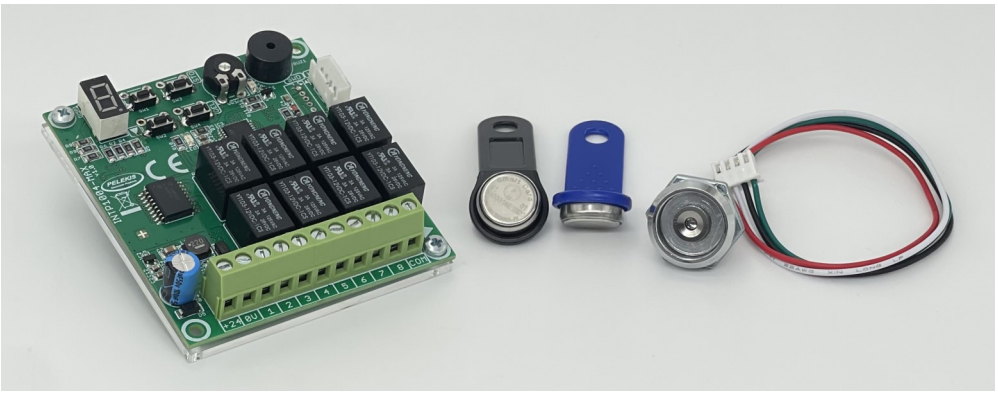
PELEKIS
Electronic Products

User manual

INTD1004_MAX

iBUTTON ACCESS SYSTEM
(up to 8 Output relay)



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

INTD1004_MAX

iBUTTON ACCESS SYSTEM
(up to 8 Output relay)

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 512 user keys to one dry contact output relay. Thus it is a “Multiple to one” type system.

In each time, the user can store or delete a user key to/from the system's memory with a simple push button press.

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.

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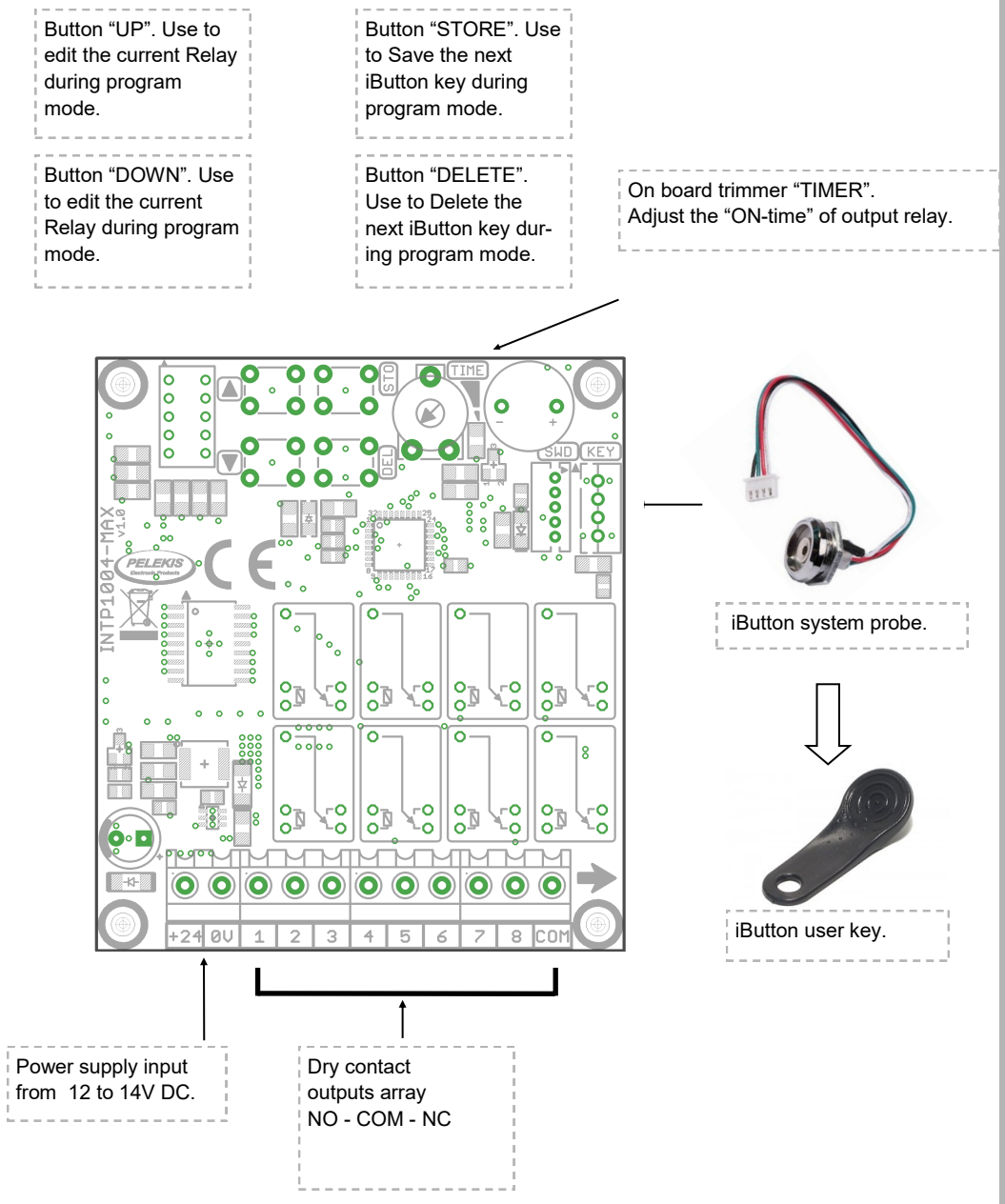
Revision history	
V1.0 5/2020	1st device revision.

Connection diagram:

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



Features:

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 512 user 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.3 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.

Programming function.

During programming mode (function) the user can store or delete the current user key with a simple push button press. Also there is an option for a mass delete of all stored user keys from system's memory.

For more information about the programming functions please refer to pages 6 and 7.

(Note: About the buzzer notification types please refer to table 1 for more information).

- ## Programming mode.

Store a user key using the “STORE” push button.

With the "Up" and "Down" keys we can edit the display on the device screen and set the desired Dry contact relay number which is going to be programed.

The number (1 to 8) shown on the device screen refers to the 8 relays installed on the device and therefore to the 8 NO dry contacts on the board.

The number we have brought up on our screen is the relay we are about to give/restrict access to during the programming process.

After the desired Dry-contact number have been set to the display, press and hold the “STORE” key for at least 1 second in order to start saving iButton keys that will activates the current relay when prompted to the prob. When “STORE” key is released the device exits the Programming mode immediately and switches to its normal mode.

Therefore, if we program a key with the screen showing the number "3", then the specific key will have access to relay "3".

If the iButton key we are going to save already exists in the systems memory then a beep will be heard (type 6 notice). If there is no memory available to store the current iButton key (memory is full with 512 users), then a beep will be heard (type 7 notice). To save an iButton key again, we do the whole procces from the beginning (We repeat the saving process).

☞ *Note 1: A buzzer notification type No.8 will be heard, if the user keeps the key attached on the system’s socket for too long (Persistent key). After removing the key the system will then return to its normal operation.*

☞ *Note 2: A buzzer notification type No.4 will be heard, if the user do not attach any user key on the systems socket during programming mode for more than 30 seconds (Programming timeout).*
The system will then return to its normal operation.

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- ## Programming mode.

Delete a user key using the “DELETE” push button.

With the "Up" and "Down" keys we can edit the display on the device screen and set the desired Dry contact relay number which is going to be programed.

The number (1 to 8) shown on the device screen refers to the 8 relays installed on the device and therefore to the 8 NO dry contacts on the board.

The number we have brought up on our screen is the relay we are about to give/restrict access to during the programming process.

After the desired Dry-contact number have been set to the display, press and hold the “DELETE” key for at least 1 second in order to start deleting iButton keys that will be no more able to activates the current relay when prompted to the prob. When “DELETE” key is released the device exits the Programming mode immediately and switches to its normal mode.

Therefore, if we program a key with the screen showing the number "3", then the specific key will be deleted from system memory and will not have access to relay "3" anymore.

For **mass delete of all user keys** stored in system’s memory, first we must remove power supply from system’s input, then **hold both** “STORE” + “DELETE” push buttons and then restore system’s power supply again. With both the push buttons keep pressed we wait until a buzzer notification type No.9 is heard. After that we can now release both the push buttons ,means that the mass delete is done successfully.

☞ *Note 1: A buzzer notification type No.8 will be heard, if the user keeps the key attached on the system’s socket for too long (Persistent key). After removing the key the system will then return to its normal operation.*

☞ *Note 2: A buzzer notification type No.4 will be heard, if the user do not attach any user key on the systems socket during programming mode for more than 30 seconds (Programming timeout).*
The system will then return to its normal operation.

- Buzzer notification types table :

Buzzer notification type No.	Buzzer duration	Notification description
1	3 short beeps.	System's memory diagnostic passed.
2	1 continuous beep for 0.5 second.	User authentication succeeded. Output relay is energized for "ON-time" settled by user trimmer.
3	2 short beeps.	The device entered in programming mode. (Store or delete user key) .
4	1 short beep and 1 long beep.	No action from user during system programming after a period of time (**timeout**). (No user iButton key in socket for more than 30 seconds).
5	1 continuous beep for 0.25 seconds.	The user key has been stored or deleted successfully from system's memory.
6	2 long beeps at 0.5 seconds each.	The user key already exists in system's memory and will not be stored.
7	3 long beep at 0.5 seconds each.	System's memory is full. The user key will not be stored.
8	2 **repeatable** short beeps.	User attached the key to the system's socket for too long.
9	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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