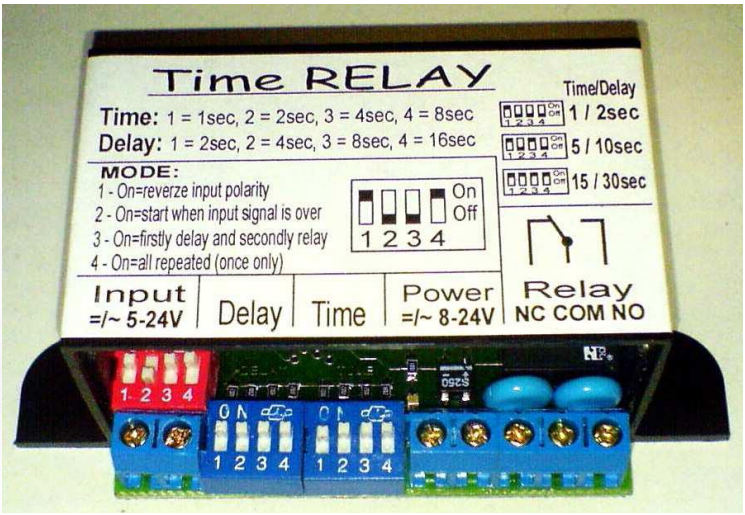
ALPHATECH TECHNOLOGIES s.r.o.
Jeremenkova 88, Praha 4, Czech Republic
www.alphatechtechnologies.cz

Time RELAY

Additional Time relay



User Guide

Description

Additional Time relay is designed as option for PBX Door phone (UDV). It is designed for more possibilities to control additional electrical locks etc..

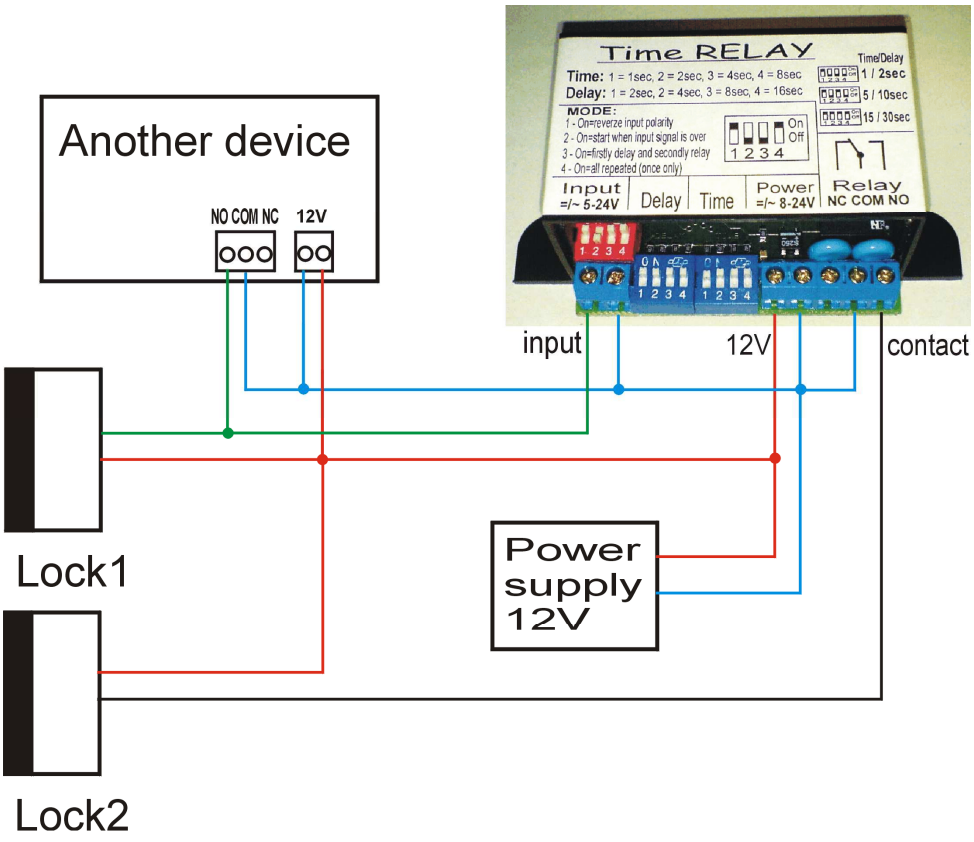
The Time relay unit required AC or DC power supply in range 8 – 24V. The input reacts on AC (DC) voltage in range 5 – 24V. This input is galvanicaly isolated and you can make its setting to react on connected voltage or voltage disconnection.The relay contacts are galvanically isolated from further components. Tle relay contacts are mark as usually COM=common, NC= normaly close and NO= normaly open. The setting done by DIP switch and you can set 4 independent modes (Mode). It is possible to set also the time of relay activation (Time) from 1sec to 15 sec and delay (Delay) from 1sec to 30sec. Activity is indicated by red LED. After power supply connection the red LED flashing a few times (autotest) and during operation lighting when relay is active.

Connection

The connection must be performed without power supply !!!!! to dont damage the unit by wires manipulation.

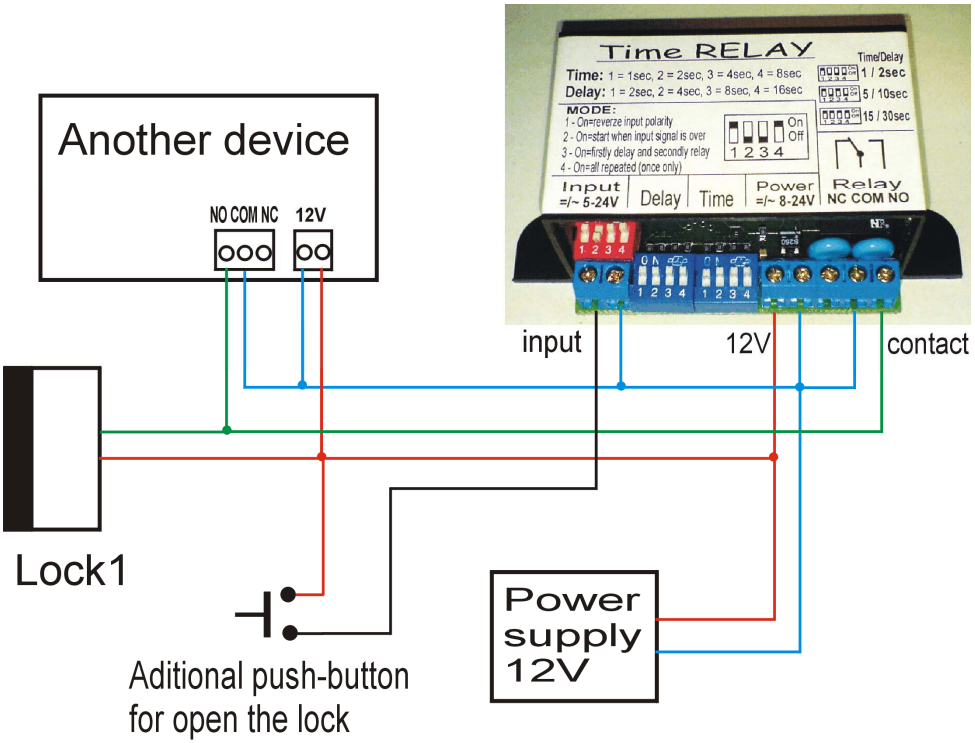
Activation signal is voltage connection or disconnection.
Typically from el. Lock screws controlled already from another device (door phone). You can use the same power supply as for PBX Door phone.

At example on picture 1 is Time RELAY used for control electrical lock of second doors. By DIP switch MODE is set as follow 1= Off (normal polarity), 2=On (activated after ending of first door opening – lock1), 3=On (is ordered before closing 2 lock delay), 4=Off (repetation is off). By DIP switch DELAY is set delay betwen opening first and second lock. By DIP switch TIME is set activation time of second lock.



Picture 1 : Example of next lock connection

The second example of Time relay usage is connection of control button to already existing lock. This button is usually install inside building at entry door and it is used by visitors when they are leaving the building. By DIP switch MODE is set that 1= Off (normal polarity), 2=On (activated after button releasing), 3=Off (delay is not used – open immediatelly), 4=Off (repetation is off). The DIP switch Delay has no sense at this moment. By DIP switch Time is set activation time of lock start by button pressing.

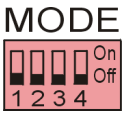


Picture 2 : Example of control button connection to already existing lock

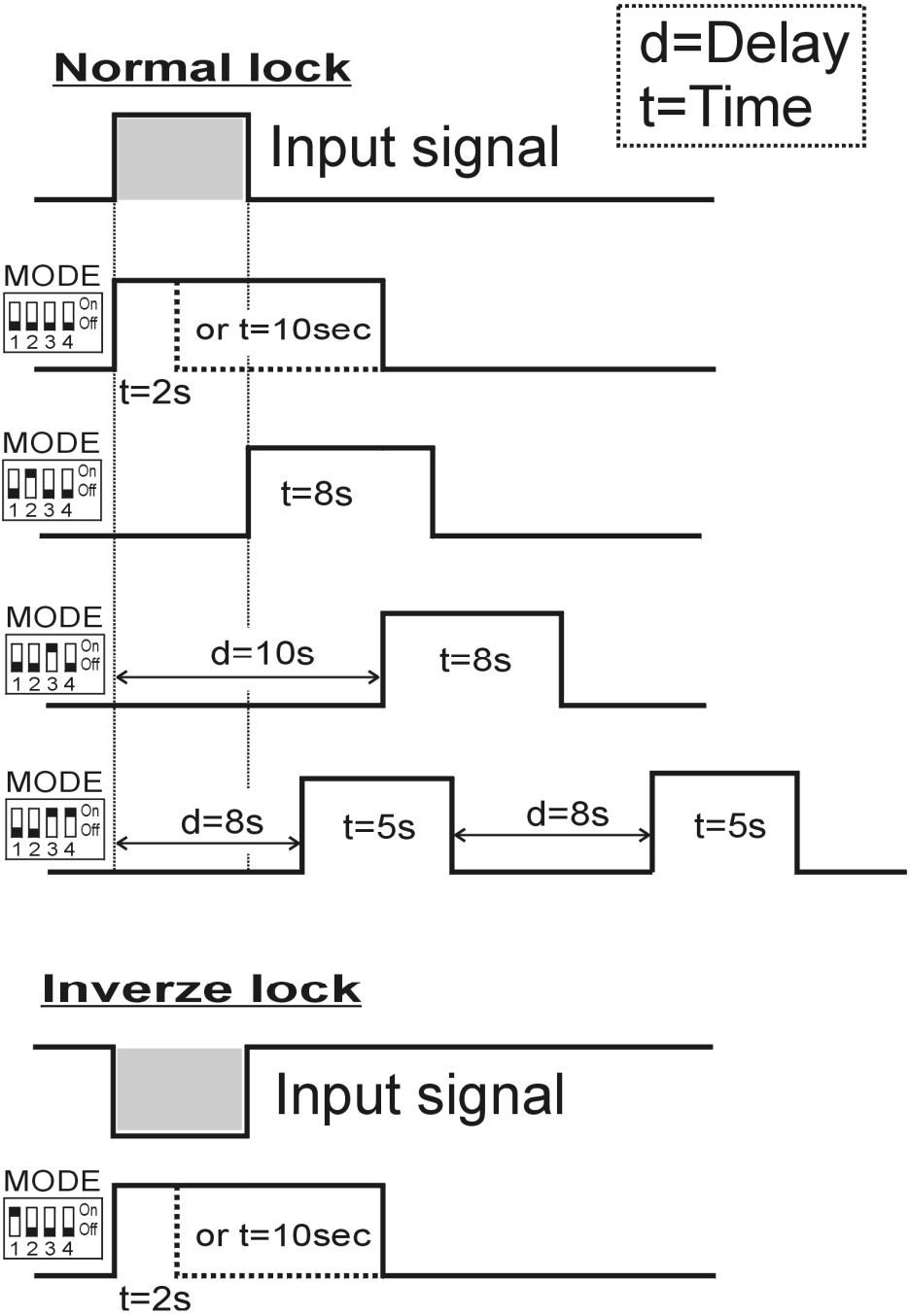
Setting

Setting of modes and times is done by DIP switch. By RED is setting mode and by BLUE time .

Mode (MODE):

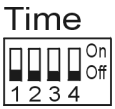


Switch	on	off
1	Reverse input polarity (activated by voltage connection)	normal input polarity (activated by voltage disconnection)
2	React on input change ending	React on input change begining
3	Closing start after delay (DELAY)	Closing start immediatelly
4	Closing is 1x repeated (timeout betwen repetation is always delay time – DELAY)	Closing is done once only



Picture 3 Time drawing of contact closing in different modes

Time setting (TIME):



switch	combination															
1		x		x		x		x		x		x		x		x
2			x	x			x	x			x	x			x	x
3					x	x	x	x					x	x	x	x
4									x	x	x	x	x	x	x	x
time [sec]	**1**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**

x – closed (on)

Time setting (DELAY):

switch	combination															
1		x		x		x		x		x		x		x		x
2			x	x			x	x			x	x			x	x
3					x	x	x	x					x	x	x	x
4									x	x	x	x	x	x	x	x
time [sec]	**1**	**2**	**4**	**6**	**8**	**10**	**12**	**14**	**16**	**18**	**20**	**22**	**24**	**26**	**28**	**30**

x – closed (on)

Technical parametres

Input (control) voltage	5÷24V ≈/=
Input impedance	> 2kΩ
Power supply voltage	8÷24V ≈/=
Power supply current	max. 90mA
Contact	48V/1A 24V/2A
Setting closing time	1÷15sec
Setting delay time	1÷30sec
Dimension	65(89) x 46 x 32mm

ALPHATECH TECHNOLOGIES s.r.o.
Jeremenkova 88
140 00 Praha 4
Czech Republic
VAT: CZ27577350

Company is registered in the Commercial Register
administered by the Municipal
Court in Prague, Section C, Record 116886

Banking details:

Komerční banka, account No. 43-7671450207/0100
IBAN: CZ0801000000437671450207
SWIFT: KOMBCZPPXXX