

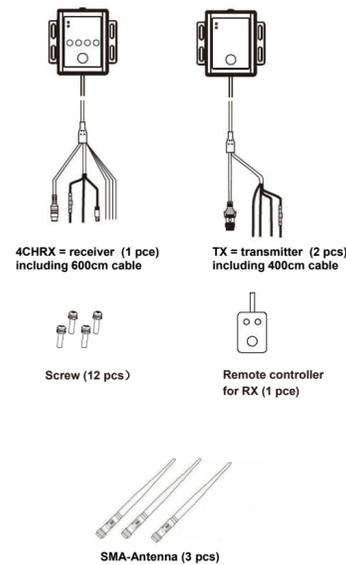
# 4CHRX-TX

Digital-Wireless  
Transmitter & receiver



Before using this product, please read the manual carefully and keep this manual for future reference

## 1. Composition 4 CHRX-TX



### Safety instructions

1. Composition
2. Features
3. Functions
4. Installation positions
5. Connection wiring
6. Specifications
7. Cleaning & maintenance

## 2. Features

1. Black anodized aluminum housing (corrosion-proof)
2. IP69K waterproof
3. Suitable for 11-32V DC
4. Compatible with motorized shutter camera
5. Manual Channel select function and Trigger function per channel
6. Remote controlled pairing function (to exchange RX-TX each other)
7. Wireless digital transmission of Video and Audio
8. High quality TPU cables at both RX and TX
9. CE marked
10. EMC approved

## 3. Functions

4. After connecting the main power, the blue color POWER LED will be activated at both 4CHRX and TX. Immediately after connecting the main power, also the green color LINK LED will be activated at both RX and TX. When RX-TX's blue color POWER LED and green color LINK LED are activated at the same time then the RX and TX are connected (linked) each other and working normally.

The remote controller from the RX has a red color POWER LED and a green color LINK LED. When RX's red color LED + green color LED at the remote controller and TX's blue color POWER LED + green color LINK LED are activated at the same time then the RX and TX are connected (linked) each other and working normally.

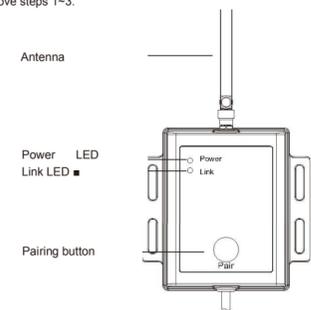
In case new PAIRING (linking) of the RX and TX is required, then within the effective working range, press the PAIR button at the RX housing and the TX housing for more than 3 seconds. Then the green color LINK LEDs at both RX and TX will start blinking. When the green color LEDs are blinking then the RX and TX are PAIRING each other.

The PAIRING mode of the RX can also be activated by pushing the CH Select button at the remote controller for more than 4 seconds.

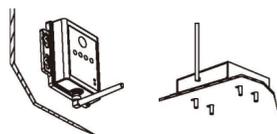
The PAIRING mode of the TX can also be activated by pulsing a DC 11-32V signal at the GREEN wire as follows: ON-OFF, ON-OFF, ON-OFF, ON-OFF (total 4 times within 10 seconds) then the TX is in PAIRING mode. The Green wire does not respond at a continue +DC signal, so it is recommended to connect the green wire at the +DC signal from the vehicle's (fog) lights. By switching the lights ON-OFF as described above, the pairing mode will be activated.

3) The pairing process takes 50 seconds. A countdown of these 50 seconds is visible via the On Screen Display at the connected monitor. After 50 seconds the green color LINK LEDs will stop blinking and stabilize into continue green color LEDs. In this case the RX and TX are connected (linked) each other correctly. As soon as the camera picture is appears, the On Screen Display shows the wireless signal strength by max. 4 vertical bars in the right top corner at the connected monitor. 1 Bar means minimum/low signal strength and all 4 bars means maximum/high signal strength. In case of low signal strength, then re-positioning the RX and/or TX is recommended to improve the signal strength. Best signal strength will be accomplished when both antennas can 'see' each other without (too many) obstacles in between. Once a RX and TX are connected (linked) each other the pairing process does not have to be repeated after the main power is disconnected. The established link will be stored by the memory function of the 4CHRX-TX in order to ensure quick startup after disconnecting and re-connecting the main power.

4) In case another RX or additional TX needs to be connected (for example, during exchange of trucks and trailers each other), then please repeat above steps 1-3.



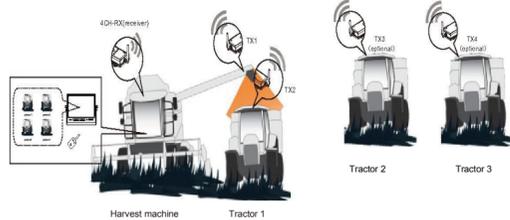
## 4. Installation positions



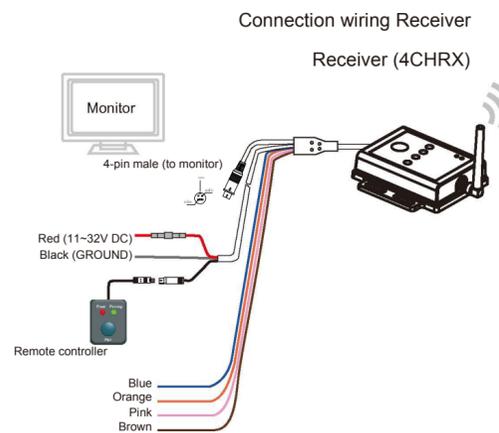
**Receiver (4CHRX)**  
The 4CHRX should be installed on top of vehicle's roof or at the cabin's back wall. Best performance is achieved when the RX-TX antennas can 'see' each other.

**Transmitters (TX)**  
The transmitters (TX) should be installed on top of the roof from the cargo space or under the bottom of the cargo space. Best performance is achieved when the RX-TX antennas can 'see' each other.

Example application 4CHRX-TX



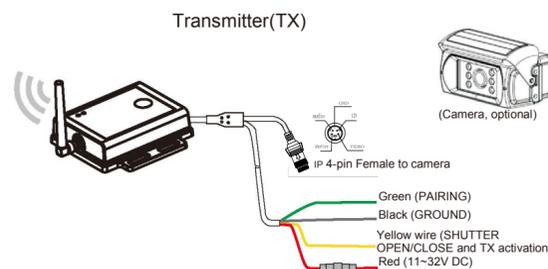
## 5. Connection wiring



**Remote controller** (for manual CHANNEL SELECT and PAIRING control)

**Blue wire:** (Trigger CH1) activation by 11-32V DC  
**Orange wire:** (Trigger CH2) activation by 11-32V DC  
**Pink wire:** (Trigger CH3) activation by 11-32V DC  
**Brown wire:** (Trigger CH4) activation by 11-32V DC

## Connection wiring Transmitter



**Green wire:** (PAIRING activation)  
This wire is an external remote wire to activate the pairing mode in situations where it is difficult to reach the manual pair button on the transmitter's housing. In order to activate the pairing mode 11-32V DC must be connected to the green wire for just 2-3 seconds only and then disconnected immediately again.

**Yellow wire:** (SHUTTER OPEN/CLOSE control and TX activation)  
This wire controls the camera's motorized shutter function. In case a camera with motorized shutter is connected at the TX, then the yellow wire needs to be connected with 11-32V DC via the vehicle's reverse gear light signal. The motorized shutter will OPEN when the reverse gear light is activated and the motorized shutter will CLOSE when the reverse gear light is de-activated.

**Note!**  
In case a normal camera (without motorized shutter) is connected at the TX, then to activate the TX the yellow wire must be connected with 11-32V DC at the same position as the red color wire.

## 6. Specifications

General	Operating frequency	2400MHZ-2483MHZ
	Modulation system	FSK
	Signal reception area	150-200M (in open air)
	Operating temperature	-30°C ~ 80°C
	Operating current	0.13-0.17A
	IP Rating	IP69K
Transmitter (TX)	Power supply	11 - 32V
	Video input	CVBS 1.0VP-P, 75Ω
	Audio input	AUDIO MAX 2VP-P, 50Ω
	TPU cable length	Approx. 400cm
	Dimensions	131mm x 100mm x 25.6mm
	Weight	0.28KG
Receiver (4CHRX)	Power supply	11 - 32V
	Video output	CVBS 1.0VP-P, 75Ω
	Audio output	AUDIO MAX 2VP-P, 50Ω
	Pixels	720x576
	TV system	PAL
	Frame rate	25-30 frames/sec
	TPU cable length	Approx. 600cm
	Dimensions	131mm x 100mm x 25.6mm
	Weight	0.28KG

## 7. Cleaning & maintenance

1. Make sure the power to 4CHRX-TX is disconnected. Gently remove any foreign material on the housing by rubbing the surface lightly with a wet, soft cloth.
2. During cleaning, please make sure there is no water ingress between the antenna terminal and the antenna.
3. In order to avoid loose contact between the antenna and the antenna-terminal, please check these positions at both RX and TX regular or apply insulation tape for durable fixation.
4. Do not put the products at high temperature and high electromagnetic interference environments.
5. Do not drop or do not expose the products to external shocks.

**Note!**  
Make sure the TPU cables are not damaged or cut. A damaged or cut TPU cable may cause defects to the 4CHRX-TX. In case of a damaged or cut TPU cable, warranty claims cannot be accepted.