

HomeWorks Manual Override Setup Guide

Overview

What is Manual Override?

A manual override is provided for systems employing a centralized topology with panel-mounted DIN Rail Modules (DPM) or Remote Power Modules (RPM) for situations when communication between the processor and local keypads fails. The homeowner can utilize the manual override feature to turn all DPM and/or RPM lighting zones to a preset level which is programmed using the HomeWorks QS software utility.

How does Manual Override work?

Manual override requires an auxiliary switch or contact closure output (CCO) to the manual override terminal blocks. In systems that utilize RPMs, the particular module interface (MI) (or group of MIs) will go into manual override mode when the contact closure completes the circuit. This subsequently drives the RPM modules, tied to each MI, to go to their manual override settings. DIN rail modules do not require an interface to communicate to the processor and, as a result, applicable DPMs have an on-board, normally closed, contact closure input that provides the manual override function.

A manual override switch or CCO will need to be installed at the commissioning stage of a job in order to take full advantage of the manual override feature. This switch/CCO would typically be located in the panel room or closet and should be clearly labeled and act as a standalone device and not be part of the system. Manual override levels are defined in the load schedule of the HomeWorks QS database.

Best Practices

It is recommended to deploy a separate switch for each panel. One switch can be used to control multiple panels in what is considered a “parallel” configuration, however all panels will be controlled together. Individual control is ideal because it allows the end user to turn on only the necessary lighting. For a DIN rail, since the individual DPM has its own manual override input, control could be made as granular as module to module, instead of controlling the entire panel at once.

Manual override switches should be installed in a location that is easily accessible to the homeowner but not in an area where guests could trigger unnecessary usage of the feature during normal operation, such as a closet close to an egress area. This solution is ideal for new construction. One manual override switch is recommended per floor of the living space.

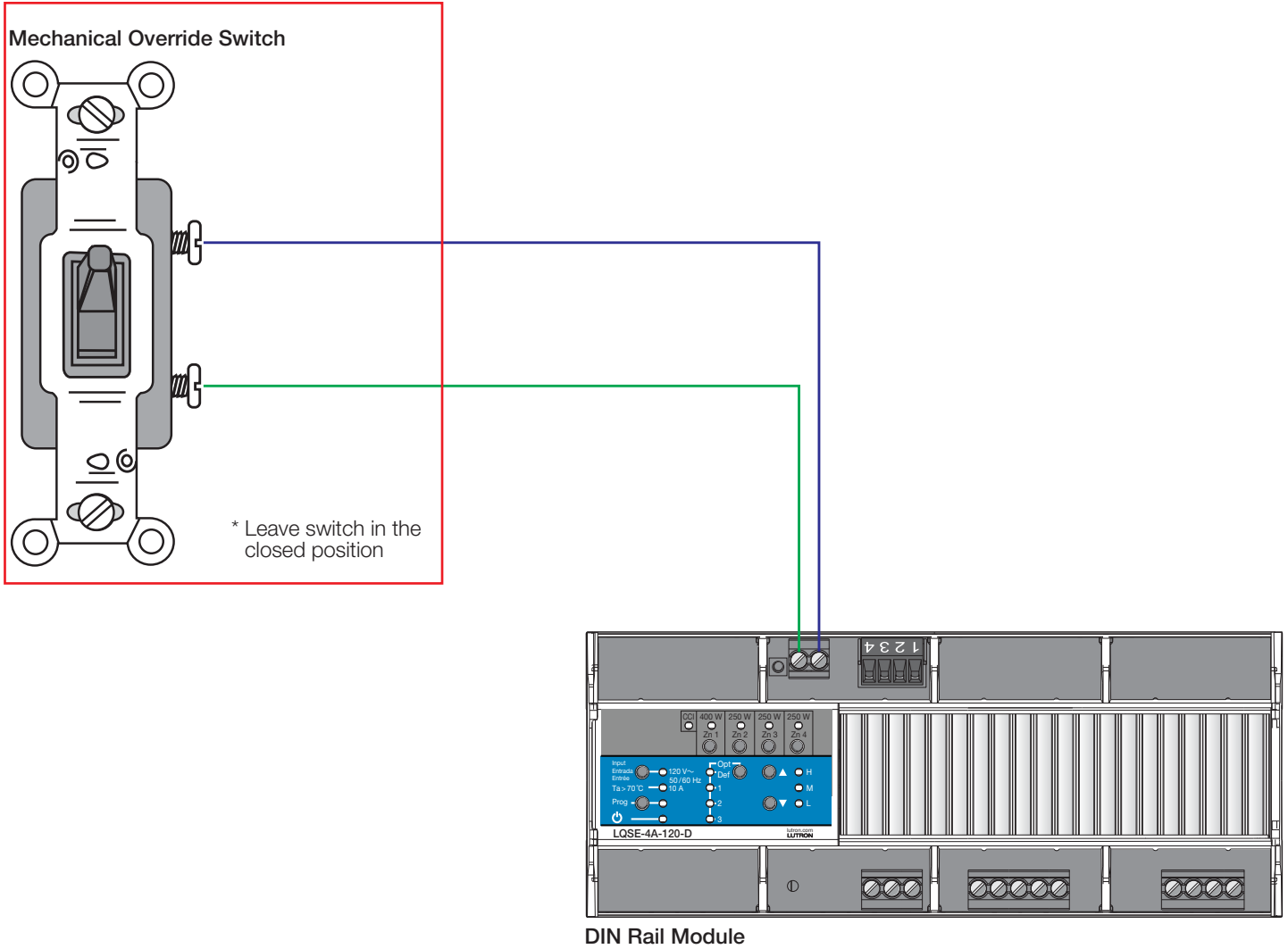
For retrofit applications, convenient control can be provided with an RF module with CCO (LMJ-CCO1-24-B) paired with a Pico wireless control (PJ2-2B). The relay module is used in place of the mechanical switch, mounted near the panel. The associated Pico wireless control can be remotely mounted in the above recommended locations. These products utilize patented Clear Connect RF technology to provide reliable communication and the flexibility to place the Pico wireless control in a more convenient location (within 30 ft [9 m] of the RF CCO Module). Note that it is best practice to also install a mechanical switch near the panel in addition to the RF CCO Module, both controlling the same MI(s) manual override.

How many mechanical switches or RF modules are needed?

- **Single** - One switch or RF CCO Module would be wired to each individual MI's manual override terminal or each individual DIN rail module manual override CCI
- **Parallel** - One switch or RF CCO Module can control multiple MIs or DIN rail modules that are daisy-chained together via their manual override terminals

Refer to the wiring diagrams on the next few pages for switch and wire ratings.

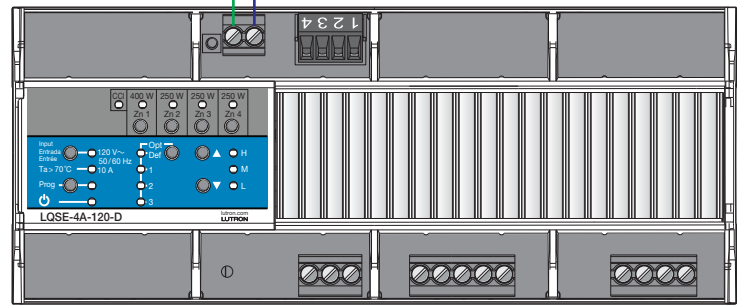
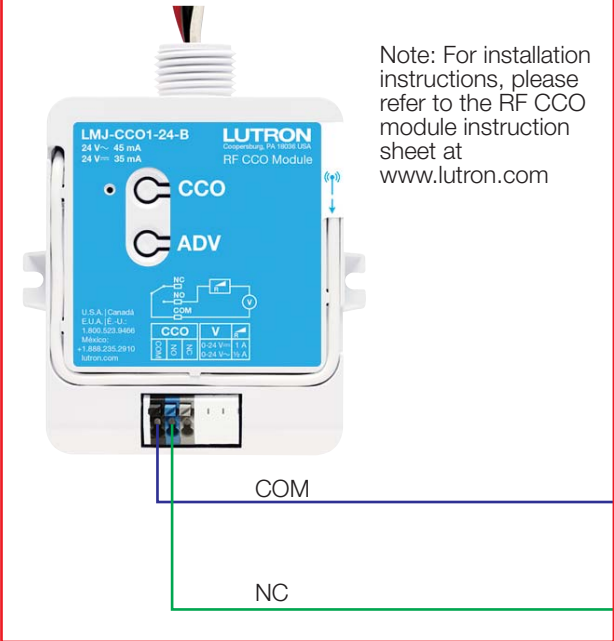
Basic Switch Solution (DIN Rail Module)



Note: In parallel configurations using DIN rail modules, up to 32 modules can be connected to the same manual override switch.

RF CCO Module Solution (DIN Rail Module)

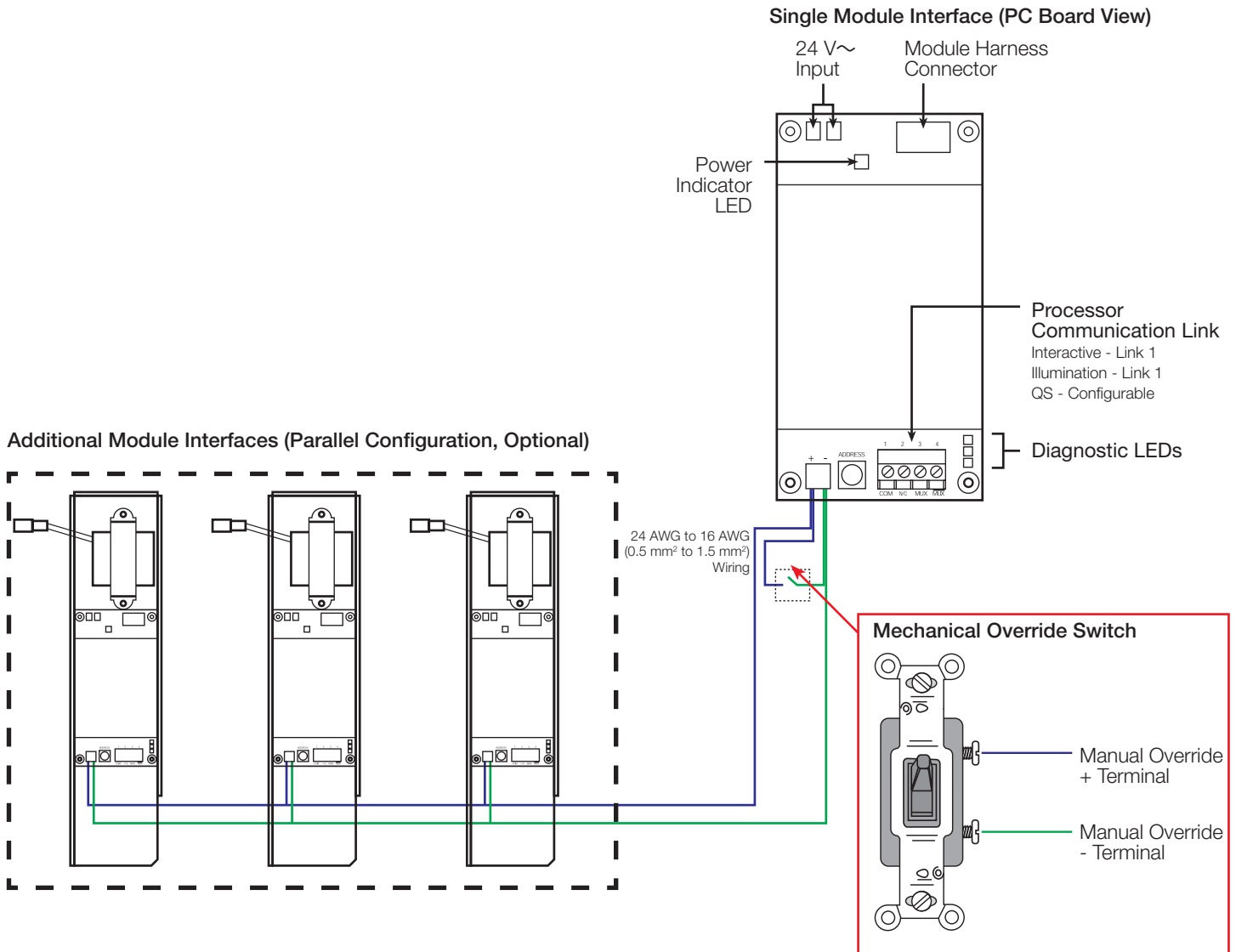
RF CCO Module (LMJ-CCO1-24-B)



DIN Rail Module

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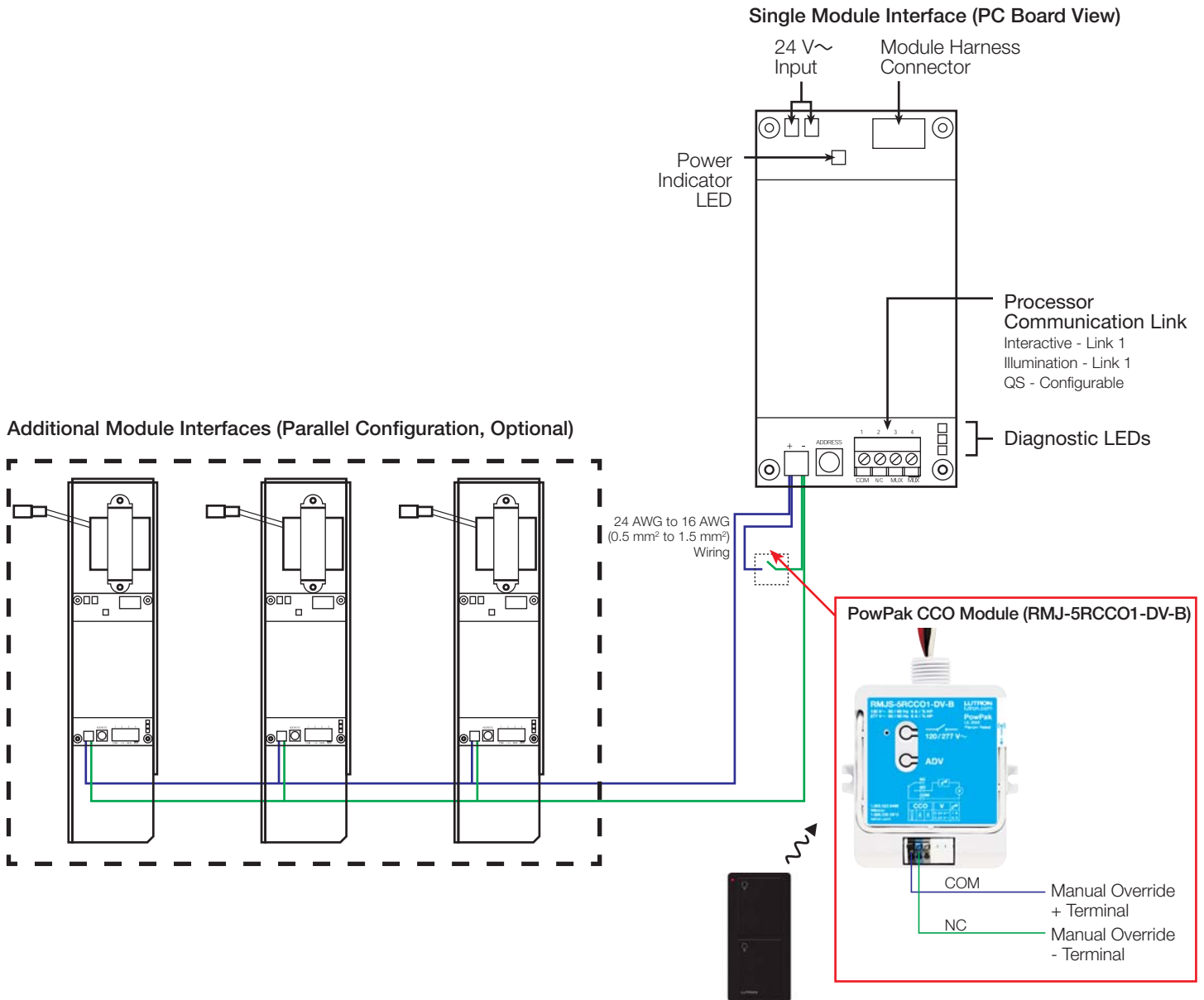
Basic Switch Solution (Remote Power Module)



| Manual Override Terminal Wire Run Length | Wire Gauge |
|--|---|
| Less than 1000 ft (305 m) | 24 AWG to 16 AWG (0.5 mm ² to 1.5 mm ²) |
| Over 1000 ft (305 m) | 18 AWG to 16 AWG (0.75 mm ² to 1.5 mm ²) |

Note: Switches should be rated to 50 mA at 30 V_{DC} or greater. In parallel configuration, where one switch controls multiple module interfaces, the switch must be rated to handle the sum total current of all the module interfaces. For example, 6 module interfaces would total 300 mA.

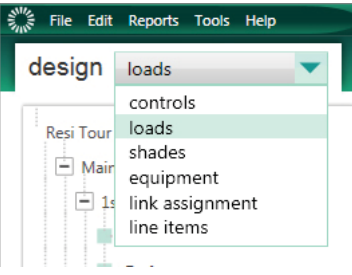
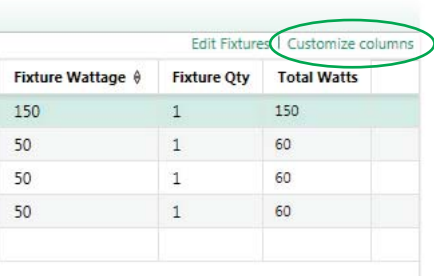
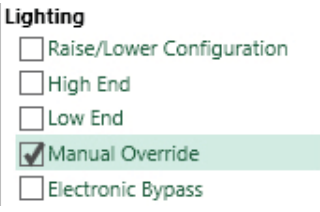
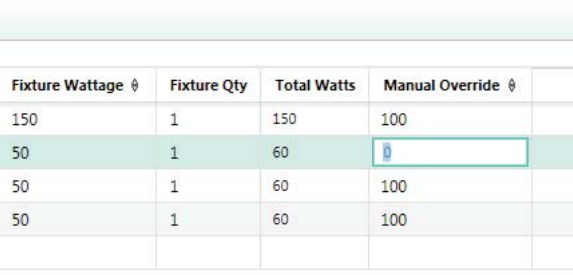
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Note: The CCOs of the RF CCO module are rated for a total of 1 A at 30 V_{DC}. In parallel configurations, where one CCO controls multiple module interfaces, the CCO can handle the maximum of 16 module interfaces (0.8 A) which could reside in a single panel link.

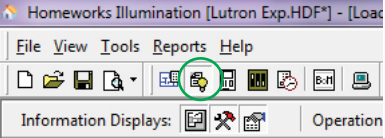

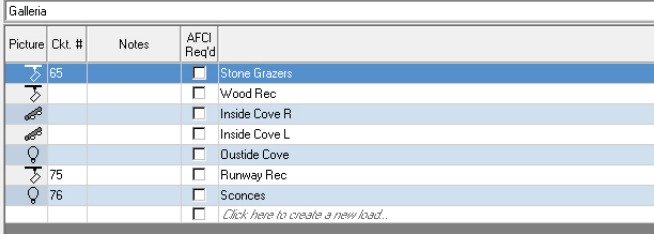
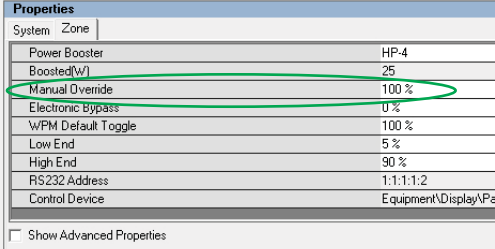
HomeWorks QS Software - Design Tab

|  | <p>1. Under the design tab select the loads option from the drop-down menu.</p> | | | | | | | | | | | | | | | | | | | | |
|--|---|-------------|-----------------|-----------------|-----|---|-----|-----|----|---|----|---|----|---|----|-----|----|---|----|-----|---|
|  | <p>2. Select Customize columns at the top of the Load Schedule screen.</p> | | | | | | | | | | | | | | | | | | | | |
|  | <p>3. Select the Manual Override option</p> | | | | | | | | | | | | | | | | | | | | |
|  <table border="1" data-bbox="121 1134 690 1344"> <thead> <tr> <th>Fixture Wattage</th> <th>Fixture Qty</th> <th>Total Watts</th> <th>Manual Override</th> </tr> </thead> <tbody> <tr> <td>150</td> <td>1</td> <td>150</td> <td>100</td> </tr> <tr> <td>50</td> <td>1</td> <td>60</td> <td>0</td> </tr> <tr> <td>50</td> <td>1</td> <td>60</td> <td>100</td> </tr> <tr> <td>50</td> <td>1</td> <td>60</td> <td>100</td> </tr> </tbody> </table> | Fixture Wattage | Fixture Qty | Total Watts | Manual Override | 150 | 1 | 150 | 100 | 50 | 1 | 60 | 0 | 50 | 1 | 60 | 100 | 50 | 1 | 60 | 100 | <p>4. Change the Manual Override settings to the desired level. By default, all zones will be 100% on.</p> |
| Fixture Wattage | Fixture Qty | Total Watts | Manual Override | | | | | | | | | | | | | | | | | | |
| 150 | 1 | 150 | 100 | | | | | | | | | | | | | | | | | | |
| 50 | 1 | 60 | 0 | | | | | | | | | | | | | | | | | | |
| 50 | 1 | 60 | 100 | | | | | | | | | | | | | | | | | | |
| 50 | 1 | 60 | 100 | | | | | | | | | | | | | | | | | | |

Notes:

1. Non-essential zones (laundry, closets, etc.) should be off.
2. Emergency pathways should be created with 75% or higher zone levels.
3. Bedroom spaces should be a dimmed value such as 50% or less.

HomeWorks Illumination Software - Design Tab

| | |
|---|---|
|  | <p>1. Select the Load Schedule screen () at the top as indicated.</p> |
|  | <p>2. Highlight the zone you would like to change.</p> |
|  | <p>3. Change the zone value to the desired level. By default, all zones will be set to 100% on.</p> |

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3. Bedroom spaces should be a dimmed value such as 50% or less.

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