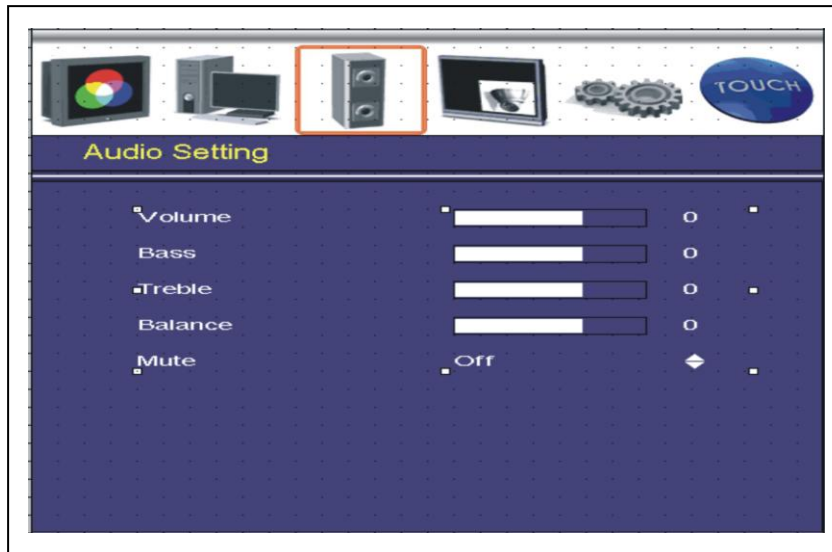
Note: improper adjustment will cause image failure.

**Clock / Line:** Is used to adjust best picture quality. It adjusts the numbers of the pixel clock across one line time. Therefore it can affect the picture position and size. Note: improper adjustment will caused image failure.

**Default:** Back to factory default



## Touch Panel LCD: OSD-Audio Setting



**Volume:** Controls built-in speakers' output volumes.

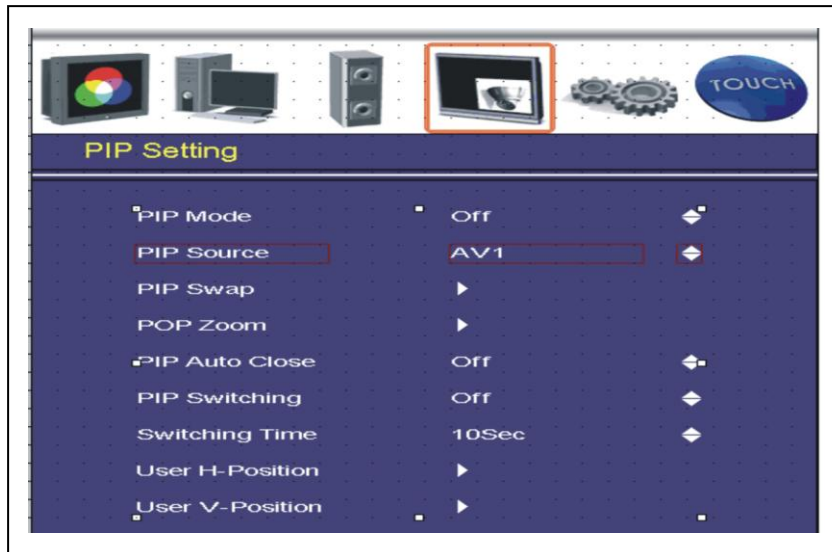
**Bass:** Adjusts the tone to low frequency part of the sound.

**Treble:** Adjust the high or acute of the sound.

**Balance:** Adjusts the softness of loudness of notes in the sound.

**Mute:** To disable the audio function. To enable, press MUTE again.

## Touch Panel LCD: OSD-PIP Setting



**PIP Mode:** This function allows the PIP mode to be selected.

**PIP Source:** This function allows the source of the PIP to be selected.

**PIP Swap:** This function allows the position of PIP to be exchanged.

**POP Zoom:** Only Operate under POP (Side By Side) mode.

**PIP Auto Close:** Detect PIP mode signal.

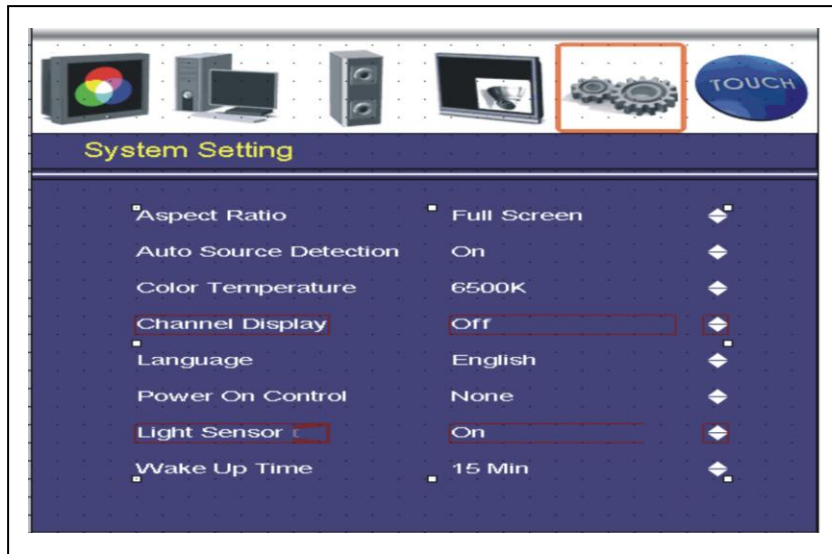
**PIP Switching:** Enable PIP source switching.

**Switching Time:** Control PIP source switching time.

**User H-Position:** Allows adjustment for horizontal position.

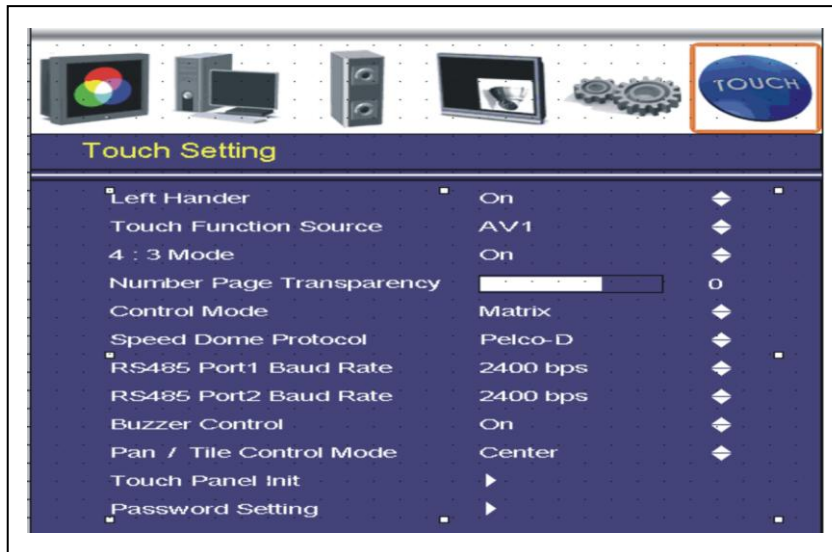
**User V-Position:** Allows adjustment for vertical position.

## Touch Panel LCD: System Setting



- Aspect Ratio:** To change the display mode.
- Auto Source Detection:** The monitor will auto detect the video source when power ON.
- Color Temperature:** Selects color temperature of either 6500°K or 9300°K.
- Channel Display:** This function is to allow the channel title to be displayed on the monitor.
- Language:** English.
- Power On Control:** This function is to assign a specific video signal when power on.
- Light Sensor:** LCD monitor brightness will vary with the environment brightness. LCD Brightness variation is from 3 lux to 0.5 lux(OFF)
- Wake Up Time:** When Light sensor set to ON, environment brightness is dark, at same time panel becomes to OFF  
Press front key as MENU / SOURCE / POWER to turn on monitor. During 15 / 45 / 60 minutes, the light sensor detection is temporarily off.

## Touch Panel LCD: OSD-Touch Setting



**Left Hander:** Left hander mode control. Set to ON, left hander / Set to OFF, right hander

**Touch Function Source:** Touch mode under AV1 / AV2 / AV1:AV2. Select AV1:AV2, user can touch the AV1 or AV 2 block icon to switch AV1 or AV2 source.

**4:3 Mode:** LCD display ratio always 4:3 and touch icon table is always on.

**Number Page Transparency:** 0 ~ 100

**Control Mode:** Single mode / Matrix mode select

**Speed Dome protocol:** Pelco-P / Pelco-D select. Depeands on

**RS485 Port1 Baud Rate:** 2400 / 4800 / 9600 select

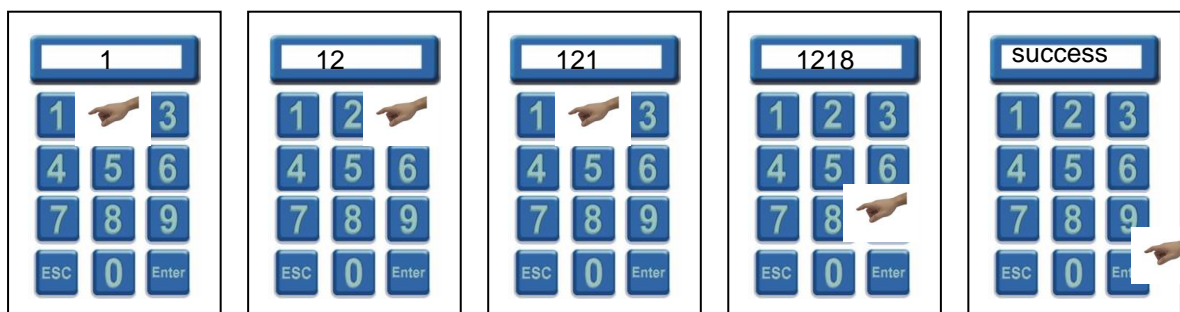
**RS485 Port2 Baud Rate:** 2400 / 4800 / 9600 select

**Buzzer Control:** Warning buzzer on / off select

**Pan / Tile Control Mode:** Center mode: the cross symbol is always on the middle of screen and it is the center point.  
Finger mode: when the hand touches the LCD in the beginning, that touch position is the center. The center position is released until finger left.

**Touch Panel Init:** Touch screen initial

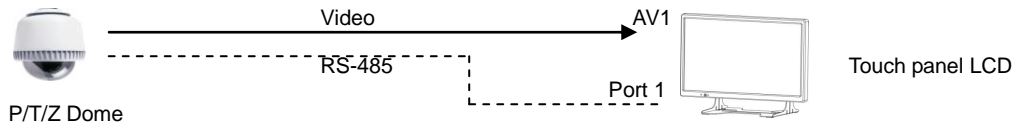
**Password setting:** Key lock password. All function key and panel can not operate. Touch the panel, touch 1/2/1/8(default password) button and touch Enter to unlock.



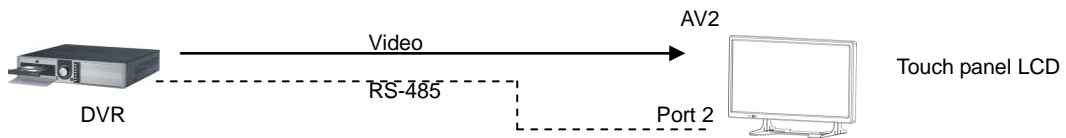
## Control mode

**SINGLE mode:** Only one control keyboard in the system. Single mode can be includes these systems below.

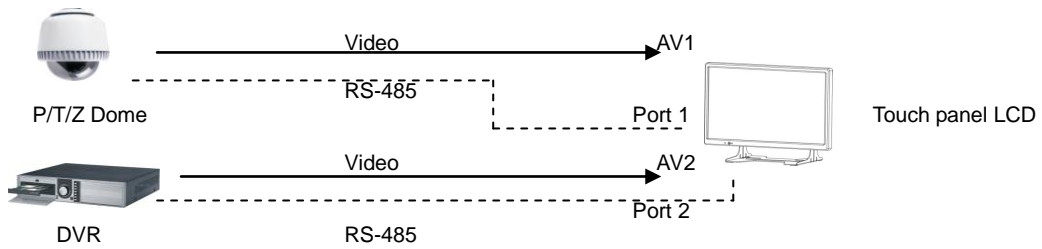
◆ System A:



◆ System B:

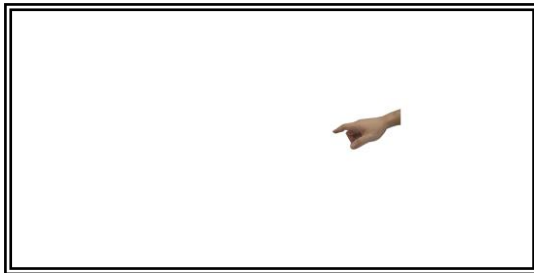


◆ System C:

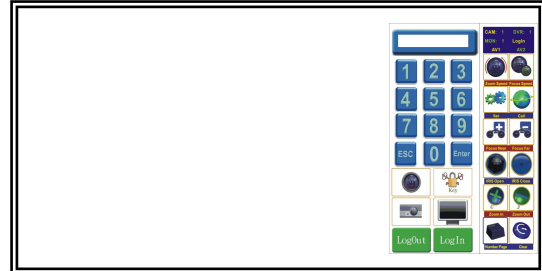
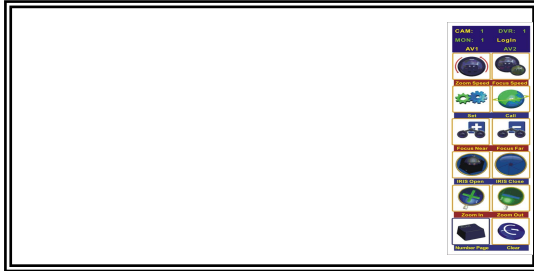
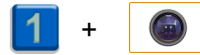


RS-485(RJ-11) pin define: 3 + / 4 -

## PTZ control mode - Single mode



1. Touch any position on the panel
2. Touch number page button into number table
3. Select PTZ(CAM) ID and call PTZ(CAM), ex:



## Main control

Touch Icon	Icon	Mode	Notice
	CAM: 000	Camera ID	Call camera ID status
	DVR: 000	DVR ID	Call DVR ID status
	MON: 000	Monitor ID	Call monitor ID status
	AV 1	Channel 1	Video 1 input source display
	AV 2	Channel 2	Video 2 input source display
	Zoom Speed	Speed control	1 ~ 4 + Zoom Speed
	Focus Speed	Speed control	1 ~ 4 + Focus Speed
	Set	ID + Set	Set the PTZ preset
	Call	ID + Call	Call the PTZ preset
	Focus Near	Manual Focus Near	Only manual mode
	Focus Far	Manual Focus Far	Only manual mode
	IRIS Open	Manual IRIS Open	Only manual mode
	IRIS Close	Manual IRIS Close	Only manual mode
	Zoom In	Lens Zoom in	PTZ camera zoom in
	Zoom Out	Lens Zoom Out	PTZ camera zoom out
	Number Page	ID table	Device and ID table
Clear	Clear preset	Presets clear	

**PTZ control with number table**

Touch Icon	Icon	Mode	Notice
	CAM: 000	Camera ID	Call camera ID status
	DVR: 000	DVR ID	Call DVR ID status
	MON: 000	Monitor ID	Call monitor ID status
	AV 1	Channel 1	Video 1 input source display
	AV 2	Channel 2	Video 2 input source display
	0 ~ 9	ID(number)	ID + Set / ID + Call ID + Clear
	ESC	Cancel	ID cancel
	Enter	Confirm	ID confirm
		Call PTZ / Camera	ID +
		Key lock protection	Touch key button count to 3 seconds to key lock mode
		Call DVR	ID +
		Call Monitor	Only Matrix mode ID + Single mode with
	LogOut	Log out	Only Matrix mode
	LogIn	Log in	Only Matrix mode

**Notice:**

**The touch and key lock table would disappear after 10 seconds if no any operation.**

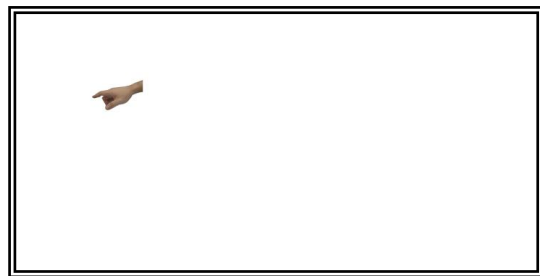
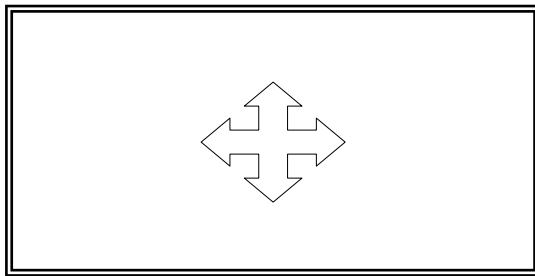
**PTZ Preset Function ID corresponding table**


Preset ID	ID + Call	ID + Set count to 3 seconds
33	180 degree rotating	
34	Speed dome return to zero	
76	Start auto pan	
92		Set line scan left stop
93		Set line scan right stop
95		Speed dome OSD Menu
96	Stop line scan	
99	Start line scan	

**Pan / Tile Control Mode: Center / Finger.**


Center mode: the cross symbol is always on the middle of screen and it is the center point


Finger mode: when the hand touches the LCD in the beginning, that touch position is the center. The center position is released until finger left.




Preset ID +  Set button (count to 3 seconds) = Set Preset Function


Preset ID +  Call button = Call Preset Function

Preset ID +  Clear button to delete preset one by one

Touch the  Clear button (count to 3 seconds) to delete all presets

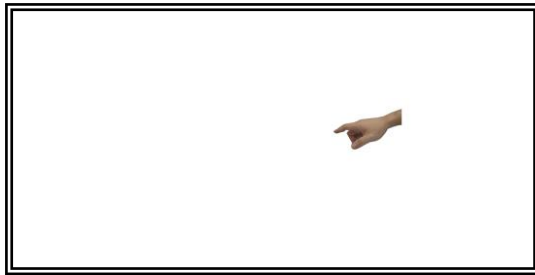
Touch the panel to move item or change value when PTZ OSD on

Touch the  IRIS Open button into main or sub menu

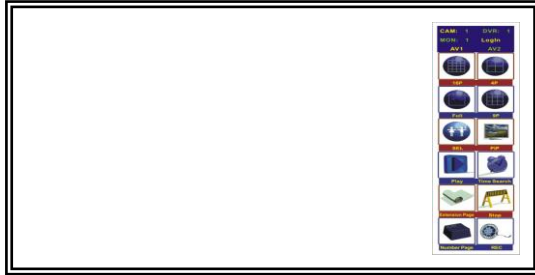
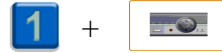
Touch the panel to move item to EXIT and then touch the  IRIS Open button to quit OSD











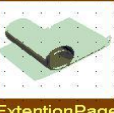



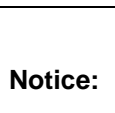

## DVR control mode - Single mode



1. Touch any position on the panel
2. Touch number page button into number table
3. Select DVR ID and call DVR, ex:



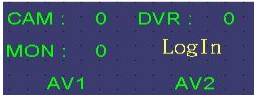
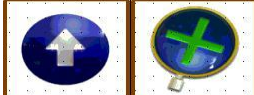

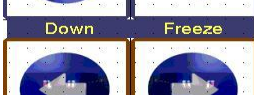



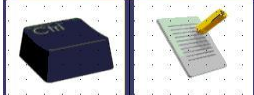
## Main control - Normal page

Touch Table	Icon	Mode	Notice
CAM : 0 DVR : 0 MON : 0 LogIn AV1 AV2	CAM: 000	Camera ID	Call camera ID status
	DVR: 000	DVR ID	Call DVR ID status
	MON: 000	Monitor ID	Call monitor ID status
 	AV 1	Channel 1	Video 1 input source display
	AV 2	Channel 2	Video 2 input source display
 	Sequence	Channel Sequence	DVR Channel Sequence function
	Zoom/Enter	Digital zoom / Enter	DVR image x2 zoom / Enter fun.
 	Ch. Sel	Channel Selection	DVR Channel Selection
	Freeze	Image freeze	DVR image freeze
 	Search	Time search page	DVR time search mode
	Dome Ctrl	DVR Dome Control	DVR Dome Control mode
 	Play/Stop	Playback start/stop	DVR Playback start/stop mode
	Mode	4/9/16 split switch	DVR monitor out on 4/9/16 split
 	Extension Page	Second page	DVR sub function control
	ESC	Escape Menu fun.	DVR Menu escape function
 	Number Page	ID table	Device and ID table
	Key Lock	DVR Key Lock	DVR Command Key Lock mode

### Notice:

The touch and key lock table would disappear after 10 seconds if no any operation.

## Extension page

Touch Icon	Icon	Mode	Notice
	CAM: 000	Camera ID	Call camera ID status
	DVR: 000	DVR ID	Call DVR ID status
	MON: 000	Monitor ID	Call monitor ID status
	AV 1	Channel 1	Video 1 input source display
	AV 2	Channel 2	Video 2 input source display
	Up	Direction button	DVR OSD item select
	Zoom/Enter	Digital zoom / Enter	DVR image x2 zoom / Enter fun.
	Down	Direction button	DVR OSD item select
	Freeze	Image freeze	DVR image freeze
	Left	Direction button	DVR OSD item select
	Right	Direction button	DVR OSD item select
	FF	Fast Forward	1~32X speed set of FF function
	REW	Rewind	1~32X speed set of REW function
	Normal Page	First page	DVR main function control
	ESC	Escape Menu fun.	DVR Menu escape function
	Number Page	ID table	Device and ID table
	Menu	Call menu	Call/quit DVR OSD

### Notice:

The touch and key lock table would disappear after 10 seconds if no any operation.

### DVR control with number table

Touch Icon	Icon	Mode	Notice
	CAM: 000	Camera ID	Call camera ID status
	DVR: 000	DVR ID	Call DVR ID status
	MON: 000	Monitor ID	Call monitor ID status
	AV 1	Channel 1	Video 1 input source display
	AV 2	Channel 2	Video 2 input source display
	0 ~ 9	ID(number)	ID + Full button to DVR full screen
	ESC	Cancel	ID cancel
	Enter	Confirm	ID confirm
		Call PTZ / Camera	ID +
			Key lock protection
		Call DVR	ID +
		Call Monitor	Only Matrix mode ID + Single mode with
LogOut		Log out	Only Matrix mode
LogIn		Log in	Only Matrix mode

**Notice:**

The touch and key lock table would disappear after 10 seconds if no any operation.

