AIR VUE™

Wireless That *ACTUALLY* Works

Air Vue™ Connect
2.4GHz Digital Wireless Transmitter and Receiver with PLC

AV-CNCT



Instruction Manual

RVS A Clarience Technologies Company

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INTRODUCTION

Congratulations on purchasing an Air Vue™ Digital Wireless Transmitter and Receiver System!
With this manual you will be able to properly install and operate the unit.
The accompanying monitor for this wireless transmitter is intended to be installed as a supplement aid to your standard rear view mirror that already exists in your vehicle. The Monitor 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 all of the installation instructions carefully before installing the product. Improper installation will void manufacturer's warranty.

IN THE BOX

1 x Transmitter Box
1 x Receiver Box
2 x Antenna
Screws

SAFETY INFORMATION

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 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.

- Always remember that the area displayed by the Rear View Camera System is limited. It does not display the entire panorama that is behind you.

SAFETY INFORMATION

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.
- In areas where the power cable may touch a metal case, cover the cable with a friction tape. A short circuit or disconnected wire may cause a fire.
- While installing the RVS System be careful with the wire positioning in order to avoid wire damage.
- The RVS 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 mechanical failure.
- When in reverse, monitor buttons are not functional

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If you have questions about this product,
please contact us at:

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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.

PRECAUTIONS

Storage and Keeping

1. Do not expose the device to excessive heat or cold. The storage temperature of this device is -30~+80°C. The operating temperature of this device is -20~+70°C with a maximum relative humidity of 90%.
2. Avoid dropping or striking this device.
3. Avoid using this device in enclosed spaces, areas with excessive vibration or subjecting this device to severe impacts.
4. Do not place cables where they may be pinched or stepped on.
5. The device is designed to be water-resistant, but not completely waterproof for underwater application.

Operating Precautions

1. The device may be powered by a 12 or 24 volt automotive battery or vehicle electrical system.
2. Make sure all cables are connected properly. Observe polarity. Improper cable connections may damage the device. Remove the power cable connections when you do not intend to use the unit.



High voltage is present within the device.
The case should only be opened by professionals.



Never try to repair this device by yourself. In case of any problems, please turn off the device at once and notify our company or an authorized dealer.

1. MAINTENANCE

Remove all cable connections from the device before cleaning the unit.

	Caution Risk of electric shock Do not open	
Caution: to reduce the risk of electric shock, Do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.		



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



This symbol is intended to alert the user not to dispose of electrical and electronic equipment.

CAUTION

Any changes or modifications not expressly approved in this manual could void your warranty and necessitate expensive repairs.

2. PRODUCT FEATURES

1. Power supply: DC10-32V
2. Transmitter supports AHD 720P or AHD 1080P camera
3. Durable metal housing for external installation on vehicles
4. IP69K waterproof protection level
5. LED indicators for Power and Pair Status

Power: the “POWER” indicator turns red when power is on.
Pairing success: the “PAIRING” indicator turns solid blue.



3. TECHNICAL SPECIFICATIONS

Air Vue™ Transmitter & Receiver	
Power supply	DC 10-32V
Video input	AHD 720P / AHD 1080P
Video Compression	H.264
Operation frequency	2400 - 2483.5 MHz (ISM band)
Modulation	QPSK
RF Bit Rate	6Mbps
Spread spectrum	FHSS
Transmitter Power	FCC < 26 dBm, CE < 20 dBm, MIC < 10 dBm
Receiving Sensitivity	-78dBm
Transmission Range	FCC < 300 m, CE < 200 m, MIC < 60 m
Active area	154.08(H) × 85.92(V) mm
Signal delay	< 200ms
Operating Temperature	-20 ~ +70°C RH90%
Storing Temperature	-30 ~ +80°C RH90%

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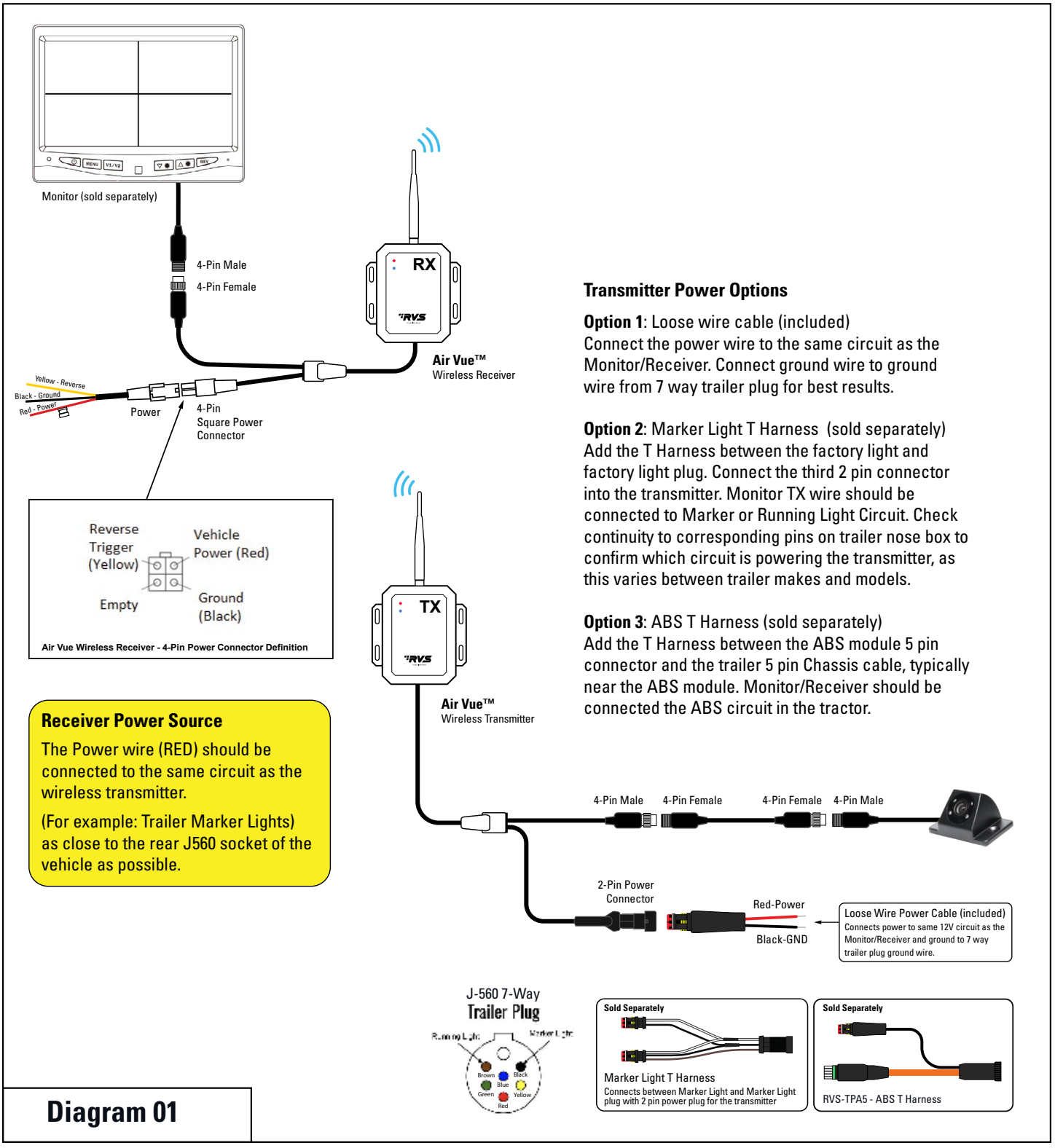
4. AIR VUE™ TRANSMITTER INSTALLATION

1. Identify where you will be making your power connection to the Trailer Running Light Circuit (recommendations on the next page).
2. Find a suitable location for the Transmitter to be mounted with either screws or nuts and bolts. This can be behind or in front of the sliding axle, depending on power connection location.
3. When evaluating a mounting location, avoid areas of the trailer that would “enclose” the transmitter.
4. Secure the camera cable and power harness with zip ties to existing cabling or P-clamps if there are areas with no existing wiring.
5. If it’s not already, align the antenna to be parallel with the trailer axle for the best results.



6. Using the supplied power harness, connect the Red and Black wires to the Trailer light circuit and ground respectively.
7. Trailer Running Light circuit can be spliced into at the two locations circled above.
8. Be sure to secure and cover connections so that they do not corrode in the elements.
9. Trailer Light Running circuit should be 12V+ when the running lights are ON and 0V when the lights are not activated.

10. Connect the transmitter to RVS-TPA5 Trailer Power Harness as shown. Connect the transmitter to RVS-TPA5 Trailer Power Harness as shown in **Diagram 01**.
11. Safely and securely route the camera system extension cable(s), any applicable sensor wiring, camera(s), and sensors. Connect the camera(s) and sensor system if applicable to the transmitter.



Receiver Power Source

The Power wire (RED) should be connected to the same circuit as the wireless transmitter.

(For example: Trailer Marker Lights) as close to the rear J560 socket of the vehicle as possible.

Transmitter Power Options

Option 1: Loose wire cable (included)
Connect the power wire to the same circuit as the Monitor/Receiver. Connect ground wire to ground wire from 7 way trailer plug for best results.

Option 2: Marker Light T Harness (sold separately)
Add the T Harness between the factory light and factory light plug. Connect the third 2 pin connector into the transmitter. Monitor TX wire should be connected to Marker or Running Light Circuit. Check continuity to corresponding pins on trailer nose box to confirm which circuit is powering the transmitter, as this varies between trailer makes and models.

Option 3: ABS T Harness (sold separately)
Add the T Harness between the ABS module 5 pin connector and the trailer 5 pin Chassis cable, typically near the ABS module. Monitor/Receiver should be connected the ABS circuit in the tractor.

Diagram 01

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5. AIR VUE™ RECEIVER INSTALLATION

On the receiver power harness, the Red wire will be connected to the same electrical circuit as the trailer wireless transmitter. For example: Trailer marker lights. This can often be found in the engine compartment before going into a fuse block or somewhere in the cab between the tractor 7-way and the interior fuse block.

- Typically a brown wire. Refer to the wiring diagram for turn signal connection recommendations for vehicles with tractor mounted cameras.

The Yellow Wire is a trigger wire input to adjust views. The default view is AUTO. This will automatically detect the furthest away trailer connected to the vehicle.

If you will only be pulling a single trailer at a time, there is no need to connect the yellow wire.

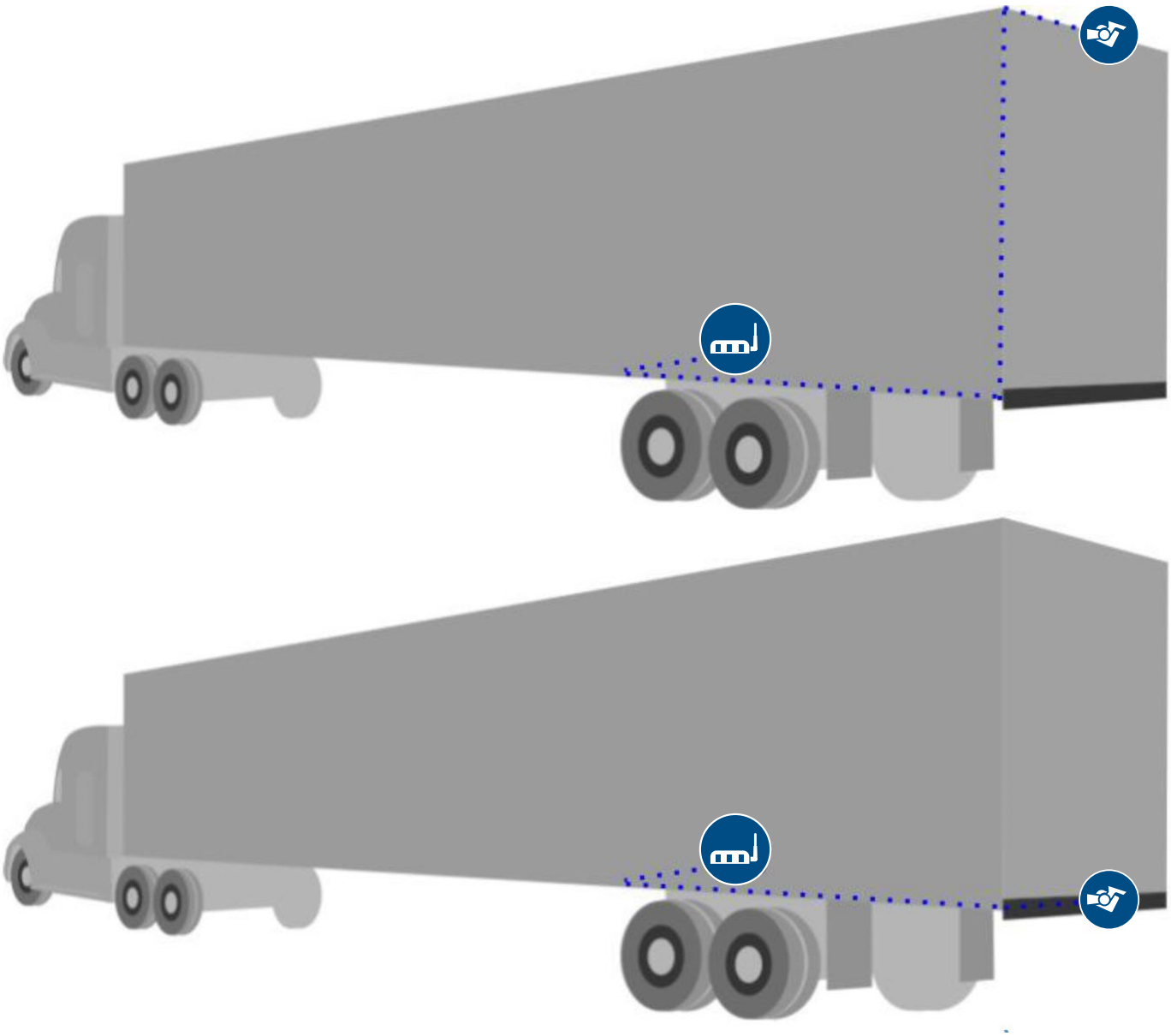
When the Yellow wire is temporarily connected to 12 or 24v power, the output view will adjust from: AUTO -> CH1 -> CH2 -> CH3 -> CH1/CH2 -> CH2/CH3 -> CH1/CH2/CH3.

6. WIRING INSTRUCTIONS WHEN CONNECTING POWER THROUGH RUNNING LIGHTS (AIR VUE™ TRANSMITTER)

Wire Connections:

- On the Receiver power harness, the Red 'Trailer TX' wire will be connected to the same electrical circuit as the trailer wireless transmitter. For example: Brown Wire - Trailer marker lights. The closer the connection point to the rear J-560 7-Way plug, the more reliable the pairing signal will be with the trailer transmitter. This can often be found in the engine compartment before going into a fuse block or somewhere in the cab between the tractor J-560 7-Way connector and the interior fuse block.
- The Black ground wire should be connected to the trailer ground circuit if possible. The closer the ground connection point to the rear J-560 7-Way plug, the more reliable the pairing signal will be with the trailer transmitter.
- Some vehicles may be able to use a connection point inside the main vehicle fuse panel for the specific trailer circuit and have a reliable connection with the trailer transmitter. This may not be a viable solution for certain vehicles depending on the electrical architecture of the vehicle (i.e. a more complex connection path may cause a reduction in pairing signal strength to the trailer transmitter).

7. TRAILER CAMERA/TRANSMITTER CABLE ROUTING



Camera placement

Transmitter placement

Camera Cable routing

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8. TROUBLESHOOTING

Receiver Output Displays Black Screen or Cannot Pair

- Verify that the device's POWER LED is illuminated. Verify existing trailer connections are secure.
- Unplug all cables and leave unplugged for 30 seconds and then re-connect them.
- Check to ensure that the connection to the camera is secure.
- Verify that the Receiver red +12V harness wire is connected same circuit as the wireless transmitter.
- If system constantly flips between 'Trying to detect camera' and 'Paired' messages, the monitor is not receiving a strong enough wireless signal and an antenna extender may be required.

Receiver Will Not Power-Up

- Check fuse
- Check +12V connection to receiver
- Check ground connection

No Image From Receiver Output

- Verify the camera connection into the wireless transmitter
- Verify power cable is connected to the receiver
- Verify the camera connection into the wireless transmitter.

No Audio From Camera (optional)

- Verify chosen camera has audio
- Verify volume setting

ONE YEAR WARRANTY

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