DIGITAL ACCESS KEYPAD   DK-85

FOR SECURITY AND DOOR STRIKE APPLICATIONS

### OPERATING INSTRUCTIONS AND SPECIFICATIONS

DESCRIPTION

DK-85 digital access keypad is a 12-button electronic coded combination lock. It provides two sets of secret codes for the owner. There are 11880 different combinations possible for security key and 132 different combinations possible for panic.

DK-85 is designed with the latest electronic circuitry and special integrated circuits. It offers high reliability and superb security in practice. The DK-85 is immune to all types of EMF, static electricity and RF noise. It also has overvoltage protection and reverse polarity protection circuits.

The keyboard of the DK-85 is mounted on a brushed stainless steel mounting plate which is designed to fit into a single electrical gang box for flush mounting attractively on wall. A plastic case is also available for the keypad for surface mounting. The keypad incorporates a normally closed tamper switch which provides tamper-proof to the keypad all time.

DK-85 is suitable for most kinds of security systems and electric door strike applications. It is a simple and straight forward system which is easy to use but virtually impossible to beat.

DIAGRAM
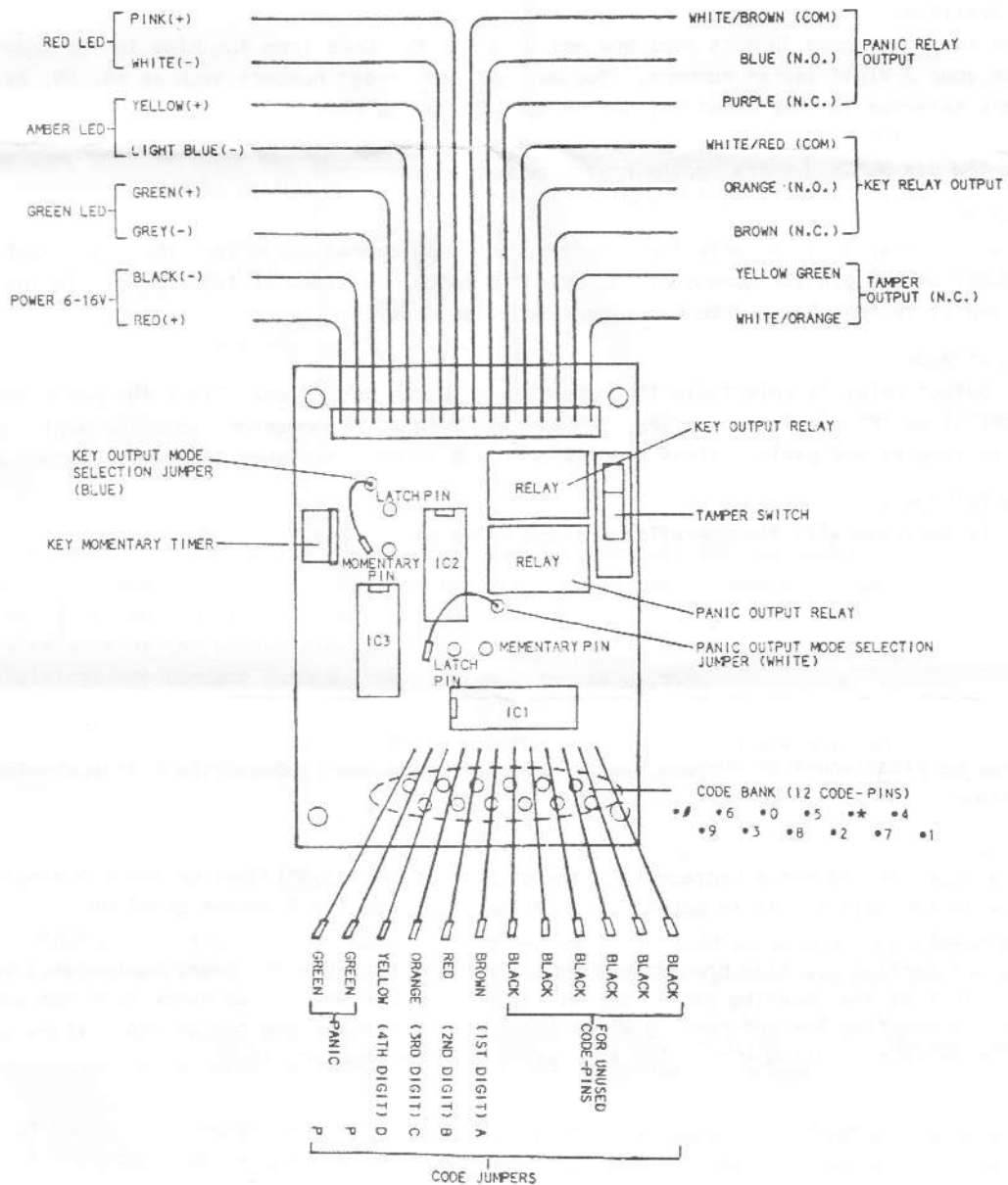
PROGRAMMING

The DK-85 is pre-programmed with the following operation conditions at the factory:
(i)   Key Code   : 1,4,7,2
(ii) Panic Code   : *, #
(iii) Key Output Mode : Momentary
(iv) Panic Output Mode : Momentary

The above operation conditions may be re-programmed to suit different application requirements in the field. It is recommended that the key code and panic code be changed for obvious security reasons. Re-programming is easy. It only requires a few minutes to complete and the following are the procedures:

(I)   Key Code :
      12 numbers are available in the code bank; they are 1,4,7,*,2,5,8,0,3,6,9,#.
      11880 combinations of 4-digit code are possible.
      (1) Remove all 12 code jumpers from the pins in the code bank.
      (2) Decide your own 4-digit secret numbers. You may not use repeat numbers such as 1223, *7*9, 5677, 6786, etc.
      (3) Place the code jumpers to the pins selected (the 4-digit secret numbers); BROWN jumper for 1st digit, RED for 2nd digit, ORANGE for 3rd digit and YELLOW for 4th digit.
      (4) Place the eight unused code jumpers (GREEN and BLACK wires) on the unused number pins if panic switch is not used.

(II) Panic Code :
      The 12 numbers in the code bank are also prepared for panic code selection. 132 combinations of 2-digit code are possible.
      (1) Remove the eight code jumpers that are not used for Key Code from the pins in the code bank.
      (2) Decide your 2-digit secret numbers. You may not use repeat numbers such as 66, 88, ##, etc.. The numbers selected for Key Codes may not be used for panic code.
      (3) Place the 2 GREEN code jumpers to the 2 number pins selected (the 2-digit secret numbers).
      (4) Place the six BLACK jumpers on the unused number pins.

(III) Key Output Mode :
      The key output relay is selectable for Momentary or Latch operation. Place the key output mode selection jumper (BLUE) on "M" pin for momentary, "L" pin for latch. A timer is incorporated in the momentary driver circuit, and it is adjustable from 0.5 second to 30 seconds.

(IV) Panic Output Mode :
      The panic output relay is selectable for Momentary or Latch operation. Place the panic output mode selection jumper (WHITE) on "M" pin for momentary, "L" pin for latch. At momentary mode the panic relay output contact operates as long as the panic buttons are pressed, and it releases when the panic buttons are left.

(v)   Operating Voltage :
      The DK-85 is designed with the operation voltage range of 6 - 16V.

INSTALLATION

(A) Mounting :
    The DK-85 may be flush mount or surface mount. It is recommended to mount the unit approximately 50"(1.2m) above the floor.

    (i) Flush mount :
        Select a location and cut a rectangular hole of 2.1"(53mm) x 2.9"(73mm) or mount a single electrical gang box in the wall for flush mounting. Fix the DK-85 use the 2 screws provided.
   (ii) Surface mount :
        An optional surface mounting box (Model DK-01) is required. Use the mounting box as a template and mark the locations of the mounting screws and wiring hole on the wall. Two knock-outs are available on the back of the mounting box for running wires thru; one at the top and one at the bottom.
        Mount the surface mounting box on the wall using the 2 screws provided.
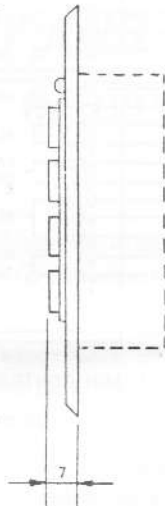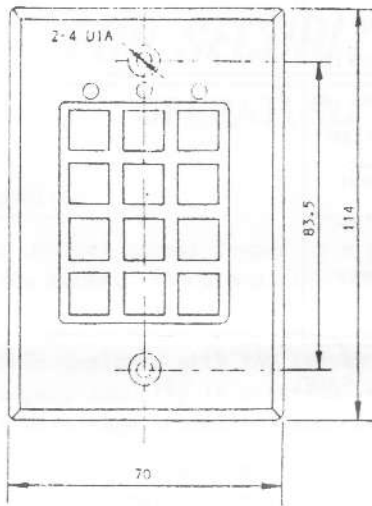
DIGITAL KEYPAD   SURFACE MOUNT BOX (OPTIONAL)
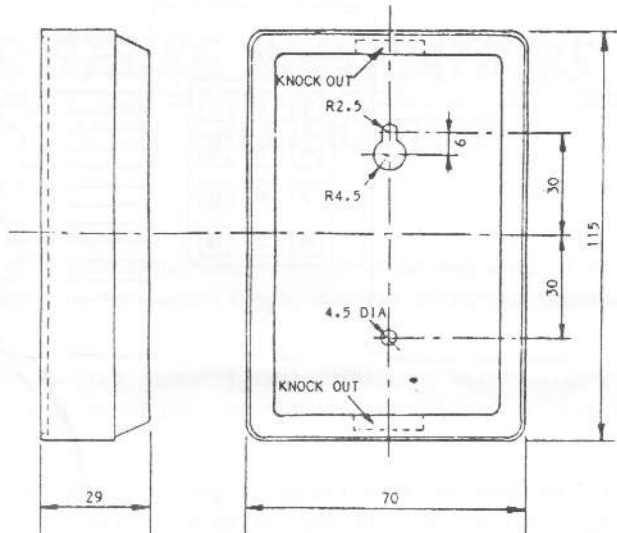
(B) Tamper Switch Adjustment :

The tamper switch is Normally Closed when depressed. To ensure the tamper switch is depressed when the key-pad is secured on wall. It is necessary to have an elastic tube with appropriate length snapping over the lever arm of the tamper switch. An elastic tube is provided for that purpose and it may be cut for appropriate length to suit different type of gang boxes.
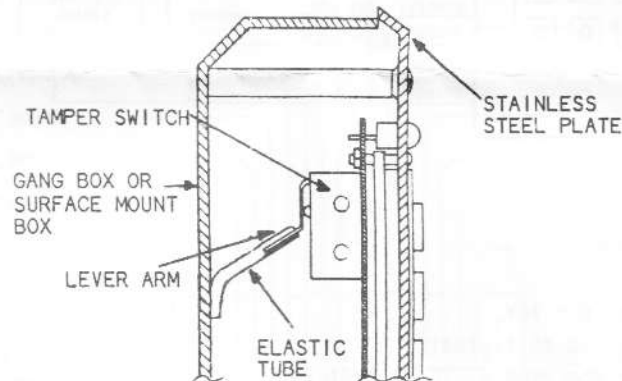
(C) Wiring :

The following is the procedures for wiring the external wires to the digital key-pad :

(i) Remove the wiring harness from the male socket carefully, so as not to damage the unit.

(ii) Connect external wires to the wiring harness.

(iii) Tape all the wire ends of the unused wires.

(iv) Make sure all wirings are correct before applying power to the unit.

(v) Plug the wiring harness back to the male socket of the digital key-pad.

NOTE : The on-board LEDs are equipped with current limiting resistors. They can work at any voltage between 6 - 16V DC. Be sure that the LEDs are wired with correct polarity.

OPERATION

(A) Digital Key :

(i) To operate the digital key, the 4 secret numbers that you selected must be pressed in a precise, exact order. Any deviation from the correct code instantly resets the digital key computer and erases the codes already entered.

(ii) The key output relay will operate when the 4 secret numbers are correctly entered. The operation of the relay can be momentary or latching; both N.O. and N.C. Output Contacts are available.

(B) Panic Buttons :

(i) The panic output relay will operate when simultaneously press the two buttons that you have programmed.

(ii) The operation of the relay can be momentary or latching; both N.O. and N.C. Output Contacts are available.

APPLICATIONS

(A) Security :

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                                    RED ─────────── ⊘(+) ┐
                                    BLACK ───────── ⊘(-) ├ 6-16V
                                    GREY ────────── ⊘(-) ┐
                                    GREEN ───────── ⊘(+) ├ GREEN LED
                                    LIGHT BLUE ──── ⊘(-) ┐
                                    YELLOW ──────── ⊘(+) ├ AMBER LED
                                    WHITE ───────── ⊘(-) ┐
                                    PINK ────────── ⊘(+) ├ RED LED
                                    WHITE/BROWN ─── ⊘COM  ┐ PANIC
                                    BLUE ────────── ⊘N.O. ┘ OUTPUT
                                    WHITE/RED ───── ⊘COM  ┐
                                    ORANGE ──────── ⊘N.O. ├ KEY OUTPUT
                                    BROWN ───────── ⊘N.C. ┘
                                    YELLOW GREEN ── ⊘     ┐ N.C.
                                    WHITE/ORANGE ── ⊘     ┘ TAMPER
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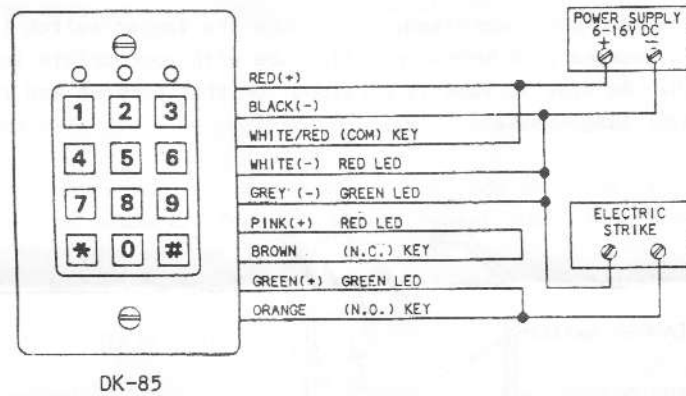
DK-85   ALARM CONTROL PANEL

(B) Electric Door Strike :

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                        RED(+)
                        BLACK(-)
                        WHITE/RED (COM) KEY       POWER SUPPLY
                        WHITE(-)   RED LED         6-16V DC
                        GREY (-)   GREEN LED
                        PINK(+)    RED LED        ELECTRIC
                        BROWN      (N.C.) KEY     STRIKE
                        GREEN(+)   GREEN LED
                        ORANGE     (N.O.) KEY
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DK-85
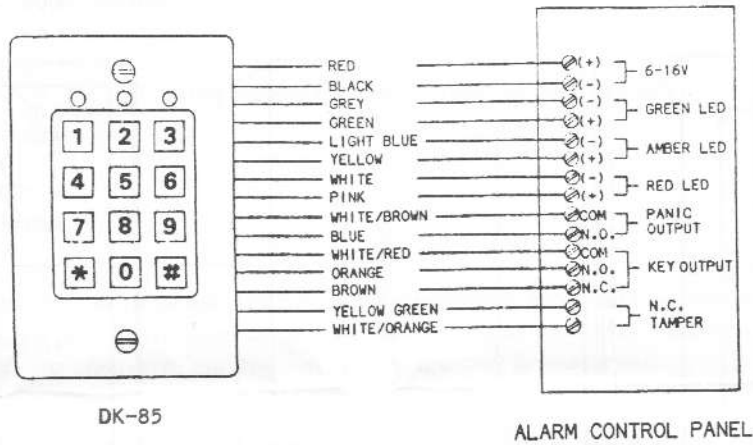
SPECIFICATIONS

* Operating Voltage Range   : 6 - 16V
* Quiescent Current Drain   : 10 mA typical
* Current Drain : Key or Panic Relay Operated : 70 mA typical
                  Key and Panic Relay Operated: 130 mA typical
* Key/Panic Relay Contact Ratings : 24V DC 1A max.
                                     100V AC 0.5A max.
* Key/Panic Relay Contacts   : N.C. and N.O. dry contacts
* Tamper Switch   : N.C. when depressed
* Key Code Combinations   : 11880 combinations (4-digit non-repeating)
* Panic Code Combinations   : 132 combinations (2-digit non-repeating)
* Code programming   : Field programmable via jumpers
* On-plate LED   : 3 LEDs in RED, AMBER, and GREEN color, each with 1K ohm current limiting
                                   resistor
* Key Relay Output Modes   : Momentary or Latch selectable (momentary mode incorporates 0.5 - 30 seconds
                                   adjustable timer)
* Panic Relay Output Modes   : Momentary or Latch selectable (Relay operates as long as the panic buttons
                                   are pressed when in momentary mode operation).
* Key Board   : 12 buttons tactile-feel
* Weight   : 100g.
* Dimensions   : 114mm(H) x 70mm(W) x 36mm(D)

AEI®

Kodförbikopplare DK-85

Kodförbikopplare DK85 har två uppsättningar hemliga koder för ägaren. Det finns 11880 olika nyckelkombinationer och 132 olika larmkombinationer (panic). Det sistnämda används ej vid inkoppling av villalarmet CASSIUS. För information om Panic-funktionen hänvisas till tillverkarens manual.

1. Inkopplingsschema
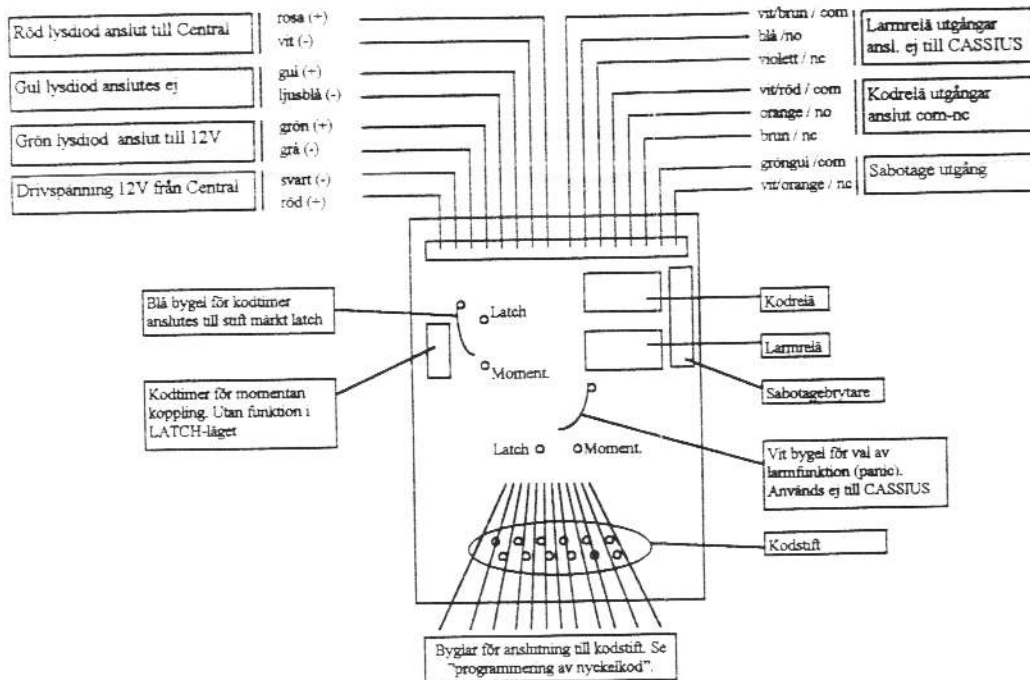
2. Programmering av nyckelkod

I kodlisten finnns 12 tecken. (1,2,3,4,5,6,7,8,9,0,*,#). Totalt ger detta 11880 möjliga fyrsiffriga koder.
Dra loss alla 12 byglarna från stiften i kodlisten.
Bestäm dej för en 4-siffrig kod. *(Du kan ej använda samma siffra 2ggr.)*
Anslut byglarna till respektive kodstift enligt följande:

- Brun kabel bestämmer kodens första siffra.
- Röd kabel bestämmer kodens andra siffra.
- Orange kabel bestämmer kodens tredje siffra.
- Gul kabel bestämmer kodens fjärde siffra.
- De två gröna kablarna bestämmer larmkoden för panic-funktionen.(används ej till *CASSIUS*). Anslutes till valfria stift.
- De svarta kablarna ansluts till de kodstift som blir över.

   * För att inte oavsiktligt utlösa ett sabotagelarm måste man slå ifrån larmcentralens huvudbrytare vid demontering av panelen på kodförbikopplaren.

3. Inställning av nyckelrelä

Nyckelreläet kan ställas in för momentan eller konstant (latch) upplåsning. I detta fall skall konstant upplåsning (latch) väljas. Placera därför blå bygel på stift märkt L. *Obs! Detta måste göras i spänningslöst tillstånd.*

4. Sabotagebrytare

Brytare skall vara intryckt då kapan är stängd. För att åstadkomma detta måste mikrobrytaens arm förlängas med medföljande plaströr.

*För övrig information och tekniska data hänvisas installatören till tillverkarens engelskspråkiga manual.