duo universal

TELEPÍTŐI KÉZIKÖNYV
868 MHz Kétirányú
Adó/vevő- vezetéknélküli ismétlő

www.ksenia.hu

Ksenia
security innovation

TARTALOMJEGYZÉK

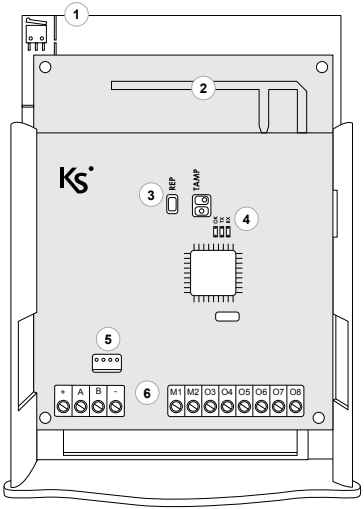
MŰSZAKI ADATOK

Frekvenciasáv:	868 MHz
Áramfelvétel:	50 mA max.
Működési hőmérséklet:	+5 - +40 °C
Működési páratartalom:	95%
Működési hatótáv szabad térben:	400 m max.
Méretek:	140 x 100 x 28 mm
Tömeg:	150 g

BEVEZETÉS

A **duo** kétirányú univerzális vevőegység lehetővé teszi a Ksenia vezeték nélküli perifériák használatát bármely vezérlőközponttal vagy hasonló eszközzel: ez az eszközön található 8 programozható kimenetnek köszönhető. Az **auxi** vagy **auxi relé** bővítőmodulok segítségével a kimenetek száma 18-ra növelhető.

AZ UNIVERZÁLIS DUO LEÍRÁSA



1. Szabotázskapcsoló
2. Beépített antenna
3. "Gyári adatok visszaállítása" jumper
4. LED-ek
5. KS-BUS csatlakozó
6. Sorkapcsok

FIGYELEM! Ne telepítse az eszközt fém dobozokba és/vagy tartókba, amelyek befolyásolhatnák annak jelátvitelét.

SZABOTÁZSKAPCSOLÓ

Csatlakoztassa a "TAMP" csatlakozót a mikrokapcsolóhoz, hogy engedélyezze a szabotázs funkciót.

LED JELZÉSEK

OK BE: Az adó/vevő megfelelően működik.
VILLOG: Szabotázs esemény van folyamatban.

TX Bekapcsol, ha a **duo** érvényes parancsot küld a vezeték nélküli hálózaton.

RX Bekapcsol, ha a **duo** érvényes parancsot kap a vezeték nélküli hálózatról.

BEKÖTÉS

ERGO KEZELŐ

Az univerzális **duo** kétféleképpen csatalkoztatható az **ergo** kezelőhöz:

1. A programozói kábelt a KS-BUS csatlakozóhoz csatlakoztatva (5)

2. Közvetlenül a BUS csatlakozókhoz csatlakoztatva **+ A B -**

AUXI / AUXI RELÉ

Az **auxi** és **auxi relé** bővítőmodulokat a BUS csatlakozókra kötve csatlakoztathatja az univerzális **duo-**hoz (**+ A B -).**

SORKAPCSOK

+ -	A B	M1 - M2 - O3...O8
12 VDC Tápfeszültség	KS-BUS bemenetek	Kimenetek

GYÁRI ADATOK VISSZAÁLLÍTÁSA

A gyári adatok visszaállításához kövesse az alábbi lépéseket:
1. Open the 'REP' jumper
2. Power up the device
3. The LED **OK**, **TX** and **RX** stays lit
4. Close the 'REP' jumper

Note
When in factory data, as soon as you connect the ergo keypad, it will be necessary to set the language.

MAIN FEATURES

- Up to 18 programmable outputs: 8 built-in on duo, up to 2 on auxi / auxi relay, each one with 5 programmable outputs
- Up to 32 configurable wireless detectors
- Up to 8 configurable remote commands to activate outputs or switch the system status
- Up to 15 groups to associate one (or all) the enrolled wireless detectors. Every group needs a corresponding output
- ergo keypad as programming tool and system monitor
- Programming multi-language menu
- Programming data saved on EEPROM non-volatile memory
- Default data restoral
- Status LED

EVENTS SIGNALISATION

Universal duo can signal the following events gotten from the detectors:
- Alarm status from one of the 32 detectors
- Sabotage status of each detector, of the device himself and the eventual **auxi** / **auxi relay** modules
- The missing status of each detector and the eventual **auxi** / **auxi relay** modules
- The battery level of the wireless detectors
- The jamming attemps

OUTPUTS

The **universal duo** outputs can be configurated as:
- NC (*normally closed*) o NO (*normally open*)
- Monostable (*ON time 1 s*) or Bistable (*default config.*).

COMPATIBLE WIRELESS DEVICES

The **universal duo** is compatible with the following Ksenia devices:
- **poli** and **nanus** magnetic contacts
- **unum** motion detectors
- **nebula** smoke detectors
- **opera** remote commands

FUNCTION

Once a wireless detector is enrolled to the **universal duo**, you can insert it in any group. Any alarm signalisation came from the detector will move the output on corresponding group.
The device has 4 presets to associate outputs to terminals on **universal duo** and **auxi** / **auxi relay** (*if connected*). Those presets are indicated on programming menù as MODE_1, MODE_2, MODE_3 and MODE_4. The default preset is the third one. The correspondence between terminals and **universal duo** outputs is shown in the table on next page.

CONFIGURATION MODE

	duo								auxi 1					auxi 2				
Terminal Preset	M1	M2	O3	O4	O5	O6	O7	O8	M1	M2	M3	M4	M5	M1	M2	M3	M4	M5
MODE 1	G 1	G 2	G 3	G 4	G 5	Sab/ Jam	Bat. Low	Sup. Fault	G 6	G 7	G 8	G 9	G 10	G 11	G 12	G 13	G 14	G 15
MODE 2	G 1	G 2	opera	opera	opera	Sab/ Jam	Bat. Low	Sup. Fault	G 3	G 4	G 5	G 6	G 7	G 8	G 9	G 10	G 11	G 12
MODE 3	G 1	G 2	G 3	G 4	opera GK	Sab/ Jam	Bat. Low	Sup. Fault	G 5	G 6	G 7	G 8	G 9	G 10	G 11	G 12	G 13	G 14
MODE 4	G 1	opera	opera	opera	opera *i*	Sab/ Jam	Bat. Low	Sup. Fault	G 2	G 3	G 4	G 5	G 6	G 7	G 8	G 9	G 10	G 11

NOTES:

1. The outputs 6, 7 and 8 are always respectively associated to the Sabotage / Jamming signalisation, to the battery level and to the Supervision (missing peripherals), regardless the selected preset.

2. With each remote command enrolled on the system it is possible:
- Press any key on remote command to move a commutation output.
- Move a specific commutation output by pressing a specific key

3. Every changes in configuration will reset the outputs as NC - Bistable (*default*)

4. The default mode (*MODE_3*) is shown in grey

5. LEGENDA: GK = generic key

WORKING MODE

NORMAL (MONITOR)

When the system is in 'Monitor' mode, for any wireless detector, it is possible to see the status in real time about the following informations on the **ergo** display:

- Alarm
- Supervision
- Sabotage
- Battery

Moreover, the **auxi / auxi relay** status eventually present on system is also shown on ergo display

If the System status management is enabled, in normal mode it is possible to use the device with 3 modes:

- **TOTAL arming**: all groups are armed, so their associated outputs will move considering the detectors signalisations
- **STAY mode**: all groups are armed, except 2 and 3, so the corresponding outputs will always stay at rest, the others will be managed by the detectors signalisations
- **TOTAL disarming**: all groups are disarmed, so all the outputs will always stay at rest, regardless the detectors signalisations

When the system is ARMED or in STAY mode, the red LED on keypad is ON.
When DISARMED, this LED is always OFF

NOTE: outputs 6, 7 and 8, respectively associated to Sabotage / Jamming, Battery level and Supervision (missing peripheral), are always active, regardless the system status.

When the system is armed TOTAL or STAY mode and an alarm is active, even if you switch the system into DISARMED mode by remote command, outputs will be disabled but alarms will remain visible on monitor menù throughout their duration. By re-arming the system (TOTAL or STAY), outputs will be reactivated and will follow the configuration.

PROGRAMMING MODE

When in 'Programming Mode' it is possible:
- To enroll / remove a wireless detector or a remote command
- To set the parameters for each wireless detector, depending of involved technology
- To associate each detector to a group (*so to a specific output*)
- To add / remove an auxi / auxi relay expansion module (*on BUS*)
- To configure the polarity / mode of each output
- To configure the programming data of the universal duo
- To change the Installator PIN

When in 'Programming Mode' all the outputs stay at rest and alarms are deleted. Coming out from this mode all BUS devices will be resetted and the correct operative mode will be restored.

Note: in 'Programming Mode' all the outputs stay at rest, even the 6 (*Sabotage/Jamming*), the 7 (*Battery level*) and the 8 (*Supevision*). Anyway the device keeps managing the signalisations coming from the detectors.

LANGUAGE SELECTION

First time you connect the ergo keypad to the universal duo, the following message will be shown:

Moving the circular scroll it is possible to browse the available languages in the same order: Italian > English > French

The keypad will restart and will show the 'Monitor in IDLE' menù (*see 'monitor in IDLE' paragraph*). From now on, all the points on menù will keep the selected language.
To change language it is necessary to reset the factory data on universal duo

MONITOR IN IDLE

During the normal function, an IDLE menù is shown on the display of the **ergo** connected to the **duo**. On this menù, the following informations blink for about 3 seconds

```
universal duo
Enter > Monitor
```

```
universal duo
PIN > Program.
```

So:
- By pressing the ENTER key you will access on Monitor menù
- By typing a valid PIN you will access to the 'Programming menù'

On programming section you will find indications step-by-step to perform the indicated operations.
On monitor section you will find different modes to check informations.

PROGRAMMING

This section shows how to program the **universal duo**, depending on different cases. A valid Installator PIN (6 digits) it's mandatory to access on this section.

IMPORTANT: all changes on device configuration are saved on non-volatile memory only when you exit from programming menù

NOTE: the default PIN is "123456". Please see 'Change PIN' paragraph if you want to change it.

Starting from the first screen on IDLE menù, just type the first digit of PIN code:

```
insert PIN
1------
```

The typed digit appears on **ergo** keypad, as soon as you digit the second digit, the first one comes hidden by an *

After typing PIN you will access on the first screen of programming menù. Otherwise this message will be shown:

```
insert PIN
wrong PIN!
```

You can come back to the start screen and repeat the procedure by pressing ENTER or ESC keys.

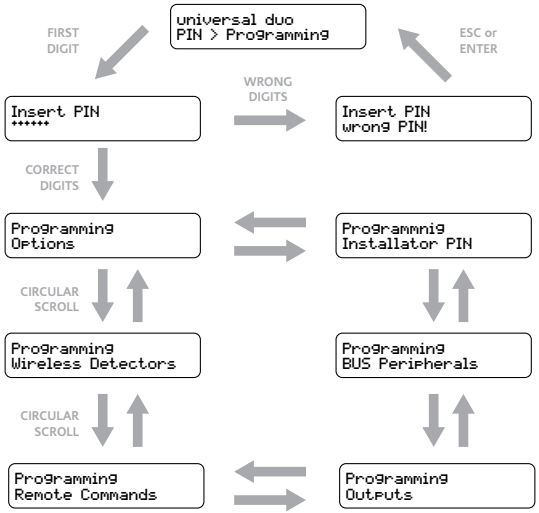
If the 'System status management' is configured, you will access on the programming menù after typing a valid PIN only if the system is DISARMED; sif system is Armed TOTAL or STAY you cannot access to the programming menù and this message will appear:

```
insert PIN
System armed!
```

On this case, you have to disarm the system by remote command, then re-type the PIN

PROGRAMMING

Once in programming menù it is possible to browse among its different points using the circular scroll. Use ENTER or ESC key to go forward or back.



GENERAL PARAMETERS

This paragraph indicates the procedure to set the general working parameters of device. Once in programming menù, go to the following screen (*that is the first one in programming menù*):

Programming
Options

By pressing the ENTER key you will access to the **Options** sub-menù on which it is possible to configure the parameters shown in the next paragraphs.

OUTPUTS CONFIGURATION

On this section it is possible to choose the configuration preset for the outputs (*it means to accociate outputs to terminals, see 'Function' paragraph for more informations*).

- From **Options** menu, press ENTER, go to 'Outputs Config.' and press ENTER again
- Select the desidered preset using the circular scroll: (*MODE_1, MODE_2, MODE_3 or MODE_4. MODE_3 is default*)
- Press ENTER to confirm the desidered preset. By pressing ESC you abort the operation
- After confirm, the menu comes back to the 'Output config.' point. Press ESC to return to **Options** menu

SYSTEM STATUS CONFIGURATION

This parameter allows to enable/disable the management of system status by the **opera** remote commands

- if this parameter is OFF (*default*), the remote command works only on outputs
- if this parameter is ON, the remote command will works also on these modes:
  - By pressing key you will switch in TOTAL arming mode by pressing key you will switch in TOTAL arm mode so all the groups are armed and all outputs enabled
  - By pressing key you will switch in STAY arming mode so all the groups are armed except the 2 and 3. In the same way, all the outputs will be activated except the ones associeted with groups 2 and 3.
  - By pressing key you will switch in DISARMED mode so all the groups are disarmed and all the outputs disabled.
  - By pressing key the LED of remote command indicates the system status

To modify the system status, please proceed as follow:

- from **Options**, press ENTER and use the circular scroll to go to System Status. Press ENTER to confirm.
- select ON or OFF using the circular scroll
- press ENTER to confirm. By pressing ESC you abort the operation
- After confirm, the menu comes back to the 'System Status' point. Press ESC to return to **Options** menu

JAMMING DETECTION

This parameter allows to enable/disable the Jamming detection. If enabled, the device will generates an alarm moving the output associated with **O6** terminal when detects a jamming over -70dbM.

- If this parameter is OFF, **O6** output will signal only sabotage
- If this parameter is ON, **O6** output will signal both sabotage and jamming

By default, this parameter is OFF. To set it ON, please proceed as follow:
To modify the system status, please proceed as follow:

- from `Options`, press ENTER and use the circular scroll to go to Jamming. Press ENTER to confirm.
- select ON or OFF using the circular scroll
- press ENTER to confirm. By pressing ESC you abort the operation
- After confirm, the menu comes back to the 'Jamming' point. Press ESC to return to `Options` menu

ENROLL, REMOVE OR CHANGE A WIRELESS DETECTOR

In this paragraph, the procedures to manage the different kind of wireless sensors compatibles with **universal duo** are described. Once in programming menù, use the circular scroll to go to:

`Programming Wireless Detector`

By pressing ENTER you will access to the `Wireless Detectors` sub-menù, on which these functions are available:

Enroll

Allows to enroll a new detector in the system. LThe enrolling take place by saving the serial number (*SN*) of the device, configuring its specific features and associating it with a group, then to a specific output. To make it easier, it is possible to use a table like the one shown in the next page and take note of essential informations.

IMPORTANT: the wireless detectors you want to enroll have to be covered by the RF range of system.

N° detector	Kind	Serial Number	Group	Notes
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				
32				

ENROLL, REMOVE OR CHANGE A WIRELESS DETECTOR

Each kind of detector needs to be assigned to specific belonging group. As you can see in "Function" paragraph, the groups are associated to the outputs depending on the configuration preset.

The installator have to associate the detectors with groups which present output configured on preset

To enroll a detector, please proceed as follow:

- from `Wireless Detector`, press ENTER and browse the menu till `Enroll`. Press ENTER to confirm.
- the system shows the first slot available
  e.g. the following screen will displayed if there aren't detectors

`Wireless Detector` `Detector 1`	so the first detector will be enrolled (*detector number 1*).

By pressing ENTER, the device will wait the "end of sabotage" signalisation from a detector among those supported. the following screen will displayed:

`Enrolling` `...`	the dots on second row flow to indicate the running process

In case of full slots, so 32 detectors are enrolled, the following screen will displayed:

`Wireless Detector` `Max Detectors`	By pressing ENTER or ESC you will return to `Wireless Detector` men

To enroll a specific detector, when in enrolling mode, it will be necessary to generate an "end of sabotage" signalisation. To do that, generally, just insert battery on detector and close the cover (*e.g. by assembling the two parts of **poli** magnetic contact*). Anyway, please refer to the manual of the detector you want to enroll.

ENROLL, REMOVE OR CHANGE A WIRELESS DETECTOR

If **universal duo** receives a radio signalisation of "end of sabotage", it shows on **ergo** display the following informations (*the second row blinks*):

```
Detector 1
<Kind> <SN> <RF>
```

On which:
<Kind> indicates the kind of wireless detector you are enrolling. It could be: **poli**, **nanus**, **nebula**, **unum**,...

<SN> are the digits about the Serial Number of detector. This number is univocal and unequivocally identifies the detector.

<RF> this reports the level of RF signal detected by the device: **OK** indicates a good RF reception, otherwise **KO** indicates low RF signal.

By pressing ENTER you accept the reported data and second row stops blinking. The enroll is terminated. If you press ESC during the data confirmation phase, you will abort the process and return to **Enroll. Detector 1** menù. By pressing ENTER again you directly access to programm the detector specific data.
Different menus will be shown depending on kind of detector you are enrolling (every detector has specific data to be programmed). These menus are described here below.

POLI

poli is a wireless detector that manage signals from magnetic contact and 2 auxiliary inputs (*AUX1 and AUX2*)
In case a **poli** is enrolled in the system, the starting screen will be:

```
Detector 1
poli 024365 OK
```

By pressing ENTER you access on programming sub-menù of **poli**, starting from associating to a group of detectors managed by this device.

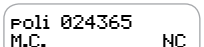
Using the circular scroll you can browse the groups and select the one you want to be associated with the detector:

```
poli 024365
Group 4
```

when the number of selected group in shown, by pressing ENTER you associate the detector to this group, by pressing ESC you leave the default programming about the others data and return to **Enroll. Detector** +1 menù

POLI

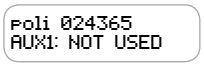
Once a detector in associated with a group, you have to choose the kind of polarity of magnetic contact (M.C.) and the following screen appears:



by browsing with circular scroll it is possible to select:
NC > Normally Closed
NON USATO > the magnetic contact is excluded from elaborations

Once you select the desired configuration, press ENTER. By pressing ESC you leave the default programming and return to previous menù

After confirm the polarity of magnetic contact you have to configure the auxiliary inputs, starting from the first AUX1. The following informations will be shown:



by browsing with circular scroll it is possible to select the polarity of the input, that can be:
NOT USED
NO > Standard Normally Open
NC > Standard Normally Closed
TAP. NC 4IM > Roller Blind NC 4 pulses with 180sec. window
TAP. NC 7IM > Roller Blind NC 7 pulses with 180sec. window

Once you select the desired polarity, press ENTER. By confirming you go to the same menù, but regarding the second auxiliary input AUX2

The same parameters as AUX1 need to be setted about AUX2. By confirming you go to Detector +1 point on **Enroll** menù

If you abort some operation by pressing ESC, you will go back on programming menù till Detector +1 point on **Enroll** menù.

NANUS POLI

nanus is a wireless detector that manage signalisation from a magnetic contact: it is the same as **poli** but without auxiliary inputs so its configuration consists only in associating a group.
In case a **nanus** is enrolled in the system, the starting screen will be:

```
Sensore 1
nanus 197208 OK
```

By pressing ENTER you access on programming sub-menù of **nanus**, starting from associating to a group of detectors managed by this device.

Using the circular scroll you can browse the groups and select the one you want to be associated with the detector:

```
nanus 197208
Group 3
```

when the number of selected group in shown, by pressing ENTER you associate the detector to this group and return to **Enroll. Detector** +1 menù

UNUM

unum is a wireless detector that manage the signalisations from a motion detector.
In case a **unum** is enrolled in the system, the starting screen will be:

```
Sensore 1
unum 040214 OK
```

By pressing ENTER you access on programming sub-menù of **unum**, starting from associating to a group of detectors managed by this device.

Using the circular scroll you can browse the groups and select the one you want to be associated with the detector:

```
unum 040214
Group 9
```

when the number of selected group in shown, by pressing ENTER you associate the detector to this group, by pressing ESC you leave the default programming about the others data and return to **Enroll. Detector** +1 menù

Once the detector is associated with a group, you have to set its sensitivity level and the starting screen will be:

```
unum 040214
Sensit.     HIGH
```

by browsing with circular scroll it is possible to choose among: HIGH sensitivity
LOW sensitivity

When the desired sensitivity appears on display, press ENTER to confirm and return to **Enroll. Detector** +1 menù.

NEBULA

This detector has not parameters to configure, so it only needs to be associated with a group.
In case a **nebula** is enrolled in the system, the starting screen will be:

By pressing ENTER you access on programming sub-menù of **nebula**, starting from associating to a group of detectors managed by this device.

Using the circular scroll you can browse the groups and select the one you want to be associated with the detector:

when the number of selected group in shown, by pressing ENTER you associate the detector to this group and return to **Enroll. Detector** +1 menù

DELETE

At this point it is possible to delete a detector previously enrolled to the system. Please proceed as follow:

- from **Wireless Detector** press ENTER and browse menù till **Delete** point. Press ENTER to confirm
- the display shows the serial number and the kind of the first enrolled detector. e.g. the starting screen could be:

In case of no enrolled detectors, the screen will shows:

By pressing ENTER or ESC, you return to **Wireless Detectors** menù. When the first detector is shown on display, it is possible to browse all the enrolled detectors using the circular scroll. Once select the detector you want to delete, press ENTER to confirm. For about 2 seconds the following information is shown:

The system manage the list of detectors an presents the next one (*the list has a circular structure so when you arrive to the last one, the list restarts from the first*).

If you press ESC while visualize a detector, you return to **Delete** point on **Wireless Detectors** menù.

MODIFY

At this point it is possible to modify the configuration of a detector enrolled to the system.
Please proceed as follow:

- from **Wireless Detectors** point, press ENTER and browse the menù till **Modify**. Press ENTER to confirm
- the display presents the serial number and the kind of the first enrolled detector. e.g. the starting screen will be:

```
Modify
Poli 024365
```

In case of no enrolled detectors, the screen will shows:

```
Modify
No Detectors
```

By pressing ENTER or ESC, you return to **Wireless Detectors** menù

When the first detector is shown on display, it is possible to browse all the enrolled detectors using the circular scroll. Once select the detector you want to modify, press ENTER to confirm. Depending on the kind of detector, you access to its programming sub-menù, that is the same as the one described in '**Enroll**' paragraph.

If you press ESC while visualize a detector, you return to **Modify** point on **Wireless Detectors** menù.

ENROLL AND MODIFY A REMOTE COMMAND

On this paragraph the procedure to manage the **opera** remote commands enrolled in the system is described. Once in programming menù, browse till the following screen using the circular scroll:

```
Programming
Remote Commands
```

By pressing ENTER you access to the programming sub -menù Remote Commands on which these functions are available:

ENROLL
At this point it is possible to enroll a remote command.
To enroll a remote command, please proceed as follow:

- from **Remote Commands**, press ENTER and browse the menù till **Enroll** using the circular scroll. Press ENTER to confirm.

ENROLL AND MODIFY A REMOTE COMMAND

The system shows the first available slot. In case of no remote commands enrolled, the screen will show:

```
Enroll
Remote Command 1
```

that means you are enrolling the first remote command (*remote command number 1*). At this point, by pressing ENTER, the device will wait for a long pression (*2 sec.*) of i key from a remote command.

The following information will appear on display:

```
Enrolling
...
```

the dots on second row flow to indicate the running process

In case of full slots, so 8 remote commands are enrolled, the following screen will displayed:

```
Enroll
Max opera
```

At this point, by pressing ENTER or ESC you return to Remote Commands menù

When in enrolling mode, in order to enroll a specific remote command it is necessary to hold the i key on this remote command till its vibration. Anyway, please refer to the **opera** installation manual. If the universal duo receives a radio signalisation about the pression of i key, the device will show on **ergo** display the following informations (*the second row blinks*):

```
Remote Command 1
<SN>
```

On which: <SN> are the digits about the Serial Number of remote command. This number is univocal and unequivocally identifies the device.

By pressing ENTER the second row stops blinking. The enroll is terminated. By pressing ENTER again you directly access to enroll the next remote command (*N+1*).
If you press ESC you abort the operation and return to **Enroll** point on previous remote command.

OUTPUTS CONFIGURATION

On this paragraph it is indicated how to configure the outputs, that means, for each output, to set:
POLARITY - to choose among:
• NC > Normally Closed;
• NO > Normally Open;

MODE - to choose among:
• MONOSTABLE (*with ON time fixed at 1 s*)
• BISTABLE

Once in programming mode, browse till the following screen using the circular scroll:

`Programming`
`Outputs`

by pressing ENTER you access to the programming sub menù of every single output. Please proceed as follow to configure it:

- Once access to Outputs menù, you visualize the first output on system (*Output 1*). You can browse the others outputs using the circular scroll.
- When arrived to the output you want to configure, pres ENTER. By pressing ESC you return at `Outputs` point on `Programming` menù.
- If the selected output is among 1 and 8 it certainly present because it is an output built-in on universal duo. If the output is among 9 and 18 is an output on auxi / auxi relay expansion modules and could be unavailable if that modules aren't enrolled on the system. So:
  - If output is present, you access to `Polarity` point
  - If output is not present, the following message will be shown: "`Not configured`" and will not be possible to go further. By pressing ENTER or ESC you return to `Output N` point (*from which you can choose another output using the circular scroll*).
- At `Polarity` point, by pressing ENTER to confirm, it is possible to choose among: **NC** > normally closed
  NO > normally open
  Press ENTER to confirm the desired polarity. By confirmation you return to `Mode` point.
- At Mode point, it is possible to choose these configuration using the circular scroll: Monostable 1s
  Bistable

- When the desired configuration is on display, press ENTER to confirm. By confirmation you return to visualize the next output (*N+1*).

ENROLL AND REMOVE AN AUXI/AUXI RELÈ

This paragraph shows how to enroll, or remove, an **auxi/auxi relay** on KS-BUS. By these modules, up to 10 additional outputs can be configured on the system.
Once in programming menù, browse till the following screen using the circular scroll:

```
Programming
BUS Peripherals
```

By pressing ENTER you access to the sub-menù, on which you can: ADD an **auxi**
REMOVE an **auxi**

In order to ADD an **auxi** to the system, please proceed as follow:

- from **BUS Peripherals** press ENTER to access to the sub menù and browse it till **Enroll**. Press ENTER to confirm.
- while in Enrolling mode, the system waits for an "End of sabotage" message from an **auxi/auxi relay** linked on KS-BUS
- force the "End of Sabotage" message by open and close the jumper on PCB (*please refer to the **auxi/auxi relay** manual*)
- the Serial Number of the **auxi/auxi relay** will appears on ergo display once the system receives the "End of Sabotage" message.

```
auxi 1
006457
```

If is possible to enroll another **auxi/auxi relay**, by pressing ENTER you return to **Enroll** point.
Otherwise will appear the following message:

```
Enrolling
Max Peripherals
```

You return to **BUS Peripherals** menù by pressing ESC

In order to REMOVE an **auxi/auxi relay**, please proceed as follow:

- From Bus Peripherals press ENTER to access in the sub-menù and browse it till Delete. Press ENTER to confirm.
- the first **auxi/auxi relay** is shown on display. If there are no **auxi/auxi relay** enrolled, will appear the following message:

```
Delete
No Peripherals
```

By pressing ESC you return to **BUS Peripherals** menù

- If there are 2 enrolled **auxi/auxi relay** it is possible to choose which one delete, browsing by the circular scroll.
- When the **auxi** you want to delete is shown, press ENTER
- the auxi/auxi relay is removed and the display shows the following message for about 2 seconds:

```
auxi 1
Deleted!
```

if another **auxi/auxi relay** is enrolled, the display will show it, otherwise it will appear "**No Peripherals**" message.

CHANGE PIN

At this point, on **Options** menù, it is possible to change the PIN to access the programming menù. To do that, please proceed as follow:

- from **Options**, press ENTER and browse the menù till **Installator PIN** using the circular scroll. Press ENTER to confirm.

```
Installator PIN
<******>
```

Press ENTER to clean the second row and insert the new PIN (*the digits, from 0 to 9, blink while inserted*)

- Press ENTER to confirm and return at Installator PIN point on Programming menù. By pressing ESC you abort the operation and the PIN will not be changed.

MONITOR

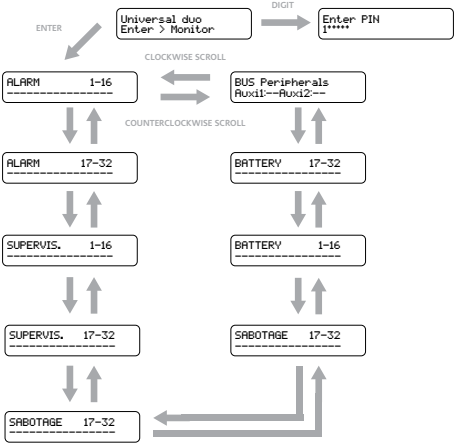
During the normal function, it is possible to visualize some informations about the system status, on **ergo** display.
During the visualization of IDLE menù, by pressing ENTER you access to the first screen:

```
Universal duo
Enter > Monitor
```

The device allows to visualize the following informations:
- **ALARM status**
- **SUPERVISION status**
- **SABOTAGE status**
- **BATTERY level**
- **BUS Peripherals status**

The first 4 voices are about wireless detectors. There are 2 pages for each information: on the first one there are informations about the first 16 wireless detector (*from 1 to 16*). On the second one, there are informations about detectors from 17 to 32. All pages are updated **every 3.5 seconds**

According to the schema here below, you can browse the pages using the circular scroll.



In detail, the information are reported as follow:

ALARM

```
ALARM          1-16
-A--A-----------
```

"–" indicates that detector is not in alarm or not configured
"A" indicates that corresponding detector is in alarm
e.g. detectors 2 and 5 are in alarm

SUPERVISION

```
SUPERVIS.      1-16
F-F-------------
```

"–" indicates that detector answers on RF channel or is not configured.
"F" indicates that detector is not answering on RF channel (*is missing*).
e.g. detectors 1 and 3 are missing

SABOTAGE

```
SABOTAGE    17-32
-T-------------T
```

"–" indicates that detector is not been sabotaged or is not configured
"T" indicates that the corresponding detector it been sabotaged (*is in sabotage alarm*).
e.g. detectors 18 and 32 are in sabotage alarm

BATTERY

```
BATTERY     17-32
-B-------------B
```

"-" indicates that the battery of corresponding detector is charge or the detector is not enrolled.
"B" indicates that the battery level of corresponding detector is low, so the battery has to be changed
e.g. detectors 18 and 30 have low batteries

BUS PERIPHERALS

The following informations are shown on second row:

```
BUS Peripherals
Auxi1:--Auxi2:--
```

There are not enrolled **auxi/auxi relay**

```
BUS Peripherals
Auxi1:OKAuxi2:OK
```

There are 2 enrolled **auxi/auxi relay** and they are correctly working

```
BUS Peripherals
Auxi1:T Auxi2:T
```

There are 2 enrolled **auxi/auxi relay** and they are both in sabotage

```
BUS Peripherals
Auxi1:M Auxi2:M
```

There are 2 enrolled **auxi/auxi relay** and they are both missing, that means that they don't answer and don't transmit signalisations on BUS

Obviously, the informations shown can be various:

```
BUS Peripherals
Auxi1:OKAuxi2:--
```

indicates that only one enrolled **auxi/auxi relay** and it's correctly working

By pressing ENTER or ESC you can return to the first screen of IDLE menù, from any programming page you are.

CERTIFICAZIONI | CERTIFICATIONS

RTTE
1995/5/CE

RISPETTO DELL'AMBIENTE

duo universal è stato progettato e realizzato con le seguenti caratteristiche per ridurne l'impatto ambientale:

1. Plastiche senza PVC
2. Laminati senza Alogeno e circuiti stampati senza piombo
3. Basso assorbimento
4. Imballo realizzato per la maggior parte con fibre riciclate e materiali provenienti da fonti rinnovabili

ENVIRONMENTAL

duo universal has been designed and manufactured with the following features to reduce its environmental impact:

1. Halogen-free laminates and lead-free PCBA
2. Low current consumption
3. Packaging made mostly of recycled fibres and materials obtained from renewable sources

Specifiche tecniche, aspetto, funzionalità ed altre caratteristiche del prodotto possono cambiare senza preavviso.

Technical Specifications, appearance, functionality and other product characteristics may change without notice.

The complete Declaration of Conformity for each Device can be found at: www.kseniasecurity.com

Installation of these systems must be carried out strictly in accordance with the instructions described in this manual, and in compliance with the local laws and bylaws in force. imago has been designed and made with the highest standards of quality and performance adopted by Ksenia Security. Is recommended that the installed system should be completely tested at least once a month. Test procedures depends on the system configuration. Ask to the installer for the procedures to be followed. Ksenia Security srl shall not be responsible for damage arising from improper installation or maintenance by unauthorized personnel. The content of this guide can change without prior notice from KSENIA SECURITY.

Information for users: Disposal (RAEE Directive)

Warning! Do not use an ordinary dustbin to dispose of this equipment.

Used electrical and electronic equipment must be treated separately, in accordance with the relative legislation which requires the proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation of directives in member states, private households within the EU may return their used electrical and electronic equipment to designated collection facilities free of charge*. Local retailers may also accept used products free of charge if a similar product is purchased from them. If used electrical or electronic equipment has batteries or accumulators, these must be disposed of separately according to local provisions. Correct disposal of this product guarantees it undergoes the necessary treatment, recovery and recycling. This prevents any potential negative effects on both the environment and public health which may arise through **the inappropriate handling of waste.**

*** Please contact your local authority for further details.**

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