

Digital Wireless Observation System

Operating and Installation Instructions



This manual is for use with

Furrion FOS48TA-BL

Digital Wireless Observation System

Furrion FOS48TAPK-BL

Digital Wireless Observation System

With FRCBRKT-BL Mounting Bracket pre-installed.

Welcome

Furrion FOS48TAPK-BL Digital Wireless Observation System Includes FRCBRKT-BL Mounting Bracket

Furrion FRCBRKT-BL Digital Wireless Observation System For vehicles with FRCBRKT-BL Mounting Bracket pre-installed.

Thank you for purchasing a Furrion Digital Wireless Observation System. Furrion's digital wireless observation system is one of the easiest rear view camera systems to install in your trailer, truck or RV. All that is required is a connection of a single DC power supply to the rear camera from a running light power source.

The Furrion digital wireless observation system uses digital wireless technology giving the major benefit of superior signal transmission with low interference on a single bandwidth channel. This means the Furrion camera unit eliminates the interferences which other analogue signal systems are subject to, meaning the Furrion digital system gives you a clearer picture of what is behind you no matter where you are.

This Furrion system with integrated antenna attached to the camera has been specifically designed for use on trailers, trucks, 5th wheels, caravans and RV's. This system has been designed for extended range applications or security monitoring.

Before installation and use, please read all instructions carefully. This will ensure safe use and reduce the risk of injury to persons.

IMPORTANT SAFETY INSTRUCTIONS.....4

System Parts.....5

Installation Mounting Bracket.....6-7

Installation Camera Wiring.....7

Installation Mounting Bracket cont.....8

Camera Installation.....9

Camera Positioning.....10

Monitor Installation.....11

Pairing.....12

Picture Control.....13

TroubleShooting.....14

Specifications.....15

IMPORTANT SAFETY INSTRUCTIONS

READ THESE INSTRUCTIONS CAREFULLY BEFORE INSTALLING OR USING THE SYSTEM

Electrical Safety

⌘ A battery or 12 or 24V DC electrical system presents a risk of electrical shock or burn hazard. Ensure all power sources are isolated before installation.

⌘ Insulate unconnected wires with vinyl tape or similar.

⌘ Use insulated tools when working with a power supply.

Caution

⌘ There are no user serviceable parts in the Furrion Digital Wireless Observation System. Do not disassemble or attempt any repairs.

⌘ There are no fuses or disconnects in the Furrion Digital Wireless Observation System. Install external fuses/breakers as required.

Care

⌘ Do not wash the vehicle with an automatic car wash or high pressure water. This may damage the camera.

⌘ Clean the LCD screen with a microfiber cloth, do not use coarse or abrasive materials.

⌘ Do not use alcohol or ammonia based products to clean the LCD screen. Only use specialist screen cleaning products.

⌘ Use a wet cloth to clean the camera lens. A dry cloth may scratch the camera lens.

Installation

⌘ Installation & wiring of this product require specialist skill. To ensure proper installation and to ensure safety, please seek a specialist technician.

⌘ Only use parts supplied or recommended.

⌘ Use watertight connectors for camera power supply cable to power source.

⌘ Use 16AWG or larger cables to supply power to the camera unit.

⌘ Connect rear the camera to a 8-30V DC circuit only.

⌘ Ensure correct polarity of DC power supply to the camera

⌘ To reduce the risk of fire, connect the camera only to a circuit provided with a maximum branch-circuit over current protection device.

⌘ Don't route wiring in areas that may get hot.

⌘ Take necessary precautions when working at elevated levels.

System Parts

FOS48TAPK-BL Digital Wireless Observation System



LCD Monitor



Monitor Stand



Camera



Monitor Power Cable

FRCBRKT-BL Digital Wireless Observation System



Camera Bracket



Camera Bracket
Gasket



Camera Power
Cable

Installation

Mounting Bracket

(If the FRCBRKT-BL Mounting is pre-installed please go to page 9)

⚠ Caution

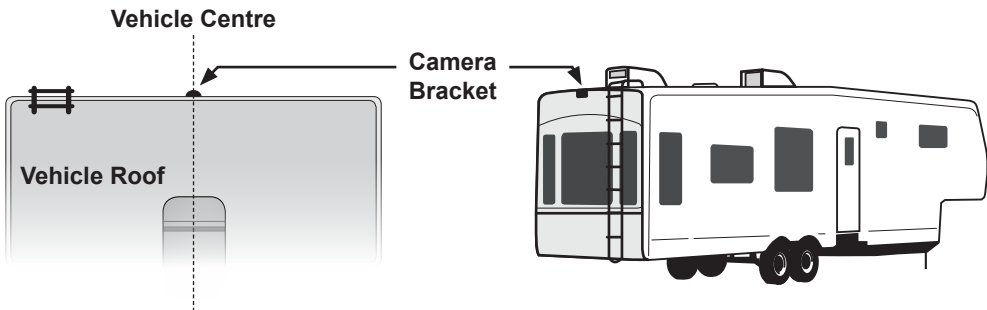
- Ensure there are no electrical cables, gas lines, pipes or other important parts behind where the drill holes will be.
- During installation, remove the key from the ignition & isolate the 12v or 24v power source.

Suitable installation position

- Where practical, as high as possible at the rear of the vehicle.
- In the horizontal centre of the vehicle or as close as.

Suitable installation position..

- Mount the camera directly above the red running lights.
- At least 2" away from any lighting. *Close proximity to lights may cause image blooming, blurring and reduced night vision performance.*
- The area should be flat with enough surface area to accommodate the bracket.
- The surface area should be clean & dry for a watertight installation.
- Ensure that power can be fed to the installation area from within the vehicle.

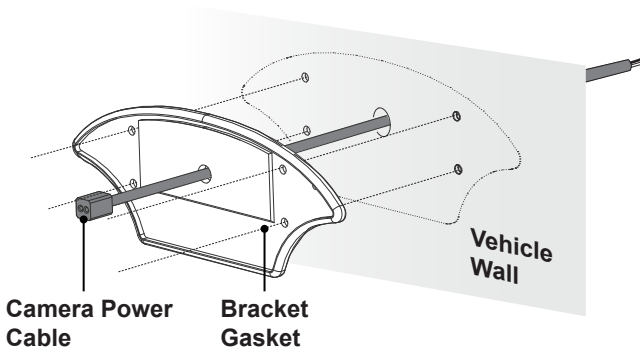


Installation

Mounting Bracket

① Use the Bracket Gasket to mark and outline where the centre hole will be drilled then drill a 5/8th hole.

② Feed the supplied 6^{ft} Camera Power Cable through the gasket. Ensure the bare wire end of the cable goes into the vehicle and the flat side of the gasket faces inward.

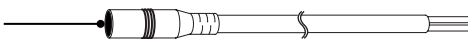


Wiring the Camera

Electrical Power

- To use the Digital Wireless Observation System for observation purposes, it needs to be wired to a constant 12V/ 24V power source. e.g *If connected to running lights, the running lights must be on for the system to operate.*
- To use it as a reversing camera, it can be wired to a circuit that comes on when the vehicle is reversing.e.g *reversing lights*

Connects to
Camera



Connects to
12V/ 24V
Power Supply

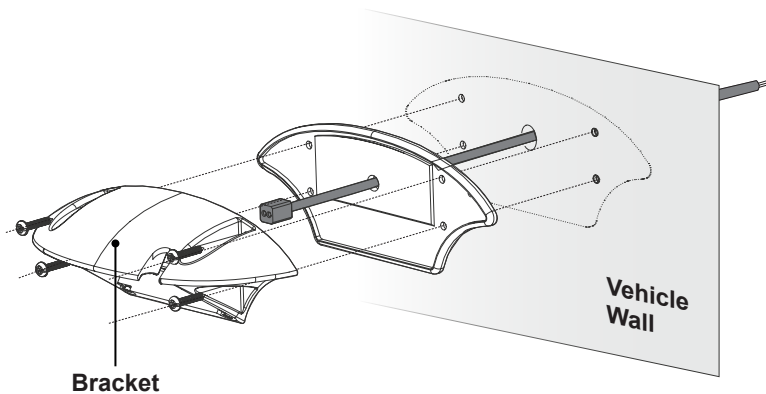
- Ensure correct polarity when wiring the cables. **RED + BLACK -**
- Wire connections & terminals must be sealed to be waterproof.
- ⚠ When connecting wires, ensure the circuit is isolated by disconnecting the - negative terminal on the battery.

Installation

Mounting Bracket

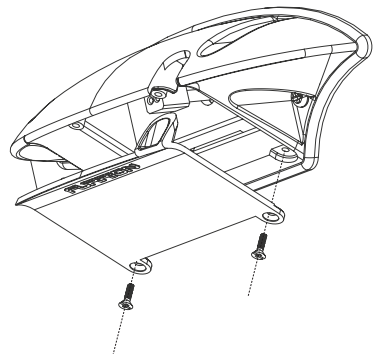
③ Mount the gasket & bracket to the rear of the vehicle. Ensure that the Camera Power Cable does not get caught between the vehicle wall & gasket or the Bracket & Gasket.

③ Fix the Gasket & Bracket to the rear of the vehicle using 4 x #2 head 3/4" self tapping screws. (*other screws can be used depending on side wall material.*) Ensure the sealing lip around the edge of the gasket is seated over the edge of the bracket before fully tightening the screws.



Mounting Bracket

If only installing the FRCBRKT-BL Mounting Bracket, secure the Camera Power Cable inside the mounting and attach the cover.

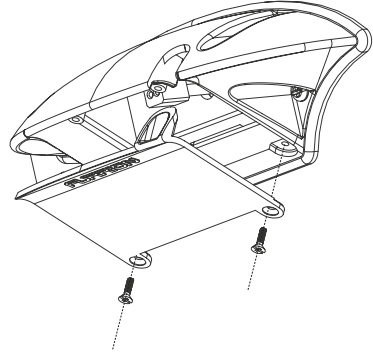


Installation

Camera Installation

FRCBRKT-BL Pre-install only

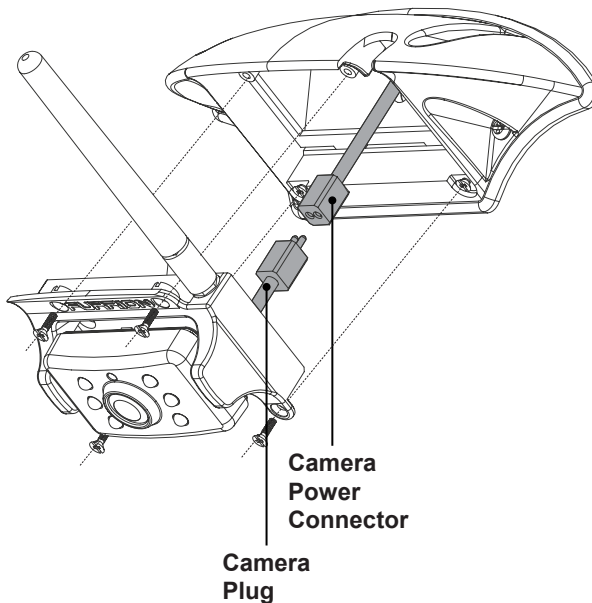
If installing to a pre-installed FRCBRKT-BL Mounting Bracket, remove the cover by unscrewing the 2 screws.



1 Locate the Camera Power Connector from within the Bracket and connect it to the Camera Plug.

2 Ensure the camera antenna is secured tight.

2 Secure the camera to the Bracket using the 4 screws.



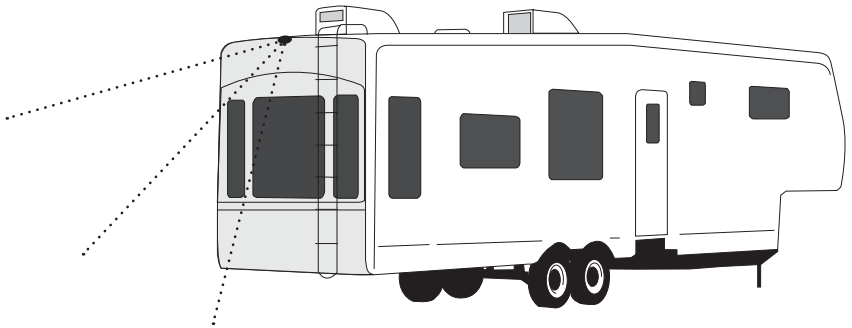
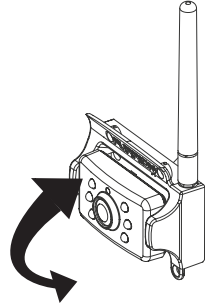
Installation

Camera Positioning

The camera can be tilted up & down to obtain the best viewing angle.

Positioning the Camera

- Adjust the camera up or down then check the view via the monitor.
- If the camera is to be used as parking camera, part of the vehicle, such as the bumper, should be visible on the monitor.



Installation

Monitor Installation

Positioning the Monitor

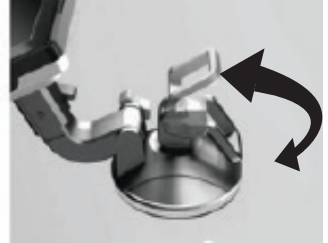
- Ensure the the is placed so that it does not obstruct vision when driving.
- Do not place in an area where it might interfere with driving.
- The surface area should be clean, smooth & flat.



With the lock open, position the mount.



Press mount down against the surface.



Push the mount lock down.

Adjusting the View Angle

- Swivel & Tilt the mount to set the optimum viewing angle.
- Lock the position by tightening the locking screws. **1**



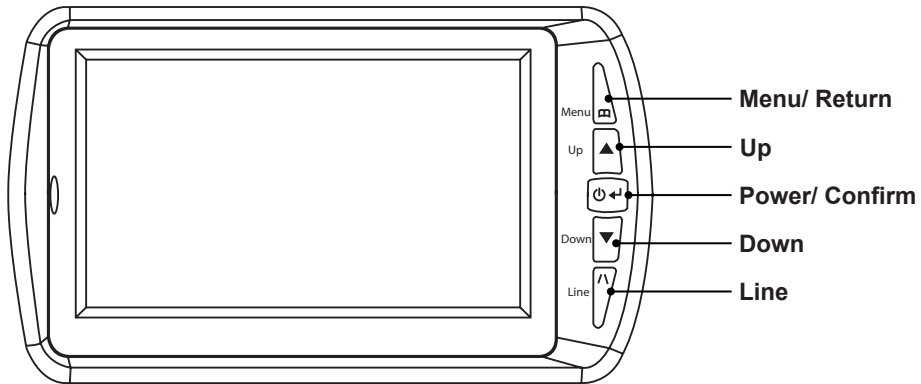
Connecting the Monitor

- Route the power cable to the vehicle's cigarette lighter socket/12/24V power outlet. The cable must not interfere with the safe operation of the vehicle.\
- Insert the small 12/24 Volt DC plug of the power cable into the right side of the monitor.
- Plug the 12/24 Volt cigarette lighter plug into the vehicle's cigarette lighter socket.

Operation

Pairing

After installation, the camera & monitor need to be paired.
This only needs to be done once.



Pairing procedure

Ensure both the camera and monitor have power supplied.
The vehicle may need to be running

1. Bring the monitor to within close proximity for pairing.
2. Press the **Power** button to turn on the monitor.
3. Press the **Menu** button, this will bring up 4 icons on the screen.



4. Use the **Up** & **Down** buttons to scroll across to the **Pair** icon.



5. Press the **Power/ Confirm** button to start pairing. A **Pair** icon will be displayed.



6. Press the small button on the underside of the camera for 2 seconds.
7. An **OK Pair** icon will be displayed once pairing is complete.



Pairing

PAIRING FAILED will appear on the monitor after 13 seconds if the pairing procedure has been unsuccessful.

*For better pairing results, bring the monitor closer to the camera.

Unpairing

To unpair the camera from the monitor, exit the menu, press & hold **Down** for 5 seconds.

Picture Control

Using the **Up** & **Down** buttons to navigate and adjust and the **Power/ Confirm** button to confirm selections, the monitors view settings can be adjusted to suit various viewing preferences.



Picture Settings



Brightness



Contrast



Color



Picture Rotation

Troubleshooting

Problem	Solution / Issue
Monitor won't turn on	-Check that power cable is connected
	-Check the cigarette lighter has 12-14V DC Output
	-Check the fuse in the cigarette socket adaptor
Camera & Monitor won't pair	-Check if the camera is receiving power
	-Reduce the distance between the camera & monitor during pairing.
	-Make sure to hold the camera pairing button for 2 seconds.
Intermittent/ Weak signal icon appears 	-Check if the camera antenna is fitted & secured correctly - it should be vertical.
	Distance between camera & monitor is too great.
	Interference from overhead power lines may be affecting the signal.
	Try unpairing and pairing.

Specifications

Specifications		
	Camera	Monitor
Voltage	DC8-30V	DC8-30V
Current	≤300mA	≤200mA
Standby Current		≤1mA
Wireless Range	≤300M (outdoors)	≤300M (outdoors)
Wireless Frequency		2.4Ghz
Image Sensor	1/4" Color CMOS VGA	
LCD Display		4.3" 480*272
Camera	Max 25frames/sec VGA f1.7mm, F2.0	
IR	850nm filter	
	View Distance ≥1.5m	
	Brightness ≥ 2Lux	
Receiver Sensitivity		-78±3dBm
Working Temperature	-10/+50	-10/+50

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

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, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

**This product is backed by Furrions 12 month product warranty
See warranty card for terms & conditions.**



Furrion reserves the right to alter the information in this document without prior notice.
Furrion shall not be liable for technical or editorial errors or omissions contained herein.