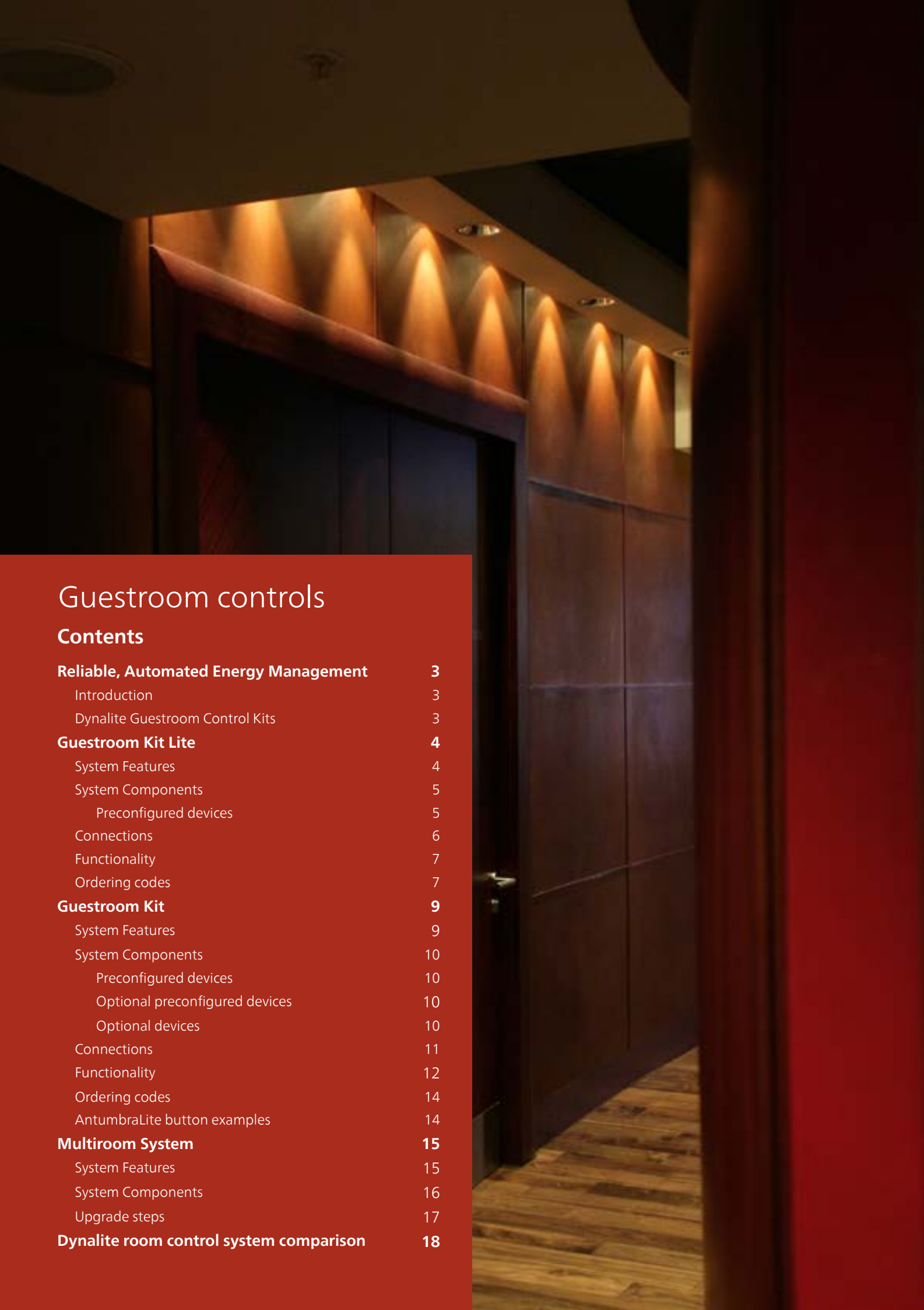


Guestroom Control Kits

Preconfigured room control kits for economy and midscale hotels and resorts



Guestroom controls

Contents

Reliable, Automated Energy Management	3
Introduction	3
Dynalite Guestroom Control Kits	3
Guestroom Kit Lite	4
System Features	4
System Components	5
Preconfigured devices	5
Connections	6
Functionality	7
Ordering codes	7
Guestroom Kit	9
System Features	9
System Components	10
Preconfigured devices	10
Optional preconfigured devices	10
Optional devices	10
Connections	11
Functionality	12
Ordering codes	14
AntumbraLite button examples	14
Multiroom System	15
System Features	15
System Components	16
Upgrade steps	17
Dynalite room control system comparison	18

Reliable, Automated Energy Management

Introduction

Hotel operators have significant commercial pressures in the current economic environment. With rising energy costs, strong local competition, and customer price sensitivity, operators need a more reliable way to conserve energy than using traditional key card drops.

Real-time occupancy detection automatically minimises electricity usage when rooms are vacant. Sensors optimise energy performance by controlling power to the lighting, heating, ventilation, air-conditioning (HVAC) equipment, general-purpose outlets (GPOs) and other electrical services as required.

Economy and midscale hotels especially benefit from a cost- and feature-appropriate controls kit that is fast and simple to consistently deploy at scale, and network ready for future upgrades and expansion.

Economy and midscale hotel needs:

Guest Experience – Focus on simple, intuitive usability and guest comfort.

Energy Management – Lower room rates drive an increased focus on cost saving.

Operational Efficiency – Fewer staff are available, so efficiency is key.

Dynalite Guestroom Control Kits

Introducing a feature-packed, cost-effective new entry point for guestroom controls, Philips Dynalite has developed a cost-effective turnkey solution with real-time occupancy sensing that is simple to use and delivers ongoing savings. Philips Dynalite guestroom kits are preconfigured to improve guest experience and operational efficiency while reducing energy costs for economy and midscale accommodation.

Our room control kits provide reliable, real-time occupancy detection across the full guestroom.

The kits are ready to install out of the box with no further commissioning required for standalone operation. Each kit is designed to control the electrical services in a guestroom but can equally be used for public spaces.

Optional guest interfaces or third-party switches can also be added, alongside direct or networked HVAC integration.

Two guestroom kits are available:



Guestroom Kit Lite

A four-channel relay controller with two motion sensors and magnetic door switch. Manual light switches can be easily added.



Guestroom Kit

A thirteen-channel relay controller with two motion sensors and magnetic door switch (a card drop facility is optional but not required).

Eighteen dry contact inputs connect to wall-mounted user interfaces and four digital outputs are provided for corridor and hallway Do Not Disturb (DND) and Make Up Room (MUR) indicators. The kit is compatible with FCUC options and upgradable to a fully networked solution with multiroom dashboard and hospitality integrations.

Guestroom Kit Lite

The Guestroom Kit Lite is an ideal standalone entry point to automatic energy savings in the rooms. It provides automated switched circuits and sensors to control power to the room based on real-time occupancy.

Automated real-time occupancy logic switches between occupied and unoccupied states to balance energy usage and guest comfort.

The controls can be added or retrofitted to any existing brand of lighting and HVAC, power outlets and other switched electrical services. Preconfiguration allows deployment without the need for commissioning software.

System Features



Energy management and sustainability
Save energy without impacting guest comfort. More reliable way to conserve energy than traditional key card drops.



Real-time occupancy
Replaces the traditional key card slot with automatic room state changes, for energy savings you can count on.



Retain existing mechanical light switches
Light switches can still be used to control power to the lighting circuits in each room.



Turnkey solution
No programming or complex setup, making it easy to implement.



Broad range of control
Master lighting control plus native HVAC and power control are included as standard.



Minimal hardware requirements
The kit and light switches provide all the required functionality. No other hardware is needed.

Guestroom Kit Lite

System Components

Preconfigured devices



DDRC420FR-GuestroomKitLite
Independent switching of four feed-through relay channels up to 20 A each.



DUS360CR-STR-Box1
Ceiling mounted recessed networked passive infrared occupancy sensor.

DUS360CR-STR-Box2
Ceiling mounted recessed networked passive infrared occupancy sensor.



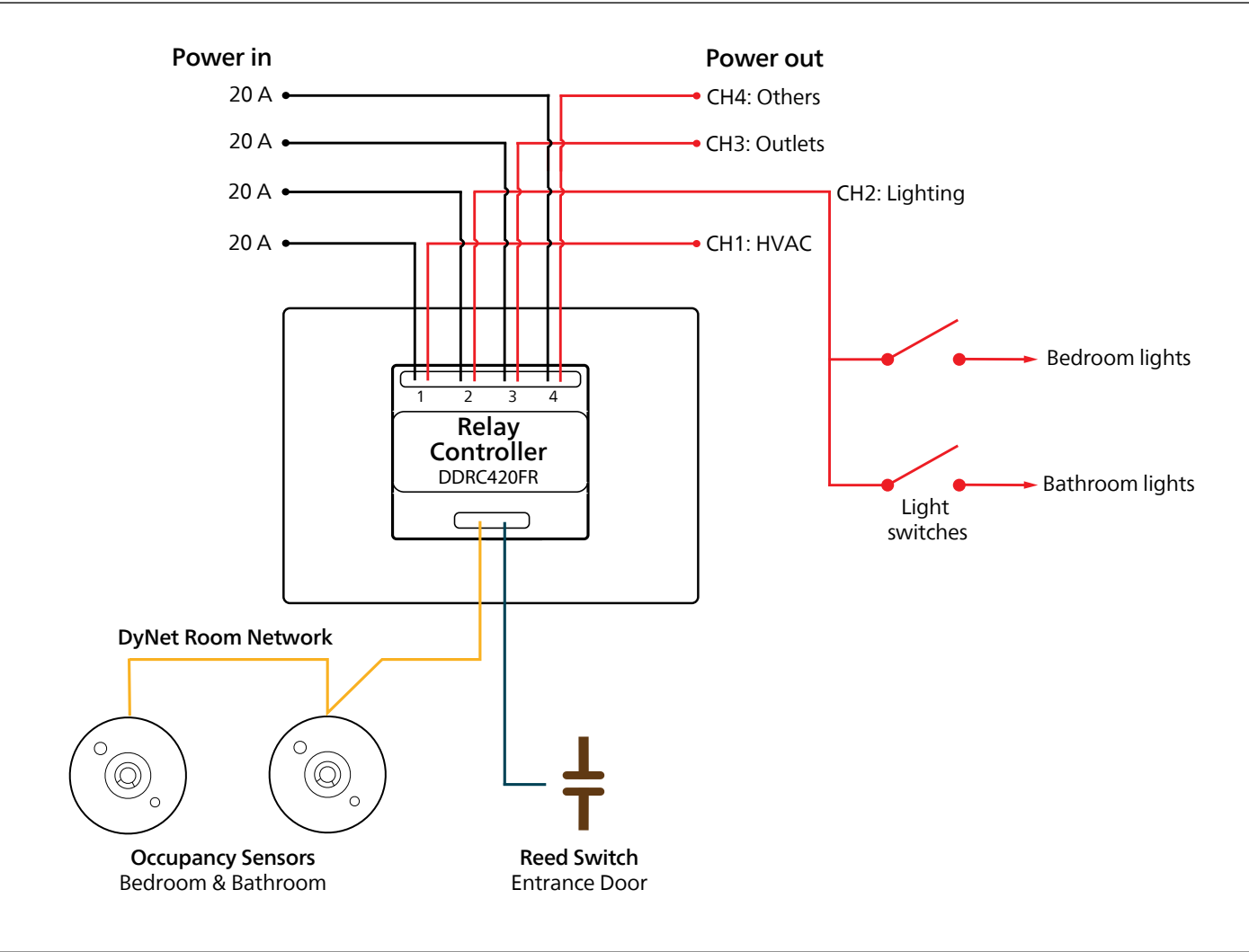
RMDCS
Recessed magnetic reed switch and magnet mounted in the entrance door to detect door open/close state.



Connections

The controller is installed in an electrical distribution board in or near the room and the switched outputs are connected to the room circuits. Sensors are typically placed in the main room and bathroom and are connected to the RS-485 DyNet room network. The magnetic entrance door switch is connected to the AUX terminal on the controller.

Wall-mounted light switches (not supplied) can be added to enable manual light switching.



- For more information about installation, refer to individual device installation instructions.
- The Guestroom Kit Lite only supports networking inside the room. Choose the Guestroom Kit to allow for full networking, multiroom dashboard, and integrations.

Functionality

The sensors in combination with the entrance door magnetic reed switch, control the two smart states Occupied and Unoccupied.

If the room is unoccupied when the door opens, the sensors will send a command to power on the room circuits. In both occupied and unoccupied states, if the door opens or closes, the sensors will look for motion and if they don't see any, will turn the power off after 15 minutes.

Controller outputs

Channel	Zone	Circuit	Maximum Capacity	Occupied	Unoccupied
1	General	HVAC	20A Relay	On	Off
2	General	Lighting	20A Relay	On	Off
3	General	Outlets	20A Relay	On	Off
4	General	Spare	20A Relay	On	Off

For load type output ratings, please refer to DDRC420FR installation Instructions..

Ordering codes

Dynalite part code	Description	Guestroom Kit Lite	Optional	12NC
DDRC420FR-GuestroomKitLite	Relay Controller + Recessed magnetic reed switch and magnet	✓		913703252209
DUS360CR-STR-Box1	Occupancy sensor (bedroom)	✓		913703373709
DUS360CR-STR-Box2	Occupancy sensor (bathroom)	✓		913703373809
Third-party light switches	Bedroom and Bathroom		Not supplied by Dynalite	

“Using real-time occupancy delivers reliable energy savings without relying on guest actions”





Guestroom Kit

The Guestroom Kit is a feature-packed room control system with automated switched circuits, user interface inputs, and sensors to control power to the room based on real-time occupancy. Preconfiguration allows deployment without the need for commissioning software. Network support is built in, ensuring upgradability to a fully networked system. Every aspect of this device is designed to be feature-rich and cost-effective.

Automated real-time occupancy logic switches between occupied and unoccupied states to balance energy usage and guest comfort.

The controls can be added or retrofitted to any existing brand of lighting and HVAC, power outlets, and other switched electrical services.

System Features



Seamless guest experience

Simple, intuitive usability.



Energy management and sustainability

Save energy without impacting guest comfort. More reliable way to conserve energy than traditional key card drops.



Broad range of control

Master lighting control plus native HVAC and power control are included as standard.



Guest interfaces

Clear, intuitive control with tactile feedback for lighting, power, and other key room services. Optional raised lettering aids accessibility for ADA rooms.



Turnkey solution

No programming or complex setup, making it easy to implement.



Real-time occupancy

You can choose to keep the traditional key card slot or use sensors to automate room state changes, for energy savings you can count on. Welcome guests with automated lighting and air conditioning settings that retain preferences throughout their stay.



Guest requests

Capture Do Not Disturb (DND) and Make Up Room (MUR) requests for display outside of the room.



Temperature display and settings

Optional user interface to adjust temperature and fan speed through the AntumbraDisplay thermostat. The display dims when not in use for guest comfort overnight, waking up automatically as they approach.



Green mode

Invite guests to opt in to greater energy savings for a more sustainable stay with Green mode.

System Components

Preconfigured devices



DDRC-GRMS-E-GuestroomKit
A versatile room automation and energy management solution with two high-capacity 20 A relays and eleven general purpose 6 A relays. The controller has the capability to incorporate bridging functionality between an Ethernet LAN and connected DyNet devices.



DUS360CR-STR-Box1
Ceiling mounted recessed networked passive infrared occupancy sensor.
DUS360CR-STR-Box2
Ceiling mounted recessed networked passive infrared occupancy sensor.



RMDCS
Recessed magnetic reed switch and magnet mounted in the entrance door to detect door open/close state.

Optional preconfigured devices



DACM-Thermostat
DyNet communication module that connects to the PADPE-WW-L-STR-Thermostat.



PADPE-WW-L-STR-Thermostat
Proximity detection and embedded temperature sensors. White polycarbonate finish with icon labelling and dynamic display.



DDFCUC-STR-Box1
Fan coil unit controller, designed for direct connection to components commonly found in heating, ventilation, and air conditioning (HVAC) systems with fan coil units (FCU).

Optional devices

Third-party user interfaces
Buttons with momentary switches are connected to the DDRC-GRMS-E dry contact inputs for manual lighting control. (DND, MUR, Master, Bathroom).

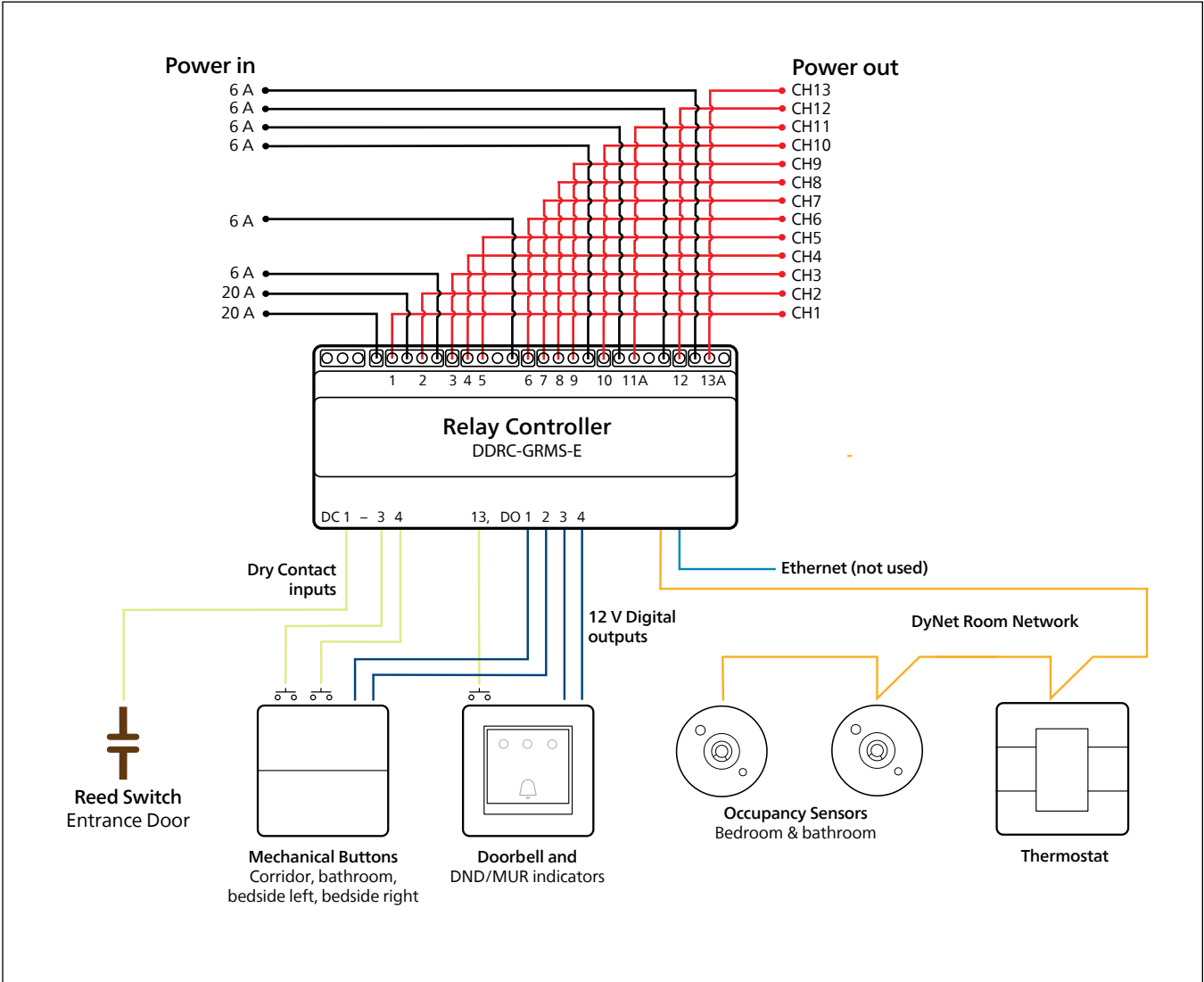
PAXBLE-xx-L
AntumbraLite dry-contact user interface. Buttons are connected to the DDRC-GRMS-E dry contact inputs. Available with text and icon labelling in 2- to 6-button configurations with a range of colours and finishes.

Card-drop facility
A dry contact card holder can be purchased from local electrical distributors for manually enabling power to the room. however, this option will decrease the reliability of energy savings.

Connections

The controller is installed in an electrical distribution board in or near the room and the switched outputs are connected to the room circuits. Sensors are typically placed in the main room and bathroom and are connected to the RS-485 DyNet room network. The magnetic entrance door switch (or key card holder) is connected to the DC1 terminal on the controller.

The mechanical buttons are connected to the dry contact inputs as recommended in the Dry Contact Inputs table. Digital outputs can be used to drive LED indicators in the corridor and hallway panels. The optional thermostat and FCUC controller are also connected to the RS-485 DyNet room network.



- For more information about installation, refer to individual device installation instructions.
- The Ethernet port is only configured when upgrading to a fully networked system with multiroom dashboard and integrations.
- If using channels 11 and 13, ensure you connect to the Normally Open terminals 11A and 13A.
- AntumbraLite user interface labelling can be customer designed using the Dynalite Design Studio designstudio.dynalite.com/#/configurator/

Functionality

The sensors, in combination with the entrance door magnetic reed switch, control the two smart states Occupied and Unoccupied.

If the room is unoccupied when the door opens, the sensors will send a command to power on the room circuits. In both occupied and unoccupied states, if the door opens or closes, the sensors will look for motion and if they don't see any, will turn the power off after 15 minutes.

If connected, the bathroom extractor fan is linked to bathroom occupancy. It is activated when the bathroom lighting is switched on and remains on for 10 minutes after the bathroom lights switch off.

Alternatively, you can choose a card drop instead of the sensors and door switch (in this case DC input 1 is for the card drop and DC input 18 must be permanently closed).





Each press of a dry contact input toggles the associated lighting circuit between on and off. The master toggle is a little different: If any of the lights are on, it turns everything off. If no lights are on, it turns on the bedroom lights.

Controller outputs
















Channel	Zone	Circuit	Maximum Capacity	Occupied	Unoccupied
1	General	Guest Outlets	20A Relay	On	On
2	"	HVAC/Service Outlets	20A Relay	On	On
3	Corridor	Corridor Lighting	6A Relay	On	Off
4	Bedroom	Downlights	6A Relay	On	Off
5	"	Cove	6A Relay	On	Off
6	"	Desk/Floor Lamp	6A Relay	On	Off
7	"	Bedside Left	6A Relay	On	Off
8	"	Bedside Right	6A Relay	On	Off
9	"	Balcony/Nightlights	6A Relay	On	Off
10	Bathroom	Downlights	6A Relay	On	Off
11	"	Cove/Mirror	6A Relay	On	Off
12	"	Extractor fan/Spare	6A Relay	On	Off
13	General	Doorbell chime/Spare	6A Relay	N/A	N/A


 For load type output ratings, and group output limitations, please refer to DDRC-GRMS-E installation Instructions.

Digital outputs

Output number	Zone	Description	Icon
1	Corridor	Guest panel DND	
2	"	Guest panel MUR	
3	Hallway	Doorbell panel DND	
4	"	Doorbell panel MUR	

Dry Contact inputs

DC input	Zone	Description	Icon
1	General	Entrance door magnetic door switch or card drop	
2	"	Balcony door magnetic door switch	
3	Corridor	Lighting circuit 3	
4	Bedroom	Lighting circuit 4 (Downlights)	
5	"	Lighting circuit 5 (Cove)	
6	"	Lighting circuit 6 (Desk/Floor Lamp)3	
7	"	Lighting circuit 7 (Bedside Left)	
8	"	Lighting circuit 8 (Bedside Right)	
9	"	Lighting circuit 9 (Balcony/Nightlights)	
10	Bathroom	Lighting circuit 10 (Downlights)	
11	"	Lighting circuit 11 (Cove/Mirror/Extractor fan)	
12	"	Master ON/OFF toggle	
13	General	Doorbell chime/Spare	
14	"	Do-not-disturb (DND)	
15	"	Make-up-room (MUR)	
16	"	Master ON	
17	"	Master OFF	
18	"	Real-time occupancy/Card drop selector.	

 DC1 is magnetic door switch when DC18 is open, and card drop when DC18 is closed.

 Other dry contact inputs require momentary activation.

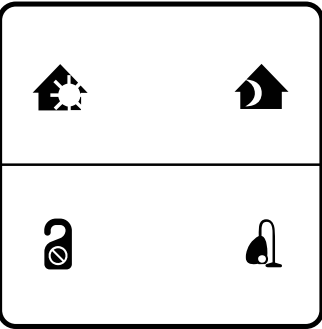
“Smart controls are most impactful when deployed across a property with integration into hotel operations.”

Ordering codes

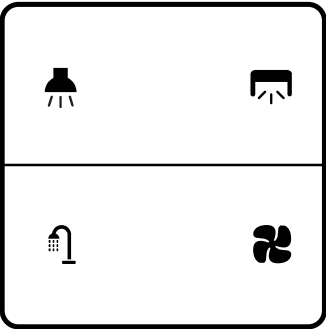
Dynalite part code	Description	Guestroom Kit	Optional	12NC
DDRC-GRMS-E-GuestroomKit	Advanced relay controller + Recessed magnetic reed switch and magnet	✓		913703379209
DUS360CR-STR-Box1	Occupancy sensor (bedroom)	✓		913703373709
DUS360CR-STR-Box2	Occupancy sensor (bathroom)	✓		913703373809
DDFCUC-STR-Box1	Fan Coil Unit Controller		✓	913703373609
DACM-Thermostat	DyNet communications module		✓	913703251809
PADPE-WW-Thermostat	AntumbraDisplay Thermostat		✓	913703093009
PAXBLE – for user interface design and ordering codes, refer to the Dynalite Design Studio	AntumbraLite Euro. Two-, four-, or six-button panel with dry contact switches.		✓	

AntumbraLite button examples

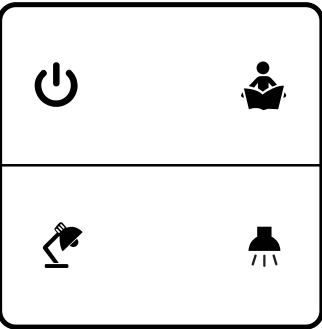
Entrance



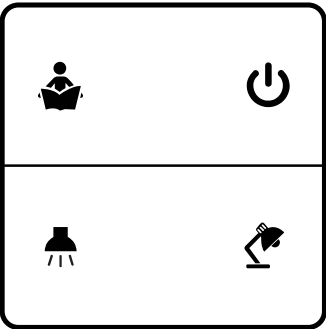
Bathroom



Bedside – Left



Bedside – Right



Multiroom System

The Guestroom Kit is fully upgradable and network-ready. The DDRC-GRMS-E controller can connect to a fully networked system with multiroom dashboard and integrations.

Network connections to sensors, guest interfaces, lighting, window coverings, HVAC, access control, and property management systems enables intelligent automation for efficient running of your total operation.

This multiroom system delivers enhanced guest experience, energy management, and improved staff efficiency with occupancy and guest request visibility across your entire property.

System Features

Multiroom System Manager includes all the features of the Guestroom Kit plus the following features.-



Real-Time Visibility

Unified browser-based dashboard showing real time and historical data for all your spaces.



Operational Integrations

Improve staff efficiency with housekeeping and facilities integration prioritise scheduled tasks such as make up room requests. Real-time occupancy prioritises vacant rooms.



Access Control Integration

Access control integration helps to tailor room conditions to suit Guests or Staff. Guest personalisation settings are restored.



Guest-Facing Integrations

Apps, tablets, voice.



Proactive Monitoring and Alerts

Proactive monitoring and alerts of system health, guest requests and environmental values.



Historical Energy and Reporting

Historical energy data and reporting.



PMS Integration

Integrate checked-in/checked-out statuses from Property Management System. Conserve energy when rooms are unsold.



Software-Upgradable

Remotely upgrade room defaults, firmware, and configuration.



Room Statuses and Guest requests

Guest and staff control of DND, MUR requests.



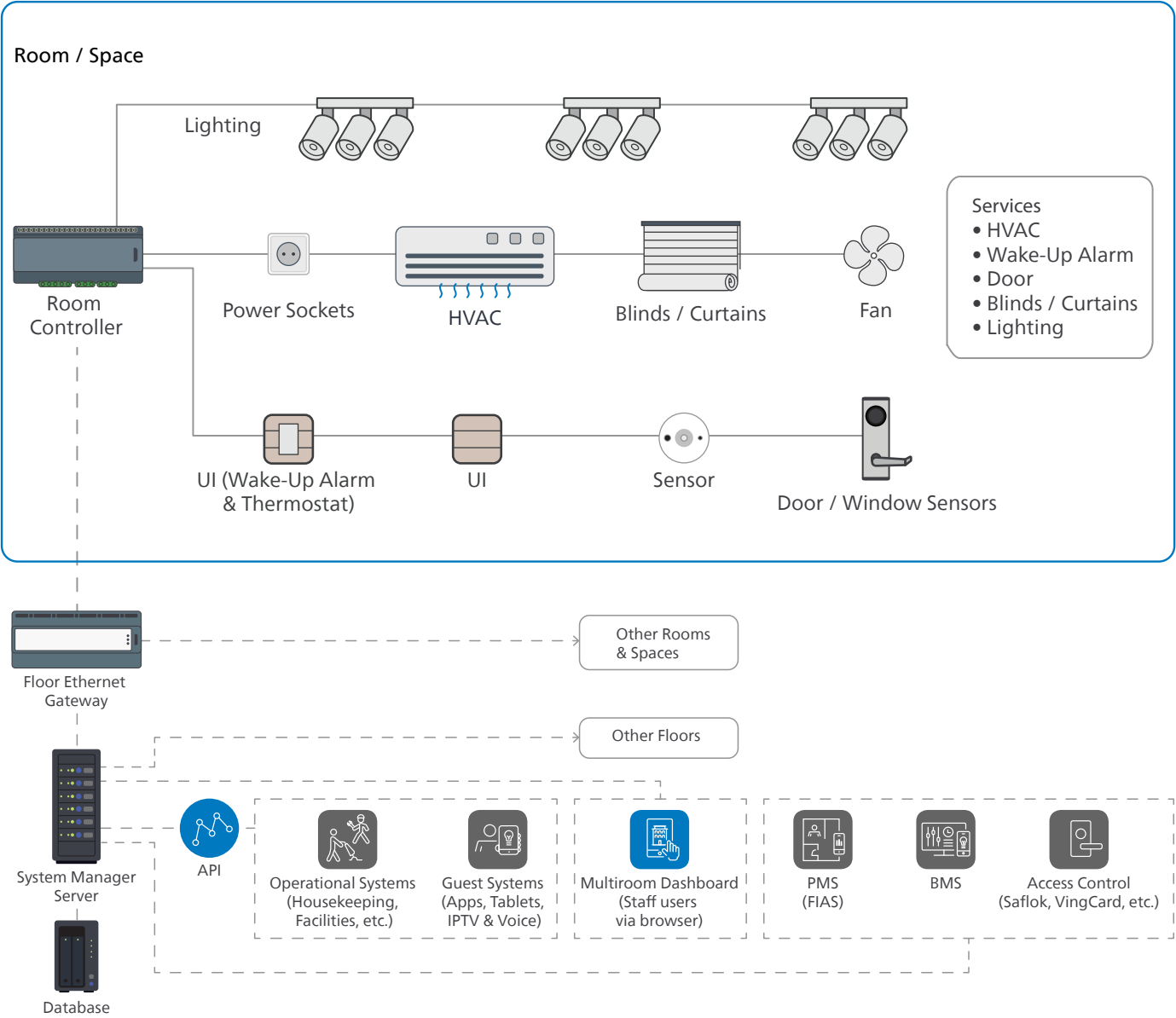
Seasons and Schedules

Self-managed schedules and seasonal settings. Create regular and special schedules, for timed events or follow sunrise and sunset.

System Components

Upgrading the guestroom kit to the multiroom system requires these additional components:

- Multiroom System Manager server and multiroom dashboard.
- PDDEG-S Floor Ethernet gateways.
- Ethernet cabling.
- Integration with supported hospitality systems (room booking, access control, housekeeping, maintenance and guest apps).

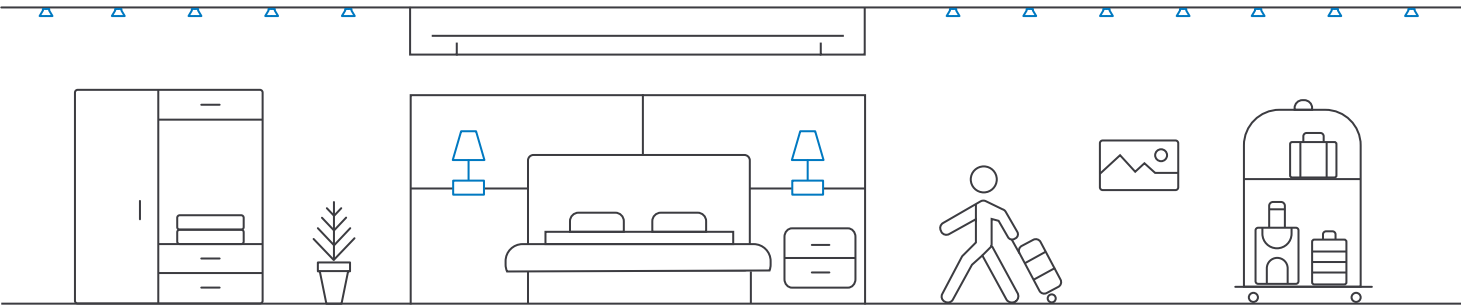


Upgrade steps

To upgrade the guestroom kits to a multiroom system, complete the following steps:

1. Purchase and configure PDDEG-S Ethernet gateways. Each gateway securely connects 25 rooms to the network.
2. Connect Ethernet network
3. Configure DDRC-GRMS-E controllers.
4. Install and configure Multiroom System Manager server and database.
5. Connect integrated systems.
6. Install security certificates for users to access the Multiroom Dashboard.

For more information please contact your local Signify representative.



Dynalite room control system comparison

Feature	Guestroom Kit Lite	Guestroom Kit	Multiroom System
Seamless guest experience		✓	✓
Energy management and sustainability	✓	✓	✓
Broad range of control	✓	✓	✓
Real-time occupancy	✓	✓	✓
Turnkey solution	✓	✓	
Retain existing mechanical light switches	✓		
Minimal hardware requirements	✓	✓	
Guest Interfaces		✓	✓
Guest requests		✓	✓
Temperature display and settings		✓	✓
Green mode		✓	✓
Operational efficiency			✓
Room statuses and guest requests			✓
Proactive monitoring and alerts			✓
Seasons and schedules			✓
Historical Energy and Reporting			✓
Software upgradable			✓
Access Control Integration			✓
PMS integration			✓
Operational Integrations			✓
Guest facing integrations			✓



Save energy with Dynalite

Real-time occupancy-based energy management is proven to save up to 28% across your rooms and suites, plus an additional 10% when guests use Green Mode. Working with international consultancy Cundall, we measured the performance of our automated guest room controls in a range of hotels. Using real rooms and guest behaviour, they confirmed that automated room management delivers significant savings.



Click the image to open the Guest Room Control Systems - white paper with Cundall



www.dynalite.com

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