VP20 PROXIMITY ACCESS CONTROL SYSTEM 1 DOOR, 20 KEYS

DESCRIPTION

The VIDEX VP20 is an advanced access control system based upon the VIDEX unique Coded proximity Key giving over 4 billion combinations. The system will operate and control a single entrance point and store up to 20 proximity Tags or Cards. An additional reader can also be connected in parallel to the first to control both entry to and exit from the building. Connections from the reader to the control equipment can be made using an un-shielded 5 core cable up to a distance of 100 meters, or a maximum resistance of 10 Ohms. A dry contact lock release relay and push to exit button input are also included.

VIDEX run free training courses for engineers who are not familiar with the Videx product range. Technical help is also available on 0191 224 3174 during office hours or via e-mail tech@videx-security.com.

CONNECTIONS

Built in programming reader



Programming push buttons, LED's and dip-switches under side cover.

Connection	Function
+12	12Vac or dc Input
-	Ground (0V)
SW	Push to exit input (Switch to 0V)
+	+12V to reader
С	Relay common connection
NO	Relay normally open connection
NC	Relay normally closed connection
LG	Reader green LED connection
LR	Reader red LED connection
RK	Serial data from reader
-	0V connection to reader

ON

ON

DIP-SWITCH SETTINGS

A two way dip-switch which can be found under the side cover of the VP20 can	SW1	SW2	TIME
be used to adjust the lock release relay operation time as follows:-	OFF	OFF	2 Seconds
	ON	OFF	4 Seconds
	OFF	ON	6 Seconds

WIRING DIRECTIONS

The VP20 controller requires either a 12Vac or 12Vdc PSU. This will normally be mounted next to the VP20. Connections from the VP20 to the door consist of 5 cores for the reader, 2 cores for the lock release and 2 cores for the push to exit button. It is important that these cores are not run together in the same cable. Furthermore we suggest that the reader and push to exit cable are a minimum of 10cm from the lock release cables and any other higher voltage cables such as mains and electrical lighting. In circumstances when this distance can not be maintained then a screen cable will be required for the 5 core reader cable. Consult the appropriate wiring diagram at the rear of this manual for more information.

OPERATION

In standby mode the reader LED will be amber. When a user presents a stored proximity key to the reader, the reader LED will change to green, a sharp "beep" will be emitted and the relay will operate for the programed time. If the key presented is not programmed, the reader LED will change to Red and a low "beep" will be emitted.

For security reasons, if an un-programmed key is presented repeatedly, the reader will lockout for a period of time. The lockout time will increase with every attempt that is made.

Pushing the 'push to exit' button will operate the lock release relay for the programmed time.

PROGRAMMING

All programming is carried out at the VP20 control unit. Two switches and two LED's are used as follows:-

Store button: Delete button: Used as delete button Green LED: Red LED:



Used as a store and accept button Used to check the key number being stored Used to check the key number being deleted 10 Seconds

Using these buttons it is possible to add up to 20 keys, delete an individual key and read a key. This is explained further in the following programming guides.

ADDING A KEY

A flow chart of this procedure is also included on a following page.

- **Step 1:** Press the STORE button. The green LED will illuminate.
- **Step 2:** Press the STORE button the same number of times as the key number. For example for key 3 press it three times, key 8, press it eight times.
- **Step 3:** Press the DELETE button. The red LED will now flash the same number of times as the key number to confirm the correct number.

If the number is incorrect, press the DELETE button to exit and begin again.

If that memory location already has a key programmed it will not be possible to put another key in without first deleting the old one. This will be confirmed by the RED LED flashing more times and then both LED's going off.

Step 4: Put the key up against the top of the VP20 housing where it shows a picture of the reader. Both LED's will flash once to confirm the key has been stored.

DELETING A KEY

A flow chart of this procedure is also included on a following page.

- **Step 1:** Press the DELETE button. The red LED will illuminate.
- **Step 2:** Press the DELETE button the same number of times as the key number to be deleted. For example for key 2 press it two times, key 6, press it six times.
- **Step 3:** Press the STORE button. The green LED will now flash the same number of times as the key number to confirm the correct number.

If the number is incorrect, press the DELETE button to exit and begin again.

Step 4: Press the STORE button to delete the key. Both LED's will flash once to confirm the key has been deleted.

DELETE ALL KEYS

A flow chart of this procedure is also included on a following page.

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- **Step 2:** Press and hold the DELETE button while the power is turned back on.
- Step 3: Release the DELETE button. All keys have been deleted.

READ A KEY

A flow chart of this procedure is also included on a following page.

- **Step 1:** Press both the DELETE button and the STORE button for 2 seconds. Both LED's will illuminate.
- **Step 2:** Place the key to be read on to the reader built into the top of the VP20.
- **Step 3:** If the key is stored, the green LED will flash the same number of times as the key number.

If the key is not stored the red LED will flash 3 times.

TECHNICAL SPECIFICATIONS

Storage capacity: Working voltage: Current (Quiescent) : Current (During operation): Working temperature: Lock output: 20 keys or Tags 12V DC +/- 10% Approx. 100mA Approx. 200mA -10 +50 C degrees 5A 30VDC Dry contact





