

Instruction Manual for the use and the maintenance of the CCS

Original instructions

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

DYNAMIC+P 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.

INDEX

1	Information on the use of instructions	8
1.1	Structure of the Instruction Manual	8
1.2	Caption and terminology	10
1.3	Symbols	11
1.4	To whom the instructions are addressed	11
1.5	Instruction storage	11
1.6	Intellectual property	11
2	Brief product presentation	12
2.1	Series, CCS and Station	12
2.2	Conformity with standards	12
2.3	Contacts and useful addresses	12
2.4	Warranty	12
2.5	Technical assistance and spare parts	12
3	Conformity	13
3.1	EC conformity	13
3.2	UK conformity	14
3.3	FCC conformity	15
3.4	IC conformity	17
4	Frequencies	19
4.1	Frequency band 863-870MHz	19
4.2	Frequency band 915-928MHz	20

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

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



This symbol identifies the parts of text in the Manual that must be read with special attention.



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.

1.4 To whom the instructions are addressed

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

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

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

2.1 Series, CCS and Station

Autec Dynamic+P 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

This part of the Manual describes:

- the Dynamic+P 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

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.

2.4 Warranty

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.

2.5 Technical assistance and spare parts

If you need technical services and/or spare parts, please refer to contacts provided in the website 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

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

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 Dynamic+P 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 UK conformity

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

Each Dynamic+P series CCS operating in the 863-870MHz frequency band complies with the following Directives: 2017 Radio Equipment Regulations, all the relevant provisions of the 2008 Supply of Machinery (Safety) Regulations, 2012 Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations and, when a cable control is available in the CCS, the 2016 Electromagnetic Compatibility Regulations too.

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

Autec CCS's UK Declaration of Conformity is provided as an attachment with the CCS.

**UK
CA**

3.3 FCC conformity

Each Dynamic+P 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
PJB Remote station	Model J8P Type NJ555	OQA-J8PNJ555
PJB Remote station	Model J9P Type VJ955	OQA-J9PVJ955 Contains FCC ID: XF6-RS9113SB
PJC Remote station	Model J6P Type NJ355	OQA-J6PNJ355
PJE Remote station	Model J7P Type NJ555	OQA-J7PNJA55
PJE Remote station	Model J7P Type NJA55	OQA-J7PNJA55
PJM Remote station	Model J8P Type NJ555	OQA-J8PNJ555
PJM Remote station	Model J9P Type VJ955	OQA-J9PVJ955 Contains FCC ID: XF6-RS9113SB
PJN Remote station	Model J6P Type NJ355	OQA-J6PNJ355
PJQ Remote station	Model J6P Type NJ355	OQA-J6PNJ355
PJQ Remote station	Model J6P Type NJ255	OQA-J6PNJ255
PJR Remote station	Model J8P Type NJ555	OQA-J8PNJ555
PJT Remote station	Model J7P Type NJ555	OQA-J7PNJA55
PJT Remote station	Model J7P Type NJA55	OQA-J7PNJA55
CRP Base station	Model CRP Type NL055	OQA-CRPNL055
AXP Base station	Model AXP Type NP055	OQA-AXPNP055



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.

3.4 IC conformity

Each Dynamic+P 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
PJB Remote station	Model J8P Type NJ555	9061A-J8PNJ555
PJB Remote station	Model J9P Type VJ955	9061A-J9PVJ955 Contains IC ID: 8407A-RS9113SB
PJC Remote station	Model J6P Type NJ355	9061A-J6PNJ355
PJE Remote station	Model J7P Type NJ555	9061A-J7PNJA55
PJE Remote station	Model J7P Type NJA55	9061A-J7PNJA55
PJM Remote station	Model J8P Type NJ555	9061A-J8PNJ555
PJM Remote station	Model J9P Type VJ955	9061A-J9PVJ955 Contains IC ID: 8407A-RS9113SB
PJN Remote station	Model J6P Type NJ355	9061A-J6PNJ355
PJQ Remote station	Model J6P Type NJ355	9061A-J6PNJ355
PJQ Remote station	Model J6P Type NJ255	9061A-J6PNJ255
PJR Remote station	Model J8P Type NJ555	9061A-J8PNJ555
PJT Remote station	Model J7P Type NJ555	9061A-J7PNJA55
PJT Remote station	Model J7P Type NJA55	9061A-J7PNJA55
CRP Base station	Model CRP Type NL055	9061A-CRPNL055
AXP Base station	Model AXP Type NP055	9061A-AXPNP055



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 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
Autec stylus $\lambda/4$ with 5m RG58	<2dBi	50 Ohm
Autec stylus $\lambda/4$ with 20m RG213/U	<2dBi	50 Ohm

4 Frequencies

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



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.

Autec cannot be held responsible if the CCS is set with frequencies that are forbidden in the country of use.

4.1 Frequency band 863-870MHz

4.1.1 Frequencies

The radio link between the Stations of Autec Dynamic+P 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

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.

4.1.2 Countries of usage

Dynamic+P 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 Dynamic+P 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	meets FCC and IC requirements
Channel spacing	50kHz

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.

4.2.2 Countries of usage

Dynamic+P 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.



Via Pomaroli, 65 - 36030 Caldogno (VI) - Italy
Tel. +39 0444 901000 - Fax +39 0444 901011
info@autecsafety.com - www.autecsafety.com

MADE IN ITALY