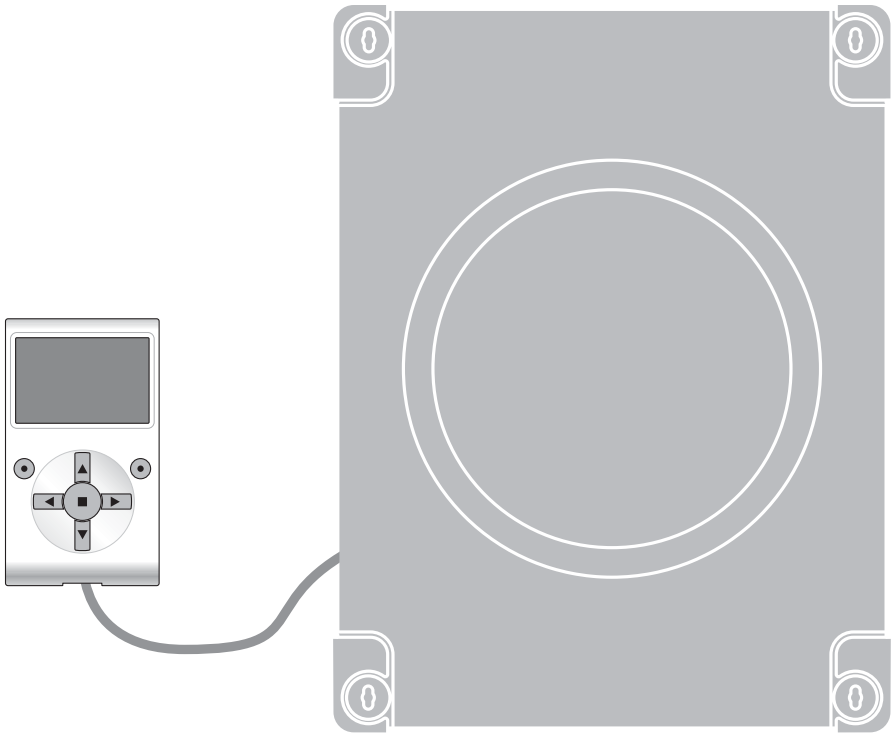
MC824H



Programmable functions

using the Oview programmer

STF MC824H – Rev01
Firmware: TF02

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 the automations in a complex system, all devices with the same assembly number can be controlled simultaneously.

Address

This parameter can be set with a value from 1 to 127; the factory setting is 3.
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 0 to 15; the factory setting is “0”. 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 bonging 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 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 at the end of the session. *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 "Run".

Motor type

This function enables memorisation in the control unit of the type of motor connected. Select the type of motor from the list of those available, using keys ▲ and ▼. After selecting the motor, press "**OK**" to memorise.

Position search

This function enables an automatic search of positions: the control unit automatically measures the leaf opening angles and calculates the opening and deceleration positions. To activate the position search, press "**Run**".

Programming of positions

• maximum closing
This function, expressed in encoder pulses, enables programming of the maximum closing position "0" (when the leaf touches the mechanical closing stop). To program the position, select the motor (1 or 2) using keys ◀ and ▶; then use the hold-to-run keys ▲ (**open**) and ▼ (**close**), to move the selected motor to the maximum closing position. Press "**OK**" to memorise.

• maximum opening
This function, expressed in encoder pulses, enables programming of the maximum opening position "1" (when the leaf touches the mechanical opening stop). To program the position, select the motor (1 or 2) using keys ◀ and ▶; then use the hold-to-run keys ▲ (**open**) and ▼ (**close**), to move the selected motor to the maximum opening position. Press "**OK**" to memorise.

• opening
This function, expressed in encoder pulses, enables programming of the required opening position "A" (the position in which the leaf should stop at the end of an opening manoeuvre). To program the position, select the motor (1 or 2) using keys ◀ and ▶; then use the hold-to-run keys ▲ (**open**) and ▼(**close**), to move the selected motor to the opening position. Press "**OK**" to memorise.

• partial open 1
This function, expressed in encoder pulses, enables programming of the partial opening position "1" (the position in which the leaf should stop at the end of an opening manoeuvre, following a Partial Open 1 command). To program the position, select the motor (1 or 2) using keys ◀ and ▶; then use the hold-to-run keys ▲ (**open**) and ▼ (**close**), to move the selected motor to the partial open 1 position. Press "**OK**" to memorise.

• partial open 2
This function, expressed in encoder pulses, enables programming of the partial opening position "2" (the position in which the leaf should stop at the end of an opening manoeuvre, following a Partial Open 2 command). To program the position, select the motor (1 or 2) using keys ◀ and ▶; then use the hold-to-run keys ▲ (**open**) and ▼ (**close**), to move the selected motor to the partial open 2 position. Press "**OK**" to memorise.

• partial open 3
This function, expressed in encoder pulses, enables programming of the partial opening position "3" (the position in which the leaf should stop at the end of an opening manoeuvre, following a Partial Open 3 command). To program the position, select the motor (1 or 2) using keys ◀ and ▶; then use the hold-to-run keys ▲ (**open**) and ▼ (**close**), to move the selected motor to the partial open 3 position. Press "**OK**" to memorise.

• deceleration on opening
This function, expressed in encoder pulses, enables programming of the leaf deceleration zone, during the opening manoeuvre (distance covered by the motors from the start of the deceleration phase through to the opening position). To program deceleration, select the motor (1 or 2) using keys ◀ and ▶; then select the required value by means of keys ▲ and ▼. Press "**OK**" to memorise.

• deceleration on closing
This function, expressed in encoder pulses, enables programming of the leaf deceleration zone, during the closing manoeuvre (distance covered by the motors from the start of the deceleration phase through to the maximum closing position "0"). To program deceleration, select the motor (1 or 2) using keys ◀ and ▶; then select the required value by means of keys ▲ and ▼ Press "**OK**" to memorise.

• open offset
This function, expressed in encoder pulses, enables programming of the leaf offset on opening (space covered by leaf 2 before leaf 1 starts opening). To program offset, select the required value by means of keys ▲ and ▼. Press "**OK**" to memorise.

• close offset
This function, expressed in encoder pulses, enables programming of the leaf offset on closing (space covered by leaf 1 before leaf 2 starts closing). To program offset, select the required value by means of keys ▲ and ▼. Press "**OK**" to memorise.

• disable value
This parameter, expressed in encoder pulses, can be set from 0 to 255; the factory setting depends on the type of installation. The selected value defines the range, according to the mechanical closing and opening limiters, within which to disable the

inversion manoeuvre, usually generated by activation of the “obstacle detection” function. To program the disable value, select the required value by means of keys ▲ and ▼. Press “**OK**” to memorise.

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;
- ❏ **delete all** – enables the deletion of all data in the Control unit memory excluding the reserved parameters: series, address, hardware version, software version, serial number.

To delete: select the configuration to delete by means of keys ▲ and ▼, then press “**Run**”.

Basic parameters

Automatic closing

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”. Parameter programming: select the required value by means of keys ▲ and ▼, then press “**OK**”.

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 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. **IMPORTANT** – This function is only enabled if the “automatic closure” function is active. Parameter programming: select the required value by means of keys ▲ and ▼, then press “**OK**”.

Reclose after photo

This parameter type is ON / OFF; the factory setting is “OFF” . When the function is active (ON), operation varies according to the parameter set in the function “Automatic closure”:

- ◆ with the “Automatic closure” function **active** (ON), during the opening or closing manoeuvre, if the photocells (Foto or Foto 1) are activated, the “pause time” is reduced to 5 seconds, regardless of the set “pause time”;
- ◆ with the “Automatic closure” function **not active** (OFF), during the closing manoeuvre, if the photocells (Foto or Foto 1) are activated, the “automatic closure” function is performed with the set “pause time”.

Parameter programming: select the required value by means of keys ▲ and ▼, then press “**OK**”.

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”.* Parameter programming: select the required value by means of keys ▲ and ▼, then press “**OK**”.

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

- ❏ ***always close*** *– For this mode, refer to the function “active” under the item “always close”;*
- ❏ ***save closure*** *– When this mode is activated, there are two possible results when power is restored 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.*

Parameter programming: select the required value by means of keys ▲ and ▼, then press “**OK**”.

• 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. Parameter programming: select the required value by means of keys ▲ and ▼, then press “**OK**”.

Speed management

• open speed
This parameter enables programming of the motor speed during an Opening manoeuvre; it can be set with a value from 1 (minimum speed) to 6 (maximum speed); the factory setting is 6. Parameter programming: select the required value by means of keys ▲ and ▼, then press “**OK**”.

• close speed

This parameter enables programming of the motor speed during a Closing manoeuvre; it can be set with a value from 1 (minimum speed) to 6 (maximum speed); the factory setting is 6. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

• opening deceleration speed

This parameter enables programming of the motor speed during the deceleration phase of an Opening manoeuvre; it can be set with a value from 1 (minimum speed) to 4 (maximum speed); the factory setting is 2. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

• closing deceleration speed

This parameter enables programming of the motor speed during the deceleration phase of a Closing manoeuvre; it can be set with a value from 1 (minimum speed) to 4 (maximum speed); the factory setting is 2. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

Force management

• opening force

This parameter can be set, for each motor, with a value from 1 (minimum force) to 8 (maximum force); the factory setting is 3. The function enables setting of the maximum force (*****) applied by the motors on the leafs during an opening manoeuvre, before the "obstacle detection" function is activated. If the current required by the motor exceeds the set value, the control unit interrupts the current manoeuvre and if necessary inverts movement. Parameter programming: select the motor (1 or 2), by means of keys ◀ and ▶; then select the required value using keys ▲ and ▼, and press "**OK**".

• closing force

This parameter can be set, for each motor, with a value from 1 (minimum force) to 8 (maximum force); the factory setting is 3. The function enables setting of the maximum force (*****) applied by the motors on the leafs during a closing manoeuvre, before the "obstacle detection" function is activated. If the current required by the motor exceeds the set value, the control unit interrupts the current manoeuvre and if necessary inverts movement. Parameter programming: select the motor (1 or 2), by means of keys ◀ and ▶; then select the required value using keys ▲ and ▼, and press "**OK**".

*(*****) **Note**: the force depends on the electrical current absorption of the motor.*

Sensitivity management

• open sensitivity

This parameter can be assigned with a value from 1 (minimum force) and 8 (maximum force); the factory setting depends on the type of installation. This function enables setting of the maximum force (******) applied by the motors on the leafs during an opening manoeuvre, before the "obstacle detection" function is activated. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

• close sensitivity

This parameter can be assigned with a value from 1 (minimum force) and 8 (maximum force); the factory setting depends on the type of installation. This function enables setting of the maximum force (******) applied by the motors on the leafs during a closing manoeuvre, before the "obstacle detection" function is activated. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

*(******) **Note**: the force depends on the frequency of pulses sent by the encoder.*

Start-up

• active

This parameter type is ON / OFF; the factory setting is "OFF". When the function is set to "ON", the manoeuvre starts with the maximum force and speed values to ensure maximum motor power during the initial phase. The end of the start-up torque phase is followed by a gradual acceleration ramp. This function is useful in the presence of static friction (e.g. snow or ice) which obstructs the automation. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

• start-up time

This parameter is expressed in seconds and can be set with a value from 0 to 3 seconds; the factory setting depends on the type of motor used. The function enables programming of the duration of start-up torque at the start of a manoeuvre. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

Important – If the function is active (ON), the start-up torque is enabled on both opening and closing manoeuvres. If the function is not active (OFF) and the "start-up time" is set to a value other than 0, the start-up torque is only activated for the opening manoeuvres which start from the gate closed position, and with a duration equal to the set time.

Pre-flash

• 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. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

• opening time

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. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

• closing time

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. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

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. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

• 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 programmable 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.*

❑ ***all*** *– 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), some internal circuits 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.*

Mode programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

• 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). Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

Operator 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". Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

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. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

Release stroke

This parameter type is ON / OFF; the factory setting is "OFF" . When this function is activated (ON) a brief closing manoeuvre is activated before the opening manoeuvre starts (starting from the gate closed position) to facilitate release of the electric lock. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

Brief inversion value

This parameter is expressed in milliseconds (ms) and can be set with a value from 0 to 2.5 seconds; the factory setting is 1.3 seconds. This function enables programming of the duration of the "brief inversion" of the motors; this is implemented after a "Halt" command is sent to the control unit. Parameter programming: select the required value by means of keys ▲ and ▼, then press "**OK**".

Close discharge

This parameter is expressed in milliseconds (ms) and can be set with a value from 0 to 1 seconds; the factory setting is 0 seconds. This function enables programming, for each motor, of the duration of the "brief inversion" at the end of a complete closing manoeuvre. Discharge programming: select the motor (1 or 2), by means of keys ◀ and ▶; then select the required value using keys ▲ and ▼, and press "**OK**" to memorise.

Advanced parameters

COMMAND 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.**

To 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 top 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...)	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 operating mode 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). The next manoeuvre is performed with the set sequence in the programmed operating mode. *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 position is reached as set in the function “opening” (Control unit functions > installation > positions > opening). The next manoeuvres are performed with the set sequence in the programmed operating mode. *Input configured as normally open.*
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 application to perform the Closing manoeuvre until the mechanical closing stops are reached. The next manoeuvres are performed with the set sequence in the programmed operating mode. *Input configured as normally open.*
Stop		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.*
Apartment block		When this command is sent, the control unit activates the application to perform the Opening manoeuvre with the sequence “open-open” until the position is reached as programmed in the “opening” function (Control unit functions > installation > positions > opening). **Note** – Once the opening position is reached, if another command is sent after this one, the application

		executes the Closing manoeuvre. *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 operating mode 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). The next manoeuvres are performed with the set sequence in the programmed operating mode. *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). The next manoeuvres are performed with the set sequence in the programmed operating mode. *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 "opening"(Control unit functions > installation > positions > opening). Once the mechanical stops are reached, the automation is blocked. *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 perform the Closing manoeuvre until the mechanical closing stops are reached. Once the mechanical stops are reached, the automation is 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, programmable on Output 1, 2 and 3. 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) **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, programmable on Output 1, 2 and 3. **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.*
Halt	Halt program the required operating mode, selecting in **Table 1-E, 1-F** (**command configuration”** > **“halt”** > 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		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 “opening”(Control unit functions > installation > positions > opening). **Note** – This command is useful when using control photocells or a magnetic detector loop. *Input configured as normally open.*
Foto Safety function		When this command is sent during a closing manoeuvre, the control unit stops the manoeuvre in progress and inverts travel (with an opening manoeuvre). *Input configured as normally closed.*
Foto 1 Safety function		When this command is sent during a closing manoeuvre, the control unit stops the manoeuvre in progress and inverts travel (with an opening manoeuvre). When this command is sent during an opening manoeuvre, the control unit stops the manoeuvre in progress and when the command input is terminated, resumes the manoeuvre. *Input configured as normally closed.*
Foto 2 Safety function		When this command is sent during an opening manoeuvre, the control unit stops the manoeuvre in progress and inverts travel (with a closing manoeuvre). *Input configured as normally closed.*
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
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 "**open-open**" until the maximum opening position is reached. After reaching this position, if another command is sent, the control unit activates a closing manoeuvre.
Apartment block 2 step step	This executes the sequence "**open-open**" until the maximum opening position is reached. After reaching this position, if another command is sent, the control unit activates a closing manoeuvre. If the command sent remains active for more than 2 seconds, the control unit activates a stop command.
Step Step 2	This executes the sequence "**open-stop-close-open**". **Important** – If the command sent remains active 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 sent command persists (hold-to-run).
Industrial mode	This executes the sequence "open in semi-automatic – close in 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 "**Partial open - Partial open**" through to the position programmed in the "Partial open" function; if another command is sent after reaching this position, the control unit activates a closing manoeuvre.

Apartment block 2 step step	This executes the sequence "**Partial open - Partial open**" through to the position programmed in the "Partial open" function; if another command is sent after reaching this position, the control unit activates a closing manoeuvre. **Important** - If the command sent remains active for more than 2 seconds, the control unit activates a stop command.
Hold-to-run	The "Partial Open" or "Closing" manoeuvre is executed exclusively if the hold-to-run command is used.
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	This executes the sequence "**open- open**". **Important** - If the command sent remains active for more than 2 seconds, the control unit activates a stop command.
Hold-to-run Open	The Opening manoeuvre is executed exclusively if the sent command persists (hold-to-run).
Industrial mode	This executes the sequence "open in semi-automatic – close in 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 latter remains active for more than 2 seconds, the control unit activates a Stop.
Hold-to-run close	The Closing manoeuvre is executed exclusively if the sent command persists (hold-to-run).
Industrial mode	This executes the sequence "**open in semi-automatic – close in hold-to-run**".

Halt on opening

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
Halt	When this type of function is set, when the control unit receives the command, it stops the Opening manoeuvre in progress immediately.
Halt 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).

Halt on closing

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
Halt	When the control unit receives the command, it stops the Closing manoeuvre in progress.
Halt 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).

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 stationary in maximum Closing position;* ***slow flashing*** *= application Opening manoeuvre execution phase;* ***quick flashing*** *= application Closing manoeuvre execution phase;* ***light permanently on*** *= application stationary in position other than maximum closing* Output active 24 Vdc / max 4 W
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* Output active 24 Vdc / max 4 W
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* Output active 24 Vdc / max 4 W
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%.* Output active 24 Vdc / max 4 W
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). Output active 12 Vdc / max 21 W

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 is recommended able to withstand the heat of the light emitted. Output active 24 Vdc / max 4 W
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 12 Vac / max 15 VA
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.* Output active 24 Vdc / max 4 W
red traffic light	This function indicates activity of the application during the phases of a Closing manoeuvre. ***slow flashing** = execution of Closing manoeuvre;* ***light permanently on** = application in maximum Closing position;* ***light off** = application in other positions* Output active 24 Vdc / max 4 W
green traffic light	This function indicates activity of the application during the phases of an Opening manoeuvre. ***slow flashing** = execution of Opening manoeuvre;* ***light permanently on** = application in maximum Opening position;* ***light off** = application in other positions* Output active 24 Vdc / max 4 W
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 sent 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 24 Vdc / 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 sent 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 active 24 Vdc / 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 sent 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 active 24 Vdc / 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 sent 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 active 24 Vdc / max 4 W

Output 2 (electric lock)

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 stationary in maximum Closing position;* ***slow flashing*** *= application Opening manoeuvre execution phase;* ***quick flashing*** *= application Closing manoeuvre execution phase;* ***light permanently on*** *= application stationary in position other than maximum closing* Output active 24 Vdc / max 4 W
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.* Output active 24 Vdc / max 4 W
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* Output active 24 Vdc / max 4 W
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%.* Output active 24 Vdc / max 4 W
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). Output active 12 Vdc / max 21 W
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 is recommended able to withstand the heat of the light emitted. Output active 24 Vdc / max 4 W
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 12 Vac / max. 15 VA

suction cup	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.* Output active 24 Vdc / max 4 W
red traffic light	This function indicates activity of the application during the phases of a Closing manoeuvre. ***slow flashing*** *= execution of Closing manoeuvre;* ***light permanently on*** *= application in maximum Closing position;* ***light off*** *= application in other positions* Output active 24 Vdc / max 4 W
green traffic light	This function indicates activity of the application during the phases of an Opening manoeuvre. ***slow flashing*** *= execution of Opening manoeuvre;* ***light permanently on*** *= application in maximum Opening position;* ***light off*** *= application in other positions* Output active 24 Vdc / max 4 W
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 sent 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 24 Vdc / 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 sent 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 24 Vdc / 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 sent 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 24 Vdc / 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 sent 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 24 Vdc / max 4 W

Output 3 (sca)

In this output the user can select one of the functions specified in **Table 4**.

TABLE 4: OUTPUT CONFIGURATION

FUNCTION	DESCRIPTION
sca (= gate open indicator)	The programmed light indicates the operating status of the control unit. ***light off*** *= application stationary in maximum Closing position;* ***slow flashing*** *= application Opening manoeuvre execution phase;* ***quick flashing*** *= application Closing manoeuvre execution phase;* ***light permanently on*** *= application stationary in position other than maximum closing* Output active 24 Vdc / max 4 W
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.* Output active 24 Vdc / max 10 W
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* Output active 24 Vdc / max 10 W
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%.* Output active 24 Vdc / max 4 W
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 is recommended able to withstand the heat of the light emitted. 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.* Output active 24 Vdc / max 4 W
red traffic light	This function indicates activity of the application during the phases of a Closing manoeuvre. ***slow flashing*** *= execution of Closing manoeuvre;* ***light permanently on*** *= application in maximum Closing position;* ***light off*** *= application in other positions* Output active 24 Vdc / max 4 W
green traffic light	This function indicates activity of the application during the phases of an Opening manoeuvre. ***slow flashing*** *= execution of Opening manoeuvre;* ***light permanently on*** *= application in maximum Opening position;* ***light off*** *= application in other positions* Output active 24 Vdc / max 4 W
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 sent 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 24 Vdc / 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 sent 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 active 24 Vdc / 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 sent 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 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 sent 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 active 24 Vdc / max 4 W

Electric lock time

This parameter is expressed in seconds and can be set with a value from 0 to 10 seconds; the factory setting is 2 seconds. This function enables programming of the electric lock activation time after the start of an opening manoeuvre (starting from the gate closed position).

Courtesy light time

This parameter is expressed in seconds and can be set with a value from 0 to 250 sec.; the factory setting is 60 sec. This function enables programming of the required time for which the courtesy light remains lit.

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 5**.

TABLE 5: input/output DIAGNOSTICS

PARAMETER	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.
BINPUT 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 halt	Indicates when the halt input is active.
HALT CONFIGURATION	Indicates the type of connection on the halt terminal. Connection types are: not configured; NC; NO; 1 8K2 resistive edge; 2 8K2 resistive edges; out of range.
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.
POWER SUPPLY	Indicates the type of electrical mains used by the automation: electric mains (120/230 Vac) or buffer battery (24 Vdc)
MEMORY ERRORS	
Functions	Indicates whether there is an error in the memorised data regarding the functions programmable with Oview.
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	
Inp M1	Indicates when encoder 1 input is active.
Inp M2	Indicates when encoder 2 input is active.
OUTPUTS	
Out 1	Indicates when output 1 is active. **Caution** – 12/24 Vdc voltage present.
Out 2	Indicates when output 2 is active. **Caution** – 12/24 Vdc voltage present.
Out 3	Indicates when output 3 is active. **Caution** – 24 Vdc voltage present.
Out M1	Indicates when motor 1 is in operation.
Out M2	Indicates when motor 2 is in operation.
ALARMS	
Out 1 overload	Indicates an electrical overload or short circuit on output 1.
Out 2 overload	Indicates an electrical overload or short circuit on output 2.
Out 3 overload	Indicates an electrical overload or short circuit on output 3.

Other parameters

This function enables display of the operating status of some parameters measured by the control unit. These parameters are described in **Table 6**.

TABLE 6: 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.
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 associated with motor 1, calculated as a percentage.
MOTOR 2:	
Torque	Indicates the torque generated by motor 2 during the manoeuvre, calculated as a percentage.
Voltage	Indicates the mean voltage to be supplied to motor 2 during the manoeuvre, calculated as a percentage.
Position	Indicates the physical position of the encoder associated with motor 2, calculated as a percentage.

Diagnostics of bluebus devices

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 7**.

TABLE 7: DIAGNOSTICS of bluebus devices

PARAMETER	DESCRIPTION
Bluebus	
PHOTOCELLS:	
FOTO	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
FOTO II	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
FOTO 1	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
FOTO 1 II	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
FOTO 2	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
FOTO 2 II	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
FOTO 3	Indicates whether the photocell is present, the relative operating status and the correct memorisation in the control unit.
OPEN FOTO	Indicates whether the control photocell is present, the relative operating status and the correct memorisation in the control unit.
OPEN FOTO 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 device is present, the relative operating status and the correct memorisation in the control unit.
CMD 2	Indicates whether the control device is present, the relative operating status and the correct memorisation in the control unit.
CMD 3	Indicates whether the control device is present, the relative operating status and the correct memorisation in the control unit.
CMD 4	Indicates whether the control device 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.

MAINTENANCE

Alarm threshold value

This parameter can be set with a value from 0 to 64,000 (manoeuvres); the factory setting is 1500 (manoeuvres). This function enables programming of a reference limit, over which automation maintenance is required. To program the threshold, select the required value by means of keys ▲ and ▼ Press “**OK**” to memorise.

Partial count

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

Cancel 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.
To cancel, select ON by means of the key ▲ and press “**OK**”.

ADVANCED FUNCTIONS

Events 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 halt 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 been 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.*