

INTD1004
iBUTTON ACCESS SYSTEM
(1 Output relay)



- Page 2 General description - Applications
- Page 3 Firmware revision - Connection diagram
- Page 4 Technical specification
- Page 5 Device operation description
- Page 6 Programming instructions
- Page 7 Buzzer notification types table
- Page 8 Technical support

For getting the most benefits from this device please
read the user manual carefully.

iBUTTON ACCESS
SYSTEM
(1 Output relay)

INTD1004

www.pelekis.tech

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- **General description:**

The INTD1004 device is a user friendly access system with an iButton type key.

The device can be programmed to give access for up to 502 User keys and up to 10 Master keys. If a pre-programmed User key touch the stainless prob the system will short the dry contact for a trimmer-defined time and will release the Dry contact after this time elapse.

Installer or user of the device can store or delete a user key to/from the system's memory with a simple push button press or with the help of the defined Master keys.

Installer or user of the device can also store or delete up to 10 Master keys to/from the system's memory with the push buttons exist on the board.

The device has also an intuitive buzzer notification system to indicate its status (e.g. User key *store* or *delete* procedure is successful - Notification type 5).

The output relay "ON-Time" (in seconds) is adjustable by an on-board trimmer.

Warning! This device must be installed by qualified personnel only.

- **Applications:**

Used to:

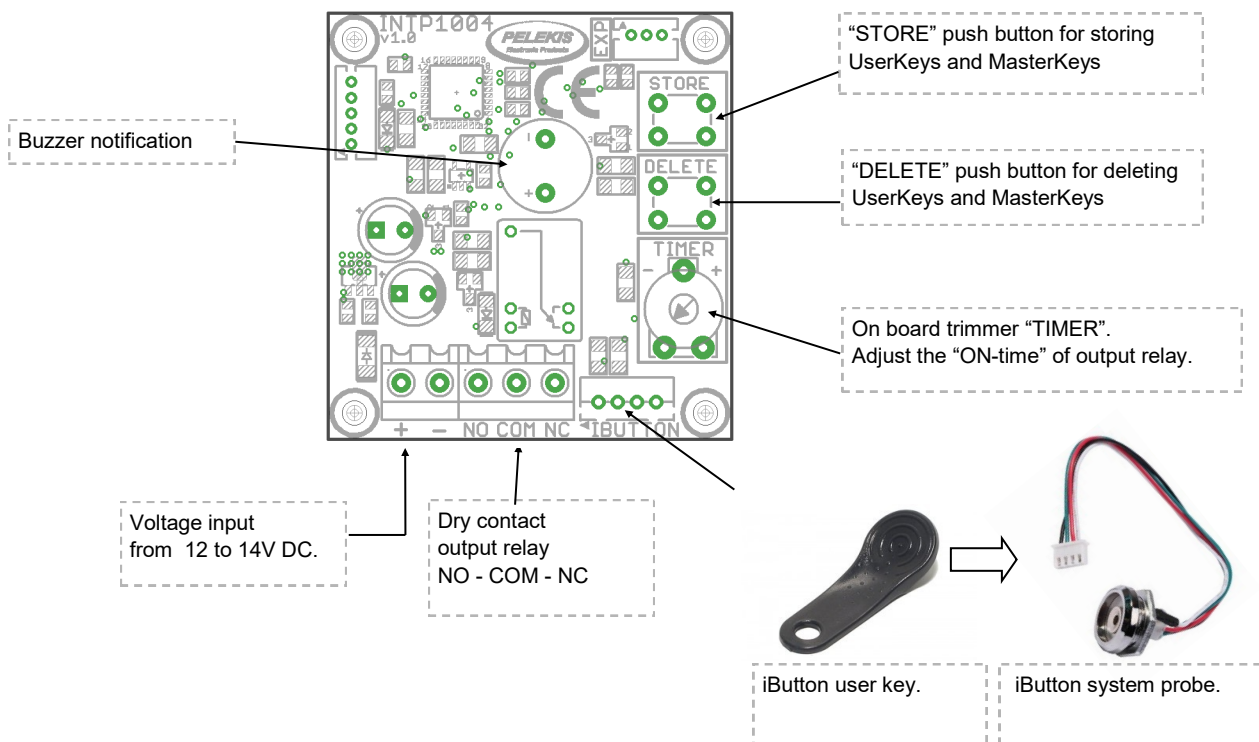
- Elevator.
- Personnel access control.
- VIP access control.
- Residential building access control.
- Electronic lock.
- Usage for Professional/Personal automobile and machinery.

Revision history

V1.1 8/2022 1st device revision.

Connection diagram:

A typical system connection can be seen in the diagram below.





Technical specifications:

Working voltage	From 12 to 24VDC
Consumption	0.5W (average) at 12VDC input.
Key type	iButton standard 64bit ROM key.
User keys support	Up to 502 user keys.
Master keys support	Up to 10 master keys.
Relay "ON time"	Adjustable from 0.5 sec (min.) - 8 sec (max.)
Outputs	1 Dry contact relay 5V (NO/COM/NC) with 1A per contact typical current handling.
Operating temperature	0-60°C
Operating humidity	10-80%
PCB dimensions	56x53x20 mm (W x D x H)
iButton installation hole diameter	18mm
Weight (Total/w probe)	250 grams.



- Device operation description:

Boot function (right after power input).

Right after power up the INTD1004 device, a memory data integrity diagnostic will be performed. If this diagnostic is successful, a buzzer notification type No.1 will be heard.

Normal function.

During normal operation the system will continuously monitor the iButton input socket. If the user key attached to the systems holder authenticates successfully the systems relay will be energized for "ON-time" according to the "TIMER" trimmer. Also a buzzer notification system No.7 will be heard. After "ON-time" passes, the output relay will be de-energized and the system will return to the monitor of iButton input socket.

If the user key authentication fails then the output relay remains un-energized and then is no buzzer notification.

Furthermore the system monitors the iButton input socket for Master keys. If a master key appear on the probe the system will act according the following instructions.



- **Store/Delete Master keys.**

Press “STORE” or “DELETE” push and hold button for about 5 seconds and a double tone sound will be indicate that the system is now ready to store or delete the next iButton Key that will touch the iButton probe and will handling it as Master Key.

It is necessary to keep holding the “STORE” or “DELETE” button while putting the key on the probe. Module will exit from the recording or deleting mode by the time user will release the “STORE” or “DELETE” button.

- **Store User keys with Master key**

If a key have previously saved as Master key in the system’s memory then user of the device can initiate the “*Store User keys*” function just with the help of a Master key.

Simply touch any Master key on the probe for time less than 1second and the system will enter the programming mode. In this period the system will save any iButton key (non-Master key) approach the probe. Module will exit from the program mode if user do not touch any key on the probe for 8 seconds. And the system will inform the user that the programming mode came to its and with 2 long beeps.

- **Store/Delete User keys with buttons**

Press “STORE” or “DELETE” push button for up to 1 second and then release.

You will hear a double beep sound that indicates that the system is ready to store/delete to from the systems memory the next iButton key that will touch the probe.

In this period, you can touch any number of iButton keys that need to be stored or deleted. Module will exit from the program mode if user do not touch any key on the probe for 8 seconds. And the system will inform the user that the programming mode came to its and with 2 long beeps.

- **Lock Device with Master key**

If a key have previously saved as Master key in the system’s memory then user of the device can Lock or Unlock the access system with the help of a Master key.

Simply touch any Master key on the probe for time more than 5 seconds and the system will be LOCKED with the Dry-contact shorted until missing power occurs. During this time the system will reject any User key approaches the probe and the systems dry-contact relay will be always shorted. In order to UNLOCK the device any Master key should touch again the probe for time more than 5 seconds

- Buzzer notification types table :

Buzzer notification type No.	Buzzer duration	Notification description
1	3 short beeps.	System's memory diagnostic passed. (System startup)
2	2 short beeps.	The device entered in programming mode. (Store or delete User keys or Master keys) .
3	1 continuous beep for 0.25 seconds.	The User or Master key has been stored or deleted successfully from system's memory.
4	2 long beeps at 0.25 seconds each.	The User key or Master key already exists in system's memory.
5	2 long beeps.	Program mode Timeout (timeout). (No user iButton key in socket for more than 8 seconds).
6	5 short beeps.	Systems Memory is Full
7	1 continuous beep for 0.5 second.	User authentication succeeded. Output relay is energized for "ON-time" settled by user trimmer.
8	3 long beep at 0.5 seconds each.	System's LOCKED or UNLOCKED Only Master key can change this state.
9	repeatable short beeps.	User attached the key to the system's socket for too long.
10	1 long beep for 3 seconds.	Mass erase all user keys from system's memory.

Table 1



- **Technical support**

For technical support please contact a local office of Pelekis Electronics.

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