Step 1
Determine number of zones and sources

An important factor to consider when creating zones is flexibility of control. Fill in Load Schedules for each room (area) and summarize the number of zones required.

Step 2
Select Lighting Zone Controllers and/or Lighting Control Panels

Lighting Zone Controllers offer distributed control of lighting loads; Lighting Control Panels contain Modular Control Cards which offer functionality of multiple Lighting Zone Controllers in a single panel enclosure and are available with main lugs or as feed through panels.


Step 3
Select Power Interfaces

For dimming of 120V sources like incandescent, low voltage, and Lutron Tu-Wire® Fluorescent Dimming Ballast loads, a Power Interface is required in conjunction with Lighting Zone Controllers from Step 2.

See ordering pg. 206.

The Digital microWATT Lighting Automation System utilizes distributed Lighting Zone Controllers and/or centralized Lighting Control Panels. These Controllers and Panels are networked together to allow total building lighting management from a single location. Local Wall Controls, Occupant Sensors, and Daylight Sensors wire directly to the Lighting Zone Controllers and Lighting Control Panels for intelligently managed local control of lighting loads.

### Design Tips

- Dimming Ballasts are required to dim fluorescent sources. For information on Lutron Fluorescent Dimming Ballasts, see pg. 236.
- For information on emergency functions available, see Application Notes, pg. 176.

### Design Tips

- Use FDI-INC-2000 Incandescent Interface with incandescent or magnetic low voltage loads. Use FDI-FTU-16A-120 Tu-Wire Ballast Interface with Lutron Tu-Wire Fluorescent Dimming Ballasts. Use FDI-ELVI-1000, Electronic Low-Voltage Interface with electronic low-voltage loads (See ordering pg. 207).
- Power Interfaces should be located within 50’ (15m) of the Lighting Zone Controller or Lighting Control Panel.
**Step 4**

**Select Router Panels and Assign Lighting Zone Controllers and Lighting Control Panels to Router Panel Links**

Router Panels are the communication hubs of the Digital microWATT network. For capability of total building lighting management from a single location, Lighting Zone Controllers and Modular Control cards in Lighting Control Panels must be wired to a Controller Link in a Router Panel. Lighting Zone Controllers and Lighting Control Panels can always be controlled locally by wall controls, occupant sensors, and daylight sensors wired directly to them.

See ordering pg. 201.

**Design Tip**

- Each Router Panel supports up to three Controller Links. Each Controller Link can be daisy-chained to a maximum of 63 Digital microWATT™ Lighting Zone Controllers/Modular Control Cards.
- Up to 21 Router Panels can be used in one networked system.

---

**Step 5**

**Add Local Wall Controls and Sensors**

Local Wall Controls allow occupants to turn lights ON/OFF or Dim/Brighten the lights manually. Occupant Sensors will automatically turn lights on when motion is detected, and will dim lights to a predetermined level or turn lights off when an unoccupied area is detected. Daylight sensors will seamlessly and automatically change the light level as it detects changes in the availability of sunlight in an area. The system intelligently manages local lighting loads for maximum energy savings based on wall control, occupant sensor, and daylight sensor inputs, while working as part of a total system by communicating with the server.

For Local Wall Controls, see ordering pg. 210. For Sensors, see ordering pg. 216.

**Design Tips**

- Local Wall Controls, Occupant Sensors, and Daylight Sensors must be located within 200' (61m) of the Lighting Zone Controller or Lighting Control Panel they are controlling.
- Multiple Wall controls can be wired to a Lighting Zone Controller/Modular Control Card and up to 3 Lighting Zone Controllers/Modular Control Cards can be controlled by a wall control. See ordering pg. 211 for style selection.
- Only one Daylight Sensor can be connected to Lighting Zone Controller/Modular Control Card. See ordering pg. 217.
- Up to 3 Occupant Sensors can be wired to a Lighting Zone Controller/Modular Control Card and up to 3 Lighting Zone Controllers/Modular Control Cards can be controlled by an Occupant Sensor. See ordering pg. 216.

---

**Step 6**

**Add Digital Wallstations/Contact Closure Interfaces**

Digital Wallstations/Control Interfaces allow users to turn lighting zones, comprised of multiple Lighting Zone Controllers/Modular Control Cards, on to a user-settable preset level and off. Digital Wallstations/Control Interfaces correspond only to Lighting Zone Controllers/Modular Control Cards wired to the corresponding Wallstation Link in the same Router Panel.

See ordering pg. 212.

**Design Tip**

- Up to 63 Digital Wallstations/Contact Closure Interfaces can be wired to a Router Panel Wallstation Link.
- Wallstations Link Boosters are required if more than 16 Digital Wallstations/Contact Closure Interfaces are used and/or if the distance to the last Wallstation is greater than 2000’ (600m).
Router Panels are the communication hubs of the System. They support connection to the System Server, Lighting Zone Controllers, Lighting Control Panels, and Digital Wallstations/Contact Interfaces. Each Router Panel has 3 Controller Links for Lighting Zone Controllers/Lighting Control Panels and 3 Wallstation Links for Digital Wallstations/Control Interfaces. Up to 21 Router Panels can be wired in one system.

Wiring Type Key

- **Type A** (2) #12 AWG wires (120V/277V)
- **Type B** (3) #12 AWG wires (120V/277V)
- **Type C** (2) #12 AWG Class 2 wires + (1) twisted, shielded pair #18 AWG Class 2 wire, + (1) #18 AWG Class 2 wire (Available from Lutron, Model #: GRX-CBL-46L)
- **Type D** (3) #18 AWG Class 2 wires
Occupant Sensors detect when a room is occupied or empty and turn lights on to a preset level or off. Up to 3 Occupant Sensors can be wired to a Lighting Zone Controller/Modular Control Card up to 200’ (61m) away. Up to 3 Lighting Zone Controllers/Modular Control Cards can be controlled by an Occupant Sensor.

Daylight Sensors measure available daylight and then dim or brighten the electric light to maintain the appropriate light level. Only one Daylight Sensor can be wired to a Lighting Zone Controller/Modular Control card up to 200’ (61m) away.

Lighting Zone Controllers intelligently integrate Wall Controls, Occupant and Daylight Sensors to control light levels in an area. They can switch and dim 16 Amps of virtually any lighting load at 120V or 277V. Lighting Zone Controllers also meter power consumption for their connected load. Up to 63 Lighting Zone Controllers can be wired to one Controller Link in the Router Panel.

Lighting Control Panels offer functionality of multiple Lighting Zone Controllers in a single enclosure. Lighting Control Panels contain Modular Control Cards for each circuit and are available with main lugs and integral load breakers or as feed through panels requiring external branch breaker protection by others. They integrate Wall Controls, Occupant and Daylight Sensors for each individual Modular Control Card. Up to 63 Modular Control Cards can be wired to one Controller Link in the Router Panel.

Power Interfaces are required to dim 120V sources like incandescent, low-voltage and Lutron Tu-Wire® Fluorescent Dimming Ballast loads.

Wire Type C

Wire Type D

Wire Type C

Wire Type B

Lighting Zone Controllers, pg. 203

Daylight Sensor, pg. 217

Lighting Control Panel, pg. 205

Lighting Control Panels, pg. 201
SPECIFICATIONS

- 1 System Server per system required; must run at all times for proper system operation
- 1 Router Panel link per system capable of up to a total of 21 Router Panels
  - Up to three RS-485 Class 2/PELV Controller Links per Router Panel:
    - Up to 63 Lighting Zone Controllers/Modular Control Cards per Link
    - Up to 189 Lighting Zone Controllers/Modular Control Cards per Router Panel
    - Up to 3969 Lighting Zone Controllers/Modular Control Cards per system
  - Up to three RS-485 Class 2/PELV Wallstation Links per Router Panel:
    - Up to 63 Digital Wallstations/Contact Closure Interfaces per link
    - Up to 189 Digital Wallstations/Contact Closure Interfaces per Router Panel
    - Up to 3969 Digital Wallstations/Contact Closure Interfaces per system

- Power:
  - 100-277V, 50-60 Hz, phase-to-neutral
- **Digital microWATT** Systems can utilize both centralized Lighting Control Panels and distributed Lighting Zone Controllers. Lighting Control Panels contain Modular Control Cards for each circuit of lighting in a single panel enclosure. Modular Control Cards offer the same functionality as Lighting Zone Controllers.
DIGITAL MICROWATT SYSTEM MAP

- Use the map at right to identify system component being reviewed in each section
- For overall wiring information, see pg. 194

DIGITAL MICROWATT Overview

Sources

- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent
- Neon/Cold Cathode*
- Lutron Tu-Wire®*
- High-Intensity Discharge (non-dim only)
- Motor (on/off only)

* Interface required to dim/control. Consult product pages for specifics.

Digital microWATT™ Overview

Sources

- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent
- Neon/Cold Cathode*
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- High-Intensity Discharge (non-dim only)
- Motor (on/off only)

* Interface required to dim/control. Consult product pages for specifics.
Digital microWATT™ Software

**Login Screen**

- **Digital microWATT™ Users**
  - Enter your User ID and Password to Login

- **User ID**
- **Password**
- **Remember User ID & Password**

Please log into the system using the User ID and Password given to you by the administrator. If you have forgotten your password or are experiencing other difficulties entering the system, contact the system administrator.

**DIGITAL MICROWATT SYSTEM MAP**

- Use the map at right to identify system component being reviewed in each section.
- For overall wiring information, see pg. 194.

**Sources**

- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent (non-dim only)
- Neon/Cold Cathode*
- Lutron Tu-Wire®*
- Motor (on/off only)

* Interface required to dim/control. Consult product pages for specifics.

**SOFTWARE BENEFITS**

- **Login Screen** (shown above) allows users to enter their User ID assigned to them by the System Administrator. Access privileges can be set for various levels of users.
  - **Note:** Options shown on user’s screen may be different depending on user’s access privileges.
- **Main Page** (shown on opposite page) allows users to monitor and control the System. Monitor and control functions on the Main Page pertain only to the unit or group highlighted under the **Groups** heading.

- Web-based Graphical User Interface (GUI) Software empowers building owners and managers to monitor and control the lighting system (for individual, groups, areas, floors, and/or entire system) while delivering proper light levels for multi-task environments.
- GUI can be accessed by any computer using Internet Explorer v5.0 or higher that is wired to the same Local Area Network (LAN) as the Digital microWATT Server.

Standards listed below apply to one or more products in the Lutron product line. Consult factory for specific information.
SOFTWARE BENEFITS

OPERATIONAL EFFICIENCY
- Minimize operational expense (energy and labor) by scheduling and pre-planning maintenance (i.e. lamp replacement)
  A. Monitor and record lamp life usage, power, and energy consumption by the lighting system in selected areas or throughout the entire building
  B. Adjust different parameters of operation in a space through Modes
     Examples of basic built-in modes are Normal, Energy Saver (e.g. applies load shed to save energy, enables occupant sensors, and enables daylight sensors to harvest natural light to further reduce energy), Afterhours, and Emergency-Full On
  C. Make standard adjustments such as occupant sensor timeouts from a central location
  D. Schedule system to automatically apply any event at a particular time of day or astronomically

SECURITY AND LIFE SAFETY
- Enhance employee security by accessing and integrating lighting system with security system and allowing security personnel to control building’s lighting at the touch of a button
  E. Monitor building occupancy in every room with occupant sensors

COMFORT
- Fine-tune light levels to each employees’ needs by adjusting light levels at workstations or in any area of the building to meet group tasks

FLEXIBILITY
- Make quick, efficient, cost-effective changes to the lighting system with point-and-click convenience reducing operational expenses now and in the future
  F. Configure system for:
     - Users, user preferences, and user’s access privileges
     - Creating and generating reports (e.g. Power Report, Light Level Report, Maintenance Report)
     - Modifying and configuring Lighting Zone Controllers, Digital Wallstations, and Contact Closure Interfaces

Main Screen
### Digital microWATT™ Servers

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SYSTEM SERVER</strong></td>
<td></td>
</tr>
<tr>
<td>• System Server is required and must run at all times for proper system operation</td>
<td></td>
</tr>
<tr>
<td>• Allows graphical control and remote clients to interface with the Digital microWATT System</td>
<td></td>
</tr>
<tr>
<td>• Network compatible via LAN (Local Area Network) or dial-up networking:</td>
<td></td>
</tr>
<tr>
<td>- Connects to LAN from its RJ45 network jack and to the Digital microWATT System through one of its serial ports;</td>
<td></td>
</tr>
<tr>
<td>- Serial port connects to Interface Adapter P/N PJ62-ADPT-1 through a DB-9 connector</td>
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<tr>
<td>• Network connection provides dual speed capability at 10Mbit/sec or 100Mbit/sec accessed by a single RJ45 connector</td>
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<tr>
<td>• The server hosts the following pieces of software:</td>
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<td>- DMWControl: Interfaces the server to the Digital microWATT Routers and Lighting Zone Controllers</td>
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<tr>
<td>- Timeclock: Schedules and automatically executes events at user-defined times</td>
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</table>

**SYSTEM SERVER A**  
DMW-SVR-A

- Can control the largest of Digital microWATT Systems, including systems with more than 250 Lighting Zone Controllers and more than 10 concurrent users
- Intel® Pentium® 3 processor or better with minimum speed of 1.8GHz
- Minimum 768MB RAM with minimum speed 133MHz
- Operating Voltage: 115V at 60Hz/230V at 50Hz
- Server requires at least 4 power receptacles. Power should be supplied through an uninterruptible power source (UPS)

**SYSTEM SERVER B**  
DMW-SVR-B

- Can control a Digital microWATT System with 250 or fewer Lighting Zone Controllers and 10 or fewer concurrent users
- Intel® Pentium® 3 processor or better with minimum speed of 1.3GHz
- Minimum 512MB RAM with minimum speed 133MHz
- Operating Voltage: 115V at 60Hz/230V at 50Hz
- Server requires at least 3 power receptacles. Power should be supplied through an uninterruptible power source (UPS)

**SYSTEM SERVER D**  
DMW-SVR-D

- Can control a Digital microWATT system with 100 or fewer Lighting Zone Controllers and 3 or fewer concurrent users
- Intel® Pentium® 3 processor or better with minimum speed of 1.0GHz
- Minimum 256MB RAM with minimum speed 133MHz
- Operating Voltage: 115V at 60Hz/230V at 50Hz
- Server requires at least 3 power receptacles. Power should be supplied through an uninterruptible power source (UPS)

**BACNET SOFTWARE**  
DMW-BACNET

- Optional Ethernet based software that allows the server to interface to other building sub-systems for system interoperability through BACnet protocol
## Digital microWATT™ System Interfaces

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</tr>
</thead>
<tbody>
<tr>
<td><strong>ROUTER PANEL</strong></td>
<td>DMW-RP3</td>
</tr>
<tr>
<td>• Global communication hub of the system</td>
<td></td>
</tr>
<tr>
<td>• Supports up to three RS485 Class 2/PELV Controller Links for Lighting Zone Controllers/Modular Control Cards in Lighting Control Panels</td>
<td></td>
</tr>
<tr>
<td>• Maximum of 63 Lighting Zone Controllers/Modular Control Cards can be daisy-chained to one link</td>
<td></td>
</tr>
<tr>
<td>• Supports up to three RS485 Class 2/PELV Controller Links for Digital Wallstations/Control Interfaces</td>
<td></td>
</tr>
<tr>
<td>• Each link can support 16 Digital Wallstations up to 2000’ (600m) from the Router panel; number of Wallstations and total link length can be boosted</td>
<td></td>
</tr>
<tr>
<td>• Use a Wallstation Link Booster P/N MX-RPTR (see below) for every 16 Digital Wallstations/Control Interfaces after the first 16 (Class 2/PELV) and/or for another 2000’ (600m) up to a maximum of 63 Wallstations and 8000’ (2400m) total length</td>
<td></td>
</tr>
<tr>
<td>• A maximum of 21 Router Panels can be daisy-chained in one system</td>
<td></td>
</tr>
<tr>
<td>• Router Panels connect to the System Server thru an Interface Adapter P/N PJ62-ADPT-1</td>
<td></td>
</tr>
<tr>
<td>• All Class 2/PELV wiring has 2000’ (600m) maximum length and must be daisy-chained</td>
<td></td>
</tr>
<tr>
<td>• Input Power: 120V, 50/60 Hz; 15A or 20A, Dedicated feed</td>
<td></td>
</tr>
<tr>
<td>• Temperature: 32˚ to 104˚F (0˚ to 40˚C); Indoors only</td>
<td></td>
</tr>
<tr>
<td>• Enclosure: NEMA Type 1, IP-20 protection; #18 U.S. Gauge Steel</td>
<td></td>
</tr>
<tr>
<td>• Mounting: Surface mount or recess mount; 3” clearance required above, below, and in front</td>
<td></td>
</tr>
</tbody>
</table>

<table>
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<tr>
<th><strong>INTERFACE ADAPTER</strong></th>
<th>PJ62-ADPT-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Connects the System Server to the Digital microWATT System through the Programming Jack P/N NT0MX-62J-WH</td>
<td></td>
</tr>
<tr>
<td>• Translates the RS-232 communication protocol from the System Server to RS485 communication used by Digital microWATT Systems</td>
<td></td>
</tr>
<tr>
<td>• Includes a 6-foot (1.8m), 9-pin RS-232 cable that plugs into a serial port on the System Server and a 12-foot (3.75m) cord that plugs into the NT0MX-62J-WH Jack</td>
<td></td>
</tr>
<tr>
<td>• One required per Server</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>PROGRAMMING JACK</strong></th>
<th>NT0MX-62J-WH</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Jack connects the PJ62-ADPT-1 Computer Interface Adapter to Digital microWATT System</td>
<td></td>
</tr>
<tr>
<td>• Wires to the Graphical User Interface Link in the Router Panel</td>
<td></td>
</tr>
<tr>
<td>• Total length of Graphical User Interface Link plus Router Panel Link (includes all Router Panels) must not exceed 2000’ (600m)</td>
<td></td>
</tr>
<tr>
<td>• One required per system. Install jack near the System Server</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>WALLSTATION LINK BOOSTER</strong></th>
<th>MX-RPTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Operates at 100/120V, 50/60Hz</td>
<td></td>
</tr>
<tr>
<td>• Allows Digital Wallstation/Control Interface Links in Digital microWATT System to be extended beyond their normal maximum distances</td>
<td></td>
</tr>
<tr>
<td>• Booster must be located within 2000’ (600m) of the Router Panel</td>
<td></td>
</tr>
<tr>
<td>• Digital Wallstation/Control Interface Link may be extended 2000’ (600m) for every MX-RPTR added to the link (maximum of three repeaters may be used per link); total maximum length including boosters is 8000’ (2400m)</td>
<td></td>
</tr>
<tr>
<td>• Total maximum number of Digital Wallstations/Control Interfaces using link boosters is 63 per link</td>
<td></td>
</tr>
</tbody>
</table>
**Digital microWATT™**

**Lighting Zone Controllers**

- Intelligently manages local lighting loads by dimming or switching virtually any type of lighting load
- Manages local loads based on wall control, sensor inputs, and emergency systems for maximum energy savings, while working as part of a total system by communicating with the server
- Provides monitoring information such as energy consumed, wall control status, photosensor status, and space occupancy
- Responds to occupant sensors; accepts inputs from most 15 and 24 volt occupant sensors
- Controls light level due to variations in ambient light using a daylight sensor
- Provides a burn-in function to assist in the seasoning of new fluorescent lamps for 100 hours

**Compatible Lutron Products**

Fluorescent Ballasts pg. 236 Interfaces pg. 207 Wall Controls pg. 210 Sensors pg. 216 PerSONNA System pg. 208

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**DIGITAL MICROWATT SYSTEM MAP**

- Use the map at right to identify system component being reviewed in each section
- For overall wiring information, see pg. 194

**Sources**

- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent
- Neon/Cold Cathode*
- Lutron Tu-Wire®*
- High-Intensity Discharge (non-dim only)
- Motor (on/off only)

* Interface required to dim/control. Consult product pages for specifics.

---

**SPECIFICATIONS**

- Input power: 120/277 VAC, 50/60 Hz; phase-to-neutral
- Wiring: Class 2/PELV to Occupant Sensors, Photosensors, and Local Wallstations
- Maximums:
  - 63 DMW-LZC1 Controllers per Controller Link in Router Panel; 189 total per Router Panel (3 Links)
  - 3969 per system (21 Router Panels maximum)
  - DMW-LZC4 counts as 4 Controllers towards maximum per Controller Link
- Mounting: Mount where ambient temperature will be 32˚ to 104˚F (0˚ to 40˚C) with a non-condensing relative humidity < 90%
  - DMW-LZC1: can be mounted in any position (vertical or horizontal)
  - DMW-LZC4: surface mount only, within 7˚ of true vertical
- Controllers create audible noise, mount where acceptable
- Maximum wire length from Lighting Zone Controller:
  - To Power Interface: 50’ (15m)
  - To last dimming ballast on circuit: 750’ (229m)
  - To Control Interfaces – local Wall Controls, occupant sensors, or daylight sensors: 200’ (61m)

---

Lutron Quality Systems registered to ISO 9001
## Digital microWATT™ Lighting Zone Controllers

### Dimensions
- **W:** 5.00" (130mm)
- **H:** 7.80" (195mm)
- **D:** 2.50" (64mm)

Mounts on a 4”- square utility box

### 1 ZONE LIGHTING CONTROLLER
- **Source:** Lutron Hi-Lume® and Eco-10™ Fluorescent Dimming Ballasts
- **Product:** Provides direct dimming control for one lighting zone of Lutron phase controlled ballasts, see pg. 236 for ballast ordering information
- **Model:** Lutron Hi-Lume® and Eco-10™

### Incandescent, Low-Voltage, Neon/Cold Cathode, HID, Fluorescent, Motors
- **Product:** Provides switching for one lighting zone, see capacity ratings below:
  - **Switching ratings:**
    - Incandescent (Tungsten)/Halogen: 16A
    - Low-voltage (Electronic or Magnetic): 16A
    - Neon/Cold Cathode: 16A
    - HID: 16A
    - Fluorescent (capacitive): 16A
    - Fluorescent (non-capacitive): 16A
    - 120V-Motor: 1/3HP
    - 277V-Motor: 1/2HP

### 4 ZONE LIGHTING CONTROLLER
- **Source:** Lutron Hi-Lume and Eco-10 Fluorescent Dimming Ballasts
- **Product:** Provides direct dimming control for up to four lighting zones of Lutron phase controlled ballasts, see pg. 236 for ballast ordering information
- **Model:** Lutron Hi-Lume and Eco-10

### Incandescent, Low-Voltage, Neon/Cold Cathode, Lutron Tu-Wire® Fluorescent Dimming Ballast
- **Product:** Loads require Interfaces for dimming.
  For more information, see pg. 207

### 4 ZONE LIGHTING CONTROLLER
- **Source:** Lutron Hi-Lume and Eco-10 Fluorescent Dimming Ballasts
- **Product:** Provides switching for up to four lighting zones, see capacity ratings below:
  - **16A capacity each, total load for four lighting zones not to exceed 16A**
  - **Switching ratings per zone:**
    - Incandescent (Tungsten)/Halogen: 16A
    - Low-voltage (Electronic or Magnetic): 16A
    - Neon/Cold Cathode: 16A
    - HID: 16A
    - Fluorescent (capacitive): 16A
    - Fluorescent (non-capacitive): 16A
    - 120V-Motor: 1/3HP
    - 277V-Motor: 1/2HP
**DIGITAL MICROWATT SYSTEM MAP**

- Use the map at right to identify system component being reviewed in each section.
- For overall wiring information, see pg. 194

**Sources**

- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent
- Neon/Cold Cathode*
- Lutron Tu-Wire®*
- High-Intensity Discharge (non-dim only)
- Motor (on/off only)

* Interface required to dim/control. Consult product pages for specifics.

**SPECIFICATIONS**

- Up to 63 Modular Control Cards per Controller Link in Router Panel
- Maximum wire length from Lighting Control Panel:
  - To Power Interface: 50’ (15m)
  - To last dimming ballast on circuit: 750’ (229m)
  - To Local Wall Controls, Occupant Sensors, or Daylight Sensors: 200’ (61m)
- All voltages indicated are phase-to-neutral
- Panels will operate on 50 or 60Hz power
- Indoor use only; NEMA Type 1 enclosure
- Panels must be surface mounted within 7° of true vertical
- Mount only where ambient temperature will be 0-40°C (32-104°F) with a non-condensing relative humidity < 90%
- Common neutrals are not permitted; run separate neutrals for each load circuit
- Lighting Control Panels contain Modular Control Cards for each circuit of lighting panel. Modular Control Cards offer same functionality as Lighting Zone Controllers in a single panel enclosure
- System can include a combination of Lighting Zone Controllers and Lighting Control Panels containing Modular Control Cards

**Standards listed below apply to one or more products in the Lutron product line. Consult factory for specific information.**

- UL
- CUL
- NOM
- CE
- ETL
- KEMA EK
- ULc

www.lutron.com  Lutron World Headquarters: 1.610.282.3800
<table>
<thead>
<tr>
<th>Model No. Prefix</th>
<th>No. of Circuits</th>
<th>Voltage</th>
<th>Feed Type</th>
<th>Main Lug (ML)</th>
<th>Branch Circuit Breaker Capacity (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMWP4</td>
<td>4-</td>
<td>120/277V</td>
<td>FT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMWP12, 18, 24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMWP12</td>
<td>12-</td>
<td>120</td>
<td>4</td>
<td>ML-</td>
<td>20</td>
</tr>
<tr>
<td>DMWP18-120V</td>
<td>18-</td>
<td>120</td>
<td>4</td>
<td>ML-</td>
<td>20</td>
</tr>
<tr>
<td>DMWP24</td>
<td>24-</td>
<td>120/277V</td>
<td>FT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMWP24-FT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions—**

**DMWP4**
- W: 15.13" (384mm)
- H: 24.00" (610mm)
- D: 4.13" (105mm)
- wt: 27 lbs (12.2kg)

**DMWP12, 18, 24**
- W: 22.00" (560mm)
- H: 63.00" (1603mm)
- D: 6.00" (153mm)
- DMWP12-120VML-20 wt: 127lbs (57.6kg)
- DMWP12-277VML-20 wt: 150lbs (68kg)
- DMWP18-120VML-20 wt: 113lbs (51.3kg)
- DMWP18-277VML-20 wt: 135lbs (61.2kg)
- DMWP24-120VML-20 wt: 120lbs (54.4kg)
- DMWP24-277VML-20 wt: 127lbs (57.6kg)

**Available model numbers** (Model No. Example: DMWP4-FT)
- 120/277V
- DMWP
- 4-
- FT

**Available model numbers** (Model No. Example: DMWP12-120VML-20)
- 120V
- DMWP
- 12-
- 120
- 4
- ML-
- 20

- 277V
- DMWP
- 12-
- 277
- 4
- ML-
- 20

- 120V/277V
- DMWP
- 12-
- FT

**Footnotes, pg. 205**

1. **Load Capacity per Circuit**
   - * requires interface for dimming
   - Dimmed: 120V or 277V
   - Switched: 120V or 277V
   - Lamp Type:
     - Incandescent (Tungsten/Halogen)*: 16A
     - Magnetic Low-voltage*: 16A
     - Electronic Low-voltage*: 1000W
     - Fluorescent—Lutron Hi-lume™/Eco-10™ (ECO-Series): 16A (120V and 277V)
     - Tu-Wire™: 16A
     - Fluorescent (non-capacitive and capacitive): 16A
     - Neon/Cold Cathode*: 16A
     - Metal Halide: 16A
     - Motors: 1/3HP (120V) 1/2HP (277V)

2. **Feed types—phase-to-neutral only. 4=3Ø, 4W; FT=Feed Through; Feed Through Panels require external branch breaker protection provided by others.**
Digital microWATT™

Power Interfaces

- Designed to work with Digital microWATT Lighting Zone Controllers and Modular Control Cards in Lighting Control Panels to provide dimming of additional load types

Compatible Lutron Products

Fluorescent Ballasts pg. 236

Digital microWATT SYSTEM MAP

- Use the map at right to identify system component being reviewed in each section
- For overall wiring information, see pg. 194

Sources
- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent
- Neon/Cold Cathode*
- Lutron Tu-Wire®*
- High-Intensity Discharge (non-dim only)
- Motor (on/off only)

* Interface required to dim/control. Consult product pages for specifics.

SPECIFICATIONS
- All Power Interfaces are compatible with 120V LOADS ONLY
- All voltages indicated are phase-to-neutral
- Power Interfaces are not plenum rated
- When mounting several units in vertical layout, allow 4.5" (114mm) between wallplates for heat dissipation
- Indoor use only
- Power Interfaces must be mounted within 7° of true vertical
- Power Interfaces generate heat; mount only where ambient temperature will be 0-40°C (32°-104°F) with a non-condensing relative humidity <90%
- Common neutrals are not permitted; run separate neutrals for each load circuit

Mount Interface Vertically
# Digital microWATT™ Power Interfaces

<table>
<thead>
<tr>
<th>Source</th>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INCANDESCENT INTERFACE</strong></td>
<td></td>
<td>FDI-INC-2000</td>
</tr>
<tr>
<td>• Provides dimming control for one lighting zone of incandescent or magnetic low-voltage loads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Operating Voltage: 120VAC; 60 Hz only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 16A Capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Accepts line voltage control wiring from Digital microWATT Lighting Zone Controllers and/or Lighting Control Panel Circuits; length of wire cannot exceed 50’ (15m)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Dimensions**
- W: 4.56” (116mm)
- H: 4.56” (116mm)
- D: 0.69” (17mm)

Wallbox Size:
- two-gang,
- 3” deep minimum

**Footnotes, pg. 207**
1. All voltages indicated are phase-to-neutral.
2. For use with Lutron Tu-Wire Fluorescent Dimming Ballasts only.
3. See pg. 237 for lamp types and ballast ordering information.

---

**TU-WIRE® BALLAST INTERFACE**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>FDI-FTU-16A-120</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provides dimming control for one lighting zone of Lutron Tu-Wire fluorescent ballasts, see pg. 237 for ballast ordering information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Operating Voltage: 120VAC; 60 Hz only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 16A Capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Accepts line voltage control wiring from Digital microWATT Lighting Zone Controllers and/or Lighting Control Panel circuits; length of wire run cannot exceed 50’ (15m)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Dimensions**
- W: 4.56” (116mm)
- H: 4.56” (116mm)
- D: 0.69” (17mm)

Wallbox Size:
- two-gang,
- 3” deep minimum

---

**ELECTRONIC LOW-VOLTAGE INTERFACE**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>FDI-ELVI-1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provides dimming control for one lighting zone of electronic low-voltage lights</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Operating Voltage: 120VAC; 60 Hz only</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• 1000W Capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Accepts line voltage control signals from Digital microWATT Lighting Zone Controllers and/or Lighting Control Panel circuits; length of wire run cannot exceed 50’ (15m)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Dimensions**
- W: 4.56” (116mm)
- H: 4.56” (116mm)
- D: 0.69” (17mm)

Wallbox Size:
- two-gang,
- 3” deep minimum

---

**Footnotes, pg. 207**
1. All voltages indicated are phase-to-neutral.
2. For use with Lutron Tu-Wire Fluorescent Dimming Ballasts only.
3. See pg. 237 for lamp types and ballast ordering information.
**Digital microWATT**

**PerSONNA System**

**Wireless Remote Control of Fluorescent Lighting**
- Dims fixtures individually or in groups using Lutron Infrared Wireless Remote Controls in conjunction with a Digital microWATT Lighting Zone Controller or Lighting Control Panel.
- Reduces glare, eye strain and fatigue to improve productivity.
- Provides different light levels to suit changing tasks.
- Provides flexibility to reconfigure control of lighting without refixturing.
- Mounts inside fluorescent fixture.

**Compatible Lutron Products**

- Lighting Zone Controllers pg. 202
- Lighting Control Panels pg. 204
- Fluorescent Ballasts pg. 236

**DIGITAL MICROWATT SYSTEM MAP**

- Use the map at right to identify system component being reviewed in each section.
- For overall wiring information, see pg. 194.

**Sources**
- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent
- Neon/Cold Cathode*
- Lutron Tu-Wire®*
- High-Intensity Discharge (non-dim only)
- Motor (on/off only)

* Interface required to dim/control. Consult product pages for specifics.

**SPECIFICATIONS**

- Works with Lutron 120VAC and 277VAC Hi-lume® and ECO-10 (ECO Series) Fluorescent Dimming Ballasts, see pg. 236 for ballast ordering information.
- Maximum:
  - 20 ballasts per Dimmer/Receiver.
- Mounting:
  - Fixture must allow PerSONNA System Dimmer/Receiver clear optical tubing to extend through wireway cover for proper reception of infrared wireless remote control signal.
- Maximum total wire run from Lighting Zone Controller or Lighting Control Panel is 750’ (229m).
- Maximum total wire run to farthest Lutron Fluorescent Dimming Ballast is 100’ (30m).

Standards listed below apply to one or more products in the Lutron product line. Consult factory for specific information.

![Lutron Quality Systems registered to ISO 9001](image)

Lutron World Headquarters: 1.610.282.3800
**Product**

<table>
<thead>
<tr>
<th>FIXTURE-MOUNTED DIMMER/RECEIVER</th>
<th>PNS-IR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>120VAC/277VAC</strong></td>
<td></td>
</tr>
<tr>
<td>Dims Lutron Hi-lume® or ECO-10 (ECO Series) phase controlled ballasts; see pg. 236, from Infrared Wireless Remote Control Transmitters</td>
<td></td>
</tr>
<tr>
<td>Max of 20 ballasts per Dimmer/Receiver</td>
<td></td>
</tr>
<tr>
<td>Works with Digital microWATT Lighting Zone Controllers and Modular Control Cards in Lighting Control Panels</td>
<td></td>
</tr>
<tr>
<td>Maximum light level of all ballasts connected to the PNS-IR will be controlled by the dimmed hot output of the Lighting Zone Controller or Modular Control Card in a Lighting Control Panel</td>
<td></td>
</tr>
<tr>
<td>PNS-IR may have only one dimmed hot source connected to it. Consult Lutron for maximum allowable number of PerSONNA System Dimmer/Receivers to be connected to each Lighting Zone Controller or Modular Control Card in a Lighting Control Panel</td>
<td></td>
</tr>
<tr>
<td>Mounting Considerations:</td>
<td></td>
</tr>
</tbody>
</table>

**INFRARED WIRELESS REMOTE CONTROL TRANSMITTERS**

<table>
<thead>
<tr>
<th>&quot;HAND&quot; TRANSMITTER</th>
<th>PN-HT-GR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tap button alternates from maximum (set through Digital microWATT system) to minimum light level; Raise/Lower button for continuous full range dimming</td>
<td></td>
</tr>
<tr>
<td>Narrow transmitter beam for single fixture control</td>
<td></td>
</tr>
<tr>
<td>Available in gray with blue buttons only</td>
<td></td>
</tr>
<tr>
<td>Security Tether and Holster are available: Order separately P/N RCTH-GR (product available in gray only)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRESET TRANSMITTER</th>
<th>GRX-IT-WH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selects five preset light levels plus Raise/Lower button for continuous full range dimming</td>
<td></td>
</tr>
<tr>
<td>Narrow transmitter beam for single fixture control</td>
<td></td>
</tr>
<tr>
<td>Available in matte white with black buttons only</td>
<td></td>
</tr>
<tr>
<td>Engraving available, see pg. 142</td>
<td></td>
</tr>
<tr>
<td>Security Tether and Holster are available: Order Tether separately P/N PNC (available in black only) Order Holster separately P/N PNH-CR for cream, or PNH-BL for black</td>
<td></td>
</tr>
</tbody>
</table>

**Dimensions**

*W: 3.75" (95mm)*

*H: 0.75" (19mm)*

*D: 1.50" (38mm)*

Mounts in fixture ballast channel; Clear optical tubing must extend through wireway cover
Digital microWATT™

Local Wall Controls

• Allows local dimming and on/off control of one zone of lighting in conjunction with a Digital microWATT Lighting Zone Controller or Modular Control Card in a Lighting Control Panel

Compatible Lutron Products

- Lighting Zone Controllers pg. 202
- Lighting Control Panels pg. 204

Matching Accessories

- Receptacles pg. 218
- Cable and Phone Jacks pg. 218

**DIGITAL MICROWATT SYSTEM MAP**

• Use the map at right to identify system component being reviewed in each section
• For overall wiring information, see pg. 194

Sources

- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent
- Neon/Cold Cathode*
- Lutron Tu-Wire®
- High-Intensity Discharge (non-dim only)
- Motor (on/off only)
* Interface required to dim/control. Consult product pages for specifics.

**SPECIFICATIONS**

• Operating voltage: 24VDC (provided by Lighting Zone Controller or Modular Control Card in Lighting Control Panel)
• Wiring: Class 2/PELV; #18 AWG (1.0mm) typical
  - 200’ (61m) maximum to Lighting Zone Controller or Lighting Control Panel
• Mounting:
  - Standard US Wallbox unless otherwise noted
  - No derating required when multiganged
• Maximums per Lighting Zone Controller/Modular Control Card:
  - Up to three RX-MIC-MW (for multilocation dimming) – or –
  - One MW-V (for dimming) – or –
  - One MW-VETS (for switching)
• Up to nine VETS-P can can be added to MW-V or MW-VETS for auxiliary ON/OFF locations
• RX-MIC-MW, MW-V, and MW-VETS are not compatible with each other
  and should not be wired to the same Lighting Zone Controller/Modular Control Card
• Wall controls can be shared with a maximum of three Lighting Zone Controllers or three Modular Control Cards in a Lighting Control Panel

**SAFETY**

Standards listed below apply to one or more products in the Lutron product line. Consult factory for specific information.
### VAREO TAPSITCH

**VAREO TAPSITCH**

- Allows local dimming and on/off control of one zone of lighting
- Single tap turns lights on and off
- Can be used in conjunction with the Vareo Multi-Location Auxiliary Tapswitch P/N VETS-P (See below) for 3-way switching
- One per Lighting Zone Controller or Modular Control Card; can be shared with up to three Lighting Zone Controllers or Modular Control Cards
- Use VETS-P for up to 9 additional Control locations

**Dimensions**

- W: 2.75" (70mm)
- H: 4.56" (116mm)
- D: 1.61" (41mm)

**Wallbox Size:** single-gang

---

### VAREO TAPSITCH/PRESET SLIDE CONTROL

**VAREO TAPSITCH/PRESET SLIDE CONTROL**

- Allows local dimming and on/off control of one zone of lighting
- Slider can be raised or lowered to select light level and can turn lights on/off
- Can be used in conjunction with the Vareo Auxiliary Tapswitch P/N VETS-P (See below) for 3-way switching
- Lights can be dimmed or switched on/off from the MW-V and switched on/off to the preset level from the VETS-P control
- Sophisticated style features a large, tactile tapswitch and small, smooth, linear slide dimmer
- One per Lighting Zone Controller or Modular Control Card; can be shared with up to three Lighting Zone Controllers or Modular Control Cards
- Use VETS-P for up to 9 additional Control locations

**Dimensions**

- W: 2.75" (70mm)
- H: 4.56" (116mm)
- D: 1.61" (41mm)

**Wallbox Size:** single-gang

---

### Ordering Example

- **RX-MIC-MW-WH**
  - add color/finish suffix to model #

### Matte Finishes

- Standard, ships in 48 hrs.
  - White WH
  - Ivory IV
  - Beige BE
  - Gray GR
  - Brown BR
  - Black BL

### Metal Finishes

- Ships in 4-6 weeks.
  - Bright Brass BB
  - Bright Chrome BC
  - Bright Nickel BN
  - Satin Brass SB
  - Satin Chrome SC
  - Satin Nickel SN
  - Antique Brass QB
  - Antique Bronze QZ
  - Anodized Aluminum
    - Clear CLA
    - Black BLA
    - Brass BRA

### Customization

- Ships in 4-6 weeks.
  - See pg. 12 for multigang wallplates, color matching, engraving/silk screening, and custom controls.
  - See pg. 143 for engraving schedules.

---

**Footnotes, pg. 211**

1 Depth includes wallplate and backbox. Wallplate depth is 0.30" (8mm).
Digital microWATT™

Digital Wallstations

- Allows users to turn lighting zones on to a user-defined preset level and off, as well as raise and lower lighting zones
- Each keypad has 2 columns of buttons; a left column button will turn on a group of lights, the right column button will turn off the corresponding group of lights
- European-style control features large buttons with available on-button engraving
- LEDs display whether each zone is on or off
- Faceplate assembly is reconfigurable allowing for changes to the number of buttons on-site
- User can reconfigure which buttons control each circuit through the Graphical User Interface software
- Warns users if the space has entered after-hours mode by flashing the off LED

8 Button Digital Wallstation

DIGITAL MICROWATT SYSTEM MAP

- Use the map at right to identify system component being reviewed in each section
- For overall wiring information, see pg. 194

Sources
- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent
- Neon/Cold Cathode*
- Lutron Tu-Wire®*
- High-Intensity Discharge (non-dim only)
- Motor (on/off only)
* Interface required to dim/control. Consult product pages for specifics.

ROUTER PANEL

- Digital Wallstations/Control Interfaces maximums:
  - Per Link (without link booster): 16 (Class 2/PELV)
  - Distance (without link booster): 2000' (600m) to last Wallstation/Control Interface
  - Addition of a Wallstation Link Booster P/N MX-RPTR, pg. 201 allows an additional 16 Wallstations/Control Interfaces and/or extends distance an additional 2000' (600m) up to 63 Wallstations/Control Interfaces and 8000' (2400m) total
  - Wallstation Links must be daisy-chained;
  - Exception: T-taps under 6” (152mm) are acceptable

- Digital Wallstations/Control Interfaces wire to the Wallstation Links on the Router Panels; each Router Panel contains three Wallstation Links
- Digital Wallstation Links correspond to Lighting Zone Controller Links in the same Router Panel:
  - Digital Wallstations/Control Interfaces wired to Wallstation Link 1 may only control Lighting Zone Controllers/Modular Control Cards wired to DMW Link 1 on the same Router Panel
  - Digital Wallstations wired to Wallstation Link 2 may only control Lighting Zone Controllers/Modular Control Cards wired to DMW Link 2 on the same Router Panel

Standards listed below apply to one or more products in the Lutron product line. Consult factory for specific information.

LUTRON Quality Systems registered to ISO 9001
### Digital microWATT™ Digital Wallstations

#### 2 BUTTON CONTROL

**With raise/lower and Save buttons**

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOMX-2S-___-CPN1372</td>
<td>(shown)</td>
</tr>
</tbody>
</table>

**Without raise/lower and Save buttons**

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOMX-2B-___-CPN1372</td>
<td></td>
</tr>
</tbody>
</table>

- Provides preset on/off for one lighting zone
- Left column button turns on up to 63 Lighting Zone Controllers/Modular Control Cards; Right column button turns corresponding lighting zone off
- Model EOMX-2S-XX-X-CPN1372 has Raise/Lower button for fine-tuning light levels with save option for modifying preset
- Mounts in UK/German Wallbox (Supplied by Lutron)

#### 4 BUTTON CONTROL

**With raise/lower and Save buttons**

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOMX-4S-___-CPN1372</td>
<td>(shown)</td>
</tr>
</tbody>
</table>

**Without raise/lower and Save buttons**

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOMX-4B-___-CPN1372</td>
<td></td>
</tr>
</tbody>
</table>

- Provides preset on/off for two lighting zones
- Left column provides two buttons, each can turn on up to 63 Lighting Zone Controllers/Modular Control Cards; Right column button turns corresponding lighting zone off
- Model EOMX-4S-XX-X-CPN1372 has Raise/Lower button for fine-tuning light levels with save option for modifying preset
- Mounts in UK/German Wallbox (Supplied by Lutron)

#### 6 BUTTON CONTROL

**With raise/lower and Save buttons**

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOMX-6S-___-CPN1372</td>
<td>(shown)</td>
</tr>
</tbody>
</table>

**Without raise/lower and Save buttons**

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOMX-6B-___-CPN1372</td>
<td></td>
</tr>
</tbody>
</table>

- Provides preset ON/OFF for three lighting zones
- Left column provides three buttons, each can turn on up to 63 Lighting Zone Controllers/Modular Control Cards; Right column button turns corresponding lighting zone off
- Model EOMX-6S-XX-X-CPN1372 has Raise/Lower button for fine-tuning light levels with save option for modifying preset
- Mounts in UK/German Wallbox (Supplied by Lutron)

#### 8 BUTTON CONTROL

**With raise/lower and Save buttons**

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOMX-8S-___-CPN1372</td>
<td>(shown)</td>
</tr>
</tbody>
</table>

**Without raise/lower and Save buttons**

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOMX-8B-___-CPN1372</td>
<td></td>
</tr>
</tbody>
</table>

- Provides preset ON/OFF for four lighting zones
- Left column provides four buttons, each can turn on up to 63 Lighting Zone Controllers/Modular Control Cards; Right column button turns corresponding lighting zone off
- Model EOMX-8S-XX-X-CPN1372 has Raise/Lower button for fine-tuning light levels with save option for modifying preset
- Mounts in UK/German Wallbox (Supplied by Lutron)

---

**Footnotes, pg. 213**

1 Depth includes wallplate and backbox. Wallplate depth is 0.25” (6mm).
Contact Closure Interface

- Allows Digital microWATT System to integrate with other equipment through contact closures
- Allows up to four user-defined presets and off to be recalled from a contact closure device
- Activates outputs from scheduled timeclock events in Digital microWATT Software to control other devices
- Can be activated by external manual or automated devices
- Provides five inputs or five outputs
- Class 2/PELV control wiring

**DIGITAL MICROWATT SYSTEM MAP**

- Use the map at right to identify system component being reviewed in each section
- For overall wiring information, see pg. 194

**Sources**
- Incandescent*
- Magnetic Low-Voltage*
- Electronic Low-Voltage*
- Fluorescent
- Neon/Cold Cathode*
- Lutron Tu-Wire®
- High-Intensity Discharge (non-dim only)
- Motor (on/off only)

* Interface required to dim/control. Consult product pages for specifics.

**SPECIFICATIONS**

- Wallstation maximums:
  - Per Link (without link booster): 16 (Class 2/PELV)
  - Distance (without link booster): 2000' (600m) to last Wallstation
  - Addition of a Wallstation Link Booster P/N MX-RPTR, pg. 201 allows an additional 16 Wallstations and/or extends distance an additional 2000' (600m) up to 8000' (600m) total
  - Wallstation Links must be daisy-chained;
    - Exception: T-taps under 6" (152m) are acceptable
- Digital Wallstations wire to the Wallstation Links on the Router Panels;
  - each Router Panel contains three Wallstation Links
- Digital Wallstation Links correspond to Lighting Zone Controller Links in the same Router Panel:
  - Digital Wallstations/Control Interfaces wired to Wallstation Link 1 may only control Lighting Zone Controllers or zones in Lighting Control Panels wired to DMW Link 1 on the same Router Panel
  - Digital Wallstations/Control Interfaces wired to Wallstation Link 2 may only control Lighting Zone Controllers or zones in Lighting Control Panels wired to DMW Link 2 on the same Router Panel
- Control Interface Outputs can be controlled by the System Timeclock on any Link

Standards listed below apply to one or more products in the Lutron product line. Consult factory for specific information.
**CONTACT CLOSURE INTERFACE**

- Inputs initiate four presets plus off on any Lighting Zone Controller/Modular Control Card programmed to the Interface
- One contact required for each preset selection including off
- Timeclock events can trigger outputs set-up in software to control other equipment
- Outputs are momentary

### Dimensions

- **W:** 5.00" (127mm)
- **H:** 7.75" (197mm)
- **D:** 2.50" (64mm)

Mounts on a 4.00"-square utility box

### Inputs

**General**
- Inputs (five) must be dry contact type only
- Inputs must be momentary
- Inputs must have:
  - On-state saturation voltage less than 2.0VDC
  - Off-state leakage current less than 10µA
- Input must have a pulse time of 40 msec or longer

### Outputs

**General**
- Outputs (five) can be used to control other manufacturers' equipment
- Customer provided output indicators must not exceed 200mA at 30VDC (Class 2/PELV)
- Provides a one-second momentary output closure
- Output requires external relay and power supply (30VDC maximum) by others for contact closure
**Digital microWATT™ Sensors**

### Product Specifications

**microOS, OCCUPANT SENSOR**

- Automatically dims or turns off lights when space is unoccupied
- Detects motion ultrasonically
- Occupancy Sensors wire directly to up to 3 maximum Lighting Zone Controllers/Modular Control Cards with low-voltage, Class 2 wiring for simple installation
- Time delay is user-adjustable through software
- Mounting Considerations:
  - The Occupant Sensor must have an unobstructed view of the room. Do not mount behind or near tall cabinets, shelves, indirect hanging light fixtures, etc.
  - Keep the Occupant Sensor away from air flow from ventilation outlets, windows, fans, etc.
  - Partitions higher than 48" (1.2m) inches reduce the coverage area of the sensor. Partitionable spaces with partitions higher than 71" (1.8m) should be treated as individual rooms. Contact Lutron for more details.
  - The sensor can detect major motion (such as a person taking a half step) at a greater distance than it can detect minor motion (such as writing or typing at a desk).
  - Decrease total coverage area by 15% for "soft" rooms (examples, heavy draperies or heavy carpeting).
- Total current drawn for connected Occupant Sensors to a Lighting Zone Controller/Modular Control Card must not exceed 60mA. An auxiliary power supply must be used if this rating is exceeded.

**ONE WAY**

**MOS-CM-15-WH**

- Detects motion in one direction
- Sensor should mount on ceiling against wall where doorway is located and not face openings into hallways
- Maximum coverage area 900 sq. ft. (84 sq. m)
- Maximum of three Occupant Sensors per Digital microWATT Lighting Zone Controller/Modular Control Card; more sensors can be used with addition of a Lutron Power Pack, P/N PP-20
- Contact Lutron for details.

**TWO WAY**

**MOS-CM2W-15-WH**

- Detects motion in two directions
- Sensor should mount in the center of space and not face openings into hallways
- Maximum coverage area 2160 sq. ft. (200 sq. m)
- Maximum of two Occupant Sensors per Digital microWATT Lighting Zone Controller/Modular Control Card; more sensors can be used with addition of a Lutron Power Pack, P/N PP-20
- Contact Lutron for details.

### Dimensions

- **W**: 6.12" (156mm)
- **H**: 1.62" (41mm)
- **D**: 2.31" (59mm)

Ceiling mounted; 3/4" (19mm) diameter hole for mounting post (Lutron-supplied).
**Digital microWATT™ Sensors**

<table>
<thead>
<tr>
<th>Product</th>
<th>Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>MicroPS. Daylight Sensor</td>
<td>MW-PS-WH</td>
</tr>
</tbody>
</table>

- Reduces electric light output based on the presence of sunlight in the room
- Use one daylight sensor exclusively with one Lighting Zone Controller/Modular Control Card
- Daylight sensor wires directly to one Lighting Zone Controller/Modular Control Card with low voltage, Class 2 wiring for simple installation
- Multiple Daylight Sensors can not be used with a Lighting Zone Controller/Modular Control Card, nor can multiple Lighting Zone Controllers/Modular Control Cards share a Daylight Sensor
- Mounting Considerations:
  - Notch on daylight sensor defines the viewing direction
  - Place daylight sensor so its viewing area does not extend out of the window
  - Do not position the daylight sensor in the well of a skylight or above indirect fixtures; move sensor away from fixtures or lower it below fixture
  - Ensure the view of the daylight sensor is not obstructed

**Dimensions**

- Diameter: 2.39" (66mm)
- D: 2.16" (55mm)
- Ceiling mounted; 2" (50mm) diameter hole for bracket (Lutron-supplied)

**MW-PS Location for Average Size Area**

- Notch towards window
- Area Viewed by Lutron Daylight Sensor

**MW-PS Location for Narrow Areas**

- Notch away from window

**Mounting Consideration**

- Do not position daylight sensor above indirect fixture
### RECEPTACLES

| 15A, 125V | NTR-15-<br>NTR-20-<br>• Wallplate included |
| 20A, 125V |

### GFCI RECEPTACLES

| 15A, 125V | NTR-15-GFCI-<br>NTR-20-GFCI-<br>• Wallplate included<br>• GFCI receptacles are only available in white, ivory, gray, brown, and black. Bright chrome, bright brass, and satin brass wallplates are available |
| 20A, 125V |

### ISOLATED GROUND RECEPTACLES

| 15A, 125V | NTR-15-IG-OR-<br>NTR-20-IG-OR-<br>• Wallplate included<br>• GFCI Receptacle is orange. Wallplate is the color requested by customer. Isolated Ground Receptacles can be special ordered to match wallplate |
| 20A, 125V |

### TELEPHONE JACKS

#### Single Telephone Jack 1,2

- 6-conductor jack
- Accepts most 4- or 6-conductor plugs

#### Double Telephone Jack 1,2,3

- 8-conductor jacks, category 5
- Not shown

#### Triple Telephone Jack 1,2,3

- 8-conductor jacks, category 5

### CABLE JACKS 1,2

#### Cable TV Jack 1,2,3

- F style, 75-Ohm coaxial cable

#### Telephone/Cable TV Jack 1,2,3

- 8-conductor jacks, category 5 with F-style, 75-Ohm coaxial cable

### Footnotes, pg. 218

1. No derating required if ganged.
2. A physical barrier (partition) must exist when ganging with 120V products.
3. Trim is white around white, ivory, and beige Telephone Jacks. Trim is black around gray, brown, and black Telephone Jacks. Trim is black around custom and special metals.
### SIX-PORT FRAME JACK \(^{1,2,3}\)

<table>
<thead>
<tr>
<th><strong>Product</strong></th>
<th><strong>Model</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>SIX-PORT FRAME JACK</td>
<td>NT-6PF-</td>
</tr>
</tbody>
</table>

- Field customizable, multi-port frame offering
- Six ports (matching blanks provided in frame)
- Multiple connector types available
  - (Phone, Cable, Fiber, BNC)
- Connectors snap to fit into frame
- Frame fits faceplates with a Designer opening
- Can be used in single and multigang applications

### CONNECTORS

- For use with 6-port frame (NT-6PF-), each connector fills one port.
- Connectors available in white (WH) only. For information about additional colors or connectors contact Lutron Customer Service.

### Phone Jack

<table>
<thead>
<tr>
<th><strong>Model</strong></th>
<th><strong>6-conductor, RJ11, Category 3</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-1P-C3-WH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Model</strong></th>
<th><strong>8-conductor, RJ45, Category 5e</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-1P-C5E-WH</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Model</strong></th>
<th><strong>8-conductor, RJ45, Category 6</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-1P-C6-WH</td>
<td></td>
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</tbody>
</table>

### Fiber Jack

<table>
<thead>
<tr>
<th><strong>Model</strong></th>
<th><strong>MT-RJ feed through</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>CON-1F-MTRJ-WH</td>
<td></td>
</tr>
</tbody>
</table>

- SC simplex
  - CON-1F-SC-WH

- LC non-flush mount
  - CON-1F-LC-WH

- ST style
  - CON-1F-ST-WH

### Cable Jack

- F-style, 75-Ohm coaxial cable
  - CON-1C-WH

### BNC Jack

- BNC connector, 50-Ohm
  - CON-1B-WH

### Ordering Example

**NT-6PF-WH**

*add color/finish suffix to model #*

### Matte Finishes

Standard, ships in 48 hrs.

<table>
<thead>
<tr>
<th>Color</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>WH</td>
</tr>
<tr>
<td>Ivory</td>
<td>IV</td>
</tr>
<tr>
<td>Beige</td>
<td>BE</td>
</tr>
<tr>
<td>Gray</td>
<td>GR</td>
</tr>
<tr>
<td>Brown</td>
<td>BR</td>
</tr>
<tr>
<td>Black</td>
<td>BL</td>
</tr>
</tbody>
</table>

### Metal Finishes

Ships in 4-6 weeks.

<table>
<thead>
<tr>
<th>Finish</th>
<th>Suffix</th>
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</thead>
<tbody>
<tr>
<td>Bright Brass</td>
<td>BB</td>
</tr>
<tr>
<td>Bright Chrome</td>
<td>BC</td>
</tr>
<tr>
<td>Bright Nickel</td>
<td>BN</td>
</tr>
<tr>
<td>Satin Brass</td>
<td>SB</td>
</tr>
<tr>
<td>Satin Chrome</td>
<td>SC</td>
</tr>
<tr>
<td>Satin Nickel</td>
<td>SN</td>
</tr>
<tr>
<td>Antique Brass</td>
<td>QB</td>
</tr>
<tr>
<td>Antique Bronze</td>
<td>QZ</td>
</tr>
<tr>
<td>Anodized Aluminum</td>
<td>CLA</td>
</tr>
<tr>
<td>Black</td>
<td>BLA</td>
</tr>
<tr>
<td>Brass</td>
<td>BRA</td>
</tr>
</tbody>
</table>

### Customization

Ships in 4-6 weeks.

- See pg. 12 for multigang wallplates, color matching, engraving/silk screening, and custom controls.

- See pg. 143 for engraving schedules.

---

### Footnotes, pg. 219

1. No derating required if ganged.

2. A physical barrier (partition) must exist when ganging with 120V products.

3. Trim is white around white, ivory, and beige Telephone Jacks. Trim is black around gray, brown, and black Telephone Jacks. Trim is black around custom and special metals.
**EMERGENCY MODE WITH Digital microWATT™**

**Overview**

Electrical and construction codes typically require that certain circuits of lights be dedicated as emergency circuits in a commercial, occupied building. One method to accomplish this is to use battery powered fluorescent ballasts that turn lamps on when normal power is lost.

Other methods utilize a feature of the Digital microWATT™ Lighting Zone Controller (DMW-LZC1). When the connection between the Link Common (LINK COM) and Emergency (EMERG) terminals is opened, the lights on that Lighting Zone Controller will be locked at an Emergency Light Level.

A normally closed dry contact closure from another system can apply this Emergency mode to a single Lighting Zone Controller or Lighting Zone Panel, a specific link of Lighting Zone Controllers or Lighting Control Panels, or the entire system, depending on where the contact closure is placed.

**Setting the Emergency Light Level**

The Emergency Light Level is configured in the Digital microWATT™ Graphical User Interface (GUI) and can be set from 50% to 100% of maximum light. A high light level is typically used to provide necessary egress for the building occupants. Follow the instructions in the Digital microWATT™ GUI Reference Guide to set this level.

**Requirements**

- A UL 1008 listed automatic emergency transfer switch (provided by others) ahead/upstream from any Lighting Zone Controllers or Lighting Zone Panels designated for emergency.
- An emergency power supply.
- A dry, normally closed, contact closure from a Building Automation System, or Security or Fire Alarm System.

**Wiring Method One**

This method should be used if the Router Panel(s) (DMW-RP3) are not powered by an emergency power source. Upon loss of power to a Router Panel, all Lighting Zone Controllers or Lighting Control Panels that have emergency power and are connected to that Router Panel will drive the lights to the Emergency Light Level.

*Note:* This method does not require the contact closure mentioned in the requirements above. The lights will go to the Emergency Light Level upon loss of power to the Router Panel(s). In the diagram, the lights on any DMW-LZC1 labeled as Emergency (EMERG) will go to the Emergency Light Level in case of loss of power to the Router Panel.
Wiring Method Two

This method assumes that the entire system, including each DMW-LZC1 and DMW-RP3 has power from the Normal/Emergency Service Distribution Panel shown on the previous page. The placement of the normally closed dry contact closure will determine what lights go to the Emergency Light Level as shown in the following diagram. One or more of these approaches can be used.

**S1** - This is the main override switch that takes the entire system to the Emergency Light Level. This switch connects between the GCOM and GEMERG terminals on the first DMW-RP3. There can be multiple S1 switches but they have to be in series before the first DMW-RP3.

**S2** - This switch controls all three links that are connected to the Router Panel. It is located right before the DMW-RP3 GEMERG terminal.

**S3** - This switch controls one of the three links that are connected to the Router Panel. It is located between one of the three DMW-RP3 EMERG terminals and the first DMW-LZC1 EMERG terminal.

**S4** - This switch controls a single unit. This switch is connected to the DMW-LZC1 EMERG terminal after the daisy chain so as not to affect any other unit on the link.

**Notes:**
- Each switch must be closed for normal operation.
- Each switch must not be shared with any other equipment.
- Dry contact closures are not supplied by Lutron.
**Notes:**

1. LT-1 = Link Terminators - are required at both ends of the Wallstation Links.
2. All wiring is Class 2/PELV; use Lutron cable P/N GRX-CBL-46L.
**Wiring Diagram #2**
Digital microWATT Lighting Zone Controller
Hi-lume®, FDB or ECO-10™ Ballast and Controller Wiring

Colors indicated are for wires coming out of Lighting Zone Controller.

**Notes:**
1. The Lighting Zone Controller accepts 120V and 277V, 50/60Hz line feeds. Verify Electronic Fluorescent Ballasts are rated for the specific line voltage that feeds the Lighting Zone Controller.
2. Length of wire from Lighting Zone Controller to last dimming ballast cannot exceed 750’ (229m).
3. Low-voltage wiring for Local Wall Controls, Occupant Sensors, and Daylight Sensors not shown.

**Wiring Diagram #3**
Digital microWATT Lighting Zone Controller
Switched Load Wiring

Load and Control Wiring Colors indicated are for wires coming out of Lighting Zone Controller.

**Notes:**
1. For switched loads (non-dimming), DIP switch 8 must be in the UP (ON) position.
2. Low-voltage wiring for Local Wall Controls, Occupant Sensors, and Daylight Sensors not shown.
Notes:
1. The FDI-INC-2000 and FDI-FTU-16A-120 operate on 120 volts only.
2. Colors indicated are for wires coming out of Digital microWATT Lighting Zone Controller.
3. Low-voltage wiring for Local Wall Controls, Occupant Sensors, and Daylight Sensors not shown.

Wiring Diagram #5
Digital microWATT Lighting Zone Controller to Controller Wiring

Notes:
1. The RS485 Lighting Zone Controller link must be daisy-chained from one controller to another. T-taps greater than 6 inches are not permitted.
2. Pigtail wiring configuration — Pigtauls must be less than 6"(152mm) from wire connector to terminal block.
Wiring Diagram #6
Digital microWATT Vareo®-style Wall Control Wiring
MW-V/MW-VETS and VETS-P Wiring

Notes:
1. Lights can be dimmed and switched ON/OFF from the MW-V.
2. Lights can be switched ON/OFF from the MW-VETS Wall Control.
3. Maximum of 9 total VETS-P Controls can be added to a MW-V or MW-VETS for additional locations of ON/OFF control.
4. Up to 3 Lighting Zone Controllers can be controlled by a wall control.
5. Do not connect +24V between Digital microWATT Lighting Zone Controllers.

Wiring Diagram #7
Digital microWATT Nova T®-style Wall Control Wiring
RX-MIC-MW Wiring

Notes:
1. Lights can be dimmed and switched ON/OFF from any location.
2. Maximum of 3 total RX-MIC-MW controls can be wired to one Lighting Zone Controller. Up to 3 Lighting Zone Controllers can be controlled by one wall control.
3. Do not connect +24V between Digital microWATT Lighting Zone Controllers.
**Wiring Diagram #8**

**Digital microWATT Occupant Sensor Wiring**

MOS-CM-15/MOS-CM2W-15 Wiring

Notes:
1. Total current drawn for connected occupant sensors must not exceed 60mA. An auxiliary power supply must be used if this rating is exceeded.
2. Maximum of 3 Occupant Sensors can be wired to one Lighting Zone Controller. Up to 3 Lighting Zone Controllers can be connected to one occupant sensor.
3. Do not connect +15V between Lighting Zone Controllers.
4. Lighting Zone Controllers are compatible with standard 15VDC and 24VDC Occupant Sensors. For non-Lutron sensors, follow manufacturer’s instructions.
5. See pg. 216 for Occupant Sensor mounting considerations.

**Wiring Diagram #9**

**Digital microWATT Daylight Sensor Wiring**

MW-PS Wiring

Notes:
1. Multiple Daylight Sensors may not be wired to one Lighting Zone Controller, nor can multiple Lighting Zone Controllers be wired to a single Daylight Sensor.
2. See pg. 217 for Daylight Sensor mounting considerations.
**Wiring Diagram #10**
Digital microWATT Lighting Zone Controller
PerSONNA System™ Wiring

Notes:
1. Maximum total wire run from Lighting Zone Controller or Lighting Control Panel is 750’ (229m).
2. Maximum total wire run to farthest Lutron fluorescent Dimming Ballast is 100’ (30m)

**Wiring Diagram #11**
Digital microWATT Lighting Control Panel
DMW-LZC4 Lighting Zone Controller Wiring

Notes:
1. Load terminals accept #12 AWG (2.5mm²) wires.
2. The Lighting Zone Controller accepts a single 15A or 20A, 120/277V, 50/60 Hz feed. Verify Electronic Fluorescent Ballasts are rated for the specific line voltage that feeds the Lighting Zone Controller.
3. No common neutrals. Run separate neutrals for each load.
**Wiring Diagram #12**

Digital microWATT Lighting Control Panel

DMWP12-FT

12 circuit, Feed Through

Lighting Control Panel Wiring

1. PS SIG (daylight sensor signal)
2. PS COM (daylight sensor common)
3. CIR COM (circuit common)
4. WC COM (wall control common)
5. WC SIGNAL (wall control signal)
6. +24V (24V power supply)
7. +15V (15V power supply)
8. OCC SIG (occupant sensor signal)
9. OCC COM (occupant sensor common)

Wire Size: 18 AWG (1.0mm²)

---

**Notes:**

1. Load terminals accept #12 AWG (2.5mm²) wires.
2. The DMWP12-FT Lighting Control Panel accepts 120V and 277V, 50/60Hz line feeds. Verify Electronic Fluorescent Ballasts are rated for the specific line voltage that feeds the Lighting Zone Controller.
3. No common neutrals. Run separate neutrals for each load.
**Wiring Diagram #13**

Digital microWATT Lighting Control Panel
DMWP12-1204ML-20
12 circuit, 120V Main Lugs
Lighting Control Panel Wiring

1. PS SIG (daylight sensor signal)
2. PS COM (daylight sensor common)
3. CIR COM (circuit common)
4. WC COM (wall control common)
5. WC SIGNAL (wall control signal)
6. +24V (24V power supply)
7. +15V (15V power supply)
8. OCC SIG (occupant sensor signal)
9. OCC COM (occupant sensor common)

Wire Size: 18 AWG (1.0mm²)

To local controls (see key above)

To router panel and additional DMW panels

(MUX) White
(MUX) Violet
(Link Common) Black
(Emergency) Red
(Shield) Grey
(Ground) Green

Wire Size: 18 AWG (1.0mm²)

Notes:
1. Load terminals accept #12 AWG (2.5mm²) wires.
2. The DMWP12-1204ML-20 Lighting Control Panel accepts a 3 phase, 4 wire 120V, 50/60Hz line feed. Verify Electronic Fluorescent Ballasts are rated for the specific line voltage that feeds the Lighting Zone Controller.
3. No common neutrals. Run separate neutrals for each load.
System Layout Sheet Instructions

The following System Layout Sheets will be helpful when designing a Digital microWATT Lighting Automation System. Completed System Layout Sheets and blueprints or reflected ceiling plans are required to accurately generate the Digital microWATT database for the project.

1. **Project Name.** Enter project name.
2. **Project Location.** Enter project location.
   i.e. City and State, or Country.
3. **Zone #.** Enter the zone number for the Lighting Zone Controller which is controlling a specific area. If there are multiple zones of control in a single area, multiple Lighting Zone Controllers will be needed.
4. **Area Description.** Enter area name or description for the specific area which will be controlled and monitored by the Lighting Zone Controller.
   (i.e. Office 101, Office 102, etc.)
5. **Lutron LZC#.** The Lutron LZC# identifies the specific Lighting Zone Controller. This identification will help unit addressing during installation.
6. **Circuit Name and Number.** Enter the circuit name and number that is feeding power to the Lighting Zone Controller. (i.e. H21, LV22, etc.)
7. **Voltage.** Enter the voltage for the circuit that is feeding power to the Lighting Zone Controller. (i.e. 120V, 277V). Voltages should be phase to neutral.
8. **Circuit Type.** Enter the circuit type for the circuit that is feeding power to the Lighting Zone Controller. (i.e. N for normal, E for emergency).
9. **Load Type.** Enter the load type controlled by the Lighting Zone Controller.
   FLD . . . . . . . . Fluorescent Dim
   FLN . . . . . . . . Fluorescent Switched
   INC . . . . . . . . Incandescent
   MLV . . . . . . . . Magnetic Low-Voltage
   ELV . . . . . . . . Electronic Low-Voltage
   NCC . . . . . . . . Neon/Cold Cathode
   HID . . . . . . . . High Intensity Discharge Switched
   MTR . . . . . . . . Motor Switched
   **Note:** If dimming load type is other than FLD, an interface will be required to dim. Any load type listed above can be switched directly by the Lighting Zone Controller.
10. **Total Load.** Enter the total load, in watts, for the source to be controlled by the Lighting Zone Controller. (i.e. 100W, 450W).
11. **Router #.** Enter Router Panel number. Maximum of 21 router panels in a system.
12. **Link #.** Enter link number. The link number will identify the link in the router panel you want to use. Each router panel has three Lighting Zone Controller Links. Maximum of 63 Lighting Zone Controllers per link. Maximum link distance is 2000’.
13. **Floor #.** Enter floor number. The floor number will identify the location or area in the building which you want to control with the specific Lighting Zone Controller Link from Step 12.
14. **Ballast Type.** Enter the ballast type and model number controlled by the Lighting Zone Controller.
    i.e. ECO-T832-277-3.
15. **Ballast Quantity.** Enter the quantity of ballasts controlled by the Lighting Zone Controller.
16. **Wall Control Type.** Enter the wall control type connected to the Lighting Zone Controller.
    **Vareo Type……** MW-V-WH (Dimming)
    …… MW-VETS-WH (Switching)
    **Nova T Type……** RX-MIC-WH
17. **Wall Control Quantity.** Enter the wall control quantity connected to the Lighting Zone Controller.
    **Vareo Type……** 10 Maximum
    (1 MW-V-WH or 1 MW-VETS-WH and up to 9 VETS-P-WH)
    **Nova T Type……** 3 Maximum
18. **Occupant Sensor Type.** Enter the occupant sensor type connected to the Lighting Zone Controller.
    **One-Way Type……** MOS-CM-15-WH
    **Two-Way Type……** MOS-CM2-W-WH
19. **Occupant Sensor Quantity.** Enter the occupant sensor quantity connected to the Lighting Zone Controller.
    **One-Way Type……** 3 Maximum
    **Two-Way Type……** 2 Maximum
20. **Daylight Sensor.** Enter 1 if a daylight sensor is connected to the Lighting Zone Controller.
    Enter 0 if a daylight sensor is not connected to the Lighting Zone Controller. Only 1 Daylight sensor can be connected per Lighting Zone Controller.
<table>
<thead>
<tr>
<th>Zone #</th>
<th>Area Description</th>
<th>Lutron LZC#</th>
<th>Circuit Name and Number</th>
<th>Voltage</th>
<th>Circuit Type</th>
<th>Load Type</th>
<th>Total Load</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Copy Layout Sheet for additional LZC’s. Up to 63 LZC’s can be wired to one Controller Link in a Router Panel.
<table>
<thead>
<tr>
<th></th>
<th>11 Router #:</th>
<th>12 Link #:</th>
<th>13 Floor #:</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Ballast Type</td>
<td>15 Ballast Quantity</td>
<td>16 Wall Control Type</td>
</tr>
<tr>
<td>17</td>
<td>Wall Control Quantity</td>
<td>18 Occupant Sensor Type</td>
<td>19 Occupant Sensor Quantity</td>
</tr>
<tr>
<td>20</td>
<td>Daylight Sensor</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Copy Layout Sheet for additional LZC’s. Up to 63 LZC’s can be wired to one Controller Link in a Router Panel.
A reference guide for the switches, receptacles, and jacks that aesthetically match the dimmers.

- Schedule provides room to specify quantity, color and symbol used on plans

<table>
<thead>
<tr>
<th>Accessory</th>
<th>Symbol</th>
<th>QTY.</th>
<th>Description</th>
<th>Rating</th>
<th>Model #</th>
<th>Color/Finish</th>
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</thead>
<tbody>
<tr>
<td>Receptacle</td>
<td>15A</td>
<td>20A</td>
<td>15A</td>
<td>NTR-15-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20A</td>
<td></td>
<td>20A</td>
<td>NTR-20-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GFCI Receptacle</td>
<td>15A</td>
<td>20A</td>
<td>15A</td>
<td>NTR-15-GFCI-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20A</td>
<td></td>
<td>20A</td>
<td>NTR-20-GFCI-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Isolated Ground Receptacle</td>
<td>15A</td>
<td>20A</td>
<td>15A</td>
<td>NTR-15-IG-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20A</td>
<td></td>
<td>20A</td>
<td>NTR-20-IG-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone Jack</td>
<td>6-conductor</td>
<td></td>
<td></td>
<td>NT-PJ-</td>
<td></td>
<td></td>
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<tr>
<td>Double Telephone Jack</td>
<td>8-conductor, each jack category 5</td>
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<td></td>
<td>NT-PJ8X2-</td>
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<td></td>
</tr>
<tr>
<td>Triple Telephone Jack</td>
<td>8-conductor, each jack category 5</td>
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<td></td>
<td>NT-PJ8X3-</td>
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</tr>
<tr>
<td>Cable TV Jack</td>
<td>F-Style, 75–Ohm coaxial cable</td>
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<td></td>
<td>NT-CJ-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Telephone/Cable TV Jack</td>
<td>8-conductor, category 5, 75–Ohm coaxial cable</td>
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<td></td>
<td>NT-PJ8-CJ-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Six Port Frame Jack</td>
<td>8-conductor, category 5, 75–Ohm coaxial cable</td>
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<td></td>
<td>NT-6PF-</td>
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</tbody>
</table>