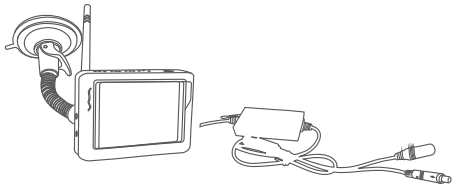


Model: VTX3600

EU Environmental Protection

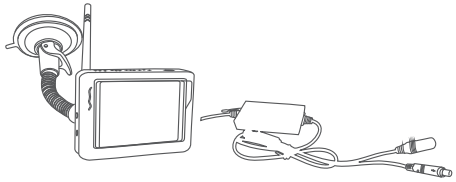
Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

22
PAP

BOYO®
VISION

USER MANUAL

Digital Wireless Backup Camera System with 3.6" TFT - LCD Monitor



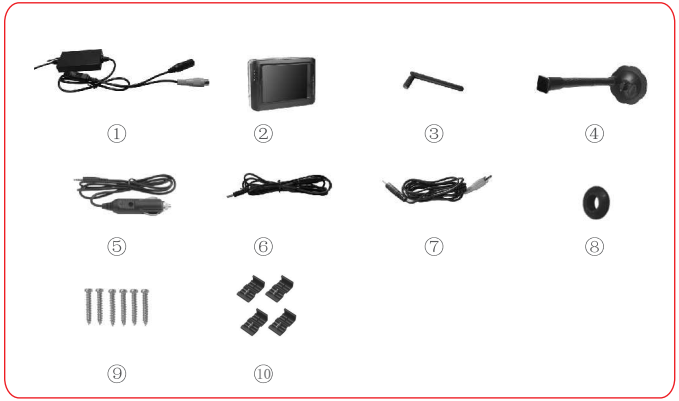
Model: VTX3600

Version 1.0
Please read this user manual carefully before using this product.
Failure to understand operation procedures may result in injury.

Welcome

Thank you for choosing our backup camera system. Please install and use the product in accordance with our operation instructions. We will provide quality and reliable service for a variety of vehicles including cars, trucks, and so on. We implement rigid quality control and testing to ensure the best performance of the product as well as satisfactory service for you.

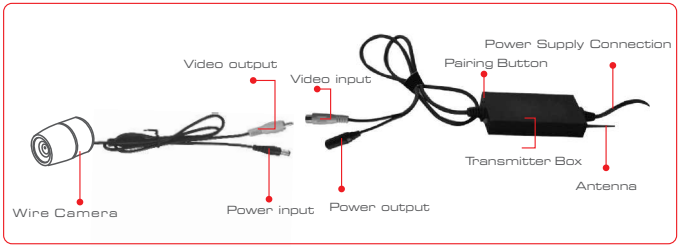
Packing List



① Transmitter Box
② Digital Wireless Monitor
③ Antenna for Monitor
④ Suction Cup
⑤ Cigarette Lighter Adapter
⑥ Power Supply Cable
⑦ Video Out Cable
⑧ Grommet
⑨ Camera Screws
⑩ In-line Wire Connectors

Structure

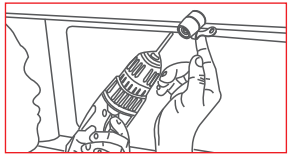
Rearview Camera



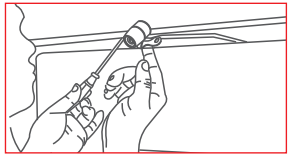
Digital Wireless

Installation

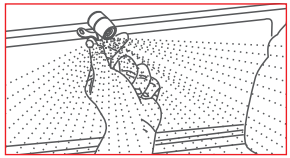
Installation of the wire camera.
(Only for reference) :



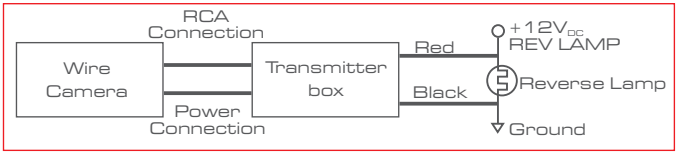
1. Drill three holes above the license plate frame: one for passing the cable through the car body; two for installing camera. Before drilling, check whether there is any part behind the hole-drilling position. If there is, for example, electronic part or fueling system part, take all necessary measures to avoid any possible damage to these parts. If the car has existing holes, please skip this step;



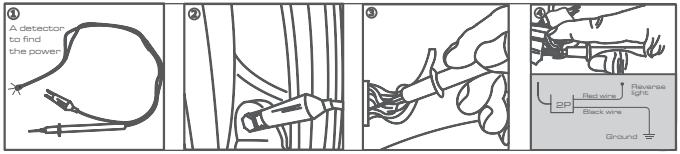
2. After the hole is drilled, insert the supplied washer, and then pass the power cable through the Grommet and into the car. The Grommet shall be used to prevent the metal side of the hole from cutting the power cable;



3. Adjust the camera to a suitable angle for view;
4. Install Camera Screws we supplied to the other holes with the camera.
5. Connect the camera to the Transmitter Box,

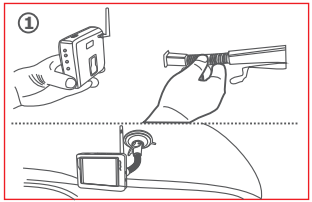


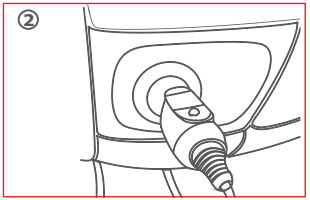
6. A detector to find the power:
how to find the power from the reverse light?
Instructions: black clamp connects to the ground wire. Use the red pen to find the power from the reverse light until the LED light is on. Then connect our red power line to the power from the reverse light, and the black to the ground wire.

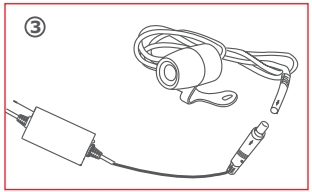


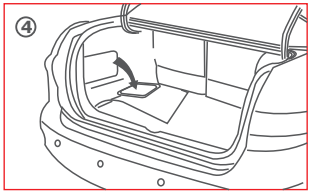
Installation of the monitor:

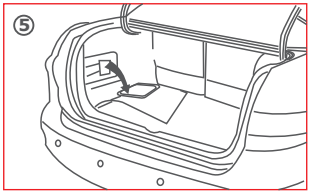
1. Use the Suction Cup to install the monitor. The Suction Cup is stamped on the front window glass.
2. Connect power of the monitor. There are two methods as below:
   A: According to the same steps, find power from the car power circuit in front, and connect the cables correctly.
   B: Use the Cigarette Lighter Adapter included in the package to get the power form cigarette lighter socket

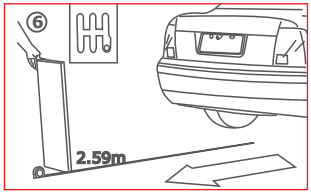








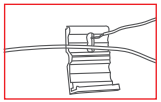




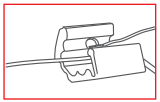
3. Connect the camera and wireless Transmitter Box.
4. Install the box on the side of the trunk.
5. Find and connect the reversing light cable with proper positive and negative electrodes.
6. Stand on the rear of the vehicle with a board(30X100cm)strait stood on hand, reverses slowly to verify the function.

In-line Wire Connector Instructions

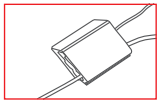
The camera can be wired directly to the reverse light circuit by stripping the reverse light wires and then twisting the camera wires to the exposed reverse light wires. Once they are connected, wrap them with electrical tape. Do not attempt this if you are not knowledgeable with electrical installation practices.



1.Insert the existing wire to be tapped.

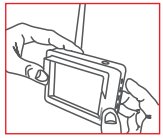


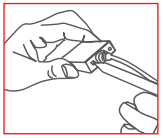
2.Insert the wire to be attached.

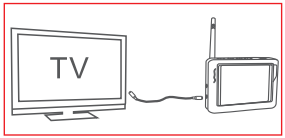


3.Crimp tap and then close lock

Pairing the system







The system is originally paired up from the factory setting, in any case the system loosed pairing, please follow the below instructions to pair up again.

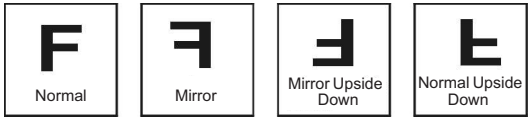
1 Make sure camera and Transmitter Box are appropriate connected, and both Transmitter Box and Monitor are powered up.

2 Press and hold the "Pair" button on the monitor for 3 second, the orange light will start to flash and monitor shows a counting down number from 30 to 0, you have 30 seconds to press and "Pair" button on the Transmitter Box to pair up the system.

3 To use a pen or small tip to press and hold the "pair" button on the Transmitter Box for 3 seconds when the Monitor is counting down. The camera image should be showed up on the monitor, which means the pairing succeed.

4 Video are able to be output from the monitor to bigger display device such as TV or other screen with a RCA video input.

Testing the System



1, Image Orientation:
There are four different ways to view the image from the monitor, press the Image Orientation button, you can change the image in four different way, depends on where and how you install the camera, make sure you have the right Image Orientation before it to backup your car.

2, Contrast Adjustment:
Press the Contrast button to adjust the monitor contrast, there are 7 levels setting changes by each time press the Contrast button.

3, Brightness Adjustment:
Press the Brightness button to adjust the monitor brightness, there are 7 levels setting changes by each time press the Brightness button.

4, ON/OFF:
The Monitor will automatically turn on when the camera powered up, if the Monitor does not turn on, press the ON/OFF button one more time.

5, Default Setting:
Press the Brightness and Contrast buttons at the same time, and the reset is done, both contrast, brightness and image orientation return to the default setting.

6, Save the settings:
System will automatically save all the user settings.

Specifications

TRANSMITTER SPECIFICATIONS

Items	Unit	Specification
Operating Frequency	MHZ	2400 - 2483.5
Bandwidth	MHZ	4.4(20dB BW)
Modulating/Demodulating Method		16QAM,QPSK,BPSK
Transmitting Power	dBm	+14dBm @ 16QAM EVM 5%, +18dBm @ QPSK EVM 8%
Receiving Sensitivity	dBm	-72dBm@QAM, -85dBm@QPSK
Safety		Proprietary Frequency Hopping Signaling With Digital Modulation 32 Bit ID
Antenna Gain	dBi	2(Omni-directional Dipole)
Unobstructed Effective Range	m	≥50
Power Supply	VDC	DC 12V
Max Consumption current	mA	DC 12V@250
Operation Temperature	℃/° F	-10~+50°
Storage Temperature	℃	-20~+60°
Operation Humidity	RH	15%~85%
Dimensions	mm	66x35x12
Weight	g	60±5g

* All the specifications are subject to minor change without prior notice.

Specifications

	Items	Unit	Specification
DISPLAY	LCD Screen Type		3.6", TFT LCD
	Effective Pixels		320 X 240
	Brightness	cd/m²	200
	Contrast		350
	Lens Mount	degree	L:60/R:60/U:40/D:60
VIDEO	Frame Rate	fps	30
	Video Resulutions		VGA
	Video Compression		MPEG-4
	Video Signal Output		CVBS, 1Vp-p@75ohm
	Video Output Format		PAL/NTSC
RF	Operating Frequency	MHz	2400 - 2483.5
	Bandwidth	MHz	4.4(20dB BW)
	Modulating/Demodulating Method		16QAM,QPSK,BPSK
	Transmitting Power	dBm	+14dBm @ 16QAM EVM 5%, +18dBm @ QPSK EVM 8%
	Receiving Sensitivity	dBm	-72dBm@QAM, -85dBm@QPSK
	Safety		Proprietary Frequency Hopping Signaling With Digital Modulation
			32Bit ID
	Antenna Gain	dBi	2(Omni-directional Dipole)
	Unobstructed Effective Range	m	>50
GENERAL	Power Supply		DC +12/24V
	Consumption Current	mA	250(max)
	Weight	g	128±20
	Dimensions	mm	108x75x38
	Operation Temperature	℃/°	-10 - +50
	Storage Temperature	℃/°	-20~+60°
	Operation Humidity	RH	15%~85%

* All the specifications are subject to minor change without prior notice.

FCC Information

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference,
(2) This device must accept any interference received, including interference that may cause undesired operation.
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Cautions

- The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
- Turn off the Camera/Monitor if the system is not in use.
- The Camera/Monitor can only be completely disconnected from the mains by unplugging the adapter.
- Do not cut the DC power cable of the apparatus to fit with another power source.
- Attention should be drawn to the environment aspects of battery disposal.