Please read this manual before using the product. The product may be different from how it is described in the manual depending on what software version you are using.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Napmelate</td>
</tr>
<tr>
<td>2 Left(Vol-)</td>
</tr>
<tr>
<td>3 Right(Vol+)</td>
</tr>
<tr>
<td>4 Menu/Esc</td>
</tr>
<tr>
<td>5 Down(CH switch)</td>
</tr>
<tr>
<td>6 Up(CH switch)</td>
</tr>
<tr>
<td>7 OK</td>
</tr>
<tr>
<td>8 Power</td>
</tr>
<tr>
<td>9 Digital wireless camera</td>
</tr>
</tbody>
</table>

Introduction ........................................... 03
Safety Information ....................................... 04-06
Before Beginning Installation ......................... 07
Precautions ................................................ 08
Features .................................................... 09
Technical Parameters ..................................... 10
Applications ............................................... 11
Monitor Menu Operation ................................... 12-13
Monitor OSD Menu Operation ............................... 14-15
Troubleshooting ........................................... 16
Warranty ..................................................... 17
Disclaimer ................................................... 18
NOTE! Please read all of the installation instructions carefully before installing the product. Improper installation will void manufacturer’s warranty.

**Congratulations** on purchasing a Rear View Backup Camera System!

With this manual you will be able to properly install and operate the unit.

The Backup Camera System is intended to be installed as a supplement aid to your standard rear view mirror that already exists in your vehicle. The Backup Camera System should not be used as a substitute for the standard rear view mirror or for any other mirror that exists in your vehicle.

In some jurisdictions, it is unlawful for a person to drive a motor vehicle equipped with a TV viewer or screen located forward of the back of the driver’s seat or in any location that is visible, directly or indirectly, to the driver while operating the vehicle.
Please read the entire manual and follow the instructions and warnings carefully. Failure to do so can cause serious damage and/or injury, including loss of life. Be sure to obey all applicable local traffic and motor vehicle regulations as it pertains to this product. Improper installation will void manufacturer’s warranty.

**USAGE:**

- The Rear View Camera System is designed to help the driver safely detect people and/or objects helping to avoid damage or injury. However, you the driver, must use it properly. Use of this system is not a substitute for safe, proper or legal driving.

- Never back up while looking at the monitor alone. You should always check behind and around the vehicle when backing up, in the same way as you would if the vehicle did not have the Rear View Camera System. If you back up while looking only at the monitor, you may cause damage or injury. Always back up slowly.

- The Rear View Camera System is not intended for use during extensive back-up maneuvers or backing into cross traffic or pedestrian walkways.

- Please, always remember, the area displayed by the Rear View Camera System is limited. It does not display the entire panorama that is behind you.
**INSTALLATION:**

- Electric shock or product malfunction may occur if this product is installed incorrectly.

- Use this product within the voltage range specified. Failure to do so can cause electronic shock or product malfunction.

- Take special care when cleaning the monitor.

- Make sure to firmly affix the product before use.

- If smoke or a burning smell is detected, disconnect the system immediately.

- Where the power cable may touch a metal case, cover the cable with friction tape. A short circuit or disconnected wire may cause a fire.

- While installing the Rear View System be careful with the wire positioning in order to avoid wire damage.

- The Rear View System should only be used when the vehicle is in reverse.

- Do not watch movies or operate the monitor while driving; as it may cause an accident.

- Do not install the monitor where it may obstruct drivers view or obstruct an air bag device.

- Dropping the unit may cause possible mechanical failure.
If you have questions about this product, contact:

**Rear View Safety**

1797 Atlantic Avenue

Brooklyn, NY 11233

Tel: 1.800.764.1028

IN NO EVENT SHALL SELLER OR MANUFACTURER BE LIABLE FOR ANY DIRECT OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.
Before drilling please check that no cable or wiring is on the other side of the wall. Please clamp all wires securely to reduce the possibility of them being damaged while vehicle is in use. Keep all cables away from hot/moving parts and electrical noisy components.

*We recommend doing a benchmark test before installation to insure that all components are working properly.*

Step 1: Choose the monitor and camera locations.

Step 2: Install all cables in vehicle, when necessary a 0.8 (20mm) hole should be drilled for passing camera cable through vehicles walls. Install split grommets where applicable.

Step 3: Once all cables and wiring have been properly routed, perform a system function test by temporarily connecting the system.
Operating Precautions
1. The device may be powered by a 12 or 24 volt battery or the vehicle's electrical system.
2. Make sure all cables are connected properly. Improper cable connections may damage the monitor. Remove the power cable connections when not using the device.
3. The back-up battery can be recharged when the power is on.
4. When battery is fully charged, recharging will automatically stop.
5. If batteries are not used for a while, it may take longer to charge.

Warning!
1. This monitor is high voltage. Only professionals should open the monitor's case.
2. Do not watch the video while driving unless you are monitoring the rear view camera display.

Special Note
Occasionally, a few highlights or dark spots may appear on the LCD screen. This doesn’t necessarily indicate any monitor defects. Never try to repair this device yourself. If any problems occur, immediately turn the display off and notify our company or an authorized dealer. Any disassembly or modification may lead to damage and will also void the warranty.
Features

ABS monitor housing that can endure high temperatures.
- 5" High resolution color TFT- LCD.
- Power input: 8V-32V DC.
- Monitor circuit has protector for battery reverse (+/-).
- LED backlight display with constant voltage and constant current circuit protection. It can solve LED working temperature problems (the limit of LED backlight’s current) and prolong life.
- OSD menu can set each channel camera image in 4 modes NOR/MIR/UP/DOWN; change the priority for each mode; each trigger cable can be set to trigger to any display mode; time delay setting.
- Two channel digital wireless signal transmission. It supports sub-screen and two screens.
- Camera waterproof rating: IP69K.
### Technical Parameters

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Display Device</strong></td>
<td>Color TFT-LCD</td>
</tr>
<tr>
<td>Size</td>
<td>5” Digital Screen</td>
</tr>
<tr>
<td>Operation Frequency</td>
<td>2400 ~ 2483.5MHz</td>
</tr>
<tr>
<td>Receiving Sensitivity</td>
<td>( \leq -86\text{dBm}(1\text{MHZ QPSK MD300RE}) )</td>
</tr>
<tr>
<td>Resolution</td>
<td>800×(RGB)×480</td>
</tr>
<tr>
<td>View Angle (LR/UD)</td>
<td>L/R: 70/70  U/D: 50/70</td>
</tr>
<tr>
<td>Contrast Ratio</td>
<td>300:1</td>
</tr>
<tr>
<td>Luminance (cd/m²)</td>
<td>300</td>
</tr>
<tr>
<td>Response Time (ms)</td>
<td>25</td>
</tr>
<tr>
<td>Load Dump</td>
<td>DC 12+87V/400ms</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20°C ~ +60°C</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-30°C ~ +80°C</td>
</tr>
<tr>
<td>operating voltage range</td>
<td>DC8V ~ 32V (5W Max)</td>
</tr>
<tr>
<td>Dimension (L x W x T)</td>
<td>139X100X55 (mm)</td>
</tr>
<tr>
<td>Transmission Power</td>
<td>18dBm with Power control</td>
</tr>
<tr>
<td>Camera</td>
<td>Color CMOS Camera</td>
</tr>
<tr>
<td>Image Pick-up Device</td>
<td>1/3” Color CMOS</td>
</tr>
<tr>
<td>Picture Elements</td>
<td>NTSC:720(H)X480(V); PAL:720(H)X480(V)</td>
</tr>
<tr>
<td>Horizontal Resolution</td>
<td>500 TV Lines</td>
</tr>
<tr>
<td>Minimum illumination</td>
<td>0 Lux At Night (IR LED ON)</td>
</tr>
<tr>
<td>View Angle</td>
<td>120°</td>
</tr>
<tr>
<td>Waterproof rating</td>
<td>IP69K</td>
</tr>
<tr>
<td>Shockproof Rating</td>
<td>10G</td>
</tr>
<tr>
<td>operating voltage range</td>
<td>DC11 ~ 32V</td>
</tr>
<tr>
<td>Dimension</td>
<td>106(W)x75(H)x70.4(D)mm</td>
</tr>
</tbody>
</table>

**WARNING:** This system should only be repaired by professionals. Please do not open and repair the system yourself. This manual is for reference only.
Applications

Cable Interface Definition

<table>
<thead>
<tr>
<th>Monitor</th>
<th>Camera</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Power</td>
<td>Red Power</td>
</tr>
<tr>
<td>Black Ground</td>
<td>Black Ground</td>
</tr>
<tr>
<td>Brown TIRG1</td>
<td></td>
</tr>
<tr>
<td>Blue TIRG2</td>
<td></td>
</tr>
</tbody>
</table>

Reverse With Confidence™
1. Pair
First establish a connection between the monitor and camera. Enter the menu, chose PAIR and press OK. The monitor will display PAIRING START 50. After 50 seconds, re-energize the camera and the monitor will show the camera image in 5~10s.
2. Picture setting
Enter the menu, chose the picture and press OK,
1. ☀️ Brightness: 0-10 (Press left/right to adjust)
2. 🔌 Contrast: 0-10 (Press left/right to adjust)
3. 🌈 Color: 0-10 (Press left/right to adjust)
3. Mirror/Normal image setting:
Set the CAM1 and CAM2 image in 4 modes.

4. Auto Scan setting:
1. Set CAM1 auto scan mode on/off;
2. Set CAM2 auto scan mode on/off;
3. Set the auto scan time.
5. Other functions:
1. NTSC or PAL system switch.
2. LED screen ambient light sensor on/off.
3. Electronic Label setting: Turn on/off the electronic label on CAM1.

Note:
When the monitor is in SCAN mode, the CAM1 and CAM2 image will switch automatically according to the setting time. Press ⬇/⬆ to choose an image.
No Image On Screen

- Do a hard reset, unplug all cables and power cables, leave out for 1 minute and then re-connect them
- Check to ensure that the connection to the camera is tight
- Verify camera cable is plugged into port labeled Backup Camera
- Verify that the green positive trigger on power harness is put to power 12v+
- Verify camera is on correct camera input
- Verify cable is connected to monitor
- Verify camera is connected to cable
- Connect known working camera and cable to monitor
- Verify Green trigger is receiving power
ONE YEAR WARRANTY
RVS SYSTEMS, INC. WARRANTS THIS PRODUCT AGAINST MATERIAL DEFECTS FOR A PERIOD OF ONE YEAR FROM DATE OF PURCHASE. WE RESERVE THE RIGHT TO REPAIR OR REPLACE ANY SUCH DEFECTIVE UNIT AT OUR SOLE DISCRETION. RVS SYSTEMS, INC. IS NOT RESPONSIBLE FOR A DEFECT IN THE SYSTEM AS A RESULT OF MISUSE, IMPROPER INSTALLATION, DAMAGE OR MISHANDLING OF THE ELECTRONIC COMPONENTS. RVS SYSTEMS, INC. IS NOT RESPONSIBLE FOR CONSEQUENTIAL DAMAGES OF ANY KIND.

THIS WARRANTY IS VOID IF: DEFECTS IN MATERIALS OR WORKMANSHIP OR DAMAGES RESULT FROM REPAIRS OR ALTERATIONS WHICH HAVE BEEN MADE OR ATTEMPTED BY OTHERS OR THE UNAUTHORIZED USE OF NONCONFORMING PARTS; THE DAMAGE IS DUE TO NORMAL WEAR AND TEAR, THIS DAMAGE IS DUE TO ABUSE, IMPROPER MAINTENANCE, NEGLECT OR ACCIDENT; OR THE DAMAGE IS DUE TO USE OF THE RVS SYSTEMS, INC. SYSTEM AFTER PARTIAL FAILURE OR USE WITH IMPROPER ACCESSORIES.

WARRANTY PERFORMANCE
DURING THE ABOVE WARRANTY PERIOD, SHOULD YOUR RVS SYSTEMS PRODUCT EXHIBIT A DEFECT IN MATERIAL OR WORKMANSHIP, SUCH DEFECT WILL BE REPAIRED WHEN THE COMPLETE RVS SYSTEMS, INC. PRODUCT IS RETURNED, POSTAGE PREPAID AND INSURED, TO RVS SYSTEMS, INC. OTHER THAN THE POSTAGE AND INSURANCE REQUIREMENT, NO CHARGE WILL BE MADE FOR REPAIRS COVERED BY THIS WARRANTY.

WARRANTY DISCLAIMERS
NO WARRANTY, ORAL OR WRITTEN, EXPRESSED OR IMPLIED, OTHER THAN THE ABOVE WARRANTY IS MADE WITH REGARD TO THIS RVS SYSTEMS, INC. RVS SYSTEMS, INC. DISCLAIMS ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE AND ALL OTHER WARRANTIES IN NO EVENT SHALL RVS SYSTEMS, INC. LIABLE FOR ANY INCIDENTAL, SPECIAL, CONSEQUENTIAL, OR PUNITIVE DAMAGES OR FOR ANY COSTS, ATTORNEY FEES, EXPENSES, LOSSES OR DELAYS ALLEGED TO BE AS A CONSEQUENCE OF ANY DAMAGE TO, FAILURE OF, OR DEFECT IN ANY PRODUCT INCLUDING, BUT NOT LIMITED TO, ANY CLAIMS FOR LOSS OF PROFITS.
DISCLAIMER

RVS SYSTEMS AND/OR ITS AFFILIATES DOES NOT GUARANTEE OR PROMISE THAT THE USER OF OUR SYSTEMS WILL NOT BE IN/PART OF AN ACCIDENT OR OTHERWISE NOT COLLIDE WITH AN OBJECT AND/OR PERSON. OUR SYSTEMS ARE NOT A SUBSTITUTE FOR CAREFUL AND CAUTIOUS DRIVING OR FOR THE CONSISTENT ADHERENCE TO ALL APPLICABLE TRAFFIC LAWS AND MOTOR VEHICLE SAFETY REGULATIONS. THE RVS SYSTEMS PRODUCTS ARE NOT A SUBSTITUTE FOR REARVIEW MIRRORS OR FOR ANY OTHER MOTOR VEHICLE EQUIPMENT MANDATED BY LAW. OUR CAMERA SYSTEMS HAVE A LIMITED FIELD OF VISION AND DO NOT PROVIDE A COMPREHENSIVE VIEW OF THE REAR OR SIDE AREA OF THE VEHICLE. ALWAYS MAKE SURE TO LOOK AROUND YOUR VEHICLE AND USE YOUR MIRRORS TO CONFIRM REARWARD CLEARANCE AND THAT YOUR VEHICLE CAN MANEUVER SAFELY. REAR VIEW SAFETY AND/OR ITS AFFILIATES SHALL HAVE NO RESPONSIBILITY OR LIABILITY FOR DAMAGE AND/OR INJURY RESULTING FROM ACCIDENTS OCCURRING WITH VEHICLES HAVING SOME OF RVS SYSTEMS PRODUCTS INSTALLED AND RVS SYSTEMS AND/OR ITS AFFILIATES, THE MANUFACTURER, DISTRIBUTOR AND SELLER SHALL NOT BE LIABLE FOR ANY INJURY, LOSS OR DAMAGE, INCIDENTAL OR CONSEQUENTIAL, ARISING OUT OF THE USE OR INTENDED USE OF THE PRODUCT. IN NO EVENT SHALL RVS SYSTEMS AND/OR ITS AFFILIATES HAVE ANY LIABILITY FOR ANY LOSSES (WHETHER DIRECT OR INDIRECT, IN CONTRACT, TORT OR OTHERWISE) INCURRED IN CONNECTION WITH THE SYSTEMS, INCLUDING BUT NOT LIMITED TO DAMAGED PROPERTY, PERSONAL INJURY AND/OR LOSS OF LIFE. NEITHER SHALL RVS SYSTEMS AND/OR ITS AFFILIATES HAVE ANY RESPONSIBILITY FOR ANY DECISION, ACTION OR INACTION TAKEN BY ANY PERSON IN RELIANCE ON RVS SYSTEMS SYSTEMS, OR FOR ANY DELAYS, INACCURACIES AND/OR ERRORS IN CONNECTION WITH OUR SYSTEMS FUNCTIONS.
If you have any questions about this product, contact:

Rear View Safety, Inc.
1797 Atlantic Avenue
Brooklyn, NY 11233
800.764.1028

Better Cameras. Better Service. IT’S OUR GUARANTEE.