# Technaxx® \* User Manual Wireless Rear Camera System TX-110

Suitable for most of cars (& vans, SUVs, minibuses, caravans, etc.) as assistance for reverse parking.

This system should be an aid and should NOT replace the need to drive carefully.

Under no circumstances will the manufacturer or supplier accept any responsibility or can held liable for any direct or indirect, incidental or consequential damage, or for injuries resulting from installing or use of this system.

The manufacturer Technaxx Deutschland GmbH & Co.KG hereby declares that this device, to which this user manual belongs, complies with the essential requirements of the standards referred to the Directive **RED**2014/53/EU. The Declaration of Conformity you find here:

www.technaxx.de/ (in bar at the bottom "Konformitätserklärung"). Before using the device the first time, read the user manual carefully.

Keep this user manual for future reference or product sharing carefully. Do the same with the original accessories for this product. In case of warranty, please contact the dealer or the store where you bought this product.

Warranty 2 years

## **Features**

- Inconspicuous reversing camera in license plate holder
- Suitable for most vehicles as assistance for reverse parking
- Wireless video transmission or via cable (6m)
- IR LED for clear night vision ~4m
- Adjustable camera alignements & 110° viewing angle
- Power supply of the camera by connection to the reverse light
- Power supply of the monitor via the cigarette lighter socket
- IP67 camera protection class (dustproof & protection against temporary immersion)
- 3.5" TFT LCD monitor with 320x240 pixel
- Distance display on the monitor
- License plate holder suitable for single-line EC registration (52x11cm)
- Complete installation set
- More safety in reverse driving

# **Technical specifications**

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License plate holder with camera					
Image sens	sor / Resolution	CMOS / 640x480 pixel			
Viewing angle		110°			
Min. illumir	nation	0.5Lux / automatic white balance			
IR night vision distance		~4m			
Power supply		Connection via transmitter			
Max. current		140mA (incl. transmitter)			
Protection class		IP67			
Weight / Dimensions 264g		y / (L) 52.8 x (W) 4.0 x (H) 13.7cm			
Wireless Transmitter					
Modulation		FM (Frequency Modulation)			
Bandwidth		18MHz			
Transmissi	on frequency	2.468GHz			
Max. radiat	ted output power	6mW			
Weight / Di	imensions	72g / (L) 9.5 x (W) 4.0 x (H) 1.4cm			
		Monitor			
Display / R	esolution Colo	r TFT 8.89cm (3.5") / 320x240 pixel			
Transmissi	on frequency	2.4GHz			
Video syste	em	PAL/NTSC			
Sensitivity		≦ -85dBm			
Input voltag	ge	DC 12V			
Max. current		250mA			
Transmissi	on distance	~10m open space (no interferences)			
Operating temperature		-10°C up to +50°C			
Humidity		85% RH max.			
Weight / Dimensions		165g / (L) 10.8 x (W) 3.7 x (H) 7.5cm			
Packing Contents	License plate holder with camera, Monitor, Suction				
	cup holder, Wireless transmitter with power				
	connection for camera, 12V power supply for monitor,				
	Video cable for direct connection, Mounting material,				
	User Manual				



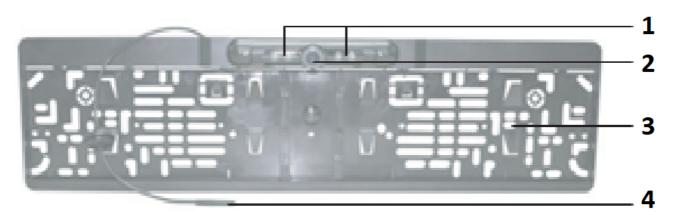


#### **Product overview**

The rear view camera sends a video signal from the camera on channel 4 in the 2.4GHz frequency range (specified for such video transmissions) to the monitor. In case another Bluetooth handsfree device is installed in your vehicle, it works in the same frequency range as the camera. If that handsfree device is activated, it may cause disturbances. Therefore we recommend to deactivate that other Bluetooth handsfree device while using the reversing system.

**Video cable (included):** In order to give you the possibility to use a reversing camera despite another Bluetooth handsfree device in your vehicle, a video cable is included. With this cable the video signal can be transmitted to the monitor. So connect alternatively the video cable to the camera and lay it inconspicuously in the vehicle. For permanent operation with the video cable, remove the antenna from the monitor.

## License plate holder with camera



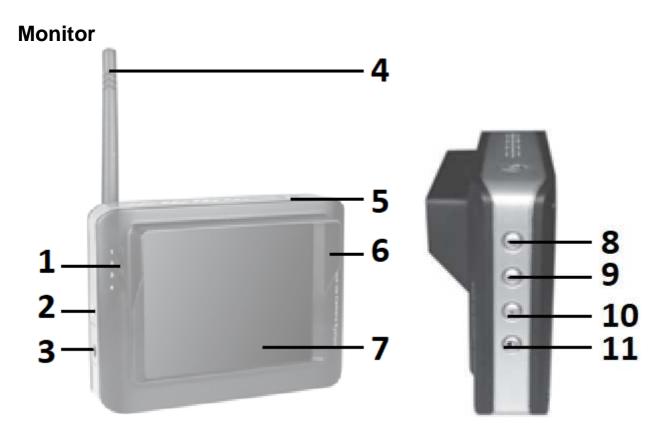
1	Infrared-LED	3	Holder
2	2 Camera		Connection cable

# **Wireless Transmitter**



1 Connection cable to reverse light

2 Connection cable to camera (wired connection to monitor)



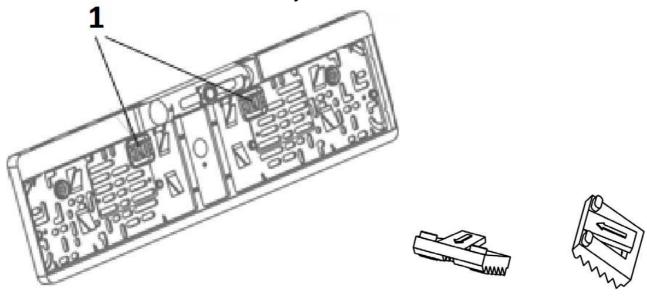
1	Channel	2	Video-In (AV) 2.5mm	
3	DC 12V power input 3.5mm	4	Antenna	
5	On/Off → press to turn the screen on/off			
6	Anti glare	7	Display (3.5")	
8	Image rotation → pressing repeatedly will rotate the image			
9	Channel selector switch → to switch the receivde channel		the receivde channel	
9	(channel 4 is default setting)			
10	Brightness → press to adjust the screen brightness			
11	Contrast → press to adjust the screen contrast			

# **Commissioning**

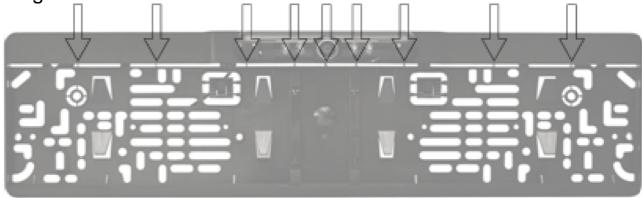
Check the functionality of the components before installation (a installed product is excluded from the return). Preparing and installing the license plate holder and the transmitter unit.

**NOTE:** You may need a voltmeter to measure the polarity of the reversing light.

→ Break the two locks carefully out of the holder.



→ Remove the transport locks carefully. Use a sharp knife or a tong.

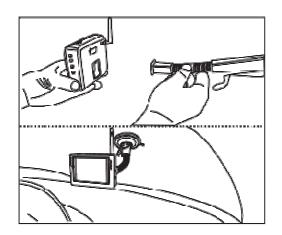


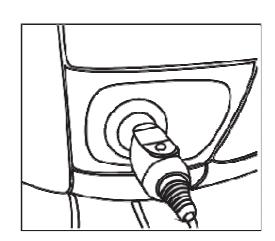
- → Attach the license plate holder to the vehicle instead of your previous license plate holder.
- $\rightarrow \rightarrow \rightarrow$  Insert the camera cable into the trunk compartment and connect it to the transmitter unit.
- $\rightarrow \rightarrow \rightarrow \rightarrow$  Attach the transmitter unit steady and firm in the trunk compartment.

- $\rightarrow \rightarrow \rightarrow \rightarrow \rightarrow$  Connect the black connection cable of the wireless transmitter to the negative pole of the reversing light.
- $\rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow$  Connect the red connection cable of the wireless transmitter to the positive pole of the reversing light.

## Installing the monitor

- → Attach the suction cup to the windshield.
- → Connect the monitor to the electrical system (onboard voltage). Use the DC 12V connection cable or alternatively the connection cable for direct connection to the electrical system (onboard voltage).







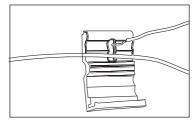
1	Hollow connector to the monitor	
2	Connect black to vehicle mass	
3	Connect red with +12V	

- → If not already preset, switch the monitor to channel 4.
- $\rightarrow \rightarrow \rightarrow$  Set the camera at an angle where you have a good view to the rear, depending on the height of the license plate holder from the ground. The displayed lines on the monitor give you an indication of the distance. Definitely control the distance with a folding ruler.
- $\rightarrow \rightarrow \rightarrow \rightarrow$  Then tighten the screws on both sides of the camera.

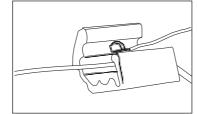
NOTE: If your 12V connection has a permanent plus, switch off the monitor when you leave the vehicle. In a parked car the temperature can easily rise up very high in direct sunlight. To avoid damages on the monitor, store it in e.g. the glove compartment.

## Using the cable clamps

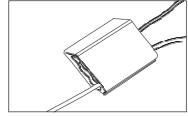
The pictures explains how to use the supplied cable clamps.



1. Put the cable from the car you want to connect the wireless transmitter with into the clamp.



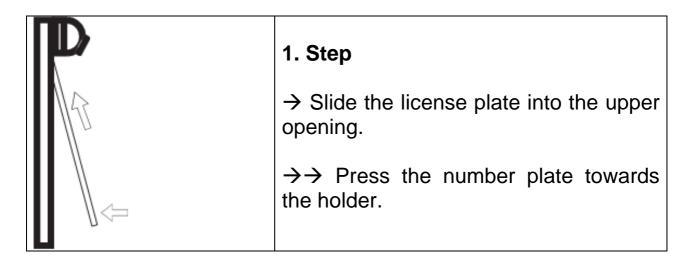
2. Insert the 2nd cable (red or black cable of the wireless transmitter).



3. Close the clamp.

## Insert the license plate in the holder

The following drawings show in sequence the insertion of the license plate.



	2. Step			
	→→→ Slide the license plate down until it stops.			
(R	3. Step			
	$\rightarrow \rightarrow \rightarrow \rightarrow$ Insert the locks from above into the holder.			
	(You carefully broke them out of the holder in the first step.)			

## Safety regulations

The reversing system is an aid and does not relieve the driver of his duty of care in road traffic according to STVO. Please read these instructions carefully before first use.

#### **General information**

Never place the device on an unstable surface. Dropping may damage the device. ● The device is not in the hands of children. It is not a toy. ● Also observe the safety instructions and the operating instructions of the other devices to which the device is connected. ● In commercial facilities, the accident prevention regulations of the Association of Professional Associations for Electrical Installations and Equipment must be observed. ● In schools, training centers, hobby or self-help workshops, the operation of electronic products is to be monitored responsibly by trained personnel. ● The seller assumes no responsibility for damage that occurs during the use of the device, as well as for complaints by third parties.

#### **Environmental conditions**

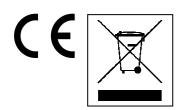
Avoid heavy mechanical stress on the device. Protect it from vibration, hard knocks, do not drop it or shake it. ● Do not expose the device to high temperatures (over 50°C) and strong temperature fluctuations. Protect it from direct solar radiation and proximity to radiators. ● IP67 camera protection class (dustproof & protection against temporary immersion). The monitor and the transmitter may only be operated indoors. ● It cannot be completely ruled out that some paints, plastics or other care products attack the material of the housing or accessories.

**Disorders:** If an object or liquid gets into the device, have the device checked by an authorized technician before continuing to use it. We recommend that you contact our service center.

**Packing material:** Keep children away from packaging material. There is danger of suffocation.

**Cleaning and care:** Always store the device in a clean, dry place when not in use. Use a dry, soft cloth to clean the exterior surfaces.

**Interference by wireless transmission:** The device operates at a frequency of 2468 MHz. This frequency can also be used by other devices that transmit video wireless. It can thus come in individual cases to disturbances.



**Protection:** for Environment Packages materials are raw materials and can be recycled. Do not disposal old devices or batteries into the domestic Cleaning: Protect the device waste. contamination and pollution (use a clean drapery). Avoid using rough, coarse-grained materials or solvents/aggressive cleaner. Wipe the cleaned device **Distributor:** accurately. Technaxx Deutschland GmbH & Co.KG, Kruppstr. 105, 60388 Frankfurt a.M., Germany

Service phone No. for technical support: 01805 012643 (14 cent/minute from German fixed-line and 42 cent/minute from mobile networks).

Free Email: support@technaxx.de

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