Warranty Information

This one-year limited warranty is given to the end-user or the retail purchaser (referred to this warranty as "Original Purchaser") that it will be free from defects in material and workmanship for a period of one year from the date of the purchase of the new product (excluding accessory items such as power cords, cradle, memory card, adaptor, and cables).

This limited warranty does not cover any physical damage to, or misuse of, this product, damage caused by improper installation; improper use; misuse; neglect; repair of cracked, scratched, broken or modified cosmetics; or parts that have been altered or removed; damages done by another device used with this product resulting from use of non-BOYO®-brand parts. This warranty is VOID if you purchased this product as used, floor model sample, or refurbished; if the product has been altered or modified in any way (including but not limited to attempted repair without authorization from BOYO®- Vision Tech America, Inc. and/or alteration/removal of the serial number).

For warranty information, visit: https://www.visiontechamerica.com/get-warranty

BOYO® User's Manual

VTM7012FHD/VTM9003FHD



Please read the instruction manual completely before use and retain it for future reference

For technical support:

Call: (888) 941-3060 Email: <u>info@visiontechamerica.com</u> Visit: www.VisionTechAmerica.com

Feature	VTM7012FHD	VTM9003FHD
Size	7" HD LCD	9" HD LCD
Resolution	1024 x 600	
Aspect Ratio	16:9 wide screen	
Video Inputs	3 (Ch1, Ch2, Ch3)	
Audio Inputs	2 (Ch1, Ch2)	
Display Triggers	3 (Ch1, Ch2, Ch3)	
Video Signal	1080P AHD/720P AHD/CVBS - Auto Switch	
Video System	PAL / NTSC - Auto Switch	
Speaker	Built-in	
Mirror Image	Selectable for each channel	
Parking Guidelines	Selectable for each channel	
Trigger Delay	Configurable	
Screen Flip	Horizontal / Vertical Flip	
Auto Dimming		Yes
Remote Control	Included	
Max. Current	< 500mA @ 12VDC	
Operating Power	12 ~ 24 VDC	

Before Installation

- Please check contents.
- Perform bench test. Ensure the product is working before installation by connecting the monitor and the camera to 12VDC.
- Perform pre-install test, before mounting the monitor and the camera. In very rare instances, a running engine causes interference.
- All issues should be resolved. So, when the monitor and the cameras are mounted, wires are run and the power is turned on, and a problem is encounter, it will be easy to troubleshoot the problem.

System Setting

2		LISE
44	AUTO DIM	ON
~	UPSIDE DOWN	OFF
37	CH1 MIRROR	OFF
×.	CH2 MIRROR	OFF
	CH3 MIRROR	OFF
0	VCOMDC	20

1) LANGUAGE

English is the default. Japanese, Korean, Russian, and Chinese are available.

2) AUTO DIM

VTM9003FHD feature. When turned on, the screen brightness dims under low ambient light.

3) UPSIDE DOWN

Vertical display flip on or off

4) MIRROR

Horizontal display flip on or off. Used when a normal camera is used as a backup camera. When a 'normal' camera is directed toward rear, an object on the front-right side of the camera will show on the right side of the display screen. Turn the mirror 'ON' to display the object on the left side of the screen, like mirror.

5) VCOMDC

When too much backlight come through the LCD, the black screen with no image will look grey, not black. Decrease the value. It controls amount backlight passes through LCD.

VOLUME Setting



1) VOLUME Adjust speaker volume

Image Setting



- 1) BRIGHTNESS, CONTRAST, SATURATION Control display brightness and color
- 2) RESET

Reset the system to factory default

3) VERSION

The system version number

General Setting

P	GENERAL SETT	LI MIG
	CHILL CHILLDES	
	CH2 GUIDES	OFF
	CH3 GUIDES	OFF
	CH1 DELAY	OFF
×	CH2 DELAY	OFF
	CH3 DELAY	OFF
•		

1) GUIDELINES

Turn on or off the parking assist guidelines. Normally used with the backup camera.

2) DELAY

Off or set between 1~10seconds. The delay setting determines the number of seconds the video channel will stay on after trigger line goes off. If the system is set off, then the monitor will return to the previous state immediately once the trigger is turned off. If delay is set 2s, then the monitor will return to the previous state 2s later after finished reversing.

Contents



Wiring



1	Black	14-PIN	power cable connector	
2	Black	4-PIN male	AV CH1 Input	AHD 1080P, AHD 720P, or CVBS
3	Black	4-PIN male	AV CH2 Input	AHD 1080P, AHD 720P, or CVBS
4	Black	4-PIN male	V CH3 Input	AHD 1080P, AHD 720P, or CVBS
5	Black	Wire	GND	
6	Red	Wire	ACC	DC 12-24V positive pole
	Yellow	Wire	Battery	DC 12-24V positive pole
7	Brown	Wire	CH1 Trigger	DC 12-24V positive pole
8	Green	Wire	CH2 Trigger	DC 12-24V positive pole
9	Blue	Wire	CH3 Trigger	DC 12-24V positive pole

A trigger wire is normally connected to a backup light, the left turn signal, and the right turn signal. When a trigger wire becomes hot, it will display the video input channel associated with the trigger.

Buttons & Sensors



		Default	Menu Mode
1	▼☆		Down: move down in the menu setting
2	MENU	Enter OSD Menu Mode	Next OSD Menu Item
3	₩▲		Up: move up in menu setting
4		Power: short press to turn on or off	
5	CH 1	Display Channel 1	Decrease Value
6	CH 2	Display Channel 2	Increase Value
$\overline{\mathcal{O}}$	СН 3	Display Channel 3	
8		Remote control sensor	
9		Dimmer sensor	
10		Bracket knob	

Remote Control



- O Power key: short press to turn on or off
- VIDEO key: CH1, CH2, CH3 video channel switching, to move up in menu setting
- Right key: increase volume, increase analog value in the menu setting
- MENU key: menu
- Left key: decrease volume, decrease analog value in the menu setting
- MODE key: image mode switching, to move down in menu setting

Operations: Using the Buttons

Default Mode

	Press Button
To turn the display on or off	
To display channel 1	СН 1
To display channel 2	CH 2
To display channel 3	СН 3

OSD Setting Mode

Press 🔤 (menu) to enter the OSD setting mode.

Repeated pressing of "MENU" button will cycle through

- Image Setting
- General Setting
- System Setting
- Volume Setting

To change the values:

- 1. Press 🔤 (MENU) button to get to the right settings
- 2. Press 🚾 (down) or 🔤 (up) button to select the rows
- Press I (decrease) or I (increase) to "decrease" or "increase" value or to turn "on" or "off"
- 4. Press 🔤 (MENU) button to save new settings