

 **BLAUPUNKT**



ALL-VIEW-MONITORING CAMERA AVMC 1.0



Enjoy it.

Operating and Installation Instructions

CAUTIONS

Safety Notes

This vehicle security system has been manufactured according to established safety guidelines. However, dangers may still occur if the safety notes in this manual is not observed. This manual is intended to familiarize the user with the reverse camera important functions. Read this carefully, prior to using the product. Keep this manual in an easily accessible location. In addition, do observe the instructions of the devices used in conjunction with this all-view monitoring camera.

Attentions

- Assign a mounting location that will not obstruct driver in any circumstances. Or cause injuries to drives and passengers in case of emergency brake or accidents.
- Ensure all wires are connected properly, and that the unit is functioning well before fitting the unit into the mount.
- Any unauthorized installation, disassembly or modification may cause malfunction to the unit and void warranty of the unit.
- Always use only the parts that are included with the units only.
- Do not damage vehicle components when drilling holes for the mount.
- Vehicle may differ from the description provided here. Consult an authorized Blaupunkt dealer or vehicle's manufacturer if the information provided here does not fit your specific installation requirement.
- This unit is applicable for front, rear and side camera use. Consult an authorized Blaupunkt dealer during installation.
- Unit does not record video.
- Avoid automatic car wash or high-pressure water to prevent water and pressure from damaging the camera or causing it to fall off.
- Do not install this unit near heater outlet.

This manual may be updated from time to time without any notice. Please visit www.blaupunkt.com/ase for latest manual.

Disclaimer

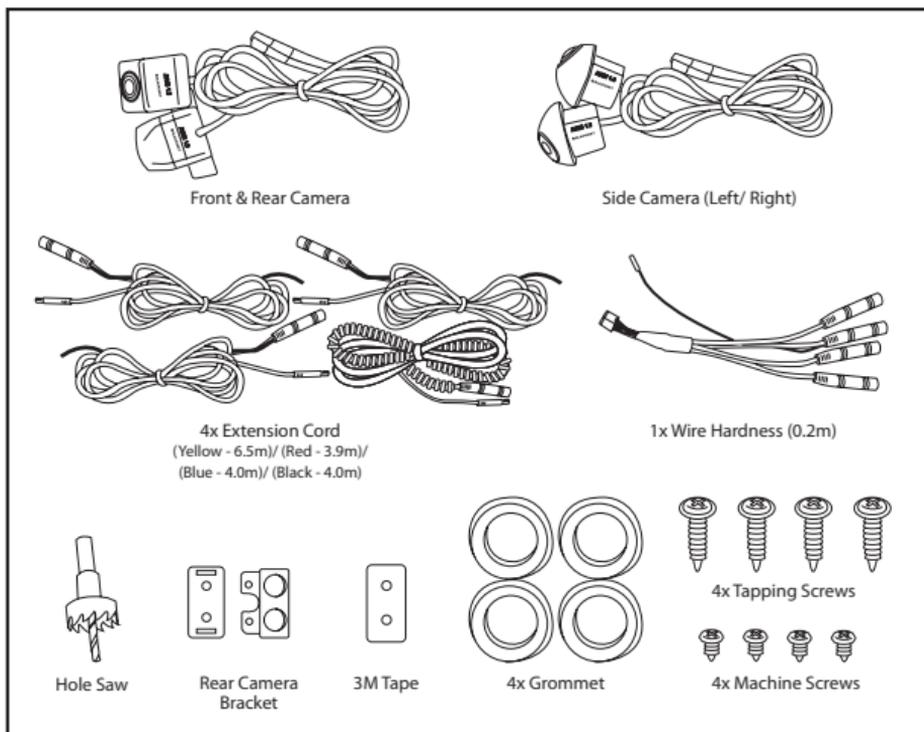
In no event shall Blaupunkt be liable for any direct, indirect, punitive, incidental, special consequential damages to property or life and whatsoever arising out of or connected with the use or misuse of our products. USA & CANADA: This product is not intended for sale in the United States and Canada. If purchased in the U.S. or Canada, this product is purchased on as-is basis. No warranty, whether expressed or implied is provided in the U.S. or Canada.

SPECIFICATION

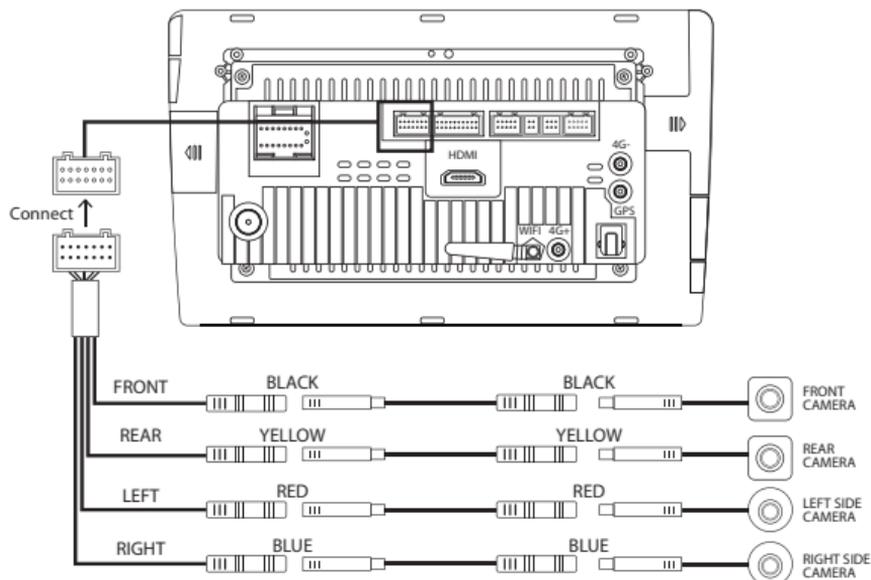
Features

| | |
|-----------------------|-------------------------------------|
| Chip Model | IMX8307(Camera)+NVP2431(Processing) |
| Camera Specifications | 1/3 inch (6mm) |
| Effective Pixels | 1297x977=L27MP |
| Image Resolution | 1000 TVL |
| Maximum Frame Rate | 720p HD 60fps |
| Dynamic Range | Support Standard Dynamic Range |
| Sync System | Internal |
| Signal Noise Ratio | ≥48dB |
| Video Signal | 1.0Vp-p at 75ohm |
| Exposure Control | Automatic |
| White Balance | Automatic |
| Illumination Min. | 0.001 Lux/F2.0 |
| Operating Voltage | 3.5V~5.5V |
| Power Input Range | 3.5V~5.5V |
| Operating Temperature | -20~75°C |

Accessories

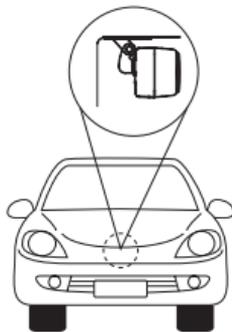


WIRING DIAGRAM

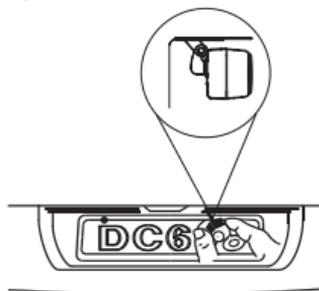


INSTALLATION LOCATION

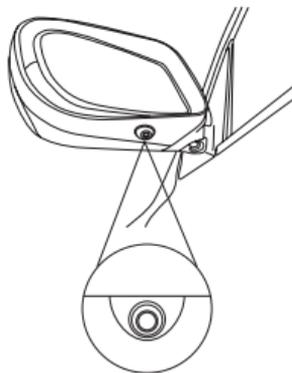
a) Front Camera



b) Rear Camera

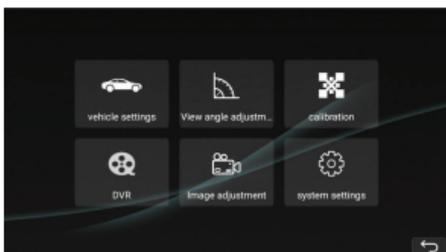
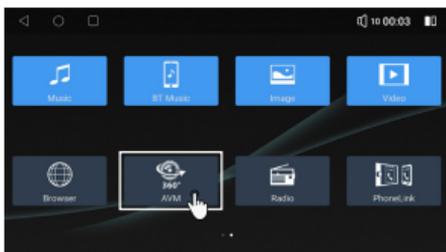


c) Side Camera



FUNCTIONS

AVM UI Interface



vehicle settings

1.0 Vehicle Settings

- Select to choose your car model
- Select to choose your car color
- Select to choose your preferred trace
- Select to choose your preferred angle mode
- Select "Save" to confirm the settings



View angle adjustm...

2.0 View Angle Adjustment

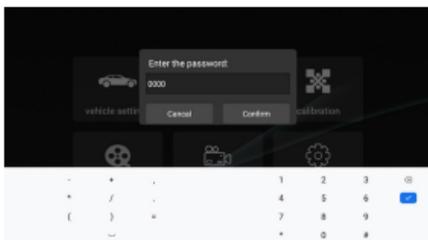
- Select the desired viewing angle, then press the up, down, left or right symbols for proportional, horizontal, vertical offset adjustment
- Select "Reset" to initialise the settings
- Select "Save" to confirm the settings



calibration

3.0 Calibration

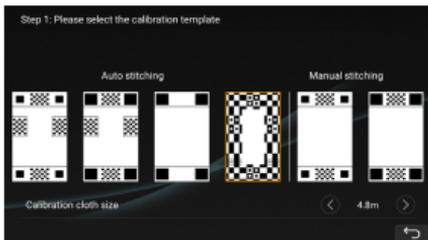
- Key in the password "0000" to access the Calibration Interface



3.1 Calibration Template

3.1.1 Auto Stitching (4 Options)

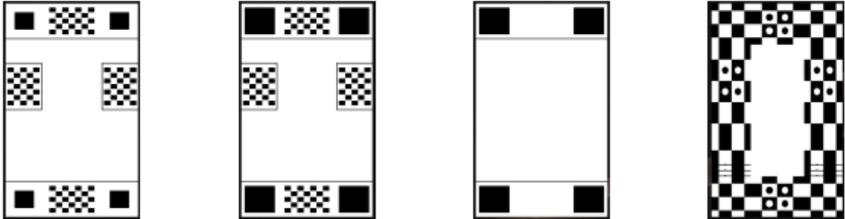
3.1.2 Manual Stitching (2 Options)



FUNCTIONS (AUTO SITCHING)

3.1.1 Auto Sitching

Calibration Template



Option 1
a) Calibration Cloth Size :
• Front & Rear : 4.4x1.2m
• Left & Right : 1.6x1.2m
b) Square Dimension : 60x60cm

Option 2
a) Calibration Cloth Size :
• Front & Rear : 4.8x1.2m
• Left & Right : 1.6x1.2m
b) Square Dimension : 1.0x1.0m

Option 3
a) Calibration Cloth Size :
• Front & Rear : 4.4x1.2m
b) Square Dimension : 1.0x1.0m

Option 4
Surrounded by Calibration Cloth

Requirement for Calibration :

- Installation Tools : 2-4 pcs of measuring tape
- Venue : at least 12M (L) x 6M (W) empty space with the relatively flat ground (should not on slopes or uneven ground)
- Environment : Daily brightness is most suitable for adjustment, water on the ground will affect the calibration.
- Adjustment : During the steps of calibrating marking point, it is advised to have 1-2 people in the car, and the individuals should not get in and out of the car during calibration process. (The weight of the car will be changed due to get in and out of the car, which is resulting the car to move up and down and causes the marking points error)

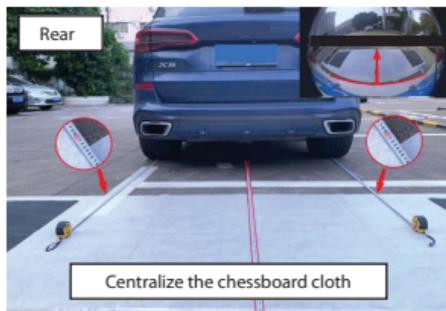
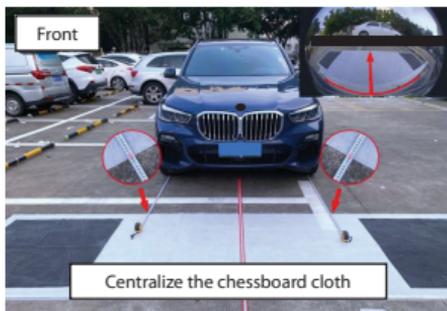
The Placement of Calibration Cloth



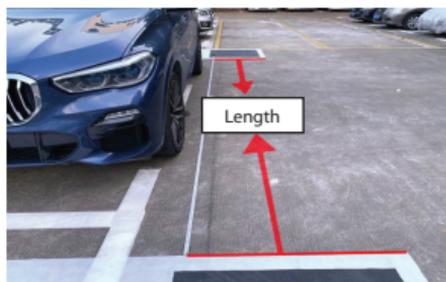
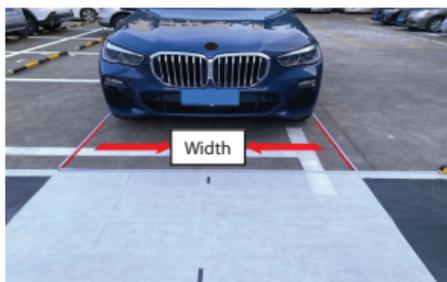
- The front & rear calibration chessboard cloths should close to the front and rear of the car body to reduce the blind spots.
- When installing the left and right cameras, the front and rear of the car must be on a horizontal line.

FUNCTIONS (AUTO SITCHING)

3. The front & rear calibration chessboard cloth should be centered and parallel to the front and rear of the car. It is recommended to use a measuring tape to measure.



- c) The width is the actual width of the car +20cm, and the length of the car is the distance between the front and rear cloth.



Calibration Process

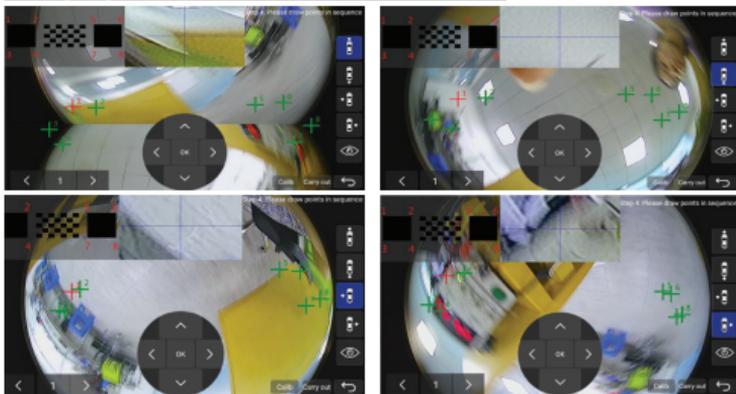
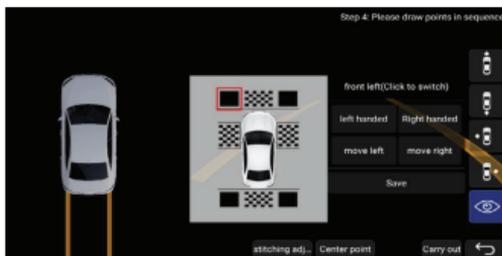
- a) After the calibration chessboard cloth is placed correctly, click on the vehicle parameter and enter the length & width of the car, camera types, and the chip of the vehicle.
- b) After entering the parameters, click "Start Stitching", and wait for a few seconds to complete the stitching, then the result of the stitching will be displayed.



FUNCTIONS (AUTO SITCHING)



c) When the result of the automatic stitching is not ideal, you can enter the lens correction section, and perform lens correction on the four cameras of the front, rear, left, and right.



Stitching Adjustment

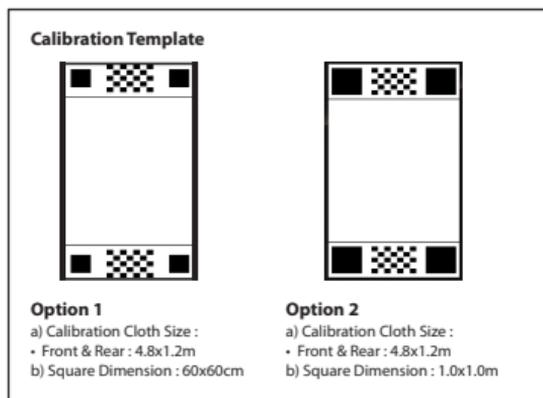
Use the stitching adjustment and the centre point setting to adjust or calibrate the landmark lines, if the landmark lines are incorrect or staggered.

Adjustment Method

- Left or right are curved : Adjust the center point to set the vertical value.
- Left and right landmarks are not on a horizontal line : Adjust the center point set the left and right values.
- Front and rear landmarks are staggered : Adjust the left rotation, right rotation, left shift and right shift by pressing stitching adjustment for correction.

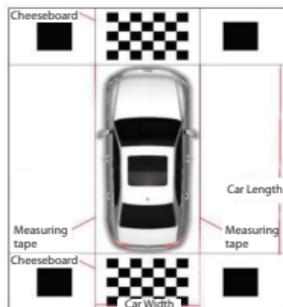
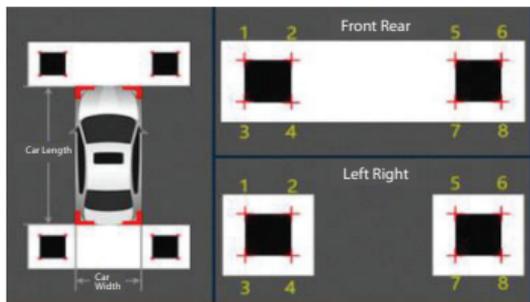
FUNCTIONS (MANUAL SITCHING)

3.1.2 Manual Sitching

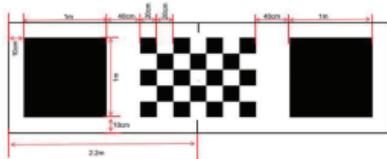
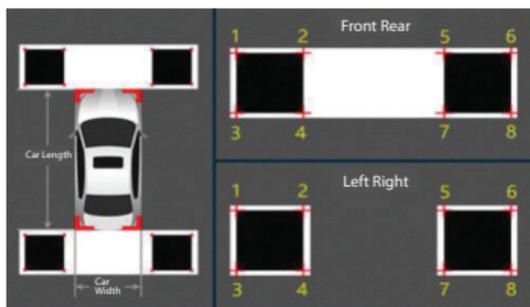


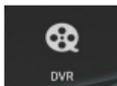
The Placement of Calibration Cloth & Marking Point Sequence

a) Option 1



b) Option 2





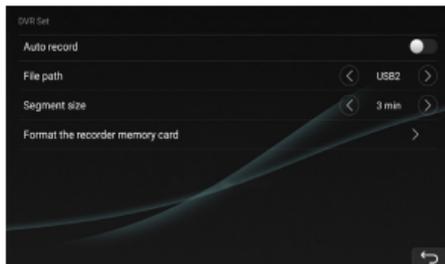
4.0 DVR

- Select the preferred video file to enter the playback interface. There is 4 channels camera field simultaneous playback in default. Press on the play/pause, previous or next icons on the control menu panel (at bottom) and fast forward/rewind by dragging the progress bar.
- Video files in the lists can be deleted manually. Tick "" on the video files that needs to be deleted and click the "trash bin" icon on the upper right corner to delete. Lock and protect the video files by pressing the "🔒" icon on the upper right corner. The locked the video files can be unlocked by ticking the "" icon & pressing the "🔒" again.
- The system is automatic loop recording when the head unit is turned on and the duration of each recording is about 3 minutes. It can be set to 1 minute or 5 minute based on the user's preference.



4.1 DVR Setting

- Auto Record: Off/On (Default: On). The upper left corner of the 360° view interface and the main page interface will not displays the recording "red dot" when turned the recording switch as "Off".
- File Path (Storage Location): USB 2
- Segment Size: 1min/ 3 min/ 5 min (Default: 3 min)
- Format the recorder memory card : All of the files will be deleted, if USB flash drive is formatted.



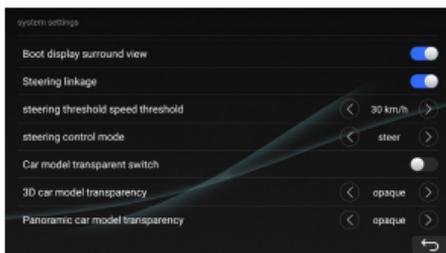
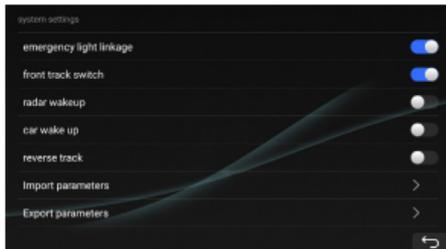


5.0 Image Adjustment

- The image brightness, contrast, colours, saturation, sharpness ratio of front & rear view, left and right view can be adjusted accordingly.



6.0 System Settings



UI Interface

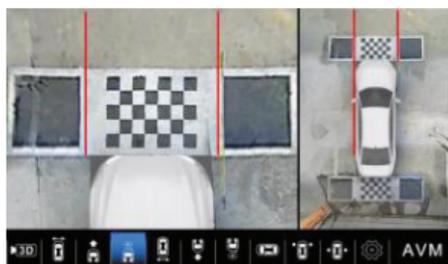
All image are for reference only, actual display mode is subject to the real-time situation



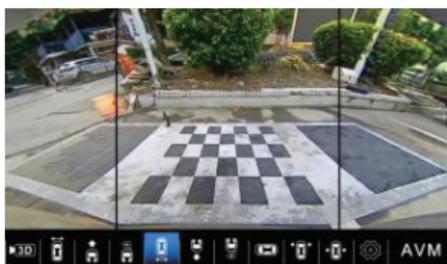
2D Streaming Front View



2D Front Angle View



2D Zoomed In (Front Car Body)



2D Streaming Rear View



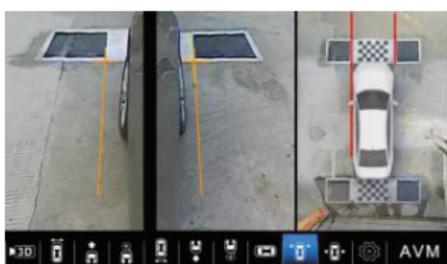
2D Front View



2D Zoomed In (Rear Car Body)



2D Horizontal



Front, Left & Right Side View

UI Interface



Left & Right Side View



3D Left Side View



3D Rear View



3D Right Side View



3D All-Around View

TROUBLESHOOTING

If any of the following problem occur, please resort to Troubleshooting for the possible solutions. Consult Blaupunkt authorized dealer if problem persist.

| Problem | Solution |
|--|---|
| Display monitor / car radio does not show surround view. | Restart the display monitor / car radio. |
| Surround view does not show even after restarting the display monitor/ car radio. | Examine if the power supplies is properly connected. |
| Surround view does not show even though power supplies of the reverse light or the rear car plate light is properly connected. | Examine if the power supply cables is damaged. Repair/ replace if the cables are damaged. |

