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Model: VT-BP3

360 Degrees
Birdview Rear Camera

Installation and Owner's Manual

4D panoramic reversing assist system, through a single large wideview angle camera mounted behind the car, Collect images from the rear of the vehicle during the reversing and perform image distortion correction through "Image Distortion Restoration and Docking Technology" -> Perspective-> image stitching -> image enhancement and other processing, and finally form a 4D panorama. Reference information through real car model, the driver can easily identify the vehicle position, obstacle distance, surrounding environment and other factors to achieve fast and Safe reversing

BEFORE using this reversing system, please read the safety information provided in this user manual.
ALWAYS use the product as outlined in this user manual.

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Please check all the components listed below are in the kit

Part A

1 x Control module
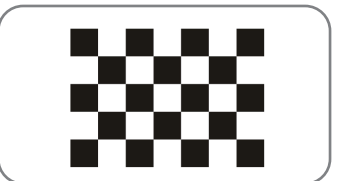
Part B

1 x Camera

Part C

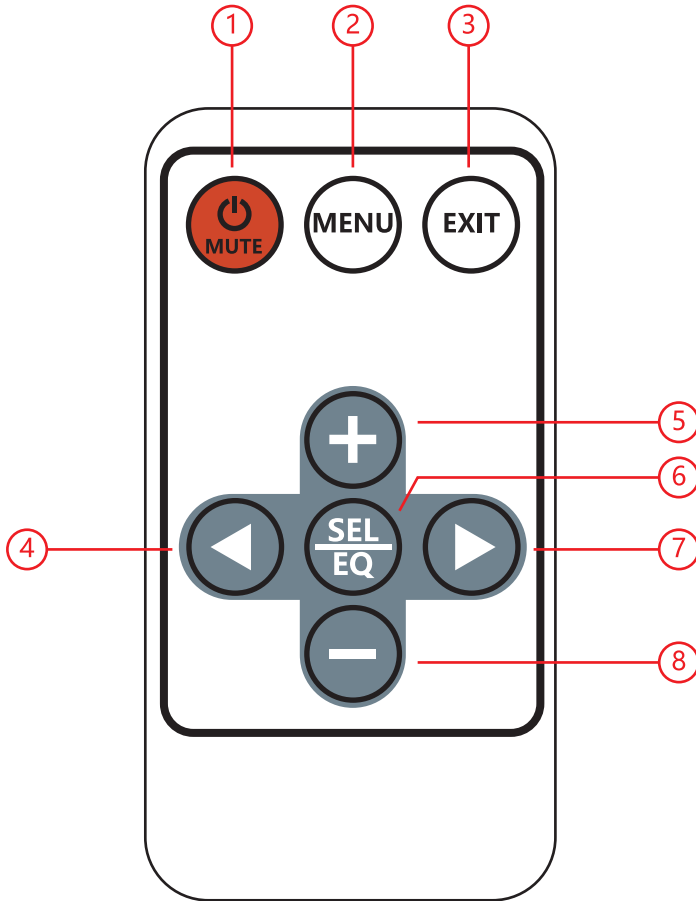1 x Remote controller

Part D

2 x Main cables

Part E

1 x License plate bracket

Part F

1 x Calibration cloth

Product Accessories

1.Reserved	2.Menu	3.Exit	4.Left
5.UP	6.OK	7.Right	8.Down

1 888 941 3060

Chipset	CPU-CortexA7,Dual-core,GPU -Mali400MP2
Storage	Nand Flash
High speed memory	DDR3
Calibration operation	Infrared remote control
Camera supply voltage	System control output:+5V/500mA
Signal format	AHD
Input detection signal	Reverse input detection
Output control	Control reverse output
Signal output format	CVBS
Operating temperature	-20℃ ~ +70℃
Storage temperature	-40℃ ~ +85℃
Storage relative humidity	0% ~ 90%
System operating voltage	+12V
Working maximum current	50mA,peak current＜1A
PCBA size	70.0 x 100.0 x 0.06(in)

1.Installation Position

Reversing camera suggested position: Above edge of the car license plate, make sure that the camera is not in the way of the key switch of the truck.

2.Attentions

1）Install the camera in a position where there is no object blocking the front view. Secure it to avoid any vibration.

2)Choose flat ground with good light as alignment site to place calibration cloth.

Specification:size 14.4ft*3.9ft black and white squares size 7.8in*7.8in edge 3.9in

1.Put the calibration cloth on the back of the car, Calibrate the centerline of the cloth to align the vertical centerline of the car, the left and right sides are parallel to the rear wheel. (refer to picture below)

2.Put the edge of calibration cloth parallel to the edge of car trail, and keep 5.9 inch distance (as below picture), make sure the camera can observe the edge of the car calibration cloth

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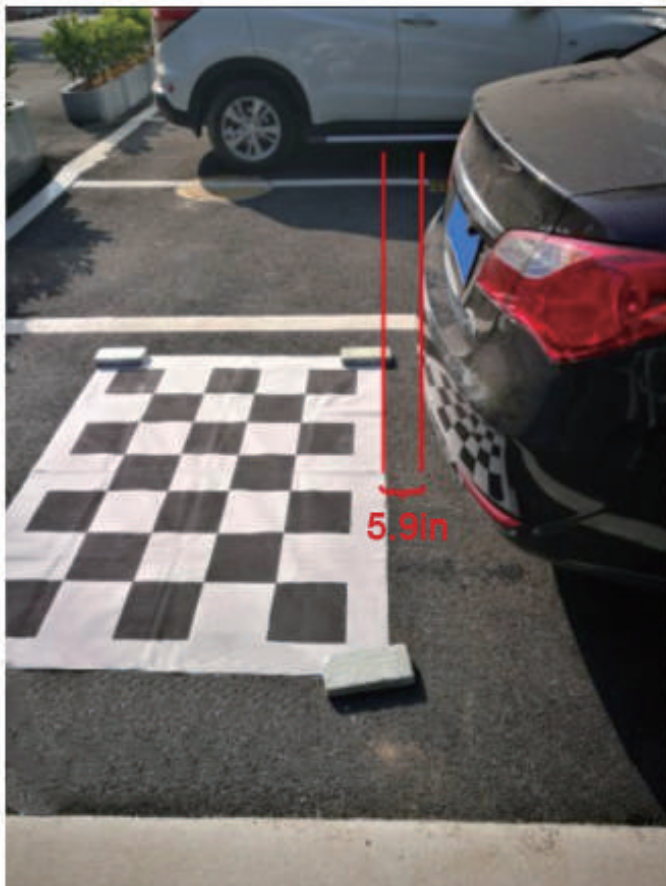
1.Enter calibration settings
First entry: When the software interface is not displayed, you can enter the software calibration interface setting by long pressing the remote control to set the red button.

2、 Camera calibration
After the calibration cloth is placed as shown above, when the video on the right side of the screen is almost the same as the effect image, the edge of the black and white grid of the calibration cloth corresponds to the disappearing position, click the software to start the calibration button.

After the calibration has started, the software performs the calibration function, and the video interface displays the calibration, then wait for the calibration to be completed.

Calibration status:
Calibration successful: When the interface prompts calibration is complete, go to the next calibration setting via the remote control.

Calibration failed: When the interface prompts that the calibration fails, please adjust the calibration cloth according to the corresponding position and click again to start calibration. Reason for failure:

Reason for failure
1) The floor is not flat enough and no enough light
2) There is an item above the black and white grid of the calibration cloth to block the identification of the calibration cloth.
3) The black and white grid of the calibration cloth is not clear enough with much folds.

The following figure is the effect of the camera centered installation. When not centered, the effect is slightly different and is not affected.
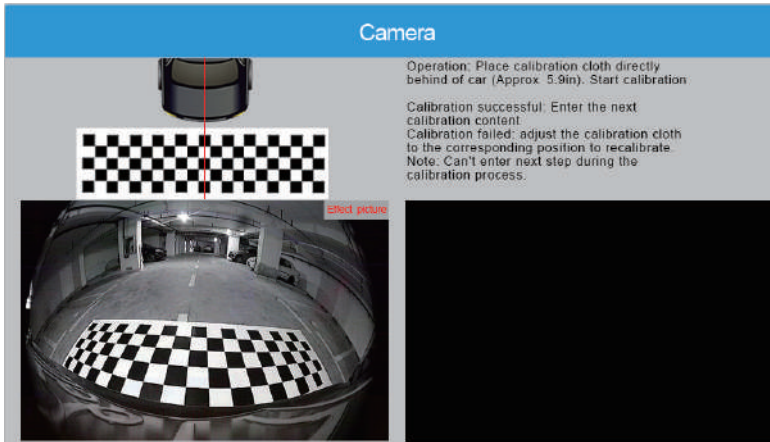
3.Image offset calibration
When the camera position is not centered, the calibration cloth position needs to be adjusted in the actual video screen on the right. Adjust the position of the calibration cloth in the video by the up, down, left and right buttons, to adjust the position of the calibration cloth in the centre of the video image.
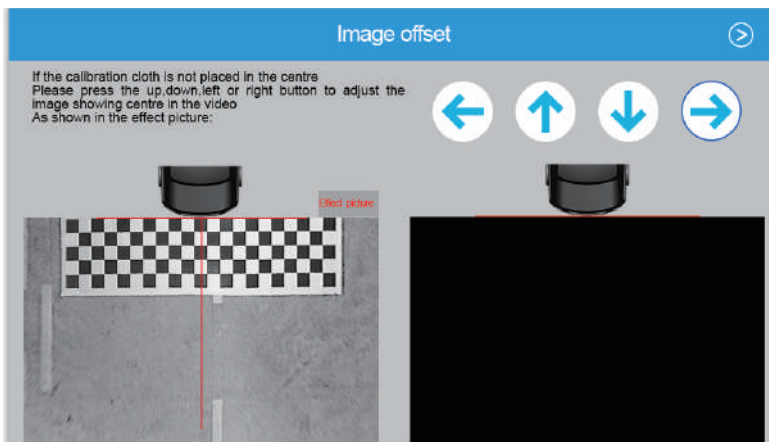
4、Car parameters calibration
Please modify the following car properties according to the actual model and parameters.
Body width range 55~ 98 in
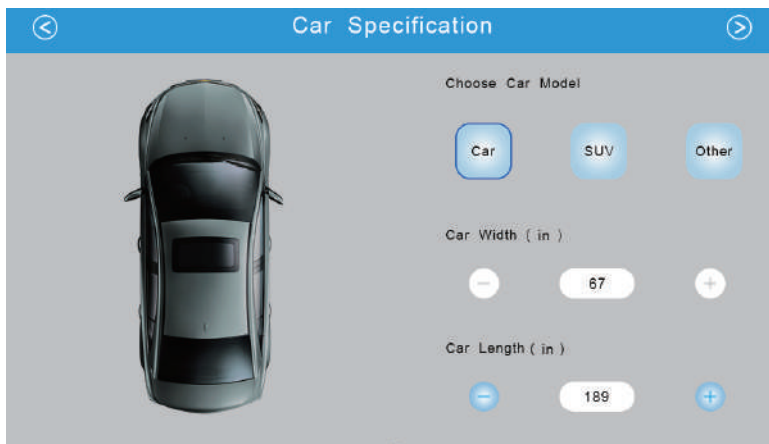Car default 67in
SUV default 70.9in
Other default 82.7in
Body length range is 126.0~216.5in
Car default 189.0in
SUV default 196.9in
Other default 196.9in

5、Image parameter calibration
The camera screen can adjust the brightness, contrast, and saturation range from 0 to 100. Default 50
Please adjust the corresponding parameters according to the actual screen effect (the default effect of the parameters is the best, non-image color sensitive people, it is recommended to use the default value)
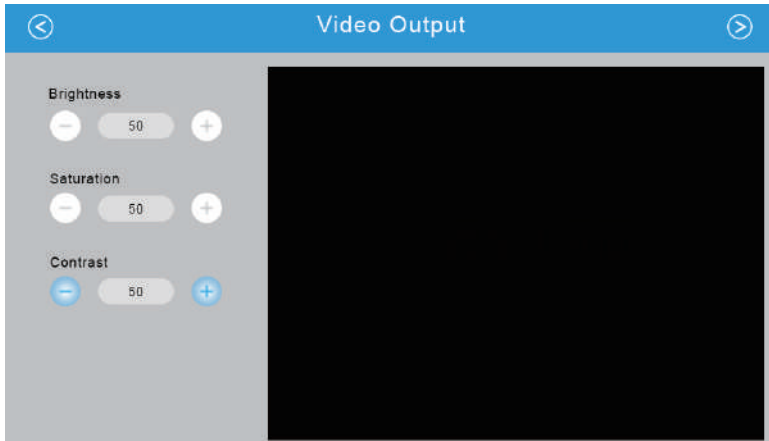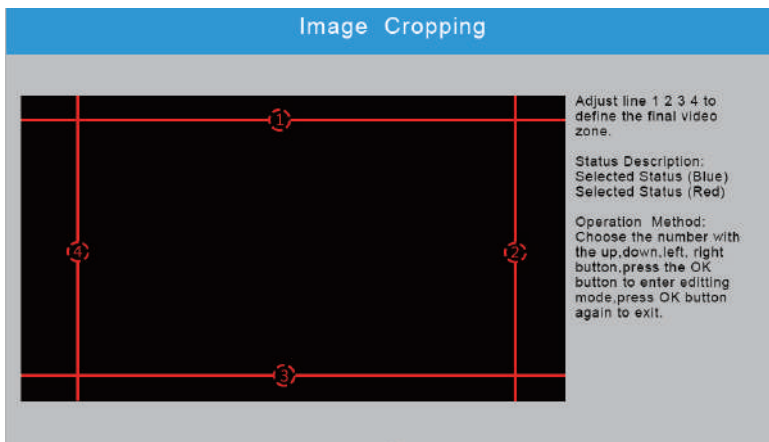
6、Video cropping

This page is cropped by the marker line and finally displays the image size behind the reversing interface.
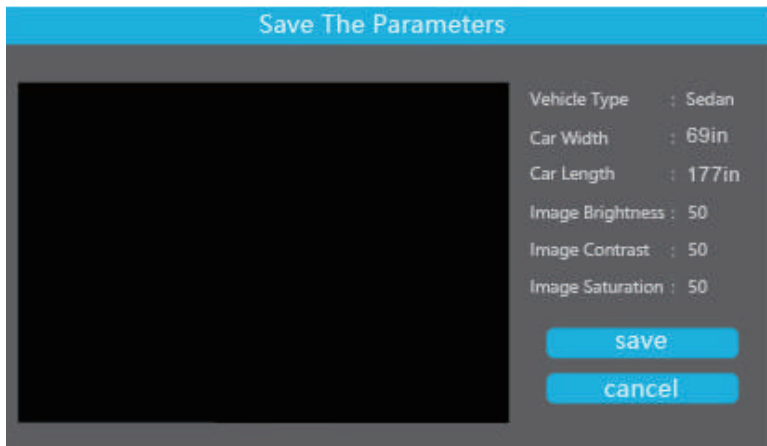
The remote control selects the marking line (blue effect) by up, down, left and right. When you need to adjust a certain marking line, click the OK button (the marking line is red effect), then move to the ideal position, and click the OK button again to exit the adjustment.

7、Parameter saving

When all parameters have been calibrated. Preview the actual effect of the video screen and confirm that the parameters on the right side are correct and save the parameters. When an error occurs, click the Cancel button to recalibrate

Save The Parameters

Vehicle Type	: Sedan
Car Width	: 69in
Car Length	: 177in
Image Brightness :	50
Image Contrast	: 50
Image Saturation :	50

save

cancel

Software settings menu description

Standby time: refers to the non-reversing gear position, and after the specified time, the panoramic reversing system will exit.

System type: CVBS output type, default N system

Panorama position: the position of the reversing panorama can be switched, the default left

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