“The *Dialog Room Controller* is the right product...

to provide the flexibility and cost savings needed in today’s competitive lighting controls market. It’s designed for stand-alone room applications, but can also be networked to a Dialog controller for centralized control of an entire floor or building.”
**Dialog Room Controller** introduces specifiers and contractors to a versatile solution for stand-alone or networked lighting control applications. The Dialog Room Controller, manages classrooms, offices, conference rooms or small rooms to meet local and national lighting requirements such as ASHRAE 90.1-2010, California Title 24, and New York Local Law 48.

The **Dialog Room Controller** incorporates 2 sections – the Room Controller and the UL924 Relay Expansion Pack. The Room Controller is the main device and it includes 4 relays, 4 independent dimming channels and the capability to connect to a Douglas Lighting Controls Dialog or BACnet network, a 2 relay 2 independent dimming channel version is also available. When the need for emergency lighting control or additional relays arises because of room size or lighting requirements, the Room Controller UL924 / Relay Expansion Pack is easily added by clipping it to the bottom of the room controller and connecting to the appropriate loads. The expansion pack provides two additional relays that are certified for emergency lighting operation or can be used for additional lighting loads.

Room controllers can further be expanded by being linked together. By using the downstream bus of a Room controller, you can have up to a total of 12 relays and 12 dimmers programmed within the system.

**Dialog Room Controller** is offered as in a custom kit for specific room applications or available as individual components. Each kit is Plug ‘N Control™ ready out of the box for fast installation. Kits can include the Room Controller, the UL924 Expansion Pack, occupancy sensors, switch stations, and daylight sensors depending on the application.

An added feature is the **Dialog Room Controller** can also be used in a centralized Dialog system to create a globally controlled network that is faster to install, requires less long wire/conduit runs, and provides room-by-room testing before complete system start-up.
DIMENSIONS

WRC-4244 and WRC-4222
WUL-4924

WEIGHT 1.15lbs (0.52kg)

2.1” (54mm)

5.7” (144mm)

6.3” (159mm)

6.1” (155mm)

4.3” (109mm)
FEATURES

- RJ45 PORT FOR BACNET IP CONNECTIVITY
- ½ INCH CHASE NIPPLES
- CIRCUIT TEST BUTTONS
- COLOR CODED WIRES
- WIRE COLOR MATCHING RELAY LABELS
- ½ INCH CHASE NIPPLES
In this example the Dialog Room Controller supports the requirements of one classroom by taking commands from wall switches and sensors in that classroom. Additionally, each Room Controller is networked to a centralized Dialog LCU (lighting control unit) through a low cost, polarity neutral, 2-wire data line. The LCU is programmed with schedules for controlling lights across the entire facility. Demand response functionality can also be initiated across the entire network.
ARCHITECTURE

ADVANCED STAND-ALONE CAPABILITIES: CAFETERIA

Daylight Sensor
Occupancy/Vacancy Sensor
Occupancy/Vacancy Sensor
Occupancy/Vacancy Sensor
Master Station
Dialog Room Controller
Dialog Room Controller
Dialog Room Controller

FUNCTIONALITY

- Lighting control (including emergency lighting)
- Receptacle control
- Closed loop dimming
- Manual control
- Control up to twelve loads (lights, receptacle, emergency lights)
- Control up to twelve 0-10v dimming zones (independent of light zones)
- Demand response ready
- Programmable with a device specific desktop application via Ethernet.
- Native BACnet
- Daylighting Dim-to-OFF
- Up to 4 daylight sensors each with their own Primary and Secondary control.
in identifying market challenges and then developing solutions that solve those challenges. We designed the Dialog Room Controller to eliminate wiring complications, ensure code compliance, simplify control systems, and improve the commissioning experience - common challenges that are found across our industry.”

Rob Mahaffey,
Director Product Market Development
In some cases, specific applications may need customized kit. For these instances, first find the kit that best suits your application, then review the modifications available below. Then call or email us.

- Occupancy/ Vacancy Sensor
- Interior Daylight Sensor
- Switch Stations

**LET US HELP YOU.** quotes@douglaslightingcontrols.com • 877-873-2797 ext. 607

### SENSOR ADDITIONS
Occupancy sensors can be added to a total of 12 occupancy sensors and 4 daylight sensors per room controller.

- WSW-3511
- WSW-3512
- WSW-3513

### SWITCH ADDITIONS
Duplicate switches can be added to a total of 14 switch stations per room controller.

- WSW-3514
- WSW-3528
- WSK-3502

### TITLE 24 DIMMING SWITCH ADDITIONS
For Title 24 requirements, dimming switches can be added to a total of 14 switch stations.
### Classroom
- Windows Perpendicular to Teaching Wall
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (4 zones)
- Entry Station (General ON/ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

### Options
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

### Operation
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
PROJECT NAME: ________________________________________________________________________
DATE: __________________

Connection Schematic
Section 2
www.DouglasLightingControls.com

Red/White
Brown/White
Yellow/White
Blue/White
Blue
White
Black

Lighting Load 1
Lighting Load 2
Lighting Load 3
Switched Receptacle(s) Load 4
Receptacle(s) Hot
Lighting Hot

Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Classroom with Emergency Lighting

- Windows Perpendicular to Teaching Wall
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (4 zones)
- Entry Station (General ON / ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

Emergency Lighting Control (2 zones Orange & Grey) (Requires UL924 Relay Expansion Pack)

Options

- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

Operation

- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
- During power failure UL924 listed relays are automatically switched ON by back-up power source switching designated emergency lights ON and to full-bright. Emergency lights remain ON with all controls disabled until primary power is restored.
Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
**Classroom**
- Windows Opposite to Teaching Wall
- Occupancy Control (Auto ON/Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (3 zones)
- Entry Station (General ON/ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

**Options**
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON/Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

**Operation**
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
Connection Schematic

Section 2  www.DouglasLightingControls.com

RED/WHITE
BROWN/WHITE
YELLOW/WHITE
BLUE/WHITE
BLUE
WHITE
BLACK

LIGHTING LOAD 1
LIGHTING LOAD 2
LIGHTING LOAD 3
SWITCHED RECEPTACLE(S) LOAD 4
BLUE
RECEPTACLE(S) HOT
WHITE
NEUTRAL
BLACK
LIGHTING HOT

CLASSROOM

PROJECT NAME: ____________________________

DATE: __________________

Primary Daylight Zone

Classroom Front (Relay 1)  Dim 2
Classroom Rear (Relay 2)  Dim 1

Secondary Daylight Zone

Classroom Front (Relay 1)  Dim 2
Classroom Rear (Relay 2)  Dim 1

Whiteboard Light (Relay 3)

Receptacle (Relay 4)

Neural not shown - these illustrations are for reference purposes only.

For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Classroom with Emergency Lighting

- Windows Opposite to Teaching Wall
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control zones (3 zones)
- Receptacle Control
- Dimming Control (3 zones)
- Entry Station (General ON / ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

Emergency Lighting Control (2 zones Orange & Grey)
(Requires UL924 Relay Expansion Pack)

Options

- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54' diameter (standard 28')

Operation

- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
- During power failure UL924 listed relays are automatically switched ON by back-up power source switching designated emergency lights ON and to full-bright. Emergency lights remain ON with all controls disabled until primary power is restored.
Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.

PROJECT NAME: __________________________
DATE: __________________________
**Classroom**
- Windows Perpendicular to Teaching Wall
- Skylight
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (4 zones)
- Entry Station (General ON / ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

**Options**
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

**Operation**
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
**Classroom with Emergency Power**
- Windows Perpendicular to Teaching Wall
- Skylight
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (4 zones)
- Entry Station (General ON/ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

Emergency Lighting Control (2 zones Orange & Grey)  
(Requires UL924 Relay Expansion Pack)

**Operation**
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
- During power failure UL924 listed relays are automatically switched ON by back-up power source switching designated emergency lights ON and to full-bright. Emergency lights remain ON with all controls disabled until primary power is restored.

**Options**
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

---

**Diagram**

- **Primary Daylight Zone**
  - Relay 5
  - Dimmer 1
  - EMERGENCY
- Dimming Zone 1
  - Relay 1
  - Dimmer 1
- D/S
- Dimming Zone 2
  - Relay 2
  - Dimmer 3
- Dimming Zone 3
  - Relay 2
  - Dimmer 3
- Entry Station

- **Secondary Daylight Zone**
  - Relay 1
  - Dimmer 2
- Dimming Zone 2
  - Relay 3
  - Dimmer 2
- Skylight
  - Relay 2
  - Dimmer 4
- Dimming Zone 4
  - Relay 2
  - Dimmer 4
  - EMERGENCY
- D/S
- Skylight
- O/S
- Relay Station

**Teacher Station**

**Relay 4 Receptacle**

**Dialog Room Controller**
Connection Schematic

Section 2

www.DouglasLightingControls.com

RED/WHITE
BROWN/WHITE
YELLOW/WHITE
BLUE/WHITE
BLUE
WHITE
BLACK
ORANGE/WHITE
ORANGE
DK BLUE/WHITE
DK BLUE

Lighting Load 1
Lighting Load 2
Lighting Load 3
Switched Receptacle(s) Load 4
Neutral
Lighting Hot
Balanced Neutral
Lighting Load 5
Lighting Load 6

Emergency Lighting Load 1
Emergency Lighting Load 2

Occupancy Sensor
(up to 4)

Daylight Sensor
Zone 1
Daylight Sensor
Zone 2

Teachers Station
Entry Station
Entry Station

Building Control
via
BACnet/IP or Dialog Network

0-10V Dimming
(18/2 per channel)

Local Room Dataline
(18/2)

Dataline

Dim 1
Dim 2
Dim 3
Dim 4

Classroom Rear
( Relay 2)

Classroom Front
( Relay 1)

Front EM Light
( Relay 3)

Rear EM Light
( Relay 4)

Whiteboard Light
( Relay 5)

Receptacle
( Relay 4)

Receptacle
120Vac Distribution Cabinet
(by Others)

Lighting
120/277/347Vac Distribution Cabinet
(by Others)

Emergency
120/277/347Vac Distribution Cabinet
(by Others)

Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Classroom

- Windows Opposite to Teaching Wall
- Skylight
- Occupancy Control (Auto ON /Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (4 zones)
- Entry Station (General ON/ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

Options

- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

Operation

- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
Clasroom

Connection Schematic
Section 2
www.DouglasLightingControls.com

- RED/WHITE
- BROWN/WHITE
- YELLOW/WHITE
- BLUE/WHITE
- BLUE
- WHITE
- BLACK
- RED/WHITE
- BROWN/WHITE
- YELLOW/WHITE
- BLUE/WHITE
- BLUE
- WHITE
- BLACK
- LIGHTING LOAD 1
- LIGHTING LOAD 2
- LIGHTING LOAD 3
- SWITCHED RECEPTACLE(S) LOAD 4
- RECEPTACLE(S) HOT
- NEUTRAL
- LIGHTING HOT

Neural not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Classroom with Emergency Lighting
- Windows Opposite to Teaching Wall
- Skylight
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (4 zones)
- Entry Station (General ON/ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

Emergency Lighting Control (2 zones Orange & Grey) (Requires UL924 Relay Expansion Pack)

Options
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54' diameter (standard 28')

Operation
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
- During power failure UL924 listed relays are automatically switched ON by back-up power source switching designated emergency lights ON and to full-bright. Emergency lights remain ON with all controls disabled until primary power is restored.
CLASSROOM + EMERGENCY

PROJECT NAME: ____________________________

DATE: ____________________

Neutral not shown - these illustrations are for reference purposes only. For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
**Double Classroom**
- Windows Perpendicular to Teaching Wall
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones per room)
- Light Control (2 zones per room)
- Dimming Control (2 zones per room)
- Entry Station (General ON/ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

**Options**
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

**Operation**
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station (ON/OFF) and Teacher Station (GENERAL, TEACHING, A/V, ALL, DIMMING) provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
DOUBLE CLASSROOM

PROJECT NAME: ____________________________
DATE: __________________

Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Double Classroom with Emergency Lighting  
(Requires UL924 Relay Expansion Pack)

- Windows Perpendicular to Teaching Wall
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones per room)
- Light Control (3 zones per room)
- Dimming Control (2 per room)
- Entry Station (General ON/ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)

Options
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

Operation
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
- During power failure UL924 listed relays are automatically switched ON by back-up power source switching designated emergency lights ON and to full-bright. Emergency lights remain ON with all controls disabled until primary power is restored.
Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Office
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (3 zones)
- Wall Station (General ON/ALL OFF)

Options
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

Operation
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Office Wall Station provides manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Office Wall Station
Neutral not shown - these illustrations are for reference purposes only. For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Office with Emergency Lighting
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (3 zones)
- Wall Station (General ON/ALL OFF)

Emergency Lighting Control (EMRG)
- UL924 Relay Expansion Pack Required
- (1 zone - Orange)

Options
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

Operation
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Office Wall Station provides manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Office Wall Station
- During power failure UL924 listed relays are automatically switched ON by back-up power source switching designated emergency lights ON and to full-bright. Emergency lights remain ON with all controls disabled until primary power is restored.
Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Office
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (3 zones)
- Wall Station (4-button toggle)

Options
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54' diameter (standard 28')

Operation
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Office Wall Station provides manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights and receptacle can be switched OFF manually at Wall Station
Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Office with Emergency Lighting
- Requires UL924 Relay Expansion Pack (orange)
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (3 zones)
- Receptacle Control
- Dimming Control (3 zones)
- Wall Station (4-button)

Options
- Additional Occupancy Sensors (4 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

Operation
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Office Wall Station provides manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights and receptacle can be switched OFF manually at Wall Station
- During power failure UL924 listed relays are automatically switched ON by back-up power source switching designated emergency lights ON and to full-bright.
- Emergency lights remain ON with all controls disabled until primary power is restored.
Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
Two Offices, One Dialog Room Controller

- UL924 Relay Expansion Pack used for additional light loads (not Emergency Lighting)
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (1 zones per room)
- Light Control (2 zones per room)
- Receptacle Control
- Dimming Control (1 zones per room)
- Wall Station (ON/OFF)

Options
- Additional Occupancy Sensors (Max. 4 per system)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

Operation
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Office Wall Station provides manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Wall Station
Neutral not shown - these illustrations are for reference purposes only. For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
**Classroom**
- Windows Perpendicular to Teaching Wall
- Occupancy Control (Auto ON / Auto OFF)
- Daylight Control (2 zones)
- Light Control (4 zones)
- Receptacle Control
- Dimming Control (9 zones)
- Entry Station (General ON/ALL OFF)
- Teacher Station (Teaching, General ON, A/V, Quiet Mode)
- Dimming Stations (a / b / c)

**Options**
- Additional Occupancy Sensors (14 max.)
- Vacancy Control (Manual ON / Auto OFF)
- Extended Lens range: 54’ diameter (standard 28’)

**Operation**
- Upon Entry Occupancy sensor switches lights and receptacles ON
- Daylight Sensor maintains light level based on light level pre-set
- Entry Station and Teacher Station provide manual control of lights
- Upon Exit and after Occupancy sensor times out, lights and receptacles switched OFF
- Lights can be switched OFF manually at Entry Station and Teacher Station
Neutral not shown - these illustrations are for reference purposes only.
For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
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For site installations, please review Kit wiring diagrams and follow local and national electrical codes.
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<th>Description</th>
<th>PN</th>
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<td>Digital 4 Channel ON/OFF/DIM Room Controller w/ Receptacle Control, BACNet</td>
<td>WRC-4244</td>
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<td>Digital 2 Channel ON/OFF/DIM Room Controller w/ Receptacle Control, BACNet</td>
<td>WRC-4222</td>
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<tr>
<td>Dialog Room Controller UL924 / Relay Expansion Pack</td>
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<td>Recessed Ceiling Standard Range Lens w/ Time Delay Dial &amp; Aux Relay</td>
<td>WORSDG1-R-T</td>
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<tr>
<td>Digital Occupancy Sensor - Extended</td>
<td>Recessed Ceiling Extended Range Lens w/ Time Delay Dial &amp; Aux Relay</td>
<td>WORXDG1-R-T</td>
</tr>
<tr>
<td>Digital Vacancy Sensor - Standard</td>
<td>Recessed Ceiling Standard Range Lens w/ Time Delay Dial &amp; Aux Relay</td>
<td>WWRSDG1-R-T</td>
</tr>
<tr>
<td>Digital Vacancy Sensor - Extended</td>
<td>Recessed Ceiling Extended Range Lens w/ Time Delay Dial &amp; Aux Relay</td>
<td>WWRXDG1-R-T</td>
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<td>2-Button Digital Switch</td>
<td>Digital Switch, 2-Button (ON/OFF/Toggle/DimUP/DimDN)</td>
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<td>3-Button Digital Switch</td>
<td>Digital Switch, 3-Button (ON/OFF/Toggle/DimUP/DimDN)</td>
<td>WSW-3513</td>
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<tr>
<td>4-Button Digital Switch</td>
<td>Digital Switch, 4-Button (ON/OFF/Toggle/DimUP/DimDN)</td>
<td>WSW-3514</td>
</tr>
<tr>
<td>8-Button Digital Switch</td>
<td>Digital Switch, 8-Button (ON/OFF/Toggle/DimUP/DimDN)</td>
<td>WSW-3528</td>
</tr>
<tr>
<td>Key Digital Switch</td>
<td>Digital 2-Position Key Switches (ON/OFF/Toggle/DimUp/DimDN)</td>
<td>WSK-3502</td>
</tr>
</tbody>
</table>

Switch Option Summary

- **WSW-3511**
- **WSW-3512**
- **WSW-3513**
- **WSW-3514**
- **WSW-3528**
- **WSK-3502**

**Dimmer Switch: Optional Dimming Control**

- **Standard naming Shown**
- **Can be Customized at Site or At Customer Request**
FAQ - DIALOG ROOM CONTROLLER

QUESTION: How does the Expansion Pack connect to Dialog Room Controller?

ANSWER: The Expansion Pack can be connected directly to the Room controller via an integrated clip attachment.

• If the Expansion Pack is connected with the Room Controller, then the units communicate through a Dialog protocol connection.

ANSWER: If the Expansion Pack is remotely mounted from the Room Controller, then a 2-wire connection is needed to communicate through a Dialog protocol. The remote mount kit includes a Conduit Adapter and Connector.

QUESTION: What power can the relays support?

ANSWER: There are two 20A circuits coming into the Room Controller, Hot on #1, #2, #3 and Hot on 4.

• #1, #2, #3 are rated for 20A (combined).
• #4 is rated for 20A by itself.
• There are 2 circuits so different voltages can be used.
• Expansion pack can add 2 more 20A Circuits (#5 and #6)

QUESTION: Do the relays support 120VAC, 277VAC and 347VAC?

ANSWER: Yes.

QUESTION: When using Dialog WLC-4150 and Dialog Room Controller and the Dialog WLC-4150 goes down, will the Dialog Room Controller function as a stand-alone?

ANSWER: Yes.

QUESTION: Does Dialog Room Controller work with a GUI?

ANSWER: Graphical UI would be for a centralized system. To drive graphics, a Dialog WLC-4150 and GWS are required.

ANSWER: Do Dialog devices work with Dialog Room Controller?

ANSWER: No. Dialog Room Controller is sold as a kit and includes sensors and switches configured for the specific room applications.

QUESTION: Is the 0-10V dimming isolated?

ANSWER: Yes, each of the four 0-10V dimming outputs are independent channels. 100mA sinking per channel.

QUESTION: What is the maximum number of devices on a room controller?

ANSWER: Dimming: Calculation required based on 100mA per channel of dimming. This will depend on LED driver sinking current requirements. Each DRC is designed to handle up to four Occupancy Sensors and 2 Daylight Sensors plus switches and is limited by the 250mA output of the Dialog Room Controller.

QUESTION: Can Dialog Room Controller provide partition control?

ANSWER: No, it is designed for room control. Partition Control requires WLC-4150 and appropriate firmware version.

QUESTION: How many Dialog Room Controllers on WLC-4150?

ANSWER: WLC-4150 can support up to 63 Dialog Room Controllers. Please contact us for your specific project.

QUESTION: Why or when should I use the expansion pack?

ANSWER: If the room requires a UL924 emergency lighting circuit.

ANSWER: If you need to support additional loads.

QUESTION: How does the emergency lighting work when a 0-10v dimmer channel is controlling the fixture_zone?

ANSWER: When power is lost to the room controller, the dimming circuit acts as an open circuit so dimming control is no longer present, while the expansion pack automatically latches both internal relays to ON position. When emergency power is provided, power goes through the UL924 expansion pack and the fixture will turn on at full brightness. – see wiring diagram.
Since 1962, Douglas Lighting Controls has been solving lighting control challenges by providing convenient and efficient solutions to buildings throughout North America. Their products effectively operate facility lighting while minimizing energy consumption. With over 50 years of providing lighting control solutions, customers trust Douglas Lighting Controls’ experience and product quality.

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