PRO-USER APR043X2 Pro User Wireless Back Up Camera and Monitor Instruction Manual

Contents

PRO-USER APR043X2 Pro User Wireless Back Up Camera and Monitor

Product Information

The Pro-User APR043X2 is a wireless back-up camera system with an 11cm / 4.3 monitor. It is designed to improve visibility behind your car, camper, trailer, or mini-van. Manufactured by Pro User International Ltd., this advanced car back-up system undergoes quality control measures to ensure top condition and satisfactory performance.

Important Safety Instructions:
Before installing the camera system, it is recommended to consult the vehicle's manufacturer or consider professional installation if you are not confident in working with 12 volt DC vehicle wiring or removing/reinstalling vehicle components. Interference may occur due to wireless devices, such as cell phones, Bluetooth headsets, Wi-Fi routers, power lines, and other electrical equipment. Keep this in mind when using the camera system. Modifying or attempting to repair the camera system by the user will void the guarantee. The camera system should not be opened.

Parts:

1. Monitor and mounting Arm
2. Camera with mounting plate X2
3. Transmitter Box X2
4. Mounting Accessories X2
5. Monitor Power Cable
6. Transmitter Box Power Cable X2

Product Usage Instructions

Installation:
Note: The following instructions are general guidelines. Specific installation steps may vary depending on your vehicle type.

1. Remove the rear license plate and loosen the license plate bolts/screws.

2. Mount the license plate on the license plate bracket.
3. Choose a routing path for the camera's power cable through the vehicle's body to the reverse light circuit. If unsure, seek professional installation assistance.
4. If there is no existing opening, you may need to drill a hole close to where the power cable is attached to the camera. Ensure that there are no vehicle components (electrical parts or fuel system components) behind where you are drilling. Remove the license plate and camera before drilling.
5. After drilling the hole, insert the supplied grommet and pass the camera cables through the grommet into the vehicle. The grommet prevents the metal edge of the hole from cutting the camera cable.
6. Mount the transmitter box inside the trunk. Connect the camera's power cable and the transmitter box power cable to the transmitter box.
7. Position the transmitter boxes as close as possible to the receiver for better signal transmission. The power cables are long enough for routing from the rear end to the front of the vehicle or trailer. Note that the transmitter boxes are not weatherproof.

INTRODUCTION

The Pro-User APR043X2 is member of the family of advanced car back-up systems manufactured by Pro User International Ltd.
The Pro-User Wireless Back-up Camera and Monitor, when used as described, will improve your ability to see behind your car, camper, trailer, or mini-van. We have taken numerous measures in quality control to ensure that your product arrives in top condition, and will perform to your satisfaction.
Please carefully read and follow the following safety and operating instructions.

IMPORTANT SAFETY INSTRUCTIONS

Before You Install
If you are not confident working with 12 volt DC vehicle wiring, removing and reinstalling interior panels, carpeting, dashboards or other components of your vehicle, contact the vehicle's manufacturer, or consider having the camera system professionally installed.

Interference
This device, as well as all other wireless devices, may be subject to interference. Interference may be caused by cell phones, Bluetooth headsets, Wi-Fi routers, power lines and other various electrical equipment, etc.

Repair
The camera system should not be opened. Any attempt at modification or repair by the user will entail the loss of your guarantee.

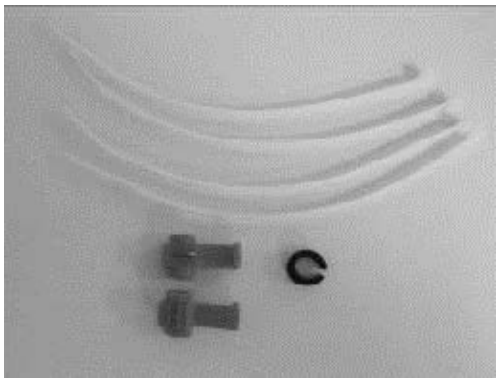
PARTS

1. Monitor and mounting Arm

2. Camera with mounting plate X2

3. Transmitter Box X2

4. Mounting Accessories X2



5. Monitor Power Cable

6. Transmitter Box Power Cable X2

INSTALLATION

These instructions do not apply to all vehicles. They are only meant as a general guide due to the number of different makes & models. For vehicle specific questions contact your vehicle's manufacturer.

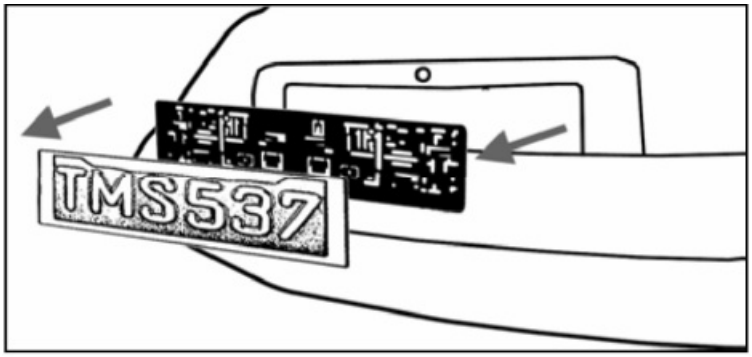
Camera installation

There are several ways to mount the camera on the back of your car. But the most convenient is to mount it near the license plate of the car. Supplied is one mounting plate that can be fixed behind the license plate, and the mounting plate have been installed in the camera.

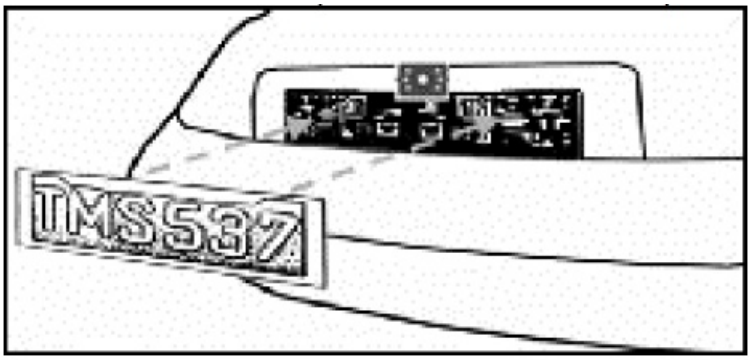
The camera is tiltable, camera angle can be adjusted manually on vertical direction. Make sure that its field of view and detection are not obstructed.

At some type of cars it is not possible to mount the camera near the license plate. You may have to find another spot at the back of your car to mount the camera.
There are two sets of cameras and transmitters, use the same way below to install them on the vehicle and trailer respectively.

1. Remove the rear license plate, and then loosen the license plate bolts/screws.



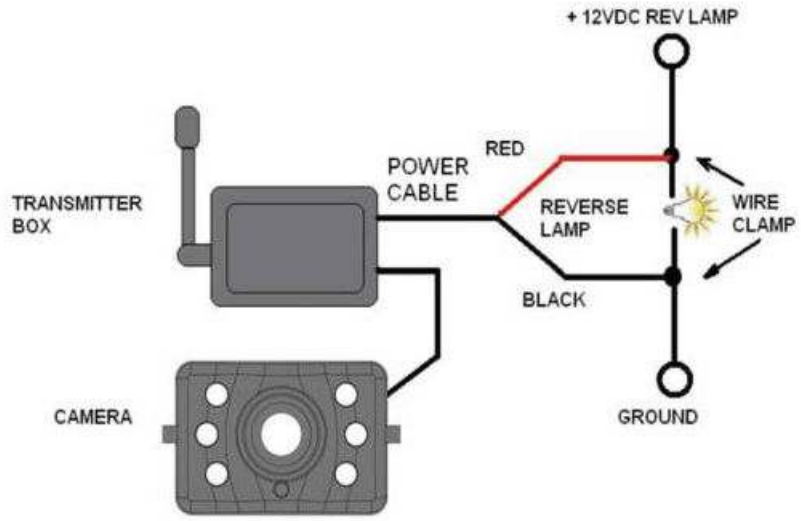
2. Mount the license plate on the license plate bracket.



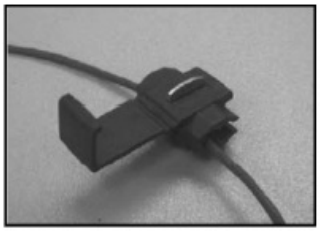
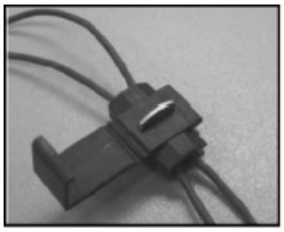
3. Choose a routing path for the camera's power cable through the vehicle's body to the reverse light circuit. If in doubt, seek professional installation assistance.
4. Some vehicles may have a hole available to pass the wire through, such as where the license plate light is mounted, or you can drill a hole close to where the power cable is attached to the camera. Once you have chosen where the cable will enter the vehicle's body, remove the camera. If you are able to use an existing opening, skip the next two steps.
5. Before you drill a hole you MUST CHECK and see WHAT IS BEHIND WHERE YOU ARE DRILLING. If there are any vehicle components, such as electrical parts or fuel system components behind where you are drilling,

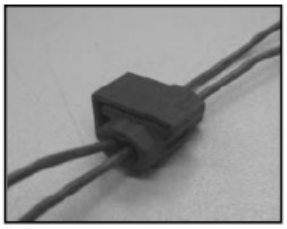
you must take whatever precaution is necessary not to damage them. Remove the license plate and camera before drilling.

6. After you have drilled the hole, insert the supplied grommet, then pass the camera cables through the grommet into the vehicle. You must use the grommet to prevent the metal edge of the hole from cutting the camera cable.
7. Mount the transmitter box inside the trunk. Connect the camera's power cable and the transmitter box power cable to the transmitter box.
   NOTICE: Choose position to mount the transmitter boxes as close as possible to the receiver for better signal transmission; The length of the power cables are long enough for routing from the rear end to the front of the vehicle or trailer.
   The transmitter doesn't comply with weatherproof.
8. Next you'll need to find the vehicle's reverse lights. Turn the vehicle's ignition key to the accessory position, engage the parking brake and put the car in reverse. Look at the vehicle's tail lights to see where the reverse lights are located, they are the white lights. To locate the reverse light's 12V+ wire it will be necessary to gain access to the rear of the vehicle's tail light. For help locating the vehicle's reverse light circuit contact your vehicle's manufacturer for vehicle specific wiring diagrams.
9. Once you have located the reverse light circuit you will have to route the transmitter box power cable to that location. You must securely fasten the power cable to prevent it from being caught on any vehicle component such as the trunk hinge. Never route the cable on the outside of the vehicle! 10. The reverse light sockets on most vehicles have two wires connected to them. Usually the negative wire is black and the positive wire is a colored wire. If you are uncertain about the wiring, you can use a 12 volt multimeter available at most auto parts stores to determine which is the positive wire. Follow the manufacturer's instructions for the safe use of the multimeter.



10. After determining which wire is the positive and which is the negative, turn off the ignition key, then remove the battery's negative cable.
11. Splice the red wire using the supplied in-line wire connectors to the reverse light's positive (+) wire. Use a set of slip joint pliers to squeeze the TAP and insure good connection.

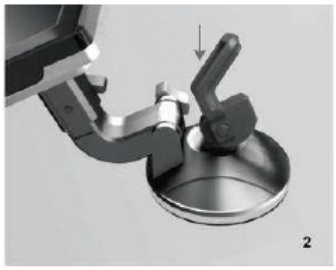


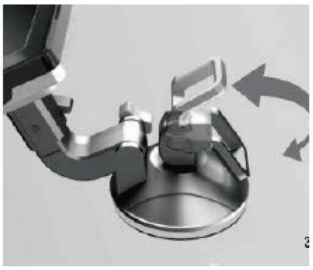
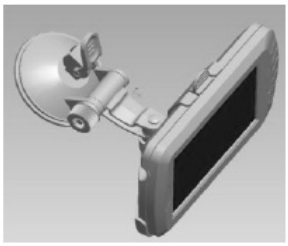
12. Next splice the black wire of the transmitter box power cable to the reverse light's negative (-) wire or ground.
13. Replace the reverse light bulb, and then re-install the light socket. Secure all the wires with cable ties or electrical tape.
14. Re-attach the negative battery cable to the battery.

Monitor Installation

When choosing a location to mount the monitor, make sure the monitor is in an area that will not obstruct your vision while driving.

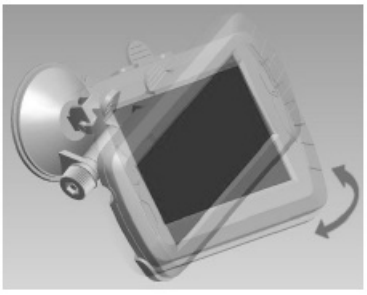
1. Before mounting the monitor, clean the mounting surface well.
2. Position the suction mount to the smooth surface which suits your requirement.
3. Press the suction cap against the smooth surface and press the lock down to attach and fix the mount to the surface.

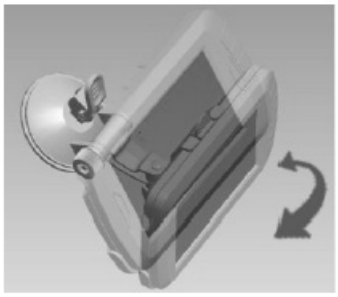


Snap in the monitor to the suction mount.

4. Adjust the mounting arms to suit your view angle to the monitor and tighten the screws on the mount to fix the position.





5. Route the power cable to the vehicle's cigarette lighter socket/12V power outlet. The cable must not interfere with the safe operation of the vehicle.
6. Insert the small 12 Volt DC plug of the power cable into the right side of the monitor.
7. Plug the 12 Volt cigarette lighter plug into the vehicle's cigarette lighter socket.

To maximize the effectiveness of the suction mount, it is recommended that the application be performed under the following conditions:

1. Surface temperature should be between 21 and 38 degrees Celsius.
2. Application below 10 degrees should be avoided.
3. Application should not occur in direct sunlight.
   Mounting should be protected from exposure to direct sunlight for a period of 24 hours.

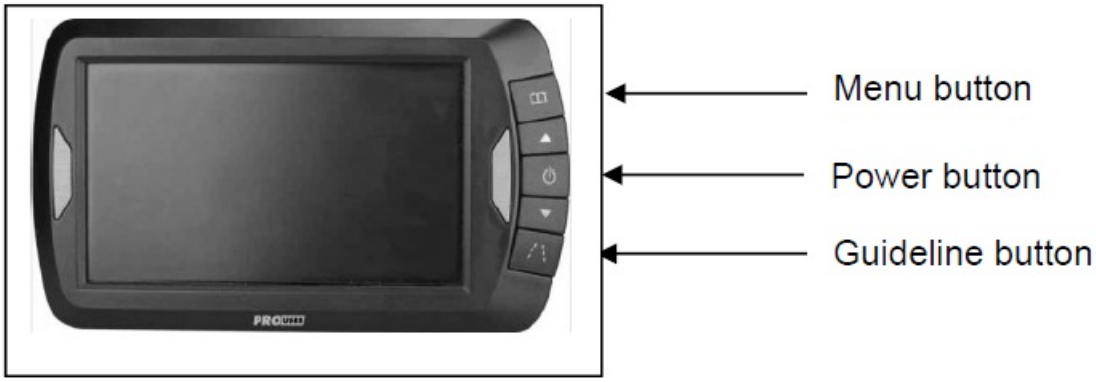
NOTE: UNDER EXTREME BRIGHT LIGHT CONDITIONS, THE SCREEN IMAGE MAY TAKE A FEW SECONDS TO STABLIZE. PLEASE WAIT UNTIL THE IMAGE HAS STABLIZED BEFORE BACKING UP.

System testing

1. Reattach the vehicle's negative battery cable.
2. Turn the ignition key to the accessory position, do not start the vehicle.
3. Engage the parking brake, and then put the shifter in the reverse position.
4. After testing the unit and you are satisfied with the route you have chosen for the cabling, you must permanently install it.
5. Route all wires behind interior panels or under carpeting so they are hidden. Use supplied cable ties to neatly gather any excess wire.

OPERATION

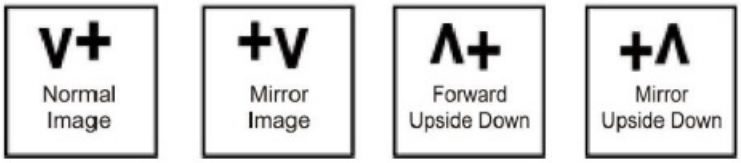
The monitor will automatically turn on when the vehicle is in reverse gear. There are 5 control buttons available for users to have their controls:



Power button
Press the POWER button to supply power to the monitor. When the monitor image is on, the blue LED will be lit. If there is power to the monitor, but the monitor image is OFF, the blue LED will blink on and off. When the monitor power is off, no picture can appear on the screen and the blue LED will be off.

Menu button
Press the Menu button to enter the menu screen as shown below:

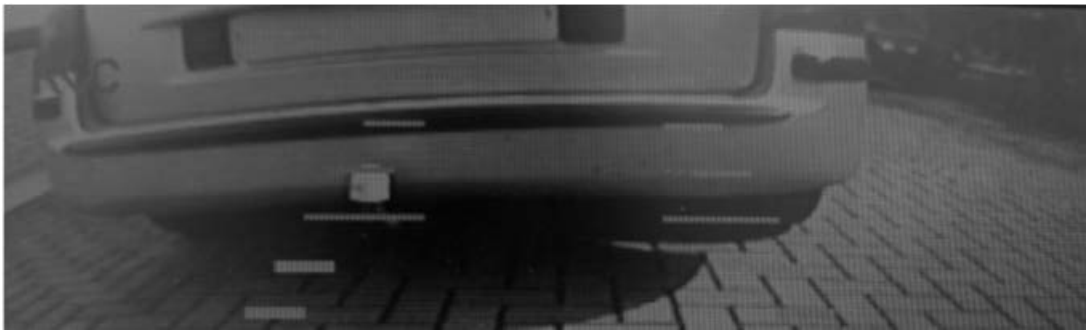
Repeat pressing the Menu button to select Brightness, contrast, color or direction of the picture. Press the △ button or Press the ▽ button to adjust settings within the control selected. Press the △ button to increase the value and press the ▽ button to decrease the value.
To change the orientation of the screen image, press the menu button until direction is selected. By pressing the △ or ▽ button repeatedly, different screen orientations will be available. These different views allow you to mount the camera and monitor in any position with keeping the right picture on the monitor.



To exit the menu screen, select exit on the screen.

Guideline button
This camera system has the option to show distance-guidelines on the display. This helps you to visually see the distance between the objects behind your car. By pressing the guideline button, you can switch this option on and

off.



TECHNICAL SPECIFICATIONS

Camera	
Operating Voltage	5V DC
Current consumption	<150mA
Image sensor	CMOS
No. of pixel	640×480
Resolution	>330
Optical lens	2,4mm / F2,1
Wireless transmitter	
Transmission frequency	2414MHz or 2468MHZ
RF transmission distance (open space)	80M
LCD monitor	
Operation Voltage	12V DC
Standby Current	<50mA
Operation Current	<250mA
LCD display screen size	10,92cm / 4.3 inch
No. of pixel	480×272
Operation temperature	-10 to +45 degree Celsius

This model may be operated in EU countries.

ENVIRONMENTAL PROTECTION

Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.\

WARRANTY

Pro-User warrants this product for a period of 2 years from the date of purchase to the original purchaser. Warranty is not transferable. Warranty covers defect against workmanship and materials only. To obtain warranty service, please return the unit to the place of purchase or authorized Pro-User dealer together with your proof of purchase. The warranty is void if the product has been damaged or not used as described in this manual. Warranty is void if a non-authorized repair has been performed. Pro-User makes no other warranty expressed or implied. Pro-User is only responsible for repair or replacement (at Pro-Users' Discretion) of the defective product and is not responsible for any consequential damage or inconvenience caused by the defect.

EU – Declaration of Conformity

We herewith confirm that the appliance as detailed below complies with the mentioned directives

- **Article description:** Wireless Back-up Camera System
- **Article number:** 20120
- **Type:** APR043X2
- **Company address:** Pro-User Europe GmbH, Seestrasse 19, 83253 Rimsting, Germany

governing EU-directives

- Electromagnetic compatibility (EMC) 2014/30/EU
- Low voltage directive 2014/35/EU
- Telekommunikationsendeinrichtungen Radio and Telecommunication Terminal Equipment R&TTE 1999/5/EC
- ROHS directive 2011/65/EU

harmonised EN- Standarts
The article complies with the standards as mentioned below which are necessary to obtain the CE-symbol:
Zu 1.
EN55022:2010+A1:2007
EN55024:2010+A2:2003
Zu 3.
EN 300 440-1 V1.6.1:2010
EN 300 440-2 V1.4.1:2010
EN 301 489-1 V1.9.2:2011
EN 301 489-3 v1.6.1 :2013
Zu 2.
EN 60950-1: 2006+A11:2009+A1:2010
+A12:2011+A2:2013
Zu 4.
IEC62231:2008
Signature & Firmenstempel
Position: Geschäftsführer
Date of issue: 10.01.2016
Pro-User Europe GmbH, Seestrasse 19, 83253 Rimsting, Germany

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83253 Rimsting **sales@pro-user.com**

Germany www.pro-user.com
Registergericht: Amtsgericht Traunstein
Registernummer: HR 18720

Documents / Resources

	PRO-USER APR043X2 Pro User Wireless Back Up Camera and Monitor [pdf] Instruction Manual APR043X2 Pro User Wireless Back Up Camera and Monitor, APR043X2, Pro User Wireless Back Up Camera and Monitor, User Wireless Back Up Camera and Monitor, Wireless Back Up Camera and Monitor, Back Up Camera and Monitor, Up Camera and Monitor, Camera and Monitor, and Monitor, Monitor

References

- User.com - Marketing Automation Platform
- Pro-User Electronics