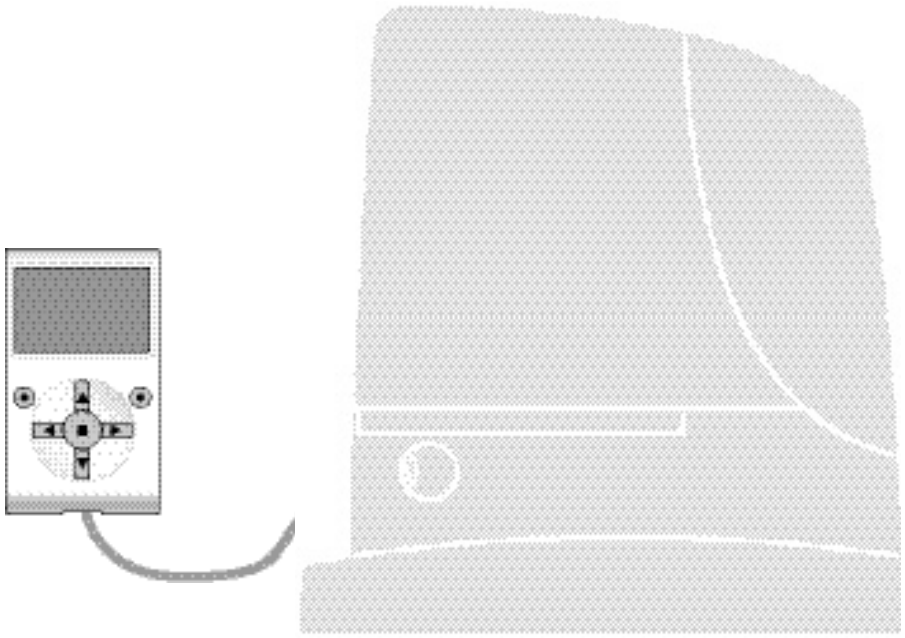
Run Inverter



Programmable functions

using the Oview programmer

STF RUN INVERTER – Rev00
Firmware: RV02

Nice

COMMON FUNCTIONS

name

This parameter enables the user to assign the automation with a name other than the original, to facilitate identification (e.g. northern gate").
A name comprising maximum 24 characters, including spaces, is admitted.

series

This parameter can be set with a value from 0 to 63; the factory setting is "0".
The series is a number that has to be assigned to each gearmotor, receiver or other device potentially connectable on a BusT4 network, to define its "classification area". Subsequently, when using automations in a complex system, all devices with the same series number can be controlled simultaneously.

address

This parameter can be set with a value from 1 to 128; the factory setting is "2" for Receivers and 3 for Control Units.
The address is a number that has to be assigned to each gearmotor, receiver or other device potentially connectable on a BusT4 network, to distinguish it from other devices in a **series**. Therefore all devices within a series must have a different address from one another.

group

This parameter can be set with a value from 1 to 14, or "None"; the factory setting is "None".
The function enables the user to assign a number to a device to be controlled (for example a gearmotor or other device potentially connectable to a BusT4 network), which enables this device to belong to a specific "command group".
Several devices, also if belonging to different **series**, can form part of the same group. Up to 14 groups of devices can be created and, in particular, the same device may be inserted in 4 different groups.
In a device network, use of this function enables:
- simultaneous control of different devices inserted in a **group**, even if some of these belong to different **series**;
- use of a single receiver, installed in one of the devices belonging to the group, to control all the devices belonging to this group.

firmware version *(not modifiable)*

This function enables the display of the version of the firmware present in a device.

hardware version *(not modifiable)*

This function enables the display of the version of the hardware present in a device.

serial number *(not modifiable)*

This function enables the display of the serial number identifying a specific device. This number is different for each device, even if of the same model.

password management

This function is useful to restrict access by unauthorised personnel to all or some of the programming functions of a device. If a device is password protected, the user must perform the "log in" procedure to proceed with a programming session, followed by the "log out" procedure on completion of the programming procedure. *Note – the "log out" procedure enables the user to prevent access by unauthorised personnel, by re-activating the existing password.* **Caution!** – *When programming the password on several devices (for example in Oview, the Control unit, Receiver etc.), we recommend using* ***the same password for all devices including Oview****. This will avoid the need to repeat the login procedure each time the device is changed during use of Oview and the connected Software.*
Two types of password can be programmed on the devices (including Oview).

- the **user password**, comprising maximum 6 alphanumeric characters. **Caution!** – Do not use uppercase letters.
- the **installer password**, comprising maximum 6 alphanumeric characters. **Caution!** – Do not use uppercase letters.

CONTROL UNIT FUNCTIONS

Installation

bluebus search

This function enables start-up of the procedure for learning the devices connected to the Bluebus input and the HALT input of the control unit of an automation. **Important** – To activate the device search, press “Start”.

position search

This function enables the measurement of the distance between the Closing limit position and Opening limit position (length of the gate leaf). This measurement is used by the control unit to censure the precise calculation of the points (positions) at which the gate leaf must start to decelerate during a manoeuvre and to determine the partial opening positions. To activate the position search, press “**Start**”.

positions

• maximum opening
This function enables the display of the Opening limit position, after the relative learning procedure has been completed.

• deceleration on opening
This function is expressed in metres. This enables programming of the precise point (position) at which the gate should start decelerating before reaching the limit switch at the end of the Opening manoeuvre. After programming the required point, press “**OK**” to save the value.

• partial open 1
This function is expressed in metres. During the opening manoeuvre this enables programming of the precise point (position) at which the gate stops travel (partial open). After programming the required point, press “**OK**” to save the value.

• partial open 2
This function is expressed in metres. During the opening manoeuvre this enables programming of the precise point (position) at which the gate stops travel (partial open). After programming the required point, press “**OK**” to save the value.

• partial open 3
This function is expressed in metres. During the opening manoeuvre this enables programming of the precise point (position) at which the gate stops travel (partial open). After programming the required point, press “**OK**” to save the value.

• deceleration on closing
This function is expressed in metres. This enables programming of the precise point (position) at which the gate should start decelerating before reaching the limit switch at the end of the Closing manoeuvre. After programming the required point, press “**OK**” to save the value.

data deletion

This function enables the user to delete the configuration of a control unit and the relative stored data, selecting items from a series. These items are:

- ❏ **positions** – enables deletion of all memorised positions;
- ❏ **bluebus devices** – enables deletion of the configuration of the Bluebus devices and the HALT input;
- ❏ **function values** – enables deletion of all values and settings of functions envisaged on the control unit;
- ❏ **all** – enables the deletion of all data in the Control unit memory excluding the reserved parameters: series, address, hardware version, software version, serial number.

Basic parameters

automatic closure

This parameter type is ON/OFF; the factory setting is “OFF”. This function enables the activation of automatic closure at the end of an opening manoeuvre in the control unit of the automation. If the function is active (ON) the automatic closure manoeuvre starts at the end of the wait time programmed in the function “pause time”.
If the function is not active (OFF) the Control unit operation mode is “semiautomatic”.

pause time

This parameter is expressed in seconds and can be set with a value from 0 to 250 sec.; the factory setting is 30 sec. This func-

tion enables programming on the Control unit of the required wait time which must pass between the end of an Opening manoeuvre and the start of a Closing manoeuvre. **IMPORTANT** – This function is only enabled if the "automatic closure" function is active.

reclose after photo

• active

This parameter type is ON/OFF; the factory setting is "OFF". The function enables the automation to remain in the Opening position only for the time required for vehicle or person transit. When this interval elapses the Automatic Closure manoeuvre is activated automatically, which in turn is started after a time as set in the function "wait time". **Important** – When the function is active (ON), operation varies according to the parameter set in the function "Automatic closure":

- ◆ with the function "Automatic closure" **active** (ON), the Opening manoeuvre is stopped immediately after disengagement of the photocells and, after the wait time set in "wait time", the automation starts up the Closure manoeuvre.
- ◆ with the function "Automatic closure" **not active** (OFF), the automation completes the entire Opening manoeuvre (even if the photocells are disengaged beforehand) and, after the wait time set in "wait time", the automation starts up the Closure manoeuvre.

Caution! – The function "reclose after photo" is disabled automatically if Stop command is sent during the manoeuvre in progress, to stop the manoeuvre.

• mode

This parameter is factory set on the mode "open until disengage" The function has 2 operating modes:

- ❑ ***open all*** *– when this mode is enabled, if the safety devices (photocells) are activated during a Closure manoeuvre, the automation starts to perform a complete Opening manoeuvre. On the other hand, if the safety devices are disengaged, the automation starts up the automatic closure manoeuvre after the wait time as programmed in the function "closure delay time" has elapsed.*
- ❑ ***open until disengage*** *– when this mode is enabled, if the safety devices (photocells) are activated during a Closure manoeuvre, the automation starts to perform an Opening manoeuvre, which proceeds until the photocells are disengaged. At this point the manoeuvre is shut down and the automation starts the closure manoeuvre after the wait time as programmed in the function "closure delay time" has elapsed.* ***Note*** *– If the "Automatic closure" function is not active, the Control unit switches to "open all" mode.*

• wait time

This parameter is expressed in seconds and can be set with a value from 0 to 250 sec.; the factory setting is 5 sec. This function enables programming on the Control unit of the required wait time to pass between the end of an Opening manoeuvre and the start of a Closing manoeuvre.

always close

• active

This parameter type is ON/OFF; the factory setting is "OFF". This function is useful in the event of a power failure, even brief. In fact, during an Opening manoeuvre if the automation shuts down due to a power failure and the function **is active** (ON), the Closure manoeuvre is performed normally when the electrical power is restored. On the contrary, if the function **is not active** (OFF), the automation remains stationary when the power is restored. ***Note*** *– For reasons of safety, when the function is active, the Closure manoeuvre is preceded by a wait time as programmed in the function "pre-flash time".*

• mode

This parameter is factory set on the mode "always close" The function has 2 operating modes:

- ❑ ***standard*** *– For this mode, refer to the function "active" under the item "always close";*
- ❑ ***save automatic closure*** *– When this mode is activated, there are two possible results after a power failure:* ***a)*** *execution of automatic closure, observing the time as programmed in the function "pre-flash time", if the timeout interval of this time was in progress at the time of the power failure;* ***b)*** *execution of closure manoeuvre if automatic closure was in progress at the time of the power failure and the manoeuvre had not been completed.* ***Note*** *– If the automatic closure manoeuvre was cancelled before the power failure (for example, by sending the Halt command), the Closure manoeuvre is not performed when the power is restored.*

• wait time

This parameter is expressed in seconds and can be set with a value from 0 to 20 sec.; the factory setting is 5 sec. This function enables programming on the Control unit of the required wait time to pass between the end of an Opening manoeuvre and the start of a Closing manoeuvre.

force management

• manual force level

This parameter can be set with a value from 10% to 100%; the factory setting is 70%. The function enables control of the force absorbed by the motor during execution of a manoeuvre.

speed management

• open speed
This parameter can be set with a value from 0% to 100%; the factory setting is 67 %. The function enables programming of the required motor speed during an Opening manoeuvre. **Important** – When this parameter is modified, the control unit updates the “force” and “obstacle sensitivity” values during the subsequent manoeuvres.

• open deceleration speed
This parameter can be set with a value from 0% to 100%; the factory setting is 33%. The function enables programming of the required motor speed during the deceleration phase of an opening manoeuvre. **Important** – When this parameter is modified, the control unit updates the “force” and “obstacle sensitivity” values during the subsequent manoeuvres.

• close speed
This parameter can be set with a value from 0% to 100%; the factory setting is 67%. The function enables programming of the required motor speed during a Closing manoeuvre. **Important** – When this parameter is modified, the control unit updates the “force” and “obstacle sensitivity” values during the subsequent manoeuvres.

• close deceleration speed
This parameter can be set with a value from 0% to 100%; the factory setting is 33%. The function enables programming of the required motor speed during the deceleration phase of a closing manoeuvre. **Important** – When this parameter is modified, the control unit updates the “force” and “obstacle sensitivity” values during the subsequent manoeuvres.

start-up

• active
This parameter type is ON/OFF; the factory setting is “OFF”. When this function is set to “ON”, the values attributed to the functions associated with motor force and speed give the motor more power during the initial phase of a manoeuvre. This function is useful in the presence of static friction (for example, snow or ice which obstruct the automation). **Note** – If the function is not active (OFF) the Opening or Closing manoeuvre starts with a gradual acceleration.

• start-up time
This parameter is expressed in seconds and can be set with a value from 0.5 to 5 seconds; the factory setting is 2 seconds. The function enables programming of the duration of initial motor start-up. **Important** – The function is only effective if the “start-up” function is enabled (ON).

deceleration

This parameter type is ON/OFF; the factory setting is “OFF”. When this function is set to “ON” it enables activation of a “deceleration phase” towards the end of an Opening or Closing manoeuvre. The deceleration speed corresponds to approx. 60% of the nominal speed.

preflash

• active
This parameter type is ON/OFF; the factory setting is “OFF”. When this function is set to “ON” it enables the activation of a flashing time, which passes between activation of the flashing light and the start of an Opening or Closing manoeuvre. This time is adjustable and useful to for an advance indication of a hazardous situation. **Important** – When this function is not active (OFF), the flashing light is switched on at the same time as the start of the manoeuvre.

• time in opening
This parameter is expressed in seconds and can be set with a value from 0 to 10 seconds; the factory setting is 3 seconds. The function enables programming of the flashing time which indicates the imminent start of an Opening manoeuvre and is associated with the “preflash” function.

• time in closing
This parameter is expressed in seconds and can be set with a value from 0 to 10 seconds; the factory setting is 3 seconds. The function enables programming of the flashing time which indicates the imminent start of a Closing manoeuvre and is associated with the “preflash” function.

stand-by

• active
This parameter type is ON/OFF; the factory setting is “OFF”. When this function is set to “ON”, automation power consumption can be reduced.

• mode
The function has 3 operating modes:
❑ ***safety*** *– when this mode is set, at the end of a manoeuvre and when the standby time has elapsed (parameter program-*

mable in the function "wait time"), the control unit switches off the transmitters of the Bluebus photocells and all leds, with the exception of the Bluebus led, which flashes at a slower interval. ***Note*** *– When the control unit receives a command, it automatically restores normal operation of the automation, and no longer in energy saving mode.*

❑ ***bluebus*** *– when this mode is set, at the end of a manoeuvre and when the standby time has elapsed, the control unit switches off the Bluebus output (devices) and all leds, with the exception of the Bluebus led, which flashes at a slower interval.* ***Note*** *– When the control unit receives a command, it automatically restores normal operation of the automation, and no longer in energy saving mode.*

• wait time

This parameter is expressed in seconds and can be set with a value from 0 to 250 seconds; the factory setting is 60 seconds. The function enables programming of the time which must pass between the end of a manoeuvre and the start of the "standby" function, if the latter is active (ON).

automation block

This parameter type is ON/OFF; the factory setting is "OFF". This function enables automation operation to be disabled, by setting the value to "ON". In this case no type of command is acknowledged or performed, with the exception of "High priority step-step", "Release", "Release and close" and "Release and open".

key lock

This parameter type is ON/OFF; the factory setting is "OFF". This function disables operation of the keys present on the control unit.

motor heating

This parameter type is ON/OFF; the factory setting is "OFF". The function enables activation of automatic motor heating when external temperatures fall below zero.

slave mode

This parameter type is ON/OFF; the factory setting is "OFF". In the case of two gearmotors which must operate in synchronised mode, each installed on one of the two leafs of a gate or door, one must operate as a Master and the other as a Slave. To use this configuration, **set the Master motor to "OFF" and the Slave motor to "ON"**.

Advanced parameters

INPUT configuration

This item covers the commands available and associable with **inputs 1-2-3** present on the control unit of an automation.
The commands available for each input are described in **Table 1**; while the command categories and relative operating modes are described in **Tables 1a**, **1b**, **1c etc**. **Important – For correct operation of the control unit, the command programmed on an input must be associated with the corresponding command category and lastly the required operating mode.**
For configure an input, proceed as follows:
01. In the section "Advanced parameters" select the item "input configuration" and then the input to be programmed. Select the required command and press "OK" to confirm the selection.
02. Then, again in "Advanced parameters", select "command configuration" and select the command category corresponding to the command selected previously in step 01. Then select the required operating mode.

There are three available inputs:

• Input 1

This function enables the programming of Input 1, assigning a command as required, from those listed in Table 1. Input 1 is factory set with the "step-step" command, with the command category "step-step" and the operating mode "open - stop - close - open".

• Input 2

This function enables the programming of Input 2, assigning a command as required, from those listed in Table 1. Input 2 is factory set with the "open" command, with the command category "opening" and the operating mode "open - stop - open".

• Input 3

This function enables the programming of Input 3, assigning a command as required, from those listed in Table 1. Input 3 is factory set with the "close" command, with the command category "closing" and the operating mode "close - stop - close".

TABLE 1: INPUT CONFIGURATION

COMMAND	COMMAND CATEGORY	DESCRIPTION
No command		Does not perform any command
Step step	Step step program the required operating mode, selecting in **Table 1-A** (**"command configuration"** > **"step step"** > operating mode...)	**This command is factory set to Input 1, with operating mode "step step" and operating sequence "open- stop - close - open".** When this command is sent, the control unit activates the application to complete the next manoeuvre following the previous one (or still in progress) according to the sequence of manoeuvres as envisaged in the programmed sequence. *Input configured as normally open.*
Partial open 1	Partial open program the required operating mode, selecting in **Table 1-B** (**"command configuration"** > **"partial open"** > operating mode...)	When this command is sent the control unit activates the application to complete the Opening manoeuvre until the position is reached as set in the function "partial open 1"(Control unit functions > installation > positions > partial open 1). *Input configured as normally open.*
Open	Opening program the required operating mode, selecting in **Table 1-C** (**"command configuration"** > **"opening"** > operating mode...)	When this command is sent the control unit activates the application to complete the Opening manoeuvre until the opening limit switch is reached. *Input configured as normally open.*
Close	Closing program the required operating mode, selecting in **Table 1-B** (**"command configuration"** > **"closing"** > operating mode...)	When this command is sent the control unit activates the application to complete the Closing manoeuvre until the closing limit switch is reached. *Input configured as normally open.*
Stop	Stop program the required operating mode, selecting in **Table 1-E** (**"command configuration"** > **"stop"** > operating mode...)	When this command is sent, the control unit stops the manoeuvre in progress gradually and in a short time (not instantly). *Input configured as normally open.*
High priority step step	Step step program the required operating mode, selecting in **Table 1-A** (**"command configuration"** > **"step step"** > operating mode...)	When this command is sent, the control unit activates the application to complete the next manoeuvre following the previous one (or still in progress) according to the sequence of manoeuvres as envisaged in the programmed sequence. **Important** – This command is performed even if the control unit is set with the command "block" (see Table 1). *Input configured as normally open.*
Partial open 2	Partial open program the required operating mode, selecting in **Table 1-B** (**"command configuration"** > **"partial open"** > operating mode...)	When this command is sent the control unit activates the application to complete the Opening manoeuvre until the position is reached as set in the function "partial open 2" (Control unit functions > installation > positions > partial open 2). *Input configured as normally open.*
Partial open 3	Partial open program the required operating mode, selecting in **Table 1-B** (**"command configuration"** > **"partial open"** > operating mode...)	When this command is sent the control unit activates the application to complete the Opening manoeuvre until the position is reached as set in the function "partial open 3" (Control unit

		functions > installation > positions > partial open 3). *Input configured as normally open.*
Open and block	Opening program the required operating mode, selecting in **Table 1-C** (**"command configuration"** > **"opening"** > operating mode...)	When this command is sent the control unit activates the application to complete the Opening manoeuvre until the position is reached as set in the function "partial open 3"(Control unit functions > installation > positions > partial open 3). *Input configured as normally open.*
Close and block	Closing program the required operating mode, selecting in **Table 1-D** (**"command configuration"** > **"closing"** > operating mode...)	When this command is sent the control unit activates the application to complete the Closing manoeuvre until the position is reached as set in the function "closing"(Control unit functions > installation > positions > closing) and the automation is then blocked. *Input configured as normally open.*
Block		When this command is sent, the control unit is blocked and does not perform any type of command, with the exception of "High priority step-step", "Release", "Release and close" and "Release and open". *Input configured as normally open.*
Release		When this command is sent, the control unit is released restoring normal operating status (all commands sent can be performed) *Input configured as normally open.*
Timed Courtesy light		This command enables activation of the courtesy light on the control unit and that programmable on Output 1 and Output 2. The courtesy light remains active for the time as programmed in the function "courtesy light time" (Control unit functions > advanced parameters > output configuration > courtesy light time). For the courtesy light connected to Output 1, the command is only enabled when this output is programmed in "courtesy light" mode (Control unit functions > advanced parameters > output configuration > output 1 (flash) > courtesy light). **Note** – When the courtesy light is already active and the command "timed courtesy light" is sent again, the time programmed in the function "courtesy light time" is reloaded. *Input configured as normally open.*
Courtesy light: on/off		This command enables activation and deactivation of the courtesy light on the control unit and that programmable on Output 1 and Output 2. For the courtesy light connected to Output 1, the command is only enabled when this output is programmed in "courtesy light" mode (Control unit functions > advanced parameters > output configuration > output 1 (flash) > courtesy light). **CAUTION!** – The courtesy light is switched off automatically if the relative time interval elapses, as programmed in the function "courtesy light time" (Control unit functions > advanced parameters > output configuration > courtesy light time). *Input configured as normally open.*
Apartment block	Step step program the required operating mode, ss apartment block 1 (**"command configuration"** > **"step step"** > operating mo-	**This command is factory set to Input 1, with operating mode "ss apartment block 1" and operating sequence "open- stop -**

	de: <u>ss apartment block 1</u>)	**close - open".** When this command is sent, the control unit activates the application to complete the next manoeuvre following the previous one (or still in progress) according to the sequence of manoeuvres as envisaged in the programmed sequence. **Note** – This apartment block step step command is used for apartment blocks and in general envisages programming of all apartment block transmitters with a single "apartment block step step" key. *Input configured as normally open.*
Alt	<u>Alt on closing</u> program the required operating mode, selecting in **Table 1-L** (**"command configuration"** > **"alt on closing"** > operating mode...)	When this command is sent, the control unit stops the manoeuvre in progress and activates the application to execute the set operating mode. *Input configured as normally closed.*
Apartment block open	<u>Opening</u> program the required operating mode, <u>apartment block 1 open</u> (**"command configuration"** > **"opening"** > operating mode **apartment block 1 open**)	When this command is sent, the control unit activates the application to perform the opening manoeuvre only until the limit switch is reached. **Note** – This command is useful when using control photocells or a magnetic detector loop. *Input configured as normally open.*
Photo Safety function	<u>Photo</u> program the required operating mode, selecting in **Table 1-F** (**"command configuration"** > **"photo"** > operating mode...)	When this command is sent, the control unit activates the application according to the selected manoeuvre type. *Input configured as normally closed.*
Photo 2 Safety function	<u>Photo 2</u> program the required operating mode, selecting in **Table 1-H** (**"command configuration"** > **"photo 2"** > operating mode...)	When this command is sent, the control unit activates the application according to the selected manoeuvre type. *Input configured as normally closed.*
Photo 3 Safety function	<u>Photo 3</u> program the required operating mode, selecting in **Table 1-I** (**"command configuration"** > **"photo 3"** > operating mode...)	When this command is sent, the control unit activates the application according to the selected manoeuvre type. *Input configured as normally closed.*
Master Step Step	<u>Step step</u> program the required operating mode, <u>open - stop - close - open</u> (**"command configuration"** > **"step step"** > operating mode: <u>open - stop - close - open</u>**)**	When this command is sent, the control unit activates the master (primary) leaf of the application to complete the next manoeuvre following the previous one (or still in progress) according to the sequence of manoeuvres as envisaged in the programmed sequence. *Input configured as normally open.*
Master open	<u>Opening</u> program the required operating mode, selecting in **Table 1-C** (**"command configuration"** > **"opening"** > operating mode...)	When this command is sent, the control unit activates the master (primary) leaf of the application to complete an Opening manoeuvre. *Input configured as normally open.*
Master close	<u>Closing</u> program the required operating mode, selecting in **Table 1-D** (**"command configuration"** > **"closing"** > operating mode...)	When this command is sent, the control unit activates the master (primary) leaf of the application to complete a Closing manoeuvre. *Input configured as normally open.*
Slave Step Step	<u>Step step</u> program the required operating mode, <u>open - stop - close - open</u> (**"command configuration"** > **"closing"** > operating mode: <u>open - stop - close - open</u>)	When this command is sent, the control unit activates the slave (secondary) leaf of the application to complete the next manoeuvre following the previous one (or still in progress) according to the sequence of manoeuvres as envisaged in the programmed sequence. *Input configured as normally open.*

Slave open	Opening program the required operating mode, selecting in **Table 1-C** (**"command configuration"** > **"opening"** > operating mode...)	When this command is sent, the control unit activates the slave (secondary) leaf of the application to complete an Opening manoeuvre. *Input configured as normally open.*
Slave close	Closing program the required operating mode, selecting in **Table 1-D** (**"command configuration"** > **"closing"** > operating mode...)	When this command is sent, the control unit activates the slave (secondary) leaf of the application to complete a Closing manoeuvre. *Input configured as normally open.*
Release and open		When this command is sent, the control unit is released (restoring normal operating status) and activates the application to execute an Opening manoeuvre. *Input configured as normally open.*
Release and close		When this command is sent, the control unit is released (restoring normal operating status) and activates the application to execute a Closing manoeuvre. *Input configured as normally open.*
Automatic opening active		This command enables the activation or deactivation of the function for bluebus control photocells and inputs configured in "apartment block open" mode. ***Note** – the factory setting of this function is "active".* For example, if this function is active, when the control photocells are engaged, the control unit activates the application to execute an Opening manoeuvre. *Input configured as normally open.*
Automatic opening deactivated		This command enables deactivation of the "automatic opening active" mode described above. *Input configured as normally open.*

COMMAND configuration

This item covers the **command categories** associable with inputs 1 - 2 - 3 (refer to the section "input configuration - Table 1" to check the commands available). Each command category features various operating modes as described in a **table** (1-A, 1-B, etc.):

step step

In this command category the user can select one of the operating modes specified in **Table 1-A**.

TABLE 1-A: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
Industrial mode	This executes the sequence "open in semi-automatic - close in hold-to-run".
Open - Stop - Close - Stop	This executes the above sequence.
Open - Stop - Close - Open	**Operating mode set in factory (Input 1 - "step step" command).** This executes the above sequence.
Open - Close - Open - Close	This executes the above sequence.
Apartment block 1 step step	This executes the sequence "**close - stop - open - open**" until the maximum opening position is reached. ***Note** – If another command is sent after this one, the application executes the Closing manoeuvre with the same sequence.*
Apartment block 2 step step	This executes the sequence "**close - stop - open - open**" until the maximum opening position is reached. ***Note** – If another command is sent after this one, the application executes the Closing manoeuvre with the same sequence.*

	Important – When sending a command, if the transmitter key is held down for more than 2 seconds, the control unit activates a Stop.
Step Step 2	This executes the sequence "**open - stop - close - open**". **Important** – When sending a command, if the transmitter key is held down for more than 2 seconds, the control unit activates a "partial open 1" command (input configuration > Table 1).
Hold-to-run	The Opening or Closing manoeuvre is executed exclusively if the transmitter key is held down (hold-to-run).

partial open

In this command category the user can select one of the operating modes specified in **Table 1-B**.

TABLE 1-B: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
Open - Stop - Close - Stop	**Operating mode set in factory.** This executes the above sequence.
Open - Stop - Close - Open	This executes the above sequence.
Open - Close - Open - Close	This executes the above sequence.
Apartment block 1 step step	This executes the sequence "**close - stop - partial open 1 - partial open 1**" until the maximum position is reached as programmed in the function "Partial Open 1". ***Note*** *– If another command is sent after this one, the application executes the Closing manoeuvre with the same sequence.*
Apartment block 2 step step	This executes the sequence "**close - stop - partial open 1 - partial open 1**" until the position is reached as programmed in the function »Partial Open 1". ***Note*** *– If another command is sent after this one, the application executes the Closing manoeuvre with the same sequence.* **Important** – When sending a command, if the transmitter key is held down for more than 2 seconds, the control unit activates a Stop.
Hold-to-run	The Partial open 1 or Closing manoeuvre is executed exclusively if the transmitter key is held down (hold-to-run)..
Industrial mode	This executes the sequence "open in semi-automatic – close in hold-to-run".

open

In this command category the user can select one of the operating modes specified in **Table 1-C**.

TABLE 1-C: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
Open - Stop - Open	**Operating mode set in factory (Input 2 - "open" command).** This executes the above sequence.
Apartment block 1	This executes the sequence "**open - open**".
Apartment block 2	**Important** – When sending a command, if the transmitter key is held down for more than 2 seconds, the control unit activates a Stop.
Open 2	This executes the Opening sequence. **Important** – When sending a command, if the transmitter key is held down for more than 2 seconds, the control unit activates a "partial open 1" command (input configuration > Table 1).
Hold-to-run Open	The Opening manoeuvre is executed exclusively if the transmitter key is held down (hold-to-run).

close

In this command category the user can select one of the operating modes specified in **Table 1-D**.

TABLE 1-D: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
Close - stop - close	**Operating mode set in factory (Input 3 - "close" command).** This executes the above sequence.
Apartment block 1 close	This executes the sequence "**close - close**".
Apartment block 2 close	This executes the sequence "**close - close**". **Important** – When sending a command, if the transmitter key is held down for more than 2 seconds, the control unit activates a Stop.
Hold-to-run close	The Closing manoeuvre is executed exclusively if the hold-to-run command is used.

stop

In this command category the user can select one of the operating modes specified in **Table 1-E**.

TABLE 1-E: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
stop	**Operating mode set in factory.** When the control unit receives the command, it stops the manoeuvre in progress gradually and in a short time (not instantly).
stop and brief inversion	When the control unit receives the "stop" command, it stops the manoeuvre in progress and activates the application to perform a brief inversion in the opposite direction.

photo

In this command category the user can select one of the operating modes specified in **Table 1-F**.

TABLE 1-F: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
stop and inversion	**Operating mode set in factory.** When the control unit receives the command, it stops the Closing manoeuvre in progress and activates a total inversion (Opening). **Caution! – During execution of the Opening manoeuvre, this command is ignored.**
stop and brief inversion	When the control unit receives the command, it stops the Closing manoeuvre in progress and activates the application to perform a brief inversion in the opposite direction (Opening). **Caution! – During execution of the Opening manoeuvre, this command is ignored.**
stop	When the control unit receives the command, it stops the Closing manoeuvre in progress. **Caution! – During execution of the Opening manoeuvre, this command is ignored.**
temporary stop	When the control unit receives the command, it stops the Closing manoeuvre for the entire time that the command remains active. Otherwise, when the command is no longer active, the control unit activates the application to perform an Opening manoeuvre. **Caution! – During execution of the Opening manoeuvre, this command is ignored.**

photo 1

In this command category the user can select one of the operating modes specified in **Table 1-G**.

TABLE 1-G: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
stop and brief inversion	When the control unit receives the command, it stops the Closing manoeuvre in progress and activates the application to perform a brief inversion in the opposite direction (Opening). **Caution! – During execution of the Opening manoeuvre, this command is ignored.**
stop	When the control unit receives the command, it stops the Closing manoeuvre in progress. **Caution! – During execution of the Opening manoeuvre, this command is ignored.**
temporary stop	When the control unit receives the command, it stops the Closing manoeuvre for the entire time that the command remains active. Otherwise, when the command is no longer active, the control unit activates the application to perform an Opening manoeuvre. **Caution! – During execution of the Opening manoeuvre, this command is ignored.**

photo 2

In this command category the user can select one of the operating modes specified in **Table 1-H**.

TABLE 1-H: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
stop and inversion	**Operating mode set in factory.** When the control unit receives the command, it stops the Opening manoeuvre in progress and activates a total inversion (Closing). **Caution! – During execution of the Opening manoeuvre, this command is ignored.**
stop and brief inversion	When the control unit receives the command, it stops the Opening manoeuvre in progress and activates the application to perform a brief inversion in the opposite direction (Closing). **Caution! – During execution of the Opening manoeuvre, this command is ignored.**
stop	When the control unit receives the command, it stops the Opening manoeuvre in progress. **Caution! – During execution of the Opening manoeuvre, this command is ignored.**
temporary stop	When the control unit receives the command, it stops the Opening manoeuvre for the entire time that the command remains active. Otherwise, when the command is no longer active, the control unit activates the application to perform a Closing manoeuvre. **Caution! – During execution of the Opening manoeuvre, this command is ignored.**

photo 3

In this command category the user can select one of the operating modes specified in **Table 1-I**.

TABLE 1-I: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
temporary stop	**Operating mode set in factory.** When the control unit receives the command, it stops the Closing manoeuvre for the entire time that the command remains active. Otherwise, when the command is no longer active, the control unit activates the application to perform an Opening manoeuvre.
stop	When the control unit receives the command, it stops the manoeuvre in progress.

alt in opening

In this command category the user can select one of the operating modes specified in **Table 1-L**.

TABLE 1-L: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
alt	When this type of function is set, when the control unit receives the command, it stops the Opening manoeuvre in progress immediately.
alt and brief inversion	**Operating mode set in factory.** When the control unit receives the command, it stops the Opening manoeuvre in progress immediately and activates the application to perform a brief inversion in the opposite direction (Closing).
alt and inversion	When the control unit receives the command, it stops the Opening manoeuvre in progress immediately and activates the application to perform a total inversion in the opposite direction (Closing).

alt in closing

In this command category the user can select one of the operating modes specified in **Table 1-M**.

TABLE 1-M: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
alt	When the control unit receives the command, it stops the Closing manoeuvre in progress.
alt and brief inversion	**Operating mode set in factory.** When the control unit receives the command, it stops the Closing manoeuvre in progress immediately and activates the application to perform a brief inversion in the opposite direction (Opening).
alt and inversion	When the control unit receives the command, it stops the Closing manoeuvre in progress immediately and activates the application to perform a total inversion in the opposite direction (Opening).

obstacle detection in opening

In this command category the user can select one of the operating modes specified in **Table 1-N**.

TABLE 1-N: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
alt	When the control unit receives the command, it stops the Opening manoeuvre in progress.
alt and brief inversion	**Operating mode set in factory.** When the control unit receives the command, it stops the Opening manoeuvre in progress immediately and activates the application to perform a brief inversion in the opposite direction (Closing).
alt and inversion	When the control unit receives the command, it stops the Opening manoeuvre in progress immediately and activates the application to perform a total inversion in the opposite direction (Closing).

obstacle detection in closing

In this command category the user can select one of the operating modes specified in **Table 1-O**.

TABLE 1-O: COMMAND CONFIGURATION

OPERATING MODE	DESCRIPTION
alt	When the control unit receives the command, it stops the Closing manoeuvre in progress.

alt and brief inversion	When the control unit receives the command, it stops the Closing manoeuvre in progress immediately and activates the application to perform a brief inversion in the opposite direction (Opening).
alt and inversion	**Operating mode set in factory.** When this type of function is set, when the control unit receives the command, it stops the Closing manoeuvre in progress immediately and activates the application to perform a total inversion in the opposite direction (Opening).

OUTPUT configuration

This item covers the **functions** available and associable with Outputs 1 (flash) - 2 - 3 present on the control unit of an automation. Each output has various functions as described in a **table** (Table 2, Table 3 etc):

output 1 (flash)

In this output the user can select one of the functions specified in **Table 2**.

TABLE 2: OUTPUT CONFIGURATION

FUNCTION	DESCRIPTION
sca (= gate open indicator)	The programmed light indicates the operating status of the control unit. ***light off*** *= application in maximum Closing position;* ***slow flashing*** *= application Opening manoeuvre execution phase;* ***quick flashing*** *= application Closing manoeuvre execution phase;* ***light permanently on*** *= application in maximum Opening position.*
gate open	The programmed light indicates the operating status of the control unit. ***light on*** *= application in maximum Opening position;* ***light off*** *= application in other positions.*
gate closed	The programmed light indicates the operating status of the control unit. ***light on*** *= application in maximum Closing position;* ***light off*** *= application in other positions.*
maintenance indicator light	The programmed light indicates the count of manoeuvres completed and therefore the need (or not) for system maintenance operations. ***light on for 2 sec at start of Opening manoeuvre*** *= number of manoeuvres less than 80%;* ***light flashing during execution of entire manoeuvre*** *= number of manoeuvres between 80 and 100%;* ***light always flashing*** *= number of manoeuvres over 100%.*
flashing light	This function enables the flashing light to indicate execution of a manoeuvre in progress with flashes at regular intervals (0.5 sec ON, 0.5 sec OFF).
courtesy light	This function type is ON/OFF. **Important** – For safety reasons, as the light is not controlled by a timer, use of an adequate light, able to withstand the heat of the light emitted, is recommended.
electric lock 1	With this function programmed, when an Opening manoeuvre is performed the electric lock is activated for a time as set in the function “electric lock time – output configuration”.
suction cup 1	With this function programmed, the suction cup is activated when the application is in the maximum Closing position. ***Note*** *– The suction cup is disabled in all other situations.* When the suction cup is disabled, before an Opening manoeuvre is started, the time interval as programmed in the function “suction cup time – output configuration” is activated, which delays the start of the manoeuvre.

radio channel no.1	If this radio channel is set for the configuration of output 1 (flash), this channel is activated when a command is set with the transmitter. It is useful if installing external devices (for example, an auxiliary light) in the same system to be controlled with a single transmitter. **WARNING** – If this channel is not free on the control unit receiver, as previously memorised with a command, the control unit activates exclusively the programmed output when the channel is activated with the transmitter, ignoring the command to the motor.
radio channel no.2	If this radio channel is set for the configuration of output 1 (flash), this channel is activated when a command is set with the transmitter. This mode is useful if installing external devices (for example, an auxiliary light) in the same system to be controlled with a single transmitter. **WARNING** – If this channel is not free on the control unit receiver, as previously memorised with a command, the control unit activates exclusively the programmed output when the channel is activated with the transmitter, ignoring the command to the motor.
radio channel no.3	If this radio channel is set for the configuration of output 1 (flash), this channel is activated when a command is set with the transmitter. This mode is useful if installing external devices (for example, an auxiliary light) in the same system to be controlled with a single transmitter. **WARNING** – If this channel is not free on the control unit receiver, as previously memorised with a command, the control unit activates exclusively the programmed output when the channel is activated with the transmitter, ignoring the command to the motor.
radio channel no.4	If this radio channel is set for the configuration of output 1 (flash), this channel is activated when a command is set with the transmitter. This mode is useful if installing external devices (for example, an auxiliary light) in the same system to be controlled with a single transmitter. **WARNING** – If this channel is not free on the control unit receiver, as previously memorised with a command, the control unit activates exclusively the programmed output when the channel is activated with the transmitter, ignoring the command to the motor.

output 2

In this output the user can select one of the functions specified in **Table 3**.

TABLE 3: OUTPUT CONFIGURATION

FUNCTION	DESCRIPTION
sca (= gate open indicator)	The programmed light indicates the operating status of the control unit. ***light off*** *= application in maximum Closing position;* ***slow flashing*** *= application Opening manoeuvre execution phase;* ***quick flashing*** *= application Closing manoeuvre execution phase;* ***light permanently on*** *= application in maximum Opening position.*
gate open	The programmed light indicates the operating status of the control unit. ***light on*** *= application in maximum Opening position;* ***light off*** *= application in other positions.*
gate closed	The programmed light indicates the operating status of the control unit. ***light on*** *= application in maximum Closing position;* ***light off*** *= application in other positions.*
maintenance indicator light	The programmed light indicates the count of manoeuvres

	completed and therefore the need (or not) for system maintenance operations. ***light on for 2 sec at start of Opening manoeuvre*** *= number of manoeuvres less than 80%;* ***light flashing during execution of entire manoeuvre*** *= number of manoeuvres between 80 and 100%;* ***light always flashing*** *= number of manoeuvres over 100%.*
flashing light	This function enables the flashing light to indicate execution of a manoeuvre in progress with flashes at regular intervals (o.5 sec ON, 0.5 sec OFF).
courtesy light	This function type is ON/OFF. **Important** – For safety reasons, as the light is not controlled by a timer, use of an adequate light, able to withstand the heat of the light emitted, is recommended.
electric lock 1	With this function programmed, when an Opening manoeuvre is performed the electric lock is activated for a time as set in the function “electric lock time – output configuration”. Output active 24 Vdc / max 4 W
suction cup 1	With this function programmed, the suction cup is activated when the application is in the maximum Closing position. ***Note*** *– The suction cup is disabled in all other situations.* When the suction cup is disabled, before an Opening manoeuvre is started, the time interval as programmed in the function “suction cup time – output configuration” is activated, which delays the start of the manoeuvre.
radio channel no.1	If this radio channel is set for the configuration of output 1 (flash), this channel is activated when a command is set with the transmitter. It is useful if installing external devices (for example, an auxiliary light) in the same system to be controlled with a single transmitter. **WARNING** – If this channel is not free on the control unit receiver, as previously memorised with a command, the control unit activates exclusively the programmed output when the channel is activated with the transmitter, ignoring the command to the motor. Output active 24Vdc / max 4 W
radio channel no.2	If this radio channel is set for the configuration of output 1 (flash), this channel is activated when a command is set with the transmitter. It is useful if installing external devices (for example, an auxiliary light) in the same system to be controlled with a single transmitter. **WARNING** – If this channel is not free on the control unit receiver, as previously memorised with a command, the control unit activates exclusively the programmed output when the channel is activated with the transmitter, ignoring the command to the motor. Output active 24Vdc / max 4 W
radio channel no.3	If this radio channel is set for the configuration of output 1 (flash), this channel is activated when a command is set with the transmitter. It is useful if installing external devices (for example, an auxiliary light) in the same system to be controlled with a single transmitter. **WARNING** – If this channel is not free on the control unit receiver, as previously memorised with a command, the control unit activates exclusively the programmed output when the channel is activated with the transmitter, ignoring the command to the motor. Output active 24Vdc / max 4 W
radio channel no.4	If this radio channel is set for the configuration of output 1 (flash), this channel is activated when a command is set with the transmitter. It is useful if installing external devices (for example, an auxiliary light) in the same system to be controlled with a single transmitter. **WARNING** – If this channel is not free on the control unit receiver, as previously memorised with a command, the control unit activates exclusively the programmed output when the channel is activated with the transmitter, ignoring the command to the motor. Output active 24Vdc / max 4 W

electric lock time

This parameter is expressed in seconds and can be set with a value from 0.1 to 10 sec.; the factory setting is 2 sec. This function enables programming on the Control unit of the required time interval to pass between the end of a Closing manoeuvre and the start of an Opening manoeuvre.

suction cup time

This parameter is expressed in seconds and can be set with a value from 0.1 to 10 sec.; the factory setting is 2 sec. This function enables programming on the Control unit of the required time interval to pass between the end of a Closing manoeuvre and the start of an Opening manoeuvre, when the suction cup is detached.

courtesy light time

This parameter is expressed in seconds and can be set with a value from 0 to 250 seconds; the factory setting is 60 seconds. This function enables programming of the required time for which the courtesy light remains lit both on the control unit and on output 1 (flash).

DIAGNOSTICS

inputs / outputs

This function enables the display of the operating status of all inputs and outputs present on the control unit. The functions of the inputs and outputs are described in **Table 4**.

TABLE 4: input/output DIAGNOSTICS

FUNCTION	DESCRIPTION
Diagnosis 1 - IN	
RADIO INPUTS (On / Off):	
Channel 1	Indicates when radio receiver channel 1 is active.
Channel 2	Indicates when radio receiver channel 2 is active.
Channel 3	Indicates when radio receiver channel 3 is active.
Channel 4	Indicates when radio receiver channel 4 is active.
SERIAL RADIO INPUTS	Indicates when the control unit receives a serial command via BusT4 from a radio receiver; these commands range from minimum 1 to maximum 15.
BOARD KEYS:	
no. 1	Indicates when key 1 is pressed (= OPEN) on the control unit.
no. 2	Indicates when key 2 is pressed (= STOP) on the control unit.
no. 3	Indicates when key 3 is pressed (= CLOSE) on the control unit.
DIRECTION SELECTOR	Indicates the operating status of the selector for the direction of a manoeuvre performed by the application.
INPUT STATUS	
inp 1	Indicates when input 1 is active.
inp 2	Indicates when input 2 is active.
inp 3	Indicates when input 3 is active.
inp alt	Indicates when the alt input is active.
ALT CONFIGURATION	Indicates the type of connection on the alt terminal. Connection types are: not configured; NC; NO; 1 8K2 resistive edge; 2 8K2 resistive edges; 1 OSE optical edge; out of range.
MOTOR 1 (On / Off):	
Limit switch on opening	Indicates when motor 1 reaches the maximum opening position.
Limit switch on closing	Indicates when motor 1 reaches the maximum closing position.
MANOEUVRE THRESHOLD:	Indicates the operating status of the manoeuvre limiter, expressed in levels: **Level 1**: OK;

	Level 2: THRESHOLD 1; the manoeuvre is started with a 2 second delay; **Level 3**: THRESHOLD 2; the manoeuvre is started with a 5 second delay; **Level 4**: MOTOR ALARM; the manoeuvre is only enabled with the hold-to-run control.
LAST 8 MANOEUVRES	Indicates any malfunctions occurring during normal operation of the application, showing the last 8 manoeuvres completed.
AUTOMATIC OPENING	Indicates if this function is active.
Diagnosis 1 - OUT	
GENERAL DATA:	
Stand-by	Indicates when the automation is in the standby status.
Motor heating	Indicates that the "motor heating" function is active.
POWER SUPPLY:	Indicates the type of mains voltage: 50 hz or 60 hz.
MEMORY ERROR:	
Rego	Indicates whether there is an error in the memorised data on the control unit regarding settable parameters.
Functions	Indicates whether there is an error in the memorised data regarding the functions programmable with Oview.
Alt	Indicates whether there is an error in the memorised data regarding the configuration of the alt input.
Bluebus	Indicates whether there is an error in the memorised data regarding the configuration of the devices connected to the bluebus input.
Positions	Indicates whether there is an error in the memorised data regarding positions.
ENCODER STATUS:	
Abs M1	Indicates whether there is a reading error or operating malfunction on the absolute encoder of motor 1.
OUTPUTS:	
Suction cup Out	Indicates when the suction cup is active.
Out 1	Indicates when output 1 is active. **Caution** – 12/24 Vdc voltage present.
Out 2	Indicates when output 2 is active. **Caution** – 24 Vdc voltage present.
Out M1	Indicates when motor 1 is in operation.
ALARMS:	
Out 1 overload	Indicates an electrical overload or short circuit on output 1 or on the courtesy light of the control unit.
Out 2 overload	Indicates an electrical overload or short circuit on output 2.
M1 high overtravel	Indicates that the absolute encoder of motor 1 is in a position close to the maximum limit (100%), over which the motor does not function.

other parameters

This function enables display of the operating status of some parameters measured by the control unit. These parameters are described in **Table 5**.

TABLE 5: DIAGNOSTICS of other parameters

PARAMETER	DESCRIPTION
Diagnostics 2	
VARIOUS PARAMETERS:	
Courtesy light	Indicates the timer for shutoff of the courtesy light.
Pause time	Indicates the timer for counting the pause time between one manoeuvre and the next.
Temperature	Indicates the temperature of the motor, measured by the control unit.

Service voltage	Indicates the voltage supplied to external devices.
Bus medium current	Indicates the current absorption of the devices connected to the bluebus output, calculated as a percentage.
MOTOR 1:	
Torque	Indicates the torque generated by motor 1 during the manoeuvre, calculated as a percentage.
Speed	Indicates the speed of motor 1 during the manoeuvre, calculated as a percentage.
Voltage	Indicates the mean voltage to be supplied to motor 1 during the manoeuvre, calculated as a percentage.
Position	Indicates the physical position of the encoder, calculated as a percentage: the values 0% and 100% correspond to the physical travel limits of the gate.

bluebus device diagnostics

This function enables the display of the device type, operating status, and configuration of the devices connected to the Bluebus output. These parameters are described in **Table 6**.

TABLE 6: DIAGNOSTICS of bluebus devices

PARAMETER	DESCRIPTION
Bluebus	
PHOTOCELLS:	
PHOTO	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
PHOTO II	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
PHOTO 1	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
PHOTO 1 II	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
PHOTO 2	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
PHOTO 2 II	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
PHOTO 3	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
FT A	Indicates whether the sensitive edge is present, the relative operating status and the correct memorisation in the control unit.
FT B	Indicates whether the sensitive edge is present, the relative operating status and the correct memorisation in the control unit.
FT C	Indicates whether the sensitive edge is present, the relative operating status and the correct memorisation in the control unit.
OPEN PHOTO	Indicates whether the control photocell is present, the relative operating status and the correct memorisation in the control unit.
OPEN PHOTO II	Indicates whether the control photocell is present, the relative operating status and the correct memorisation in the control unit.
COMMANDS:	
CMD 1	Indicates whether the control photocell is present, the relative operating status and the correct memorisation in the control unit.
CMD 2	Indicates whether the control photocell is present, the relative operating status and the correct memorisation in the control unit.
CMD 3	Indicates whether the control photocell is present, the relative operating status and the correct memorisation in the control unit.
CMD 4	Indicates whether the control photocell is present, the relative operating status and the correct memorisation in the control unit.
OTHERS:	
GATE	Indicates the operating status of the application.
BLOCK AUTOMATION	Indicates when the automation is blocked following a “Block” command.

MEMORY	Indicates a problem regarding the data related to bluebus devices, memorised in the control unit.
BUS	Indicates whether there is a short circuit on the bluebus output.
STAND-BY	Indicates when the control unit is in standby status.
OTHER DEVICES:	
COURTESY LIGHT	Indicates whether the control device is present, the relative operating status and whether it is memorised correctly in the control unit.
SUCTION CUP	Indicates whether the control device is present, the relative operating status and whether it is memorised correctly in the control unit.
LOCK	Indicates whether the control device is present, the relative operating status and whether it is memorised correctly in the control unit.

MAINTENANCE

mode

This function enables programming of the type, and method of managing the control unit maintenance phase. There are two application modes:

- ❑ ***automatic*** – *When this mode is set, the "partial counter" (number of manoeuvres completed after maintenance) is updated automatically according to the duration of the manoeuvres performed and the force applied on the motor;*
- ❑ ***manual*** – *When this mode is set, the "partial count" is updated according to the number of manoeuvres performed.*

manual alarm threshold

A value from 0 to 16777215 (manoeuvres) can be assigned to this parameter; if the mode is set to manual, the factory setting of the parameter is 10000 (manoeuvres).
This function enables programming of a reference limit, over which automation maintenance is required.

partial count

This function enables the user to check the number of manoeuvres performed by an automation since the last maintenance procedure on the latter.

delete maintenance

This parameter type is ON / OFF; the factory setting is "OFF". This function enables deletion of the "partial count" value; this is required after performing maintenance on the automation.

ADVANCED FUNCTIONS

event log

This function enables the display of the events generated or received by the control unit. “Event” refers to a condition that changes the operating status of the control unit, for example: activation of an input, end of a manoeuvre, activation of a photocell or the alt input, etc. In this section the date and type of event can be displayed.

firmware updates

This function enables the firmware of a control unit to be updated with another compatible version, without the obligation to change the board. To update, proceed as follows:
01. Download the firmware update file *(the software update is available at the site internet **www.nice-service.com**);*
02. In “Advanced Functions” select “**Update firmware**”;
03. In the window displayed, select “**Select file**” and then select the update file previously downloaded. The data related to the software of the device to be updated are displayed on the left of the window, while the data related to the update software and compatible hardware versions are displayed on the right;
04. If the file is compatible, the text “**Update firmware**” appears on the button, and when this is clicked, the update procedure is started. At the end of the procedure, if the message “**Update completed successfully**” is displayed, this means that the procedure has bee completed. Otherwise, the message “**Retry**” appears on the button; in this case press the button again to repeat the update process.

If the update process is not completed, the user can retry a number of times, or return to the window “Device List”, selecting “Back” and then decide on how to proceed. In this window, the device previously selected will no longer be visible; to display the latter select the down arrow on the right of the window and select the function “**Devices in boot phase**”. This enables a search for devices ready for the firmware update phase.
At this point the user can retry the update process, repeating the procedure described above.
If the update is still not completed successfully, contact the Nice Assistance Service.

user permits

This function enables the installer to decide which functions and parameters are to be selected for display and modifications by the user. For example, for safety reasons, the installer can decide to prevent the user from modifying the parameters related to automation motor force and speed.
User permits can be managed exclusively by using the “installer password” (password management, common functions).
***Note** – All parameters of the various functions of a control unit or receiver are factory set as disabled.*