
ZADE/Room Management System

Energy Saving

- When the room is vacant, TV, hair-dryer, iron, sockets, kettle, lights and AC will be 100% turned OFF.
- When doors/windows are opened, AC will be 100% turned OFF after a preset time delay.
- Additionally, save more by removing all electrical contactors from the room electricity supply panel and avoid the annoying 50Hz contactor coil noise!
- Save even more, by secretly locking minimum & maximum temperature limits, by shifting **Cool Offset** & **Heat Offset**.
Example: set "18°C preset" to recall 20°C (each degree saved accounts to approximately 6% savings)
- Power meter in each room controller to record energy consumption cost via RMS (Room Management System), for each room and for all hotel rooms, to 100% warranty that consumption is under control.

A Real Green Product

- Our target is not only to **maximize energy savings**, but also, to **pay the minimum in system consumption** in order to achieve this and at **no expense to customer comfort**.
- **By installing ZADE/Room Management System, the consumption is as follows:**

Example:

For one Room: 10mA room controller + 5mA thermostat + (5mA sensors x2) x 24Volts = 0,5Watt

For **300** rooms: 300 x 0,5W/controller/room = 150W → 0,150KW x 24hours x €0,21/KWh = €0,756/day

→ **Total: €276/year.**

With any other system:

For one Room: 10W/Room, as every Room makes use of its own Power Supply

For **300** rooms: 300 x 10W = 3000W → 3KW x 24h x €0,21= €15,12/daily

→ **Total: €5,519/year.**

That's an astonishing 95% savings originating only from the system consumption!

- Our system works on a Wired Network and is powered over Bus (PoB), thus allowing us to make use of one Central Intelligent & Industrial degree SMPS (redundant included) to limit 240VAC to 24VDC conversion losses to **one only**, and not to **300** as with the case of systems using **Distributed Power Supplies**.
- During operation of the system, no extra energy loss is added, as the system makes use of it's own latching relays. Latching relays have zero consumption, while all other type of relays/contactors will add extra cost to the energy consumed.
- Please note that wireless systems also have an additional cost , as they require battery replacements every 2 years.
For 2 x sensors & 1 x contacts, consider an extra cost of 3 x 300 rooms x €4 batteries → **Total: €3,600/year.**
Wireless systems also consume more as they need to power their transmitters/receivers.
Humans are also affected when exposed to RF waves for long periods of time.

An Absolute Controller

- One Din-Module to offer Complete Solution to experience today's LifeStyle and Save Energy.
- Advance intelligent algorithm warranties that Electricity,TV, Lights, AC will Never go OFF, **even if occupants remain motionless for ever.**
All other systems will switch electricity **OFF**, if no motion is detected within the preset OFF-Delay time.
In order to minimize Guest complaints, a long OFF-Delays of 30 minutes is used. **This works against the Energy Saving!**
- **Adoptive intelligence** will save Current Thermostat Presets when Doors/Windows open, and return them back after Doors/Windows close.
- **Thermostat keys** will lock when Doors/Windows open, to warn Guest that AC can not operate.
All other systems will allow Guest to change Thermostat settings when doors are opened, which will may lead to an increase of consumption after AC turns on.
- **100% Tamper proof**, as key fob & key card are no longer required. System is also password protected.

Guest Comfort

- **No compromise** between Energy Save and Guest Comfort.
ZADE/RMS System will transparently achieve its goal, but at the same time will not allow Guest to feel uncomfortable.
- When Room is reserved you can use the RMS:
To set AC either go OFF, or go to the predefined preset to keep Room comfort when unoccupied.
To set AC to be auto-switched to TURBO immediately after Room is occupied and auto switched to normal after the end of the predefined period to effectively prepare Guest comfort. Thanks to Auto Season Mode calculator.
Guest can touch thermostat to override turbo.
- "Preset Lifestyles" also enable Guest to set comfort in no time with just a touch.
- Not Only Fan Hi-Mid-Low, but Fan Raise-Lower as well, enables the Guest to instantly set or fine adjust the fan to the exact desired speed.

Reliability

- ZADE/RMS system makes use of one Central Intelligent & Industrial degree SMPS (redundant included).
All other systems make use of 300No. power supplies ,which will need frequent maintenance and access in each room.
Power Supplies are the most sensitive electronic devices and fail easily, as they dissipate continuous heat .
- ZADE/RMS system controllers make use of Latching relays/Triacs/Mosfets/Overload& Over-temperatureprotection.
All other systems make use of standard relays/contactors.
- ZADE/RMS system utilizes TCP/IP platform & unencrypted Z-Bus over Industry Standard RS485 protocol, to communicate with each other and third party devices.
- Fully distributed brain architecture in every system device, ensures a robust system with the utmost reliability.
Network distribution uses Industry Standard CAT6 cabling.
Other systems make use of Wireless technology ,which is subject to wave propagation changes.
- **Glass Touch Thermostat-Panels** with no moving parts and no touch LCD offer a life warranty trouble free operation.

System Components

Glass Touch ThermostatPanel-LightsPanel

Simplified Design Style:

- Ultra Low Profile-8mm thick only. Can easily fit into any interior style and easy to install.
- Any Glass Color, Any Backlight Color, Any Text, Any Design to match any Décor.
- Buttons color change to red when in HEAT Mode, cyan when in COOL Mode & green when in FAN Mode.
- 7# Preset Lifestyles, 3# Hi-Mid-Low, 2# Raise-Lower, 4# Mode.
- Hotel/Company logo can be printed on Touch Panel Glass.

Capacitive Glass Touch:

- No push buttons, no moving parts, no matter if touched with wet hands.
Technology which warranties the touch functionality. Trouble free operation to last a lifetime.

Audible Feedback:

- Button touches response to different preset Audio Tones - 1KHz for TempPresets, 500Hz for Fan, 200Hz for Mode.

Built-in (6 Sensors):

- IR receiver as standard.
- Digital Ambient Light Sensor to auto dim brightness of backlight when dark (1lux -65000lux).
- Digital Temperature Sensor to be used for HVAC control (0°C-99°C +/-0.2°C).
- Digital PIR sensor to detect motion (1-10 sensitivity steps).
- Two digital inputs to connect to push buttons/others.
- Low Voltage Bus Communicating Touch Thermostat. No relays inside thermostat - therefore 240V eliminated.

ESC All InOne Controller

- All Controls in One Din-Module. All types of HVACs: FCU-2pipes, FCU-4pipes, PWM, VRV-Split
FanSpeed can be adjusted & set individually for each Lo/Mid/Hi Button. Say set FanLo=35%.
Lights, RGBs, Blinds, Curtains, WaterHeat, Sockets . Add "All Hotel Veranda Lights".

Sensors & Contacts

- Dome type recessed wired motion detectors & hidden wired door/window contacts.

7 Option Packs

- **Basic Pack. Thermo Pack. Luxury Pack. RoomManagementSoftware. Fire/Security. Access Control.**
Advance Hotel Corridor Lights Management.

By monitoring Lux level and dim or turn off Hotel Corridor Lights, we not only save energy, but double Led-lamps life too.

Installation

- Just one DIN-Module for all needs, which is installed inside the Room Electrical Bank.
- Absolutely no equipment in loose junction boxes and inside false ceilings.
- Install or Remove Controller & TouchPad in seconds! No screws! All detachable style - All pluggable Connectors!
- Thanks to Auto-Set FCNs: Set & Program a Room in seconds. Set & Program 500 Rooms in a few hours.

Maintenance

- Thanks to the big LCD display & buttons included on each Room Controller, helps troubleshoot faults in seconds .
- Messages: "Entry Open", "Entry Close", "Veranda Open" "Occupancy Detection", "Make Up Room", "DND"
- Manual Test of: ACFC valves/FanSpeed, Lights, Blinds & Curtains .
- Electricity Power Meter inside each Room Controller.
- Thanks to the Central SMPS, Central Power OFF/ON of all System components (Controllers/Tstats/Sensors).
No need for human access in each room.
- All kinds of faults will also be reported to RMS.

Warranty

- Ten (10) years warranty period to all system components.

Action

- Model room to experience the intelligence and measure actual energy saving.

RMS

- Monitor & Control All Rooms via single screen **All Rooms View**

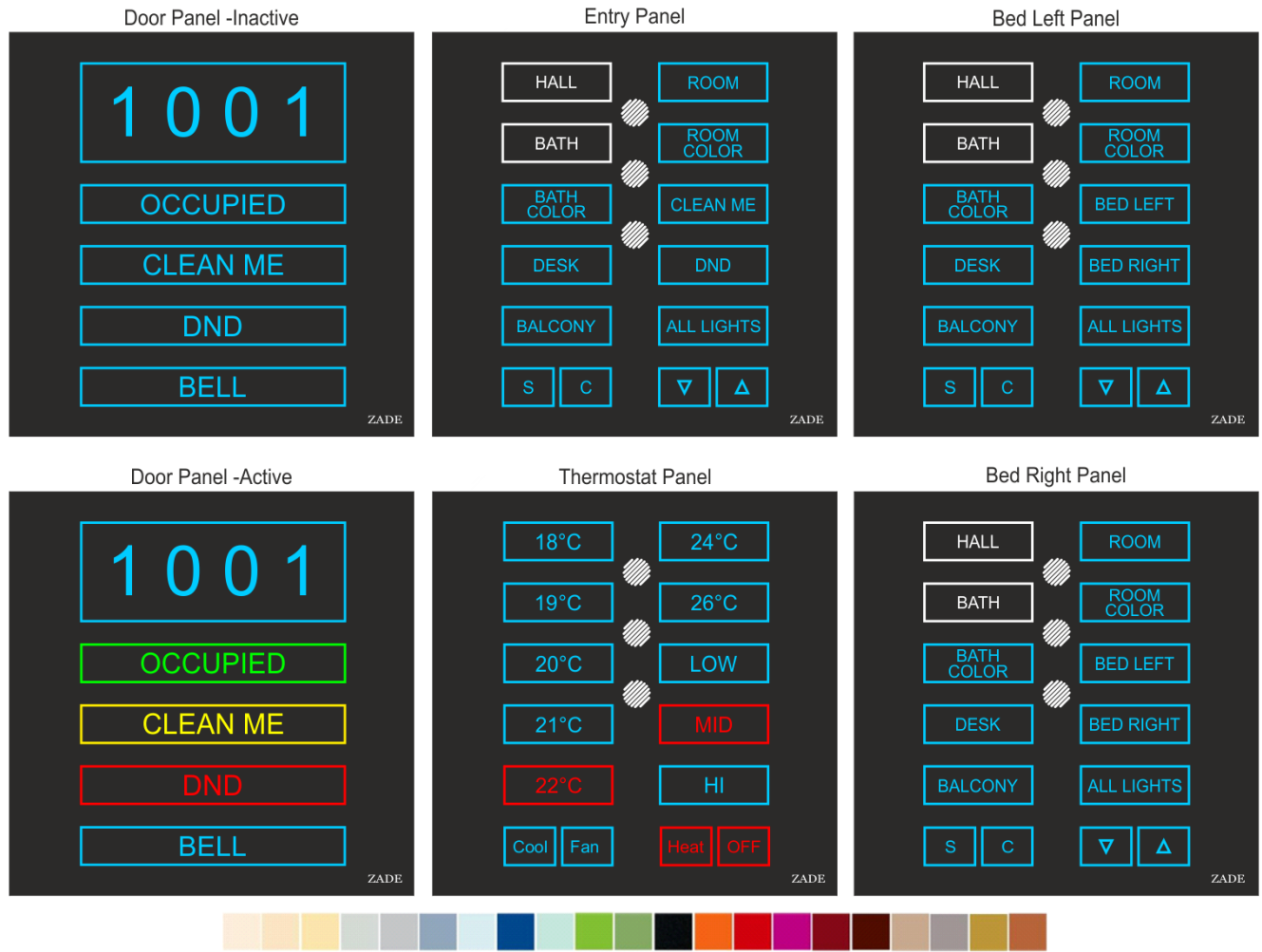
ROOM MANAGEMENT														VIEW				SETTINGS				By ZADE	
Home	All Rooms	From: ▼	To: ▼		Live	Last Hour	Last Day	Last Week	Last Month	Last Year	Compare	Total:											
Power Consumpt	KWh Consumpt	Bill Amount	Heat Consumpt	Cool Consumpt	AwayHeat Presets	AwayCool Presets	Auto Hi-Lo	Occupancy	Entries Opened	Verandas Opened	Bed1 Ver Opened	Bed2 Ver Opened	CleanMe Requests	DND Requests									
AREA1																							
101 1KWh	102 1KWh	103 1KWh	104 1KWh	105 1KWh	106 1KWh	107 1KWh	108 1KWh	109 1KWh	110 1KWh	111 1KWh	112 1KWh	113 1KWh	114 1KWh	115 1KWh									
121 1KWh																							
AREA2																							
201	202	203	204	205	206	207	208	209	210	211	212	213	214	215									
221																							
AREA3																							
301																							
AREA4																							
401																							
AREA5																							
501																							
AREA6																							
601																							
AREA7																							
701																							
AREA8																							
801																							

- Monitor & Control each Room in detail via **Single Room View**.

Room 001										By ZADE	
Room Consumption Current Power 3.24kW Consumption upto now 56KWh Cost upto now 15.00E Hourly Cost Daily Cost 0.50E 12.00E		Inputs Status Motion: No EntryLocked: Closed EntryDoor: Closed Veranda: Closed Room1 Ver: Closed Room2 Ver: Closed Fire: No ACLeak: No		Messages Occupied: Yes CleanMe: ON DND: OFF DoorBell: ON Check in: ON EntryLock: OFF		Comfort 18°C 24°C 19°C 26°C 20°C HI ▲ 21°C MID 22°C LO ▼ COOL FAN HEAT OFF AWAYHeat Preset 1 ▼ AWAYCool Preset 5 ▼ AUTO HI-LO 1 m ▼		Lights/Blinds CORRIDOR VERANDA WC CLEANME BED DND SITTING BLIND HIDDEN ALL S COL ▼ ▲ S C ▼ ▲		Colors/Fades S C ▼ ▲	
<div style="display: flex; justify-content: space-between;"> RESET KWh SAVE CLOSE </div>											

Human Interfaces

- Total Harmony. One Line for All Room Glass Touch Panels.



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