

# **Instruction Manual for the use and the maintenance of the CCS**

Original instructions

**Part B: Conformity and frequencies  
(863-870MHz and 915-928MHz)**

**AIR SERIES**



# **WARNING**

**THIS PART OF THE MANUAL CONSISTS OF Part B - Information, instructions and warnings for the Conformity and frequencies (863-870MHz and 915-928MHz). The Manual consists of Part A – General, Part B – Conformity and Frequencies, Part C – Remote station, Part D – Base station, Part E – Battery and Battery Charger, plus the Technical Data Sheet.**

**THIS MANUAL, INCLUDING ALL PARTS THEREOF, AND ALL INSTRUCTIONS CONTAINED HEREIN, MUST BE READ CAREFULLY AND UNDERSTOOD BEFORE INSTALLING, USING, MAINTAINING OR REPAIRING THE AUTECCS.**

**FAILURE TO READ AND COMPLY WITH ALL APPLICABLE WARNINGS AND INSTRUCTIONS OR ANY ONE OF THE LIMITATIONS NOTED IN THIS MANUAL CAN RESULT IN SERIOUS BODILY INJURY OR DEATH, AND/OR PROPERTY DAMAGE.**

**THE AUTECCS IS NOT A STANDALONE PRODUCT AND IS INTENDED ONLY AS A COMPONENT ON A MACHINE:**

- ON WHICH AND WHERE THE USE OF A CCS IS APPROPRIATE,
- THAT CAN BE OPERATED SAFELY AND IN ACCORDANCE WITH ALL APPLICABLE LAWS, REGULATIONS AND STANDARDS BY SUCH REMOTE CONTROL.

**ACCORDINGLY, IT IS THE RESPONSIBILITY OF THE MACHINE MANUFACTURER ON WHICH THE AUTECCS IS INTENDED TO BE INSTALLED, to perform an in-depth and accurate risk assessment to determine if the Autec CCS is suitable for operating a Machine in conditions of safety and operational effectiveness, taking into account the conditions of use, the intended uses and the reasonably foreseeable incorrect ones, so that the installation, maintenance and use of the Autec CCS, and all its components, are performed only and entirely in compliance with this Manual and in accordance with all local regulations, safety standards and regulations (referred to herein as "Laws, Regulations and Standards").**

**With reference to the USA market the Laws, Regulations and Standards include all safety rules and regulations of the Occupational Safety & Health Administration (OSHA) (<http://www.osha.gov>), all federal, state and local laws, regulations and building and electrical codes, and all applicable standards, including but not limited to ANSI Standards.**

**It is also the responsibility of the Manufacturer and of the design professionals of the Machine on which the Autec CCS is to be installed and used to be certain that the structure, condition, organization and markings of the Machine as installed at the facility is appropriate for and will allow for the safe and reliable use and control of the Machine through the Autec CCS interface.**

**IT IS THE RESPONSIBILITY OF THE OWNER AND FACILITY OPERATOR, AND THEIR DESIGN PROFESSIONALS, that the installation, maintenance and operation of the Autec CCS and all of its components are done solely and completely in accordance with this Manual, and with all applicable Laws, Regulations and Standards, even local. It is also the responsibility of the Manufacturer of the Machine on which the Autec CCS is to be installed and used, and their design professionals, to be certain that the structure, condition, organization and markings of the Machine as installed at the facility is appropriate for and will allow for the safe and reliable use and control of the Machine through the Autec CCS interface.**

**ONLY QUALIFIED AND PROPERLY TRAINED PERSONNEL SHOULD BE PERMITTED TO OPERATE OR USE THE AUTEC CCS AND THE MACHINE OPERATED BY OR THROUGH THE AUTEC CCS. ONLY QUALIFIED AND PROPERLY TRAINED PERSONNEL SHOULD BE PERMITTED TO BE IN THE VICINITY OF MACHINE OPERATED BY OR THROUGH THE AUTEC CCS.**

**FAILURE TO PROPERLY INSTALL, OPERATE, MAINTAIN AND SERVICE THE AUTEC CCS CAN RESULT IN SERIOUS BODILY INJURY OR DEATH AND/OR PROPERTY DAMAGE. Refer to this Manual and each of its Parts for further assistance or contact Autec. Autec is not responsible for and shall not be held liable for any installation of the Autec CCS not performed by Autec or for any use of the Autec CCS not in complete compliance with, and/or not maintained in complete compliance with, all Autec instructions and warnings and all applicable Laws, Regulations and Standards, even local.**

**Autec is not responsible for and shall not be held liable for any alteration or modification of the Autec CCS, or the use of non-Autec components or products used with or incorporated into the Autec CCS.**

**IT IS THE RESPONSIBILITY OF THE OWNER AND FACILITY OPERATOR, AND THEIR DESIGN PROFESSIONALS, to be certain that the Autec CCS is properly maintained and serviced at all times in compliance with all Autec instructions and warnings, and with all applicable Laws, Regulations and Standards, even local.**

**IT IS THE RESPONSIBILITY OF THE OWNER AND FACILITY OPERATOR, AND THEIR OFFICERS, MANAGERS AND SUPERVISORS, to be certain that all Users of the Autec CCS and that all Persons who are or will be working with or near the Machine operated by or through the Autec CCS are fully and properly educated and trained by qualified Personnel in the proper and safe use of the Autec CCS and of the Machine, including without limitation complete familiarity with and understanding of Autec warnings and instructions, and all applicable Laws, Regulations and Standards, even local, and that such Users and other Persons do in fact at all times operate or work with the Autec CCS safely and ONLY in compliance with Autec instructions and warnings and with all applicable Laws, Regulations and Standards, even local. FAILURE TO DO SO CAN RESULT IN SERIOUS BODILY INJURY OR DEATH AND/OR PROPERTY DAMAGE.**

**IT IS THE RESPONSIBILITY OF THE OWNER AND FACILITY OPERATOR, AND THEIR OFFICERS, MANAGERS AND SUPERVISORS, to be certain that the areas in which the Machine operated by or through the Autec CCS is located and operates are clearly delineated and marked in accordance with all Autec warnings and instructions, and all applicable Laws, Regulations and Standards, even local, and otherwise sufficient to alert and warn ALL PERSONS that the Machine is operated by or through a CCS, and prohibiting any unauthorized access thereto. FAILURE TO DO SO CAN RESULT IN SERIOUS BODILY INJURY OR DEATH AND/OR PROPERTY DAMAGE.**

**FAILURE TO OPERATE THE AUTEC CCS SAFELY AND IN COMPLIANCE WITH AUTEC INSTRUCTIONS AND WARNINGS AND WITH APPLICABLE LAWS, REGULATIONS AND STANDARDS, EVEN LOCAL, AND/OR PERMITTING USERS OR OTHER PERSONS NOT PROPERLY TRAINED IN THE SAFE AND PROPER USE OF THE SYSTEM, OR THE MACHINE ON WHICH IT IS INSTALLED, CAN RESULT IN SERIOUS BODILY INJURY OR DEATH AND/OR PROPERTY DAMAGE.**



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## 1 Information on the use of instructions



Before reading this part of the Manual, you must read and understand the general part (Part A) of the Manual provided with the CCS.

### 1.1 Structure of the Instruction Manual

The Manual for the use and maintenance of Autec CCSs consists of different parts, that altogether form the Manual; the Manual must be read carefully, understood and applied by the CCS's Owner, User and by all those Persons that, for any reasons, may operate with the CCS or with the Machine where it is installed.

The following table describes the structure of the Instruction Manual for the use and the maintenance of the CCS.

| Part | Title                       | Contents   |
|------|-----------------------------|--|
| A    | General part                | <ul style="list-style-type: none"> <li>- General information regarding the series,</li> <li>- directions for risk assessment of the "Machine+CCS" system,</li> <li>- warnings for installation of the CCS,</li> <li>- warnings for use and maintenance of the CCS,</li> <li>- instructions for correct transportation and storage of CCS.</li> </ul> |
| B    | Conformity and frequencies  | <ul style="list-style-type: none"> <li>- Operating frequency bands of the CCS,</li> <li>- conformity and law references of the CCS.</li> </ul>   |
| C    | Remote station              | Description and instructions concerning the Remote station, including: <ul style="list-style-type: none"> <li>- description of operation,</li> <li>- commands,</li> <li>- light signals,</li> <li>- malfunctions,</li> <li>- additional instructions to the general part.</li> </ul>   |
| D    | Base station                | Description and instructions concerning the Base station, including: <ul style="list-style-type: none"> <li>- description of operation,</li> <li>- light signals,</li> <li>- malfunctions,</li> <li>- additional instructions to the general part.</li> </ul>  |
| E    | Battery and battery charger | Description, warnings and instructions concerning batteries and battery chargers, including: <ul style="list-style-type: none"> <li>- description of operation,</li> <li>- light signals,</li> <li>- malfunctions,</li> <li>- instructions for the User.</li> </ul>  |



Usage and maintenance instructions are supplemented by the CCS's Technical Data Sheet, that:

- Describes the Remote station's configuration
- Indicates the relation between commands sent by the Remote station and those available on the Base station.

Usage and maintenance instruction as a whole are to be considered as an integral part both of the Autec CCS and of the Machine, system, device or Machinery system where the CCS is installed.

The Manufacturer of the Machine on which the Autec CCS is installed, and the Owner and User of the Machine, must make sure that the Instruction Manual and all of its parts are included in the Instruction Manual of the Machine.

## 1.2 Caption and terminology



Contact Autec if any of the instructions, symbols, warnings or images are not clear and understandable.

In this part of the Manual, the terms listed below have the same meaning explained in the corresponding paragraph of the general part (Part A):



- **Station**
- **CCS**
- **Remote station**
- **Base station**
- **Radio link**
- **Active stop**
- **Automatic stop**
- **Manual stop**
- **Passive stop**
- **Machine**
- **Manufacturer**
- **Installer**
- **User**
- **Maintenance Technician**
- **Manual or Instruction Manual**
- **Installation manual**
- **Person**
- **Owner**

Functions indicated for the Manufacturer, the Installer, the User and the Maintenance Technician may be performed by a single Person, if he/she has the needed competence and undertakes the resulting responsibilities. Each Person must be aware of the instructions contained in the Manual, depending on the activity they carry out.

For example, if a Manufacturer is also the Installer, and/or Maintenance Technician, he/she must also know and follow the instructions specifically addressed to those Persons. The same applies, for example, if a User is also the Manufacturer and/or the Installer.

### 1.3 Symbols

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|   |  |
|---|--|
|  | <p>This symbol identifies the parts of text in the Manual that must be read with special attention.</p>  |
|  | <p><b>This symbol identifies the parts of text in the Manual containing warnings, information and/or instructions that are particularly relevant with regards to safety; failure in understanding them or in complying with them may cause hazards for People and/or property.</b></p> |

### 1.4 To whom the instructions are addressed

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Addressees of instructions are listed in the paragraph with the same title in the general part: please refer to that part.

### 1.5 Instruction storage

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Regulation for the storage of instructions are described in the paragraph with the same title in the general part: please refer to that part.

### 1.6 Intellectual property

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Restrictions connected to intellectual property are described in the paragraph with the same title in the general part: please refer to that part.

## **2 Brief product presentation**

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### **2.1 Series, CCS and Station**

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Autec Air series' CCSs are designed to be used on Machines and provide a command interface to their command and control system, to be used from an appropriate distance and position.

### **2.2 Conformity with standards**

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This part of the Manual describes:

- the Air series' CCS compliance with the standards, the requirements and conditions of use in each Country and
- the different frequency bands, in which the CCS is able to operate.

### **2.3 Contacts and useful addresses**

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The CCSs are produced by Autec Srl – Via Pomaroli, 65 - 36030 Caldogno (VI) - Italy.  
You can find contacts for Autec, its distributors, dealers and authorized service centres on the website [www.autecsafety.com](http://www.autecsafety.com).

### **2.4 Warranty**

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General warranty conditions are indicated both in the relevant sheet provided together with this documentation, and in the specific page on the website [www.autecsafety.com](http://www.autecsafety.com).

### **2.5 Technical assistance and spare parts**

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If you need technical services and/or spare parts, please refer to contacts provided in the website [www.autecsafety.com](http://www.autecsafety.com).

When applying for technical service to Autec, its distributors, dealers and authorized service centres, the CCS's serial number is required; you can find it on the identification plate on the Remote station and/or on the Base station.

### 3 Conformity

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Addressees of instructions must:

- Make sure that the CCS works within the frequency band permitted in the country where it is used.
- Make sure that the CCS works correctly, in compliance with the applicable standards in the relevant country.
- Not modify the CCS conformity, by performing modifications or technical operations that change its operation.

During training on or usage of Autec CCSs, local provisions imposing the conservation of product conformity with local standards must be respected, as well as specific standards related to safety in the use of CCSs or electrical devices, both in the working environment or outside of it.

#### 3.1 EC conformity

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According to the regulations in force in the European Union, one of the requirements for a CCS to be compliant with the EC conformity is to work at one of the permitted frequencies. If it does not, the CCS cannot be considered compliant.

Each Air series CCS operating in the 863-870MHz frequency band complies with the following Directives: RED Directive (2014/53/EU, Annex II), all the relevant provisions of the Machinery Directive (2006/42/EC), RoHS Directive (2011/65/EU) and, when a cable control is available in the CCS, the EMC Directive (2014/30/EU) too.

Each CCS also complies with the harmonised standards listed in the EU Declaration of Conformity, that are in force and applicable when the CCS is put on the market.

The EU Declaration of Conformity of Autec CCSs is provided in English as an attachment with the CCS. Contact Autec if you need this declaration in one of the other languages of the European Union.



### 3.2 ECE R10-05 conformity of the MVRCAN Base station

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The MVRCAN (Model RNF) Base station complies with the ECE R10-05 Regulation and its approval number is E49\*10R05/01\*0096\*00.

### 3.3 ECE R10-06 conformity of the DCRF13 Base station

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The DCRF13 (Model RTR) Base station complies with the ECE R10-06 Regulation and its approval number is E49\*10R06/01\*0220\*00.

### 3.4 FCC conformity

Each Air series CCS working in the 915-928MHz frequency band whose Stations are listed in the following table complies with the requirements stated in Part 15 of the FCC (Federal Communication Commission) standards.

| Station                      |                      | FCC ID   |
|------------------------------|----------------------|--|
| AJC Remote station           | Model J4A Type NZ3QH | OQA-J4ANZ3QH                                     |
| AJQ Remote station           | Model J4A Type NZ3QH | OQA-J4ANZ3QH                                     |
| AJQ Remote station           | Model J4A Type NZ2QH | OQA-J4ANZ2QH                                     |
| AJN Remote station           | Model J4A Type NZ3QH | OQA-J4ANZ3QH                                     |
| AJT Remote station           | Model J7A Type NZ2QH | OQA-J7ANZ2QH                                     |
| AJT Remote station           | Model J9A Type VZ9QH | OQA-J9AVZ9QH<br>Contains FCC ID:<br>XF6-RS9113SB |
| LK NEO 6 DF Remote station   | Model LKN Type DA1LH | OQA-LKNDA1LH                                     |
| LK NEO 6 Remote station      | Model LKN Type LA1JH | OQA-LKNLA1JH                                     |
| LK NEO 8 Remote station      | Model LKN Type LA1JH | OQA-LKNLA1JH                                     |
| LK NEO 10 DF Remote station  | Model LKN Type DA2NH | OQA-LKNDA2NH                                     |
| LK NEO 10 DFN Remote station | Model LKN Type DF2NH | OQA-LKNDF2NH                                     |
| LK NEO 10 Remote station     | Model LKN Type LA2MH | OQA-LKNLA2MH                                     |
| LK NEO 12 Remote station     | Model LKN Type LA2MH | OQA-LKNLA2MH                                     |
| SK4 Remote station           | Model SK4 Type LA0PH | OQA-SK4LA0PH                                     |
| SK4 Remote station           | Model SK4 Type LU0PH | OQA-SK4LU0PH                                     |
| SK8 Remote station           | Model SK4 Type LA0PH | OQA-SK4LA0PH                                     |
| SK8B Remote station          | Model SK8 Type NA5QH | OQA-SK8NA5QH                                     |
| ACRS13-G Base station        | Model RGA Type GC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| DCRS13 Base station          | Model RGM Type KC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| ACRS13-L Base station        | Model RLB Type HC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| ACRM15 Base station          | Model RMC Type EC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| MVRCAN Base station          | Model RNF Type LC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| MVRL9E Base station          | Model RRL Type PC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| DCRM24 Base station          | Model RMG Type MC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| ACRM5E Base station          | Model RMH Type NC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| MVRDIN Base station          | Model RSN Type QC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| ACRDIN Base station          | Model RSP Type RC0FH | Contains FCC ID: OQA-AIRRT42FH                   |
| DCRF13 Base station          | Model RTR Type UG0FH | OQA-RTRUG0FH                                     |



**Place the antenna of the Base station in a position that ensures a minimum separation distance of 20cm from all the people that can be in the working area.**

**Read carefully the section of the Manual where the antenna position is described, both in the general part and in the specific part referring to the Base station.**



Autec allows you to use only the dedicated antenna supplied either with the remote control or as original spare part. The use of any other type of antenna is prohibited and will invalidate the warranty.

As required by FCC standards Part 15, the following indication is valid for all the Stations listed in the previous table.

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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the User's authority to operate the equipment.

As required by FCC standards Part 15, the following indication is valid for all the Stations listed in the previous table.

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.



### 3.5 IC conformity

Each Air series CCS working in the 915-928MHz frequency band whose Stations are listed in the following table complies with the requirements stated in the RSS-247 IC (Industry Canada) standards.

| Station                      |                      | IC  |
|------------------------------|----------------------|---|
| AJC Remote station           | Model J4A Type NZ3QH | 9061A-J4ANZ3QH                                      |
| AJQ Remote station           | Model J4A Type NZ3QH | 9061A-J4ANZ3QH                                      |
| AJQ Remote station           | Model J4A Type NZ2QH | 9061A-J4ANZ2QH                                      |
| AJN Remote station           | Model J4A Type NZ3QH | 9061A-J4ANZ3QH                                      |
| AJT Remote station           | Model J7A Type NZ2QH | 9061A-J7ANZ2QH                                      |
| AJT Remote station           | Model J9A Type VZ9QH | 9061A-J9AVZ9QH<br>Contains IC ID:<br>8407A-RS9113SB |
| LK NEO 6 DF Remote station   | Model LKN Type DA1LH | 9061A-LKND A1LH                                     |
| LK NEO 6 Remote station      | Model LKN Type LA1JH | 9061A-LKNLA1JH                                      |
| LK NEO 8 Remote station      | Model LKN Type LA1JH | 9061A-LKNLA1JH                                      |
| LK NEO 10 DF Remote station  | Model LKN Type DA2NH | 9061A-LKND A2NH                                     |
| LK NEO 10 DFN Remote station | Model LKN Type DF2NH | 9061A-LKND F2NH                                     |
| LK NEO 10 Remote station     | Model LKN Type LA2MH | 9061A-LKNLA2MH                                      |
| LK NEO 12 Remote station     | Model LKN Type LA2MH | 9061A-LKNLA2MH                                      |
| SK4 Remote station           | Model SK4 Type LA0PH | 9061A-SK4LA0PH                                      |
| SK4 Remote station           | Model SK4 Type LU0PH | 9061A-SK4LU0PH                                      |
| SK8 Remote station           | Model SK4 Type LA0PH | 9061A-SK4LA0PH                                      |
| SK8B Remote station          | Model SK8 Type NA5QH | 9061A-SK8NA5QH                                      |
| ACRS13-G Base station        | Model RGA Type GC0FH | Contains IC: 9061A-AIRRT42FH                        |
| DCRS13 Base station          | Model RGM Type KC0FH | Contains IC: 9061A-AIRRT42FH                        |
| ACRS13-L Base station        | Model RLB Type HC0FH | Contains IC: 9061A-AIRRT42FH                        |
| ACRM15 Base station          | Model RMC Type EC0FH | Contains IC: 9061A-AIRRT42FH                        |
| MVRCAN Base station          | Model RNF Type LC0FH | Contains IC: 9061A-AIRRT42FH                        |
| MVRL9E Base station          | Model RRL Type PC0FH | Contains IC: 9061A-AIRRT42FH                        |
| DCRM24 Base station          | Model RMG Type MC0FH | Contains IC: 9061A-AIRRT42FH                        |
| ACRM5E Base station          | Model RMH Type NC0FH | Contains IC: 9061A-AIRRT42FH                        |
| MVRDIN Base station          | Model RSN Type QC0FH | Contains IC: 9061A-AIRRT42FH                        |
| ACRDIN Base station          | Model RSP Type RC0FH | Contains IC: 9061A-AIRRT42FH                        |
| DCRF13 Base station          | Model RTR Type UG0FH | 9061A-RTRUG0FH                                      |

|   |  |
|---|--|
| <br><b>WARNING</b> | <p><b>Place the antenna of the Base station in a position that ensures a minimum separation distance of 20cm from all the people that can be in the working area.</b></p> <p><b>Read carefully the section of the Manual where the antenna position is described, both in the general part and in the specific part referring to the Base station.</b></p> |
|                    | <p>Autec allows you to use only the dedicated antenna supplied either with the remote control or as original spare part. The use of any other type of antenna is prohibited and will invalidate the warranty.</p>  |

As required by the document "RSS-Gen — General Requirements and Information for the Certification of Radio Apparatus", the following indication is valid for all the Stations listed in the previous table.

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

- (1) This device may not cause interference; and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

As required by the document "RSS-Gen — General Requirements and Information for the Certification of Radio Apparatus", the following indications are valid for all the Base stations listed in the previous table.


Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

This radio transmitter has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

| Antenna type             | Antenna gain | Antenna impedance |
|--------------------------|--------------|-------------------|
| Autec stylus $\lambda/4$ | <2dBi        | 50 Ohm            |

## 4 Frequencies

Air series' CCSs can work in two different frequency bands: 863-870MHz or 915-928MHz.

|   |   |
|---|---|
|  | <p>The CCSs' working frequency is defined by market-specific laws and standards. In order for the system "Machine+CCS" to be compliant and therefore to be used, these laws and standards must be respected: if they are not, the CCS cannot and must not be used.</p> <p>Autec cannot be held responsible if the CCS is set with frequencies that are forbidden in the country of use.</p> |
|---|---|

### 4.1 Frequency band 863-870MHz

#### 4.1.1 Frequencies

The radio link between the Stations of Autec Air series CCSs is established at one of the frequencies permitted by the European standards in force when the system is put on the market.

|                         |              |
|-------------------------|--------------|
| Frequencies used        | 128          |
| RF power                | <25mW ERP    |
| Channel spacing         | 50kHz        |
| (Typical) working range | 100m (330ft) |

The Stations communicate with one another in dynamic mode, that is:

- They use a working frequency in the 863-870MHz band
- They verify that the frequency is free before using it
- They continuously change the working frequency in order to guarantee the radio connection even in the presence of interference.

All the Model J9A Type VZ9QH Remote Stations, operating in the 863-870MHz frequency band, also communicate with the Video Feedback Module (VFM) in the 2400-2483.5MHz frequency band.

|                  |                    |
|------------------|--------------------|
| Radio technology | Wi-Fi 802.11 b/g/n |
| RF power         | <100mW             |

#### 4.1.2 Countries of usage

Air series' CCSs working in the 863-870MHz frequency band can be used within the EU (European Union) and the EFTA (European Free Trade Association).

Refer to the technical data plate of the Stations to check in which markets the CCS can be used.

## 4.2 Frequency band 915-928MHz

### 4.2.1 Frequencies

The radio link between the Stations of Autec Air series CCSs is established at one of the frequencies permitted by the USA, Canadian and Australian standards in force when the system is put on the market.

|                         |                               |
|-------------------------|-------------------------------|
| Frequencies used        | 256                           |
| RF power (FCC and IC)   | meets FCC and IC requirements |
| Channel spacing         | 50kHz                         |
| (Typical) working range | 100m (330ft)                  |

The Stations communicate with one another in dynamic mode, that is:

- They use a working frequency included in the band 915-928MHz
- They verify that the frequency is free before using it
- They continuously change the working frequency in order to guarantee the radio connection even in the presence of interference.

All the Model J9A Type VZ9QH Remote Stations, operating in the 915-928MHz frequency band, also communicate with the Video Feedback Module (VFM) in the 2400-2483.5MHz frequency band.

|                  |                    |
|------------------|--------------------|
| Radio technology | Wi-Fi 802.11 b/g/n |
| RF power         | <100mW             |

### 4.2.2 Countries of usage

Air series' CCSs working in the frequency band 915-928MHz can be used in the USA, Canadian and Australian markets.

Refer to the technical data plate of the Stations to check in which markets the CCS can be used.







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