

Analog Wireless Video System for Agricultural, Forestry, and Special Machinery



Components

Wireless transmitter
(part no. 231305002099)



Wireless receiver
(part no. 231305001099)



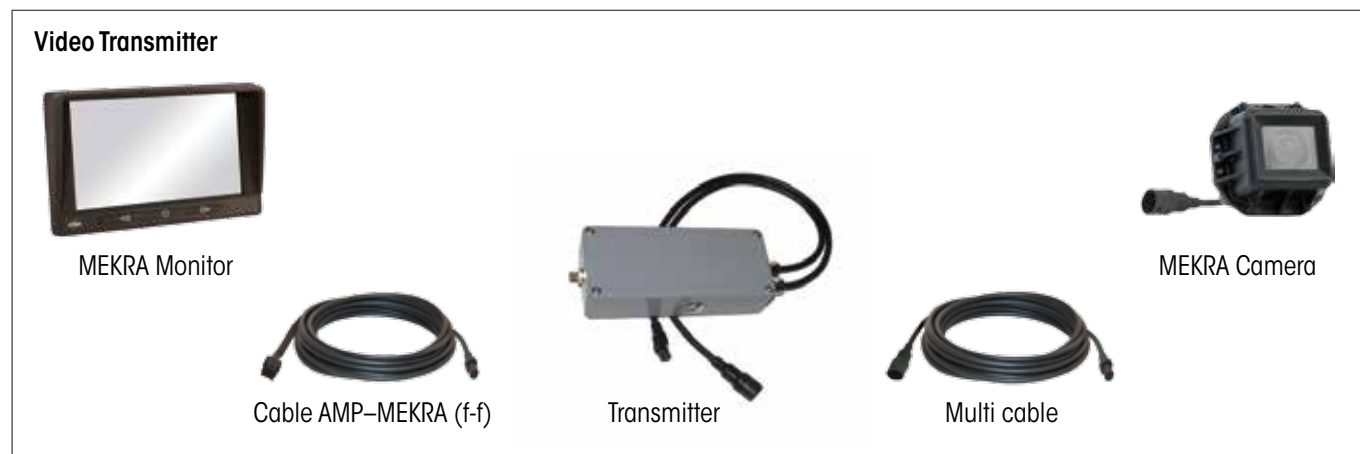
Antenna
(part no. 081305001099)

Antenna extension kit
(part no. 081305002099)

CE RoHS 

Connections / About Wireless Transmission

Connections

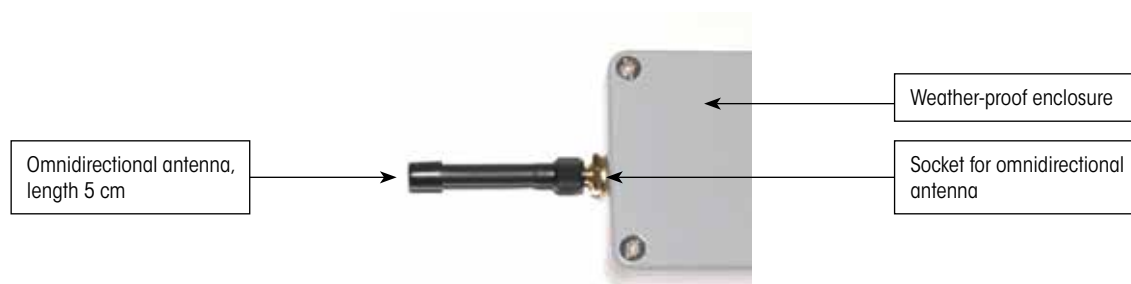


If applicable, components may be connected to existing or other displays. Please contact your authorized dealer for more information.

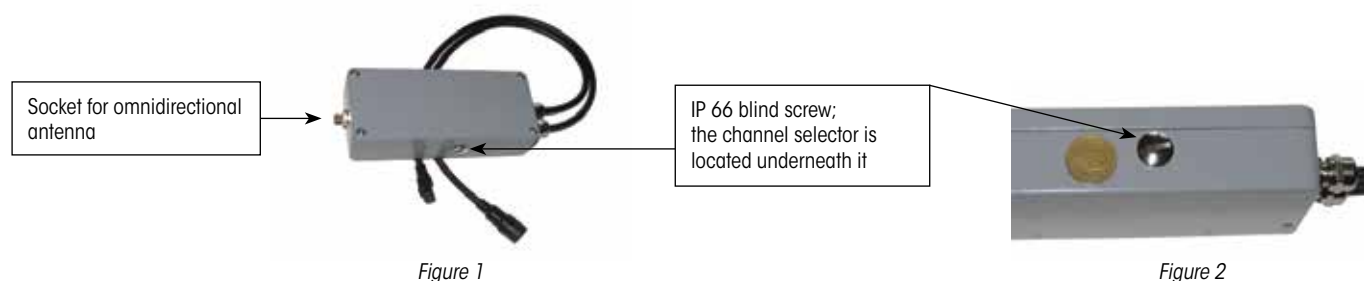
About Wireless Transmission

- Ensure a minimum distance of 30 cm between the transmitter/receiver omnidirectional antennas and any metal objects. Ensure that the system can transmit and receive in all directions without obstructions.
- The transmitter and receiver antennas must have the same polarization. To ensure that both omnidirectional antennas are direction-independent, they must be mounted vertically, i. e. they must stand upright. The omnidirectional antennas on both the transmitter and the receiver cover a line-of-sight transmission range of up to 600 m.
- When operating a 5.8 GHz video wireless system indoors, the potential transmission ranges can only be determined through testing.
- Avoid transmission interference by ensuring that both the transmitter and the receiver are always mounted above objects moving in the transmission path.
- Do not allow the antennas to ice over, as this will significantly impair the effectiveness of the wireless system.
- Interference may occur when operating the system in the ISM frequency band. In this case, switching to a free channel is recommended.
- Follow all applicable safety rules and regulations for the protection of third parties when operating the system.
- Do not operate transmitters when they are in physical contact with a person or animal, as this may cause injuries.
- Maintain a safe distance of several meters at all times.

System Setup

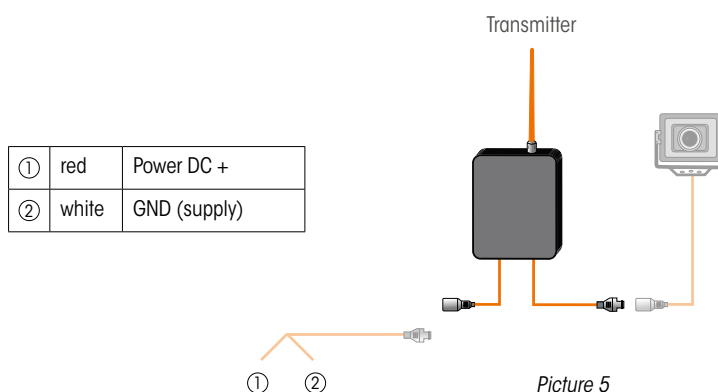


Both the transmitter and the receiver are ready to use upon installation. They do not require any manual operation. If required, however, the transmission channel may be changed by performing the following steps. Use a coin to remove the blind screw on the side of the enclosure (see figures 1 and 2) to expose the channel selector. Using an appropriately sized screw driver, gently turn the channel selector clockwise or counter-clockwise to select the desired channel. Reinsert and tighten the blind screw to re-establish ingress protection (IP rating 66).



There are 8 transmission channel settings (0-7) available for selection. With approximately the same field strengths at the receiving location, 8 systems can be operated in parallel.

- Next, the monitor can be connected to a power source and in turn provide power to the transmitter and the camera via the respective connecting cables. **If a monitor is not required, the transmitter can also be directly connected to a power source via a special cable.**



The power supply circuit must be protected using a 3 Amp fuse!

- The transmission system consisting of the monitor, the video transmitter, the omnidirectional antenna and the camera, is now ready to use.
- **Make sure that both the transmitter and the receiver are set to the same channel.**

Operation / Specifications / Compliance with EU Standards

Important Operating Notes

- Do not operate the transmitter without the antenna.
- The permissible operating temperature range is -40°C to +85°C. This temperature range must be maintained to ensure trouble-free operation.
- During operation, avoid direct contact with the transmitter and the antenna, as this may cause bodily injuries.
- Maintain a minimum distance of 30 cm between the antenna and any other objects to ensure unobstructed transmission in all directions.
- Orient the omnidirectional antenna vertically to achieve vertical transmission.
- To ensure trouble-free operation of the transmitter, do not modify any of the factory settings. Set both the transmitter and the receiver to the same channel to achieve optimum transmission quality.
- **The transmitter housing is weather-proof and meets the requirements of ingress protection rating IP66. Follow all applicable installation guidelines and safety requirements when mounting the system outdoors!**
- **The power supply used must meet all limited power source (LPS) requirements stipulated by DIN EN 60950-1!**
- **The power supply circuit must be protected using a 3 Amp fuse!**
- For mobile applications, operate the receiver with the omnidirectional antenna that was shipped with the system. In order to achieve omnidirectionality (direction-independent operation), the antenna must be polarized vertically, i. e. it must stand upright.

Specifications / Standard Settings

Frequency range	5725 MHz – 5875 MHz
Selectable channels	8
Power supply	9 – 36 VDC, typically 100 mA at 12 VDC
IP rating:	IP66
Transmit power	25 mW maximum
Antenna connection	SMA socket
Video input	FBAS / 1 Vpp
Video frequency response	up to 5 MHz
Operating temperature range	-40°C to +85°C
Dimensions	150 x 64 x 34 mm
Transmitter weight	454 g (excluding the antenna)
Receiver weight	424 g (excluding the antenna)
Antenna weight	6 g

European Standards

The analog 5.8 GHz system operates in a frequency range approved for general purpose use in Europe. The maximum transmit power generated by the transmitter is 25 mW. The system complies with all relevant EN standards:

EN 300 440-1, EN 300 440-2, EN 301 489-1, EN 301 489-3, EN 60950-1 and ECE-R 10

There are no registration requirements when the system is operated within Europe. For operation outside Europe, all applicable rules and regulations for transmitters and receivers must be met. Additional approvals may be required, e. g. under FCC rules for the United States and Canada. The components described in this manual also comply with the following standards:

ISO 13766:2006

Earth-moving Machinery, Electromagnetic Compatibility

ISO 14982:2009

Agricultural and Forestry Machinery, Electromagnetic Compatibility

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