

COMBO - MAIN CONTROLER

LOCAL INDICATIONS ON EXTERNAL READERS (VR-EXT)

- Blue color night lighting at all sockets
- Activated door-open display (*green LED*)
- Occupied room display (*green LED*)
- 'Do Not Disturb' display (*red LED*)
- 'Make my room' display
- Balcony door is left open in a free room (Open Door *LED is flashing*)
- Colors: Ivory White & Black Mat



- A protective case (IP-55) can be used when needed in cases of high humidity.



INTERNAL READERS (VR-INT)



- Blue color night lighting at all sockets
- 'Do Not Disturb' button with display (*red LED*)
- 'Make my room' button with display (*yellow LED*)
- Independent Room Temperature Sensor (internally)
- Colors: Ivory White & Black Mat

Alternative Buttons

- Optional extra buttons for DND and MAKE UP ROOM available

EXTERNAL DISPLAY RF-ID READER



Alternative External RFID card reader. Brief Description of the Device



Icons displayed



DO NOT DISTURBE



ROOM EMPTY



MAKE UP ROOM



DOOR OPEN



BALCONY DOOR OPEN

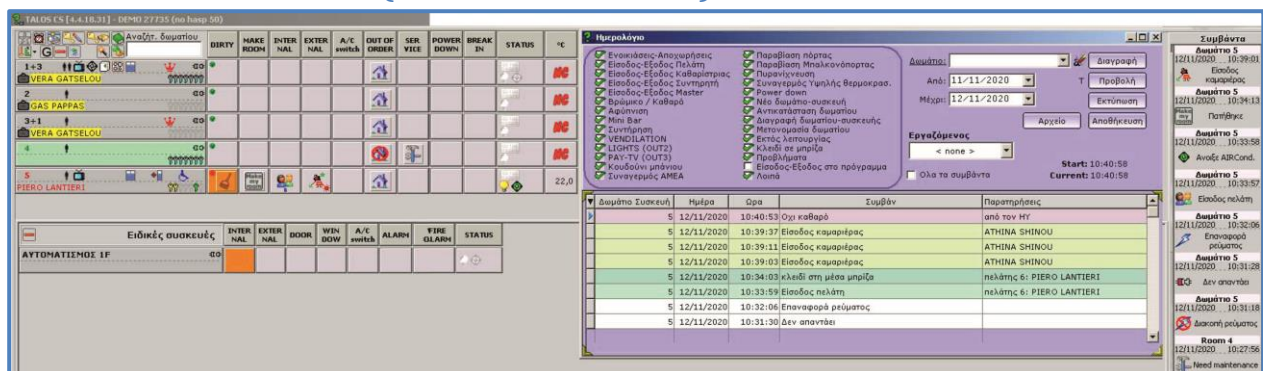
- Backlight 4.3" display screen with high brightness and large viewing angle.
 - Programmable display of room number (single-digit, 2-digit, 3-digit, 4-digit).
 - Symbol and letter display option (*, #, A, B, C, D).
 - Color selection option for characters and background color.
 - Selection of small or large DOOR OPEN symbol.
 - Display option for hotel logo (optional).
 - Custom-made screen print applied on screen (optional).
 - Color selection option for fiberglass screen (transparent or translucent).
 - Card reading distance up to 5 cm (max).
 - Color selection option for plastic part (white or dark grey).
 - Wall-mounted; designed to be opened only with special opening tool provided.
 - Connected to detachable 4-pole terminal block (GND, +12V, LED DATA, RFID OUT).
 - Mini USB for retrofitting and adding color, font and other data through a txt file.
 - 2-button option (Set & Include) to select, save and initialize system variables.
 - IP-55 dehumidifier (optional).
 - Dimensions 12.5 – 12.8 – 2.25 cm
-
- Colors: Plastic case, White or Black-Mat. Glass color: transparent or tinted.

System characteristics

- **Silent door opening.**
By touching the card against the room's external socket, the door's electric mechanism is activated for 4 seconds; the Door opener display is switched on, while the room's lights are also switched on for 1 minute. The system controller supplies the door's electric mechanism with direct voltage to prevent any noise from being produced.
- **Consumption control:** If you insert your card in the illuminated slot of the internal socket, lights and air conditioning will remain on for as long as the system controller can read the card. After removing the card from the socket, lights and air conditioning are switched off after one minute. The system is equipped with a 30A load relay for several energy consuming devices and a 16A load relay for the air-conditioning system.
- **Independent air conditioning control:** In an occupied room the system allows the air-conditioning device to operate only if the balcony door is closed. It provides for a 3-minute operation while the balcony door remains open, only to allow guests to ventilate the room or step out onto the balcony. If the balcony door remains open for more than 3 minutes, the air-conditioning shall be deactivated until the door closes again. The optional use of air conditioning is indicated on the card, thus allowing guests to buy air conditioning as an extra service, when the mention 'NO AIR-CONDITION' is displayed on their cards. The option of using an additional air-conditioning system in two-space family rooms is also provided.
- **Multiple users per room:** The system recognizes and grants access to six different card holders per room, as well as to different groups or categories of master key cards with predefined access rights (*e.g. cleaners, maintenance staff, master cleaner etc.*). Therefore, several key cards can be provided to suite guests or families accommodated in our facility.
- **'Do not disturb':** The guest can activate the 'do not disturb' function by pressing the respective button on the room's internal socket. This prevents the room maid to enter the room. However, for safety reasons this function can be deactivated by using a master key card from the outside. A message of the request is delivered to the system main computer.
- **'Make My Room':** The guest can activate the 'make up room' function by pressing the respective button on the room's internal socket. The corresponding LED lamp of the external reader is activated and a message of the request is delivered to the system main computer.
- **Room condition display:** All functions, as well as the room's condition, are displayed by LED lighting on the external (and internal) room socket.
 - Door activated:** Door opener/Alarm green LED on for 10 seconds;
 - Room occupied:** Room occupied green LED;
 - Do not disturb:** Do not disturb red LED;
 - Make Up Room:** Make up room yellow LED;
 - Open balcony door** in a free room: Door opener/Alarm LED flashing.

- **Night lighting:** All sockets (*internal or external*) are illuminated on the upper part by intense but discrete blue night lighting to facilitate the movement of guests when lights are off in their room or in the floor corridors.
- **Emergency by-pass mode:** In the event of a failure, COMBO modules can work on a by-pass mode controlled by a lock installed on the device, which activates lighting and air conditioning.
- **Power safe mode:** COMBO modules can automatically switch into a power safe mode using an external 0,8HA battery (optional) in the event of a power failure, equipped with a charging and discharging control.
- **Access to central entrance and other entrances:** Additional COMBO modules, programmed for central entrance, parking entrance and other accesses can be used across different hotel areas. Guest and staff cards can be programmed to grant or not grant access to these areas.
- **Categories of guests/ prepaid services:** Cards can be programmed to match the needs of every hotel, including the presale of services and to grant or not grant customer access to them, such as the right to use air conditioning, access to parking spaces or to a fitness center etc. when these services are charged separately. The programming of such cards is ensured through the use of Nemesis USB devices.

FUNCTIONALITIES VIA THE NETWORK AND THE CENTRAL SOFTWARE OF TALOS-NET SERVER (Multiuser Software)



- **Alarm system**

ALARMS GENERATED FOR:

- fire detection;
 - bathroom emergency button;
 - door forced open;
 - balcony door forced open;
 - high temperature.
- **Access to rooms and shared areas**
 - Access to rooms in accordance with booking time limits, as well as to another five groups of shared areas, to parking area and to central entrance.
 - Room door opening also from the reception.

- **Room services**

- Granting or not granting access to room services (*air conditioning; pay TV; spa treatments etc.*).
- Checking the mini bar.

- **Automations**

- Assigning Talos-Net COMBO devices as automation devices (*for floors, buildings etc.*).
- Starting and stopping the operation of automations in rooms and corridors based on a day time schedule, with guest entering and exiting the room, programming of ventilation automation etc.
- Automatic control of electric valves for hot and cold water in rooms, night lighting etc.
- Virtual connection of guests exiting their rooms or using the elevator with corridor automations etc.
- Virtual connection of empty floors and/or hotel wings with automations for the management of circulators/electric valves.

- **Cards programming and registration**

- Programming of cards for guests, cleaners, holders of master keys by the reception via Nemesis-USB and update of room data via the network.
- Local programming of cards (*in case of emergency*).
- Possibility to generate group cards in advance, before the date of arrival.

- **Data registration**

- Room condition data (*free – occupied, clean – to be cleaned – being cleaned – in need of maintenance – out of order – maintenance notes etc.*).
- Room booking data.
- Printouts of room condition data, lists of rooms to be cleaned, lists of rooms requiring maintenance work and maintenance details, lists of staff, lists of IP & Mac addresses etc.
- Possibility to generate lists of arrivals or to automatically download them from the front office via the FIAS interface.
- Room access history by guests, room maids etc.

- **Easy room management**

- Change of room by hitting only one key on your computer.
- Connection of two rooms with each other (*suite*).
- Rooms with common external door.
- Virtual rooms to generate cards for use only by the hotel's POS systems.

- Shared rooms & staff rooms.

- **Indications and warnings**

- Temperature indications per room, managing minimum and maximum temperature levels, temperature control in empty rooms.

- Warnings of power failure and recovery.

- Reminder of wake-up call requests, bookings expiring before check-out time, message waiting text.

- Identifying room maids and maintenance staff (*room maids and maintenance staff identity*) – Event and maintenance work logging etc.

- **Search function**

- Mechanism for searching customer data and an emergency display of selected events (*e.g. doors forced open, fire, power failure etc.*).

- Mechanism for searching employs room accesses.

- Complete events file – search mechanism.

- **Operating characteristics of the system**

- PMS; connection with front-office programs via the FIAS interface.

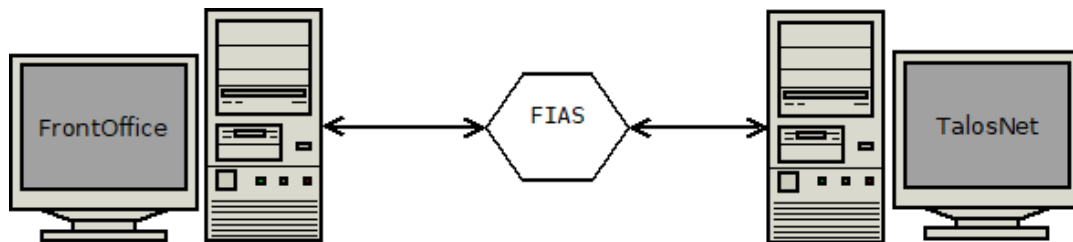
- Possibility to upgrade any Talos-Net COMBO modules while the system is in operation (*with all new functionalities being added without any hardware modifications*).

- Free upgrade of central software with new versions (*post-Version 4*). Automatic client upgrade following connection to the server.

- Free installation of Talos-Net client stations on computers across several hotel sections and connection of multiple Nemesis USB card programmers and readers.



SYNCHRONIZATION WITH FRONT OFFICE (FIAS)



ADVANTAGES

- 1) Automatic assignment of rooms to guests with check-in through Fidelio/Protel
- 2) Key generation via command from Fidelio/Protel without using Talosnet (*assisted process*)
- 3) Controlled key activation (*on standby*) by cleaners and computer, when room is checked.
- 4) Future support for the use of POS devices (*nominal keys*)
- 5) Information from Fidelio/Protel on room condition (*free, occupied, clean, not clean etc.*)
- 6) Move to other room
- 7) Key preparation/generation before arrival date
- 8) Connecting predefined rooms (*by internal door*) into a suite or for independent tenancy

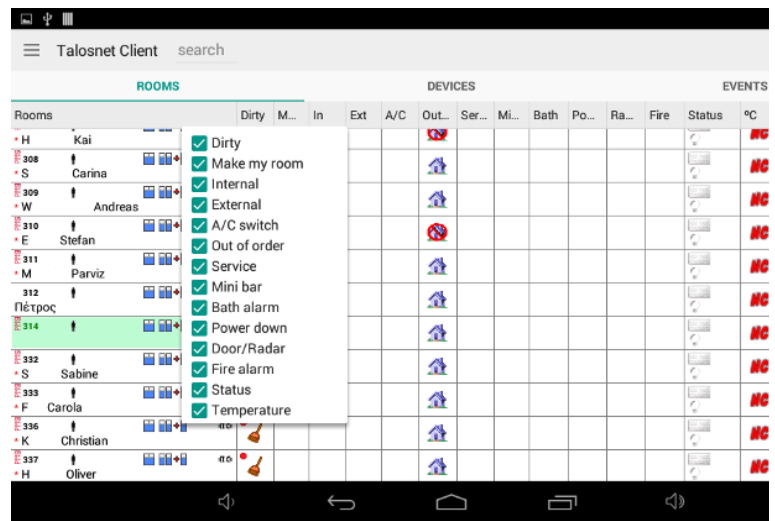
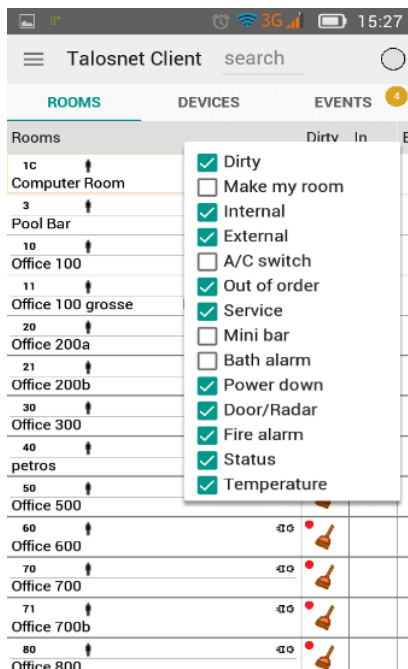
In conclusion: using one single program

YouTube videos for TALOS_NET

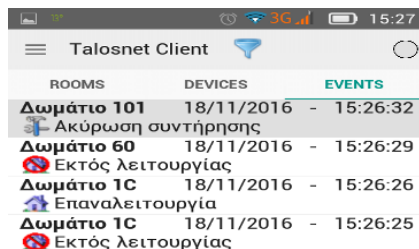
BAR PAYMENT WITH ROOM CARD:

<https://youtu.be/u-OhJnp6Go0>

Client operating system for Android devices (Tablet & Android phones).



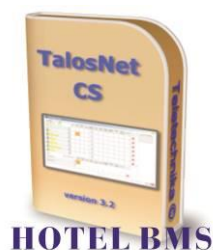
Several selected events displayed to Android phones or tablets, through TALOS-CLIENT Apk.



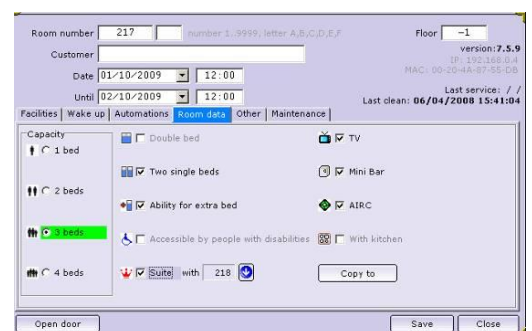
Email server for alarm messages (example bellow)

14/12/2016 18:40:35	room: 80	Fire detection ALARM
14/12/2016 18:40:35	room: 80	Power outage
14/12/2016 18:40:35	room: 80	Bath bell ALARM
14/12/2016 18:40:44	room: 80	Power recovery

VARIOUS MONITORS OF TALOS-NET PROGRAM



Key read, pop up menu in USB Nemesis



Setting room data & facilities

General Appearance Other Events Window Room upgrade Customers Keys PMS interface

Hotel code: 34 56 78
Master code: 9A BC DE FO
12 35 56 FF

Update devices - Cleaner keys
Update devices - Maintainer keys
Update devices - Master key
no update because no devices found
Update Access Devices and Automations

Which devices?
☒ 001
☒ 004
☒ 079
☒ 101
☒ 207
☐ 203
☐ 204
☐ 205
☐ 206
☐ 207
☐ 208
☐ 209
☐ To all ☐ Invert selected

Level 1 Password Level 2 password Level 3 password Save

Room notification about staff keys

General Appearance Other Events Window Room upgrade Customers Keys PMS interface

Caption of OUT1 field: Aircondition ☐ Save Log
Caption of OUT2 field: Badlueftung ☒ Save Log
Caption of OUT3 field: Badlueftung2 ☒ Save Log
Become OFF when vacant

Ovoqada ACCESS1: PLAY ROOM
Ovoqada ACCESS2: KINDER GARDEN
Ovoqada ACCESS3: SPA
Ovoqada ACCESS4: ACCESS4
Ovoqada ACCESS5: SHOP

Delayed report of customer outgoing (from internal key in seconds)
 0 2 4 6 8 10 12 14 16 18 20

Thermostat resides in BT-internal
Thermostat will trigger when exceeds limit more than 60 seconds

WEB Server Active
☒ NO ☐ YES
 TCP port for Web Server: 80
 Auto refresh web pages: ☒ NO ☐ YES
 Refresh room table every x seconds: 5
 Refresh events table every x seconds: 5
 Rooms to check every second: 1: all, 2: half, 3: one third, 4: quarter
 1 2 3 4

Multiser system: ☐ NO ☒ YES
Auto logout user on server: ☐ NO ☒ YES after 15 seconds
Save Close

Name-changing of room & commonly used Premise, automations

TCP/IP SETUP

Devices found

Rooms or Devices	MAC	Last IP	Real or new IP	Ver	status	information
** NEW **	00-20-4A-AD-85-0F	192.168.0.250	192.168.0.250	6.50	Reset	gave settings
217	00-20-4A-87-55-DB	192.168.0.4	192.168.0.4	1.80	Reset	gave settings

Name: ** NEW ** MAC address: 00-20-4A-AD-85-0F
 LAST IP: 192.168.0.250
 REAL IP: 192.168.0.250 (fixed IP - by user)
 HOST IP: 192.168.0.1
 PC TCP PORT: 1200
 SERIAL PORT: 38400,8,none,1 Speed: Auto
 NEW IP: 192 168 0 250 OK Cancel

Effective only when device belongs on the same subnet with PC
 (for example: Device IP is 192.168.0.5 and PC IP is 192.168.0.1)

Set device(s) Lock device(s) Reset device(s) Unlock device(s)
 Found: 2
 Asked settings: 10
 Came settings: 10
 Send settings: 0
 Written settings: 0

Selected Devices Type
☐ All types except NEMESIS
☒ NEMESIS
 Addressing
☐ DHCP server exists (Router)
☒ Fixed IP addresses
 Select all Inverse selection Clear list Search for devices Search for all Close

Setting IP address of a room device

List of new rooms/devices on lan

MAC address	IP address	Room Name
00-20-4A-AD-85-0F	192.168.0.250	1

DEVICE KINDS

- NEMESIS Reception
- Automation
- Parking
- Hotel Main Door
- ACCESS1
- ACCESS2
- ACCESS3
- ACCESS4
- SHOP

Select Cancel

Found: 2

Room Name or device
 Refresh List
 Delete selected
 Rooms
 Save selected
 Save All
 Replace selected
 Special devices
 Save selected as NEMESIS etc
 Replace selected
 Close

Define new devices

Print outs

☐ Not clean rooms
☒ rooms need service
☐ Staff
☐ Not free rooms
☐ Free rooms
☐ Out of Order room
☐ Wake up
☐ Technical data

Rooms	Date	Time	Description
221	03/09/2009	11:54	WATTER LEACK
223	01/10/2009	11:55	WATTER LEACK
226	26/09/2009	11:56	BATHROOM LAMP
253	30/09/2009	11:57	A/C NOT FUNCTIONING
258	31/10/2009	11:57	DOOR IS TO TIGHT
403	01/10/2009	11:57	MAIN LAMP

Print Close

Maintenance request details

Print outs

☐ Not clean rooms
☐ rooms need service
☐ Staff
☐ Not free rooms
☐ Free rooms
☐ Out of Order room
☐ Wake up
☐ Technical data

Daily	Room	Customer	Date	Time	Message
YES	219		Thu 01/10/2009	07:40	
YES	220		Thu 01/10/2009	08:30	
YES	217	PAPADOPOULOS JOHN	Thu 01/10/2009	11:36	ΚΑΛΗΜΕΡΑ ΣΑΙ
	218	GERHART ROOLMAN	Fri 02/10/2009	11:39	GUTTEN MORGEN

Print Close

Wakeup call list

TALOS CS [3.0.9] - DEMO

Find Customer

DIRTY INTER NAL EXTER NAL A/C switch OUT OF ORDER SER VICE MINI BAR BATH ALARM POWER DOWN BRE IN

Room number 100 number 1..9999, letter A,B,C,D,E,F Floor -1

Customer PAPPAS KOSTAS version:7.7.7

Date 03/07/2009 12:00 IP: 0.0.0.0 MAC: 00-20-4A-B4-15-2B

Until 30/09/2009 12:00 Last service: 17/09/2009 08:24:23 Last clean: 17/09/2009 08:21:11

Facilities Wake up Automations Room data Other Maintenance

CLIMATIC VENTILATION NIGHT LIGHTS Copy automations

Switch OFF

Time switch Open at 17:30 Close after 06:30 active [when rented]

Trigger of outgoing customer Open for 30 seconds active [when rented and cust out] not if open Door AC switch

Thermostat Heating Cooling limit 18,0 °C

Activation [by customer absence]

Open by key Internal External

Open by [general in] Close after x seconds, x=

Open door Save Close

Setting room automations

Automation number 1 F number 1..9999, letter A,B,C,D,E,F version:7.7.7

Display Label FIRST FLOOR - WING A IP: 0.0.0.0 MAC: 00-20-4A-AF-33-67

CORRIDOR LIGHT WATTER VALVES FIRE ALARM - ZONE 1 Other

Switch OFF

Time switch Open at 00:00 Close after 00:00

Trigger of outgoing customer (*)

Open by magnetic trap (mini bar) Open for X sec, X= 35 [time from termination of excitement]

Thermostat Heating Cooling limit 25,0 °C

Open when any room is rented, close when no room is rented (*)

Open by key Internal External (*)

Open by general in fire in break in bath in Close after x seconds, x= 0

Open by * general in fire in balkoni-door break in bath in high temp

(*) Associated rooms

100	107	136
101	130	137
102	131	200
103	132	201
104	133	202
105	134	203
106	135	204

Open door Save Close

Floor or building automation – interconnected rooms

Print outs

Not clean rooms
rooms need service
Staff
Not free rooms
Free rooms
Out of Order room
Wake up
Technical data

Print

Close

Code	Surname Name	NET key	from	to	valid till	Lives In
001	KOLPRECAJ ALFREDO					
002	KOTSI VARVARA					
003	STRATI EVANGELIA					
004	KOTSIS KIRIAKOS					
005	MALER 2					
006	MALER 3					
007	RECEPTION DRAGAN					
008	ANTONOURIS DIMITRIS					
009	VAPORIS NKOS					
010	KOTSIS MONTIS					
011	KOKKALIS NKOS					
012	SAKELIS STAMATIS					
013	SKEVOFILAKA POPI					
015	PANOULAS GREGOR		00:00	23:59	14/04/2009	
017	MOUZAKIS 1					
018	MOUZAKIS 2					
020	MOUZAKIS ELECTRICIAN		00:00	23:59	27/03/2009	
021	PAPPAS KOSTAS		00:00	23:59	30/09/2009	

Staff list definition and validity

Arriving Groups

Groups: Print New Edit Delete Move to room Get PMS Group 23/04/2008

Customers: New Edit Delete Move to room

Group	Name	Persons	Room	Key created
FDF	Sat 05/04/2008 00:00 - Thu 24/04/2008 12:00			#3
	PIERINO LANTIERI	3	217	
	PAPPAS KOSTAS	1	219	
	BANDIS CHRISTOS	2	218	

Group FDF

Cust Name

Persons 1

Room

Date In 05/04/2008

Date Out 24/04/2008

New customer [F9] Save [Esc] Close

PMS connection with Front office to receive arrivals list

General Appearance Other Events Window Room upgrade Customers Keys PMS interface

PMS synchronized

FIAS interface (via TCP) Hotel ID in protel program: 8

PMS Server IP 127.0.0.1 Port 5005 Connect now

Sync rooms status Set EMPTY the rooms not updated at the end of synchronization

** CURRENT DATA (AND KEYS) WILL BE REPLACED BY SYNCHRONIZATION **

PMS current Date: 09/10/2010

Use FIAS interface to create customer keys

Use FIAS interface to update PMS room status (clean/dirty)

Use FIAS interface to update PMS room status (Do Not Disturb)

Lock fields which are updated automatically

Setup Nemesis Allow to clone keys Allow key erasing (in rooms form)

Multisuser system NO YES Auto logout user on server NO YES after 15 Save Close

Connection – synchronization with front office

username kostas Is Administrator? ERASED

takis

vis

username jiohan

password vis

administrator YES

erased YES

Select the events to show in the Events Window for this user

- Customer In
- Customer Out
- Cleaner In
- Cleaner Out
- Maintainer In
- Maintainer Out
- Master In
- Master Out
- fire ALARM
- Balcony infraction
- Radar ALARM or Room door opened
- Bath bell ALARM
- Waken up
- MiniBar used
- MiniBar checked
- Out of order
- became functional
- Power off
- Power on
- Need maintenance
- Not Clean
- Clean
- Local programming
- Wheelchair ALARM
- Opened AIRCond.
- Closed AIRCond.
- High temperature
- Employee In/Out

Edit [F9] Save [Esc] Close

Make new client users for other reception's & departments

NET KEY Access

from 00:00 to 23:59 valid till 30/04/2008

217	228	258	409	430	441	477
218	247	340	410	431	442	478
219	249	400	411	432	444	504
220	250	401	412	433	445	505
221	251	402	413	434	446	506
222	252	403	414	435	447	507
223	253	404	415	436	448	508
224	254	405	416	437	449	509
225	255	406	417	438	450	510
226	256	407	418	439	451	511
227	257	408	419	440	476	512

All Inverse selection Save Close

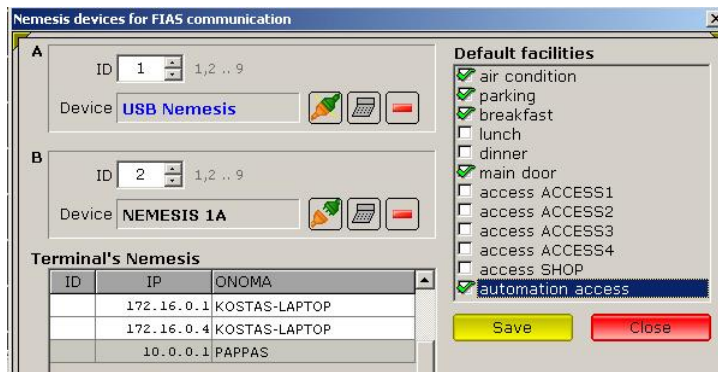
Empty Key Write or clear key pending

Customer key 1 or 2 Emergency key

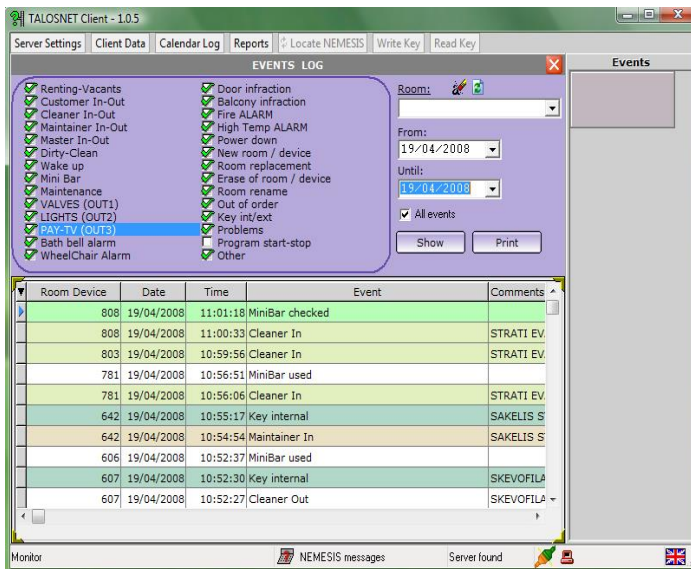
Customer key 1 or 2 - local Emergency KEY - local

Accessibility on staff member card (time & date table)

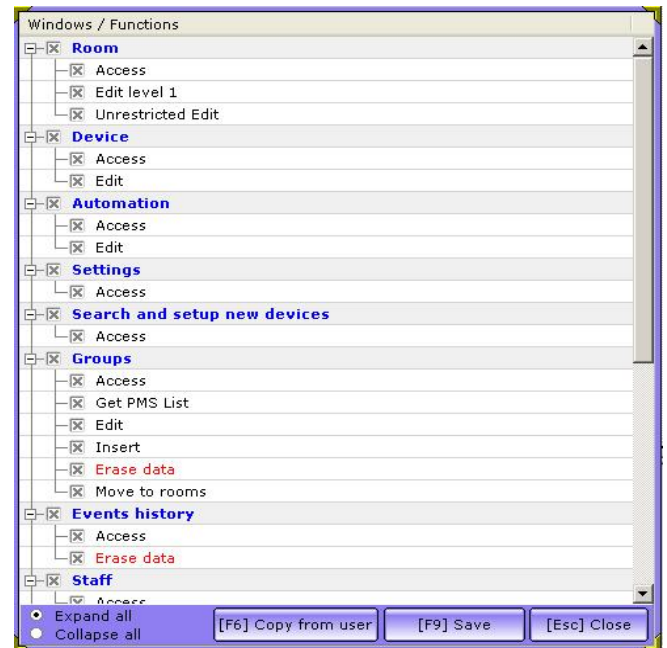
Key color code, description



Setup more Nemesis devices (usb or TCP/IP card programmers)

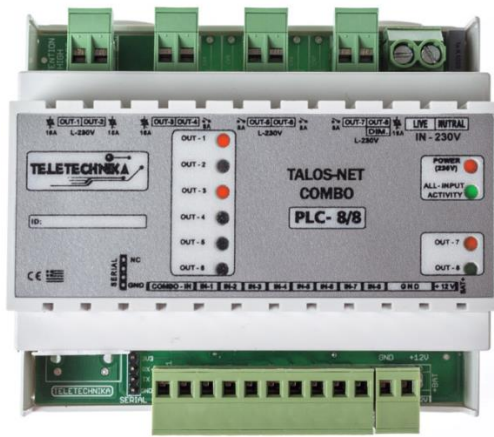


TALOS – Client user, main screen



Setup, Client- user rights

TALOS-NET PLC module (Optional Expansion)

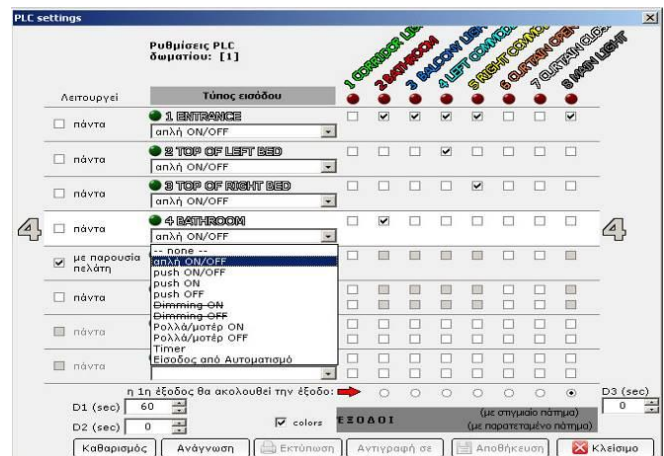
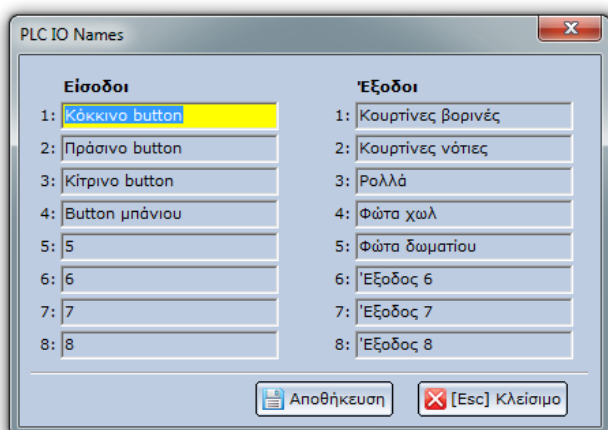


Hardware description

- **10-Watt** switching power supply.
- **Din rail box** (switch board) with 6 positions
- **Inputs:** 8 inputs for low voltage switch buttons.
- **Outputs:** 7 phase outputs via a 10A contact relay and only one output via TRIAC 20A, for light dimming.
- **Visual displays:** 8 LEDs for the outputs, 1 LED for all inputs (*activated simultaneously with the active input*) and one LED to indicate power supply.
- **Communication:** via the Ethernet network connected to the COMBO device.

Functions

- Every input can perform two different functions, depending on how the push button is activated (*by pressing and holding or instantly pressing*).
- Every input can activate one or more (or even all) outputs for ON-OFF functions (*except for the dimming output*).
- If selected, the dimming output occupies exclusively two inputs (gradual up-and-down function when activated by pressing and holding, and ON-OFF function when pressed instantly).
- Should an output be selected to handle a curtain or window shade, this shall occupy exclusively two inputs (*gradual opening or closing when activated by pressing and holding, and ON-OFF function when pressed instantly*).



PLC input when activated by automation

Every input can be selected to follow specific automation instructions by an interconnected COMBO device.

Therefore, all available COMBO room automation scenarios can be implemented through PLC inputs. The operations that can now be performed, depending on the hour of day, shall concern any of the following: an occupied or free room, with the guest(s) being inside or outside of it, the opening of a door followed by a specific period of time, the guest(s) leaving the room followed by a specific period of time, the room temperature depending on whether a room is occupied or not and whether the guests are present or absent etc.

- Free selection of inputs and outputs to be matched with automations through the TALOS program.
- Ease of switching between scenarios and operations via the central computer.
- Renaming of inputs and outputs via the central computer to easily guide operators and maintenance staff.
- Visual display of the state of outputs on the central computer.

For more information go to:

<http://talosnet.blogspot.com/>

<https://wiki.teletechnika.gr/index.php?title=Category:TalosNet>

Contact Details

25 G. Seferis Str., Thessaloniki
Greece, Postal Code 54250

Tel.: + 30 2310330177

Fax: +30 2310330187

teletechnika.electronics@gmail.com

Teletechnika

Electronics