

E-CHRONOS 36915V3-2 Remote Controls and Custom Instruction Manual

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E-CHRONOS 36915V3-2 Remote Controls and Custom

Product Information

Specifications

- **Brand:** E-Chronos SA
- **Model:** RF Module
- **Compliance:** FCC Part 15
- **Antennas:** Integrated PCB antenna and external port for additional antennas
- **Authorized Antennas:**
 - **Part number:** CEM.0128.001C
 - **Brand:** E-Chronos SA
 - **Characteristics:** 2.15dBi max gain, 50 impedance, 866-936MHz bandwidth, 1.3:1 VSWR, Vertical polarization, TNC male connection
 - **Usage:** Machine antenna
 - **Part number:** CEM.0184.000 (1m cable), CEM.0184.002 (2m cable), CEM.0184.003 (3m cable)
 - **Brand:** E-Chronos SA
 - **Characteristics:** Max 3dBi gain, 50 impedance, 698-960/1710-2690MHz bandwidth

Product Usage Instructions

Integration Requirements

- OEM integrators are responsible for ensuring that the end-user does not remove or install the module manually.
- The module is limited to OEM installation only.

Instructions for User Manual

- Any changes or modifications not approved by E-Chronos SA may cause harmful interference and void FCC authorization.
- The equipment must comply with FCC's radiation exposure limits based on usage conditions.

Authorized Antennas Usage

- The RF module supports authorized antennas with specific characteristics and usage guidelines.
- Ensure proper connection and configuration based on the selected antenna.

FAQ

- **Q:** Can I use antennas other than the authorized ones?
- **A:** No, only antennas approved by E-Chronos SA should be used to ensure proper functionality and compliance with FCC regulations.
- **Q:** Is professional installation required for this device?
- **A:** Yes, this device must be professionally installed to maintain compliance with FCC regulations and ensure correct operation.

Generally

The module is not sold separately as a standalone board. It is either used systems manufactured by E-Chronos or sold together with other E-Chronos boards for OEM customers bound to E-Chronos by an integration project. The module is only used in professional industrial radio applications. For integration in the host device, the present integration instructions define the minimal requirements for installation, for the safety instructions to be written in the host manual, and for the labeling. Changes or modifications made to this module not expressly approved by the party responsible for compliance voids the authorization to operate this equipment. The module is exclusively approved for integration into host devices by the Grantee or his authorized OEM integrators.

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.

Integration requirements

OEM integrator responsibility

The OEM integrators are responsible for ensuring that the end-user has no manual instructions to remove or install the module.

The module is limited to OEM installation ONLY.

Instructions/statements to be reported on the User Manual

Any changes or modifications to this equipment not expressly approved by E-Chronos SA may cause, harmful interference and void the FCC authorization to operate this equipment

FCC STATEMENT

This equipment complies with FCC's radiation exposure limits set forth for an uncontrolled environment under the following conditions:

- This equipment should be installed and operated such that a minimum separation distance of 20cm is maintained between the radiator (antenna) and user's/nearby person's body at all times.
- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The RF module has been certified for mobile and fixed applications. If the module will be used for portable application the device must undergo SAR testing and the following instructions shall be reported on the User Manual:

Separate approval is required for all other operating configurations, including portable configurations to Part 2.1093 and different antenna configurations.

If SAR measurement is not required

This portable equipment with its antenna complies with FCC's radiation exposure limits set forth for an uncontrolled environment. To maintain compliance, follow the instructions below

- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- Avoid direct contact to the antenna or keep contact to a minimum while using this equipment.

If SAR measurement is required

This portable equipment with its antenna complies with FCC's radiation exposure limits set forth for an uncontrolled environment. This equipment has shown compliance with FCC's Specific Absorption Rate (SAR) limits. To maintain compliance, follow the instructions below:


This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment has been tested and found to comply with the limits for a Class B digital device, according 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 under the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. Suppose this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on. In that case, 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 the receiver.
- Connect the equipment to 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 device must be professionally installed.

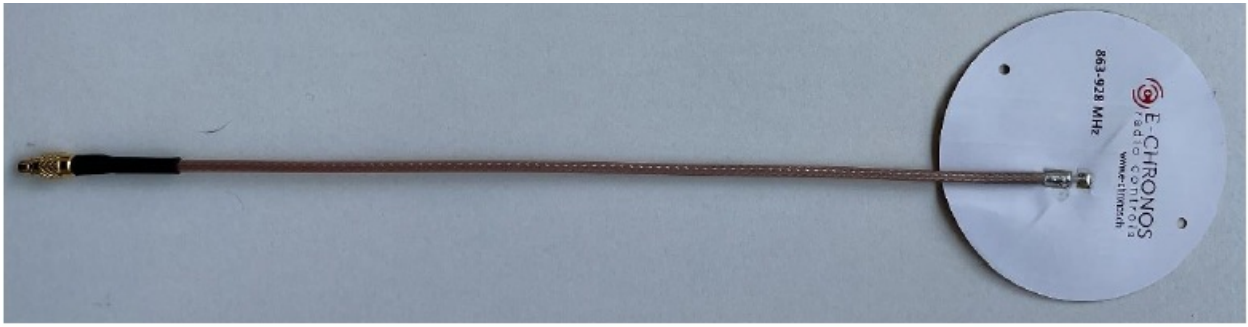
Authorized antennas

The RF module has an integrated PCB antenna and an external port. The following antennas can be connected to the external RF port:

	
Part number	CEM.0128.001C
Brand	E-Chronos SA
Characteristics	
Max gain	2.15dBi
Impedance	50W
Bandwidth	866-936MHz
VSWR	1.3:1
Polarization	Vertical
Length	1/2l ground plane independent
Connection	TNC male
Usage	Machine antenna



Part number	CEM.0184.000 (1m cable) CEM.0184.002 (2m cable) CEM.0184.003 (3m cable)
Brand	E-Chronos SA
Characteristics	
Max gain	Max 3dBi
Impedance	50W
Bandwidth	698-960/1710-2690MHz
VSWR	<3.0:1
Polarization	Linear
Length	Min cable length: 1m
Connection	TNC male with RG174 Coaxial cable
Usage	Machine antenna



Part number	CEM.0028.003C
Brand	E-Chronos SA
Characteristics	
Max gain	Max 1.9dBi
Impedance	50W
Bandwidth	863-928MHz
VSWR	Max 1.7:1
Polarization	Linear
Length	15cm
Connection	MMCX
Usage	The transmitter antenna is only used inside portable equipment. To be stuck on the plastic enclosure of the transmitter.

Antenna installation requirements

- For the machine device, TNC antennas must be connected to the RF module using the original 20cm MMCX to TNC adapter provided by E-Chronos, ref. CEM.0029.001:



- In case of an extension coaxial cable would be needed to connect the antenna, it must be connected to the CEM.0029.001 adapter at one end and to the TNC antenna at the other end. The cable impedance must be 50 . Note that the RF certification has been performed without extension cable.
- For the portable transmitter, the only allowed external antenna is the CEM.0028.003C patch antenna. This antenna must be stuck on the plastic housing of the transmitter without any metallic parts in the RF path. As stated in §1, each OEM integrator must be bound to E-Chronos SA through an integration project before being allowed to use its equipment. The antenna placement will be part of the project.

Product labelling

The host equipment must be labeled as follows:
Contains Transmitter Module FCC ID: 2A2B4-36915V3-2 or

Contains FCC ID: 2A2B4-36915V3-2.

"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."

Label example

Contains transmitter module FCC ID: 2A2B4-36915V3-2

*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.*

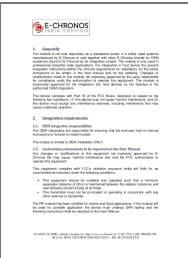
The FCC ID information can either be printed on an individual label or directly in the main product label. In both cases, the information must be visible and easily readable.

When the device is so small or for such use that it is not practicable to place the statement specified above on it, the information required shall be placed in a prominent location in the instruction manual or pamphlet supplied to the user or shall be placed on the container in which the device is marketed.

CONTACT

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Documents / Resources

	E-CHRONOS 36915V3-2 Remote Controls and Custom [pdf] Instruction Manual 36915V3-2, 2A2B4-36915V3-2, 2A2B436915V32, 36915V3-2 Remote Controls and Custom, 3 6915V3-2, Remote Controls and Custom, Controls and Custom, Custom
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References

- chronos.ch
- [E-Chronos SA](#)

- [User Manual](#)

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