



DA-03

ACCESS CONTROL WITH KEYBOARD

The DA-03 module will allow to control the access thanks to a keyboard any place or device. You could insert up to 10 different codes (composed by 4 numbers each code) which will be stored in memory even if you stop to supply the module. It allows to authorize and deny codes and offers a relay output. The output could be flip-flop or timed types with times adjustable between 1 and 60 sec. Or 1 and 60 minutes.

It includes signal leds, acoustic signal, keyboard and connection terminals.

TECHNICAL CHARACTERISTICS.

Voltage.	12 V. DC.
Minimum Consumption.	10 mA.
Maximum Consumption.	60 mA.
Relay timing.	Between 1 and 60 sec./min.
Maximum Load to the relay.	5 A.
Maximum different codes.	10.
Maximum trials before auto-blocking.	5.
Maximum time on auto-blocking state	5 minutes.
Circuit Sizes.	90 x 70 x 30 mm.
Keyboard sizes with communication PCB.	76 x 51 x 20 mm.
Keyboard sizes	64 x 51 x 12 mm.
Communication cable length.	150 mm.

OPERATING.

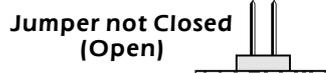
POWER SUPPLY. The DA-03 circuit had to be supplied by a 12 VDC power supply correctly filtered. We recommended you the FE-2 power supply which has been developed to perfectly answer to the circuit needs. Install a fuse and a switch has it is indicated on the schedule. Both are necessary for the module's protection as well as for your own safety, as it is required by the "CE" regulations. Connect the positive of the power supply to the positive terminal indicated in the wiring map, then connect the negative of the power supply to the negative terminal indicated in the circuit. **Verify that the assembly is correct.**

OPERATING. The module operating could be divided according two parts (or concepts): **Operations control** and its use in **common work**.

INFORMATION ABOUT THE DA-03. Before to explain the operations control or its use in standard way, you have to proceed according to following instructions:

- **Do never desold, separate or make longer the communication cable installed between the PCB and the keyboard.** If you do not respect this point, the module could be damaged and the warranty cancelled.
- Install the module on an enclosure correctly ventilated. If you have to install the module outside, use a watertight enclosure with a minimum interior space to allow to the module to dissipate heat without any problem during its operating.
- Then, you have to protect the DA-03 module against bad weather, excessive humidity as well as against devices or apparatus generating industrial parasites as coils, motors, neons, etc..

OPERATIONS CONTROL. Thanks to the operations control you could authorize and deny access code as well as program relay timing. To activate the operations control mode, you have to connect, close or short-circuit both terminals of the JP1 jumper using the JP piece supplied with the module. See the corresponding schedule. When the DA-03 is on this mode, the module could not be used as access control, and only accept operations control management.

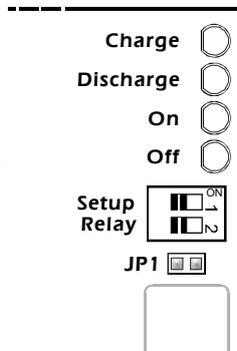




OPERATING.

As soon as the JP1 Jumper is closed, both Leds ON and OFF will intermittently light to indicate that the Operations Control mode is activated.

OPERATIONS CONTROL. To authorize access codes. Access codes are composed by 4 numbers (from 0 up to 9) and you could store in memory a maximum of 10 different codes. The ten memories allowing to store codes are the ten digits present in the keyboard (from 0 up to 9). For instance, the access code N°8974 could be stored on the digit 0, 1, 2, 3, 4, 5, 6, 7, 8 or 9. Only one code could be stored per digit, for this reason the maximum codes number in memory is 10. To authorize an access code, firstly you have to verify that the module is on operations control mode (JP1 closed), then you have to select which digit will store the code, maintaining pressed the digit "*" you have to press the digit (from 0 up to 9) in which you wish to store the code. Then, the "Charge" Led will light and an acoustic signal will be emitted to indicate that the code is stored and that you could to release both digits.

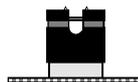


Elements' situation of Operations Control on the main PCB.

A digit could not store two different access code; you have to previously deny the anterior code. If you do not deny the anterior code, the OFF led will light and an acoustic signal will be emitted to indicate the mistake. When you are into the memory of the selected digit (Charge led lighting), you have to introduce the code composed by 4 digit using the keyboard and pressing the digit "*". If you have correctly done the operation, the module will require you to confirm the code to definitively store it, maintaining the "charge" led lighting and ON led intermittent. Then introduce again the code and press the digit "*". Finally, and if you have correctly proceed, an acoustic signal will be emitted and Charge & ON Leds will light. After a short time, the module will be back at the Operations control mode (ON & OFF led alternatively intermittent) and the code has been correctly stored. You have to do this operation for each access code that you need till a maximum of 10 codes. If you wrongly proceed to authorize a code, as to wait more time than authorised for the code confirmation, or to introduce more or less than 4 digit, the circuit will emit an acoustic signal and the OFF Led will momentarily light to indicate the error. Each time you finish a control operation as to authorize an access code, you have to wait that the circuit indicates you (ON & OFF Leds have to alternatively light) the possibility to insert a new code.

HOW TO AUTHORISE THE CODE N°8974 ON THE MEMORY N°1.

1° DA-03 on Operations Control mode. JP1 closed.
ON & OFF Leds alternatively lighting.



2°. To store into the memory N°1. Digit "*" and Digit "1"
Charge Led lighting.



3°. To introduce the Code. Digits 8, 9, 7, 4 and ... *.
Charge Led lighting and ON Led intermittent.



4°. Code's confirmation. Digits 8, 9, 7, 4 and... *.
Charge and ON Leds lighting.



To finish the Access code authorisation. To come back to the initial state of the Operations Control.
ON & OFF Leds Alternatively Intermittent.



DA-03

ACCESS CONTROL WITH KEYBOARD

OPERATING.

OPERATIONS CONTROL. To deny access codes. According to the same mode than to authorize, the DA-03 could also deny or erase up to 10 stored codes.

Do not forget that codes are individually stored on digits of the keyboard, for this reason, you have to remember the digit associated to the code that you wish to deny or erase.

To deny a code, firstly you have to verify that the module is on operations control mode (JP1 closed), then you have to select which digit will store the code, maintaining pressed the digit “#” you have to press the digit (from 0 up to 9) in which you wish to erase the code. Then, the “Discharge” Led will light and an acoustic signal will be emitted to indicate that the code has been erased and that you could to release both digits.

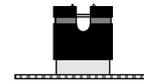
When you are into the memory of the selected digit the module will wait for the erase confirmation. To do that you have to repeat the previous operation pressing “#” and memory digit at the same time. If you have correctly proceed, an acoustic signal will be emitted and Discharge & ON Leds will light. After a short time, the module will be back at the Operations control mode (ON & OFF led alternatively intermittent) and the code has been erased and this digit will be available to store new access codes.

You could do this operation as time as you wish if you wait that the circuit indicates its availability (ON & OFF Leds have to alternatively light).

If you wrongly proceed to deny or erase code, as to wait more time than authorised for the erase confirmation the circuit will emit an acoustic signal and the OFF Led will momentarily light to indicate the error.

HOW TO ERASE OR DENY THE CODE N°8974, ON THE MEMORY N°1.

1° DA-03 on Operations Control mode. JP1 closed.
ON & OFF Leds Alternatively Lighting.



2° To erase the memory N°1. Digits “#” and “1”.
Discharge Led lighting and ON Led Intermittent



3° Confirmation to erase the memory N°1. Digits “#” and “1”
Discharge and ON leds lighting



To finish to deny the access code. To come back to the initial state of operations control
ON & OFF Leds alternatively Intermittent

OPERATIONS CONTROL. Relay Timing. The relay connection could be adjusted according to a flip-flop or timed mode (for more information, see the Output Connection- Load paragraph). If you select the timed mode, you have to program the module to adjust the relay connection time, after a correct access. You could program the time between 1 and 60, selecting after and thanks to the corresponding switch the timing scale : Seconds or Minutes. From the factory, the module is supplied with a timing of 5 sec.

To program the relay timing, as to authorize or deny codes, firstly you have to place the DA-03 module on Operations Control mode (JP1 closed). Then, you have to press “*” and “#” digits at the same time, Discharge and Charge leds will light to indicate that you are into the memory of the relay and that you could release both digits.

Once in the relay memory, the module will wait for the introduction of the wished timing. Press digits corresponding to the wished timing (Press previously the digit “0” if the wished timing is inferior than 10) and the digit “*” to confirm.

If the operation is correctly done, an acoustic signal will be emitted and the ON Led will light. After a short time, the module come back to the initial state of Operations control (ON & OFF Leds alternatively intermittent).



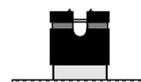
OPERATING.

To change again the relay timing, repeat this process, awaiting that the module indicates its availability (ON & OFF Leds alternatively intermittent).

If you wrongly proceed, as to wait more time than authorised for the data insertion, or to press wrong digits, or to digit a number superior than 60, the circuit will emit an acoustic signal and the OFF Led will momentarily light to indicate the error.

HOW TO ADJUST A RELAY TIMING : 9 sec./min.

1° DA-03 on Operation Control mode. JP1 closed
ON & OFF Leds alternatively Intermittent



2° To have access to the Relay memory . Digits “*” and “#”.
Charge and Discharge Leds lighting



3° To insert Timing. Digits “0”, “9” and “*”.
Charge, Discharge and On Leds lighting

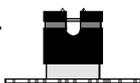


To leave the relay’s memory . To come back to the initial state of the Operations Control.
ON & OFF Leds alternatively intermittent

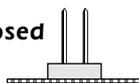
COMMON OPERATING MODE. Thanks to the common operating mode, the DA-03 module will exclusively operate as a standard access control. It will compare the inserted code with the stored codes and authorize or deny according to the situation. On this mode, you could not done authorization, deny or relay timing operations.

To place the Da-03 on common operating mode, you have to open or desold both terminals of the JP1 Jumper and remove it. See the schedule. When the JP1 jumper is open, leds of the circuit will be maintained light off. Then, the module will wait for any access code.

Jumper Closed



Jumper not Closed (Open).



JP Piece



To insert the code, you have to proceed as following : firstly introduce the code, digit after digit. For instance if you wish to insert the code N°8974, you have to press the 8, then 9, 7, and at the end the digit N°4. To confirm you have to press the digit “*”.

If the code has been correctly inserted, and this one was already stored in a memory, the DA-03 module will emit a signal to confirm and the ON Led will light connecting the relay.

If the code was not stored in the memory, or if there was a mistake, the module will emit a signal and OFF Led will shortly light; the output won't be connected.

The circuit accept till 5 consecutive trials. After these trials, the module will be automatically blocked, impeding any operation during 5 minutes or till you disconnect the power supply. .

After a correct code, previous wrong trials are eliminated to avoid any accumulation. Then, after the 5 minutes of auto-blocking or after resetting the module the module will also eliminate wrong trials and come back to its normal operating state.

Between access codes introductions, you have to wait ON or OFF leds are light off. If the relay is connected, for instance, the ON led will lighting till the output is disconnected.



DA-03

ACCESS CONTROL WITH KEYBOARD

OUTPUT CONNECTION. LOAD.

OUTPUT CONFIGURATION. As we have previously communicated you, the DA-03 output could be adjusted according to Flip-Flop or Timed mode. The Flip-Flop mode, when the code is correct, will maintain connected the relay till you press the Flip-Flop push button. The Timed mode will maintain connected the relay during the adjusted time. To configure the module on the Flip-Flop mode, you have to place the switch N°2 of the "Setup Relay" on ON position. To configure the output on timed mode, place the switch N°2 on OFF position. See schedule hereafter.

Relay configured with Timed output.



Relay configured with Flip-Flop output



TIMED OUTPUT. If you configure the output on timed mode, the module offer the possibility to use two different scales, seconds or minutes. For instance, if you have inserted the number 9, this number could be in seconds or minutes scale according to your needs.

To select the seconds scale, you have to place the switch N°1 of the "Setup Relay" on OFF position. To select the minutes scale, place the switch N°1 on ON position. See the schedule hereafter.

To configure the Timed output on Seconds scale

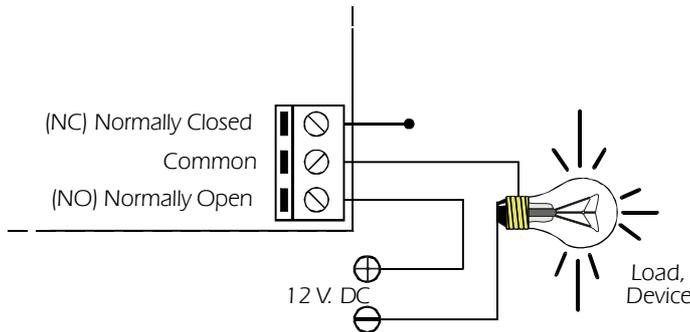


To configure the Timed output on Minutes scale

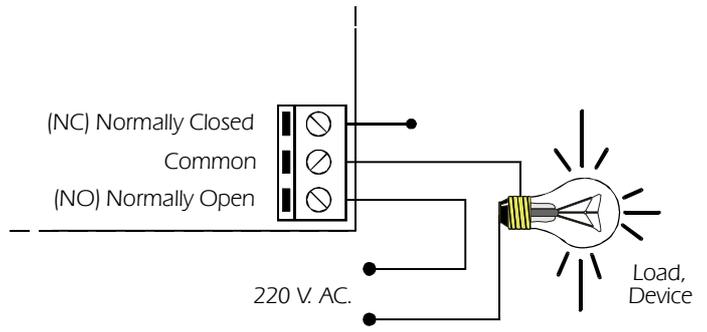


OUTPUT CONNECTION. The DA-03 output is controlled by a relay, and accept any device up to 5 A. The relay have three output terminals: The normally open quiescent (NO), the normally closed quiescent (NC) and the common. This mechanism operate like a switch with two terminals NO and Common. For the inverse function you have to use the NC and Common. In the drawing hereafter, you could see a typical connection with a 12 V D.C and 230 V A.C devices.

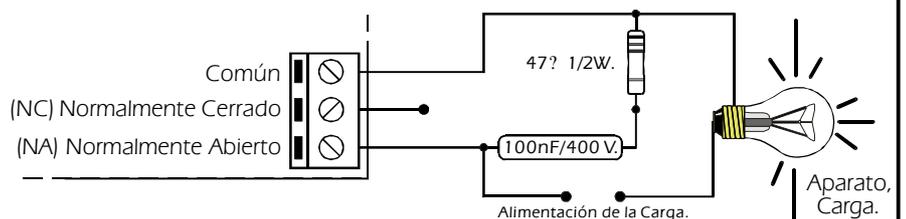
12 V. DC. CONNECTON



220 V. AC. CONNECTION



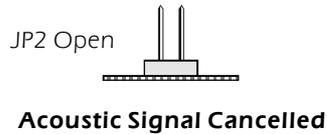
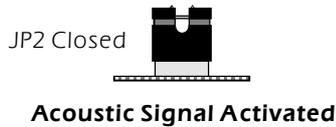
INFORMATION ABOUT THE OUTPUT. During the operating mode and according to its load, it could happen a fluctuation or an incorrect working of the output. In such case, you have to install an anti-spark circuit between both contacts of the used relay, as it is indicated on the schedule.



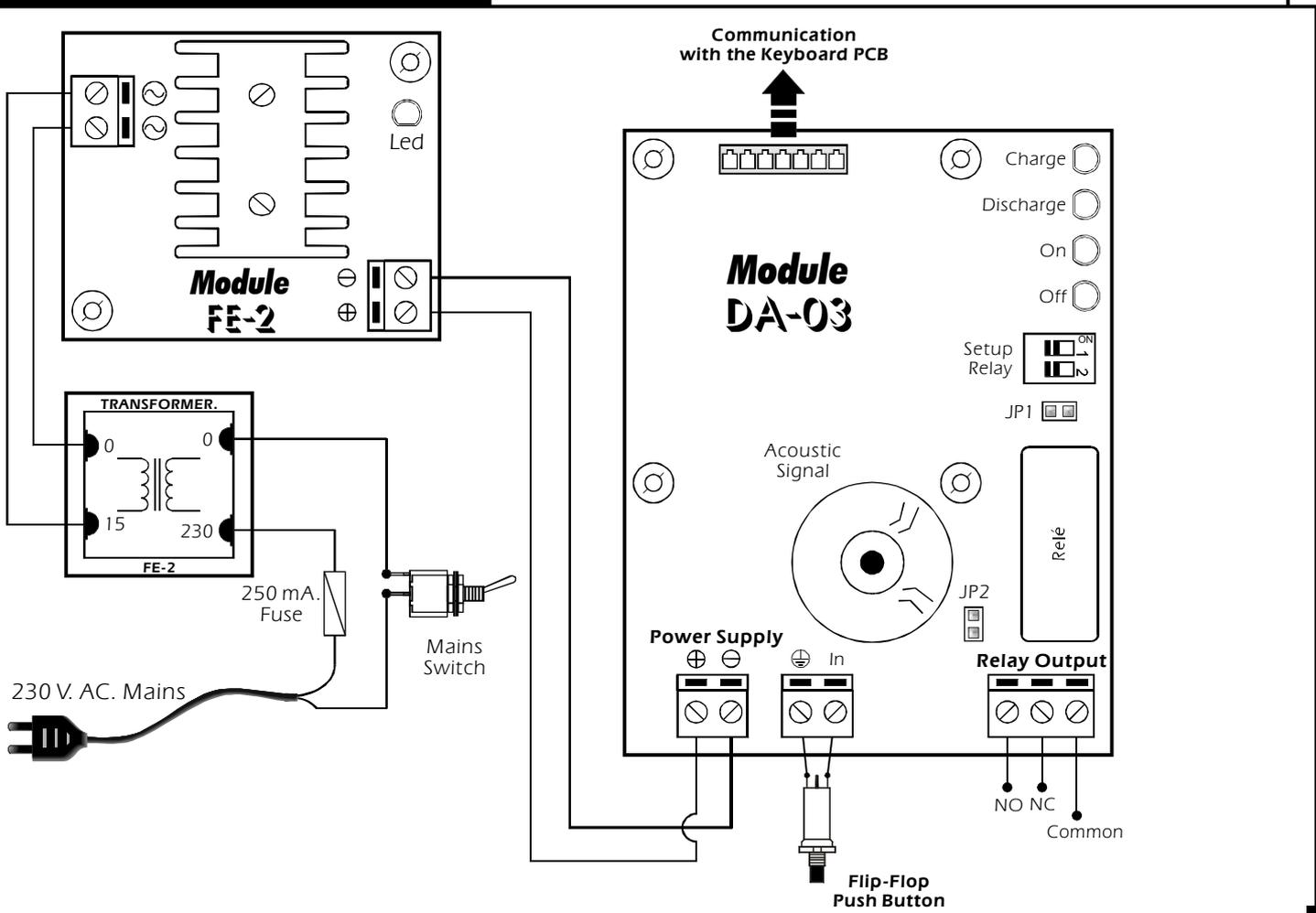


ACOUSTIC SIGNAL.

ACOUSTIC SIGNAL. If you wish, you could cancel the acoustic signal, to avoid a signal answer for each operating options. To do that, you have to desold or open terminals of the JP2 jumper, removing the JP piece supplied with the module. If after you wish to use again the acoustic signal you only have to connect JP2 contacts.



GENERAL WIRING MAP.



TECHNICAL CONSULTATIONS.

If you have any doubt, you could contact your wholesaler or our Technical Department.
- Via E-Mail, sat@cebek.com | by mail P.O Box 23455 - 08080 BARCELONA - SPAIN.

**MORE 300
MODULES.**

All the module's CEBEK have **3 years of total warranty** in technical repairing, and spares from the date of buy.

CEBEK is trade make of FADISEL S.L. more than 300 module's are available in stock for any purpose **request our CATALOGUE**, or visit our Web.

[Http://www.cebek.com](http://www.cebek.com)

WARRANTY

**3
YEARS**