VIDEX VproX-100
(2 DOOR, 100 KEY SYSTEM)

DESCRIPTION

The **Vprox 100** is an advanced access control system based upon the VIDEX unique Coded Key giving over 4 billion combinations. The system will operate and control two independent doors and store up to 100 contact keys or proximity Tag or Card, each door can also have an additional reader. Connections from the reader to the control equipment can be made using un-shielded 5 core cable up to a distance of 200 meters, or a maximum resistance of 10 Ohms.

Push to exit switches at each door will operate the associated relay in the control unit for the programmed entry/exit time.

Security against sabotage, is maintained by having the VproX control equipment remote from the reader heads. Should un-stored or un-qualified keys attempt to operate the system, the control unit will disable all readers after every 5 attempts, the duration of the readers disable time will increase if further attempts are made.

The control equipment has an LED display that confirms all data in programming mode, and displays the key number when in the stand by mode *(when key inserted)*.
The system has 4 push buttons for programming and modifying the information. Using these buttons it is possible to :

> Program a Master code to access the programming menu.
> Program up to 100 unique keys or Tags with door access options.
> To modify the settings and parameters of a stored key.
> Delete one or more keys or Tags.
> Program each door relay time *(1 to 99 seconds)*

INITIALISATION

When the installation has been completed *(carried out in accordance with the supplied wiring diagram)*, the system can be powered up and programmed following the VproX 100 Programming FLOW CHART, on completion the VproX 100 is ready for use.
NOTE: we suggest to separate the Mains lines *(lift, electricity, electric lock, etc.)* from the readers connection line *(at least 10 cm. far or use shielded cable for it)* to avoid electrostatic discharge and magnetic influence which could give control problems to the CPUs present on the system.

OPERATION

In stand by mode the DISPLAY shows "--", when a stored key is inserted at any of the reader heads the display will show the key number and which door is being operated (decimal point position). When a stored key is inserted at any of the readers, the readers LED's will display green and a sharp "beep" will be emitted. If the key is not programmed the Display will show nothing and the readers LED's will display Red and a low "beep" will be emitted
To operate relay 1 for the programmed time *(door open)* a n/o switch or short across terminal "S1" to ground is required.
To operate relay 2 for the programmed time *(door open)* a n/o switch or short across terminal "S2" to ground is required.

VIDEX VproX-100
(2 DOOR, 100 KEY SYSTEM)

Programming overview

The information below is to be used in conjunction with the programming flow chart.

Standby : (The display shows [**--**])

Master code : The master code allows access to the programming menu.
The preset factory master code is 4 times the arrow right key.

To move through the modes, use the arrow right key.

New master code : (The display shows [**n.c.**])
The master code can be any combination of the four keys on the cpu.
The master code must be four keys.
If you want to keep the existing master code, you must key that code in again.

Reading a key or Tag: (The display shows [**rd**])
In this mode, when you present a key to the on board reader head, the key number will appear on the display. (NOTE : If the key or Tags is not programmed, the display will go blank).
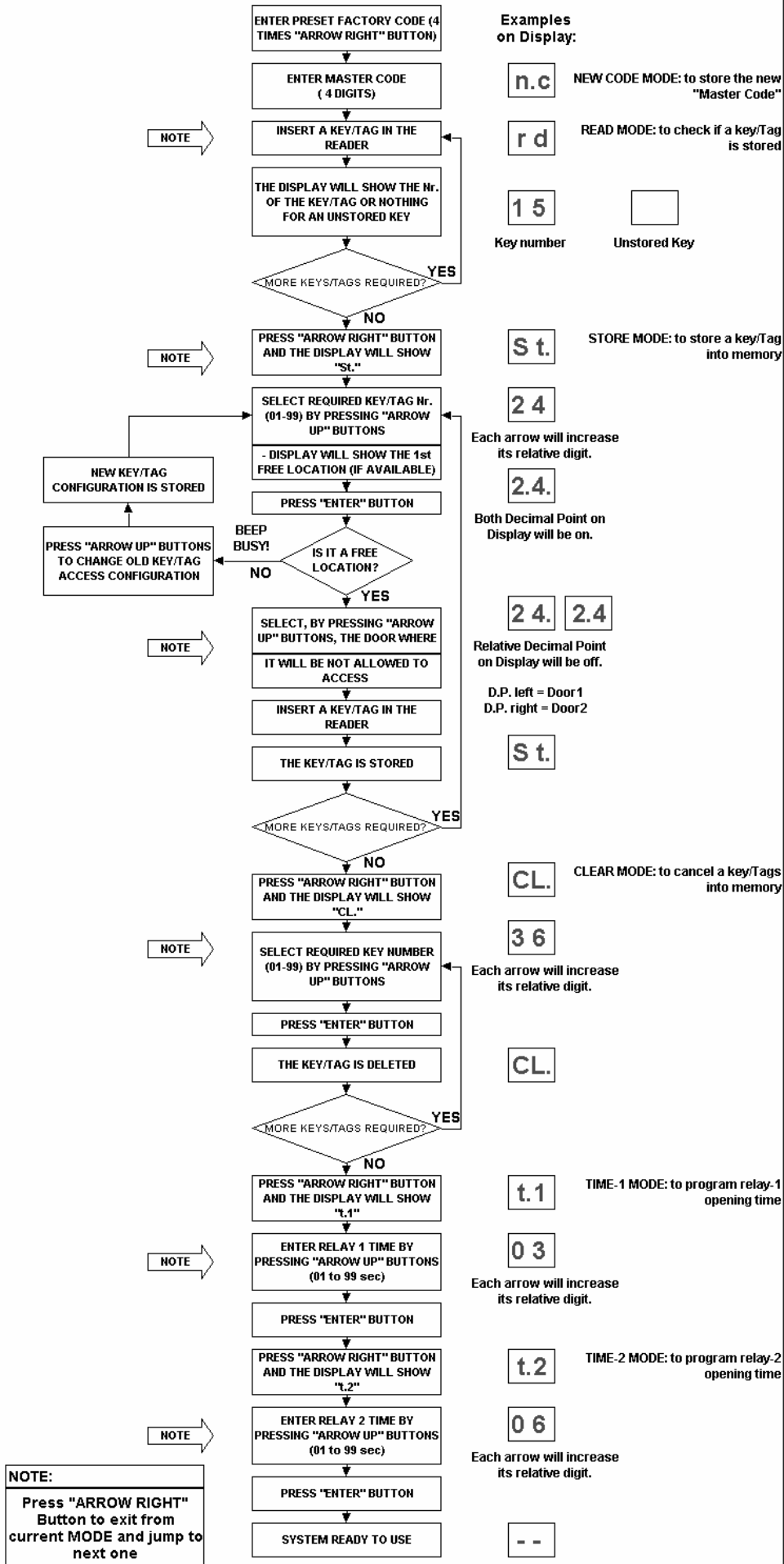
Storing a new key or Tag: (The display shows [**St.**])
After pressing one of the up arrow keys, the display will show the number of the 1st free location (if available); press enter to confirm or select another number by pressing the up arrow keys. (NOTE : If when you press enter you hear a long beep, that number is already taken and you must choose another number).
After pressing enter, you may select using the up arrow keys, which door the key has access to. (Default : both doors on). The doors are indicated by the decimal points on the display. When the decimal point is showing, the key has access through that door. The decimal points are toggled on and off using the up arrow keys.
After selecting the doors, simply present the key to the on board reader head, the key is stored.

Deleting the key or Tag: (The display shows [**CL.**])
You do not need the key to delete it.
Simply select the key number to delete using the up arrow keys and press enter. The key is now deleted.

Setting lock open time for door one : (The display shows [**t.1**])
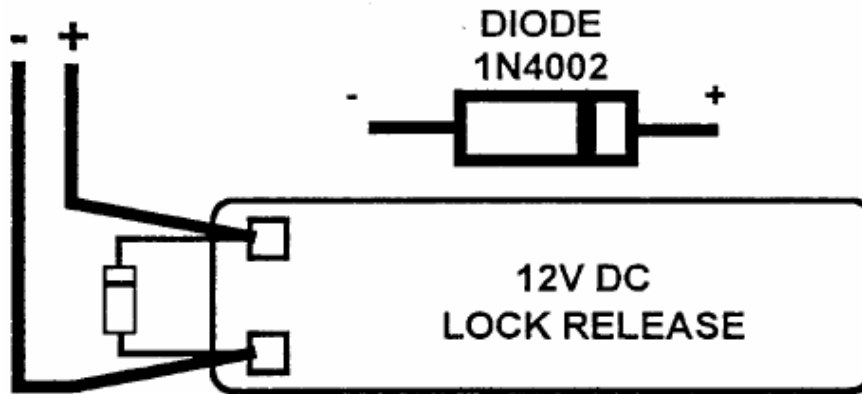Use the up arrow keys to select the time in seconds and then press enter.

Setting lock open time for door two : (The display shows [**t.2**])
Use the up arrow keys to select the time in seconds and then press enter.

VproX-100 PROGRAMMING

ENTER PRESET FACTORY CODE (4 TIMES "ARROW RIGHT" BUTTON)

ENTER MASTER CODE (4 DIGITS)

NOTE ▷ **INSERT A KEY/TAG IN THE READER**

THE DISPLAY WILL SHOW THE Nr. OF THE KEY/TAG OR NOTHING FOR AN UNSTORED KEY

◇ MORE KEYS/TAGS REQUIRED? — **YES** / **NO**

NOTE ▷ **PRESS "ARROW RIGHT" BUTTON AND THE DISPLAY WILL SHOW "St."**

SELECT REQUIRED KEY/TAG Nr. (01-99) BY PRESSING "ARROW UP" BUTTONS

NEW KEY/TAG CONFIGURATION IS STORED

- DISPLAY WILL SHOW THE 1st FREE LOCATION (IF AVAILABLE)

PRESS "ARROW UP" BUTTONS TO CHANGE OLD KEY/TAG ACCESS CONFIGURATION

PRESS "ENTER" BUTTON

BEEP BUSY!

◇ IS IT A FREE LOCATION? — **NO** / **YES**

NOTE ▷ **SELECT, BY PRESSING "ARROW UP" BUTTONS, THE DOOR WHERE**

IT WILL BE NOT ALLOWED TO ACCESS

INSERT A KEY/TAG IN THE READER

THE KEY/TAG IS STORED

◇ MORE KEYS/TAGS REQUIRED? — **YES** / **NO**

PRESS "ARROW RIGHT" BUTTON AND THE DISPLAY WILL SHOW "CL."

NOTE ▷ **SELECT REQUIRED KEY NUMBER (01-99) BY PRESSING "ARROW UP" BUTTONS**

PRESS "ENTER" BUTTON

THE KEY/TAG IS DELETED

◇ MORE KEYS/TAGS REQUIRED? — **YES** / **NO**

PRESS "ARROW RIGHT" BUTTON AND THE DISPLAY WILL SHOW "t.1"

NOTE ▷ **ENTER RELAY 1 TIME BY PRESSING "ARROW UP" BUTTONS (01 to 99 sec)**

PRESS "ENTER" BUTTON

PRESS "ARROW RIGHT" BUTTON AND THE DISPLAY WILL SHOW "t.2"

NOTE ▷ **ENTER RELAY 2 TIME BY PRESSING "ARROW UP" BUTTONS (01 to 99 sec)**

PRESS "ENTER" BUTTON

SYSTEM READY TO USE

Examples on Display:

| n.c | NEW CODE MODE: to store the new "Master Code" |

| r d | READ MODE: to check if a key/Tag is stored |

| 1 5 | Key number | | Unstored Key |

| S t. | STORE MODE: to store a key/Tag into memory |

| 2 4 | Each arrow will increase its relative digit. |

| 2.4. | Both Decimal Point on Display will be on. |

| 2 4. | 2.4 | Relative Decimal Point on Display will be off.

D.P. left = Door1
D.P. right = Door2

| S t. |

| CL. | CLEAR MODE: to cancel a key/Tags into memory |

| 3 6 | Each arrow will increase its relative digit. |

| CL. |

| t.1 | TIME-1 MODE: to program relay-1 opening time |

| 0 3 | Each arrow will increase its relative digit. |

| t.2 | TIME-2 MODE: to program relay-2 opening time |

| 0 6 | Each arrow will increase its relative digit. |

| - - |

NOTE:
Press "ARROW RIGHT" Button to exit from current MODE and jump to next one

VP100

3

VIDEX VproX-100
(2 DOOR, 100 KEY SYSTEM)

Lock release back EMF protection : A diode must be fitted across the terminals on the lock release to suppress back EMF voltages. The diagram below shows the polarity of the diode when fitted to the release.

Connections

+12V	-	+ supply input
-	-	Negative
S1	-	Door one push to exit trigger. (Short to -)
S2	-	Door two push to exit trigger. (Short to -)
NO1	-	Normally open contact (Door one)
NC1	-	Normally closed contact (Door one)
C1	-	Common contact (Door one)
NO2	-	Normally open contact (Door two)
NC2	-	Normally closed contact (Door two)
C2	-	Common contact (Door two)
LG1	-	Green LED's (Door one)
LR1	-	Red LED's (Door one)
RK1	-	Serial data (Door one)
-	-	Negative (Door one)
LG2	-	Green LED's (Door two)
LR2	-	Red LED's (Door two)
RK2	-	Serial data (Door two)
-	-	Negative (Door two)

Technical Specification

Storage capacity	-	100 keys or Tags
Number of doors	-	2
Number of readers	-	4
Working voltage	-	12V DC +/- 10%
Current (Quiescent)	-	Approx. 100mA
Current (During operation)	-	200mA max.
Working temperature	-	-10 +50 C degrees
Lock output	-	5A 30VDC Dry contact

VIDEX VproX-100
(2 DOOR, 100 KEY SYSTEM)

Trouble shooting guide

The display does not show [--] when you power up :
Check the voltage across +12 & - on the cpu.
Disconnect everything except the supply into the CPU and check again. (If the fault goes away check all connections and wiring again).

The reader head is only showing red in standby :
Check the LG1/2 connection from the cpu to the reader head for breaks.
Check the voltage across LG1/2 & - (This should be 8V DC). Do this check at the CPU with both the Read head connected and disconnected.

The reader head is only showing green in standby :
Check the LR1/2 connection from the cpu to the reader head for breaks.
Check the voltage across LR1/2 & - (This should be 8V DC). Do this check at the CPU with both the Read head connected and disconnected.

The LED's on the read head are on but do not change state when a key is presented :
Check terminal RK1/2 for continuity and possible shorts to other wires.

Reader head is going green when a key or Tag is inserted but the door is not opening :
Check the relay is operating on the CPU. If the relay is operating :
Check with a volt meter the voltage across the lock release when the relay has energized. If the correct voltage is there, replace the release. If not, check the cables from the release, back to the relay.

The reader head is dead :
Check the - terminal to the reader head for continuity.
Check the reader head connections for shorts.
Check the CPU is powered up.

The key has been programmed but the reader head is going red.
Check the key or Tag is programmed by using the read key mode on the CPU.
Check in the programming that the door has not been switched off.
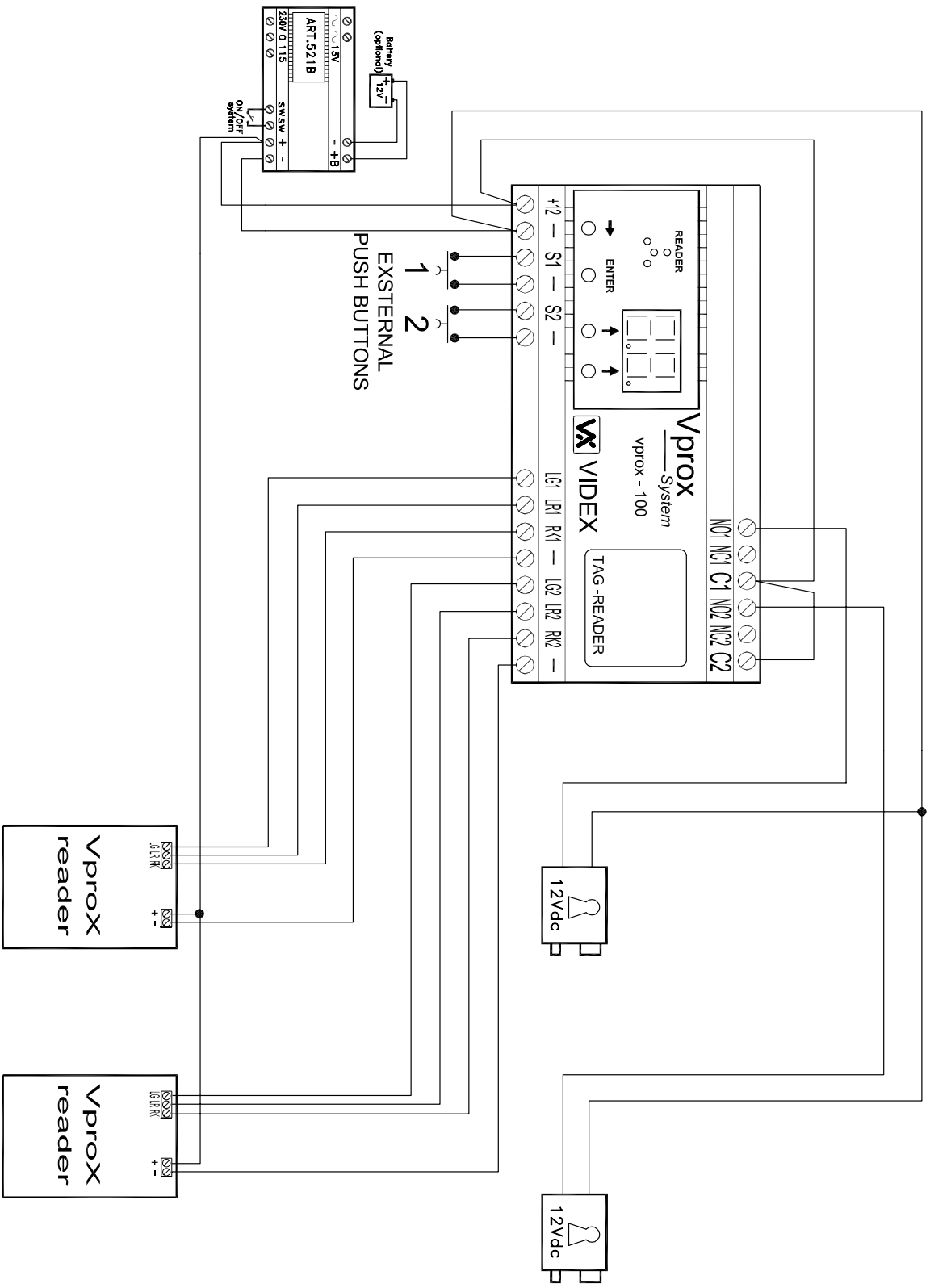
Vprox System
vprox - 100
VIDEX
TAG-READER
READER
ENTER

+12 — S1 — S2 —
LG1 LR1 RK1 — LG2 LR2 RK2 —
NO1 NC1 C1 NO2 NC2 C2

EXSTERNAL
PUSH BUTTONS
1
2

230V 0 115
13V
ART.521B
SW SW + —
— +B
ON/OFF
system
Battery
(optional)
12V

Vprox
reader
LG LR RK
+ —

Vprox
reader
LG LR RK
+ —

12Vdc

12Vdc

VP100

6

VIDEX Electronics   VproX-100
Data list stored into memory.

ACCESS CODE
□□□□

Time Relay 1 □□
Time Relay 2 □□

USER KEYS

USER NAME	N° KEY	USER NAME	N° KEY	USER NAME	N° KEY	USER NAME	N° KEY
	0 0		2 5		5 0		7 5
	0 1		2 6		5 1		7 6
	0 2		2 7		5 2		7 7
	0 3		2 8		5 3		7 8
	0 4		2 9		5 4		7 9
	0 5		3 0		5 5		8 0
	0 6		3 1		5 6		8 1
	0 7		3 2		5 7		8 2
	0 8		3 3		5 8		8 3
	0 9		3 4		5 9		8 4
	1 0		3 5		6 0		8 5
	1 1		3 6		6 1		8 6
	1 2		3 7		6 2		8 7
	1 3		3 8		6 3		8 8
	1 4		3 9		6 4		8 9
	1 5		4 0		6 5		9 0
	1 6		4 1		6 6		9 1
	1 7		4 2		6 7		9 2
	1 8		4 3		6 8		9 3
	1 9		4 4		6 9		9 4
	2 0		4 5		7 0		9 5
	2 1		4 6		7 1		9 6
	2 2		4 7		7 2		9 7
	2 3		4 8		7 3		9 8
	2 4		4 9		7 4		9 9

NOTE:

VP100