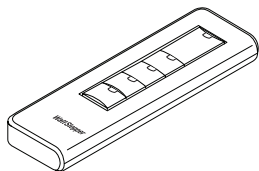


# LMRH-105

## Digital Lighting Management

### Digital IR Handheld Remote 5-button Scene Switch



## SPECIFICATIONS

Power Supply. . . . . 3 AAA batteries, 1.5V alkaline or NiMH rechargeable  
Environment:

Operating Temperature . . . . . 32° to 95°F (0° to 35°C)

Storage Temperature . . . . . 23 to 176°F (-5° to 80°C)

Relative Humidity . . . . . 5 to 95% (non condensing)

Other:

RoHS compliant

Patents Pending

5-year warranty

FCC part 15

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

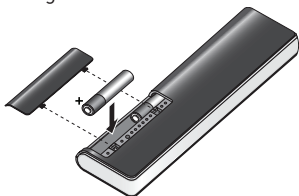
## UNIT DESCRIPTION

The WattStopper LMRH-105 Digital IR Handheld Remote uses an infrared (IR) transmitter to send commands to a Digital Lighting Management (DLM) network. It allows the user to record and recall scenes, turn lights ON/OFF and dim without going to a wall box device.

The LMRH-105 operates on three AAA batteries. It communicates wirelessly with other DLM devices by sending an IR signal to a DLM IR enabled device within its range and line of sight.

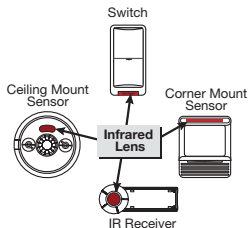
### Battery Installation

The battery compartment holds three standard 1.5V AAA Alkaline batteries (supplied). Rechargeable NiMH batteries can be used. Do not mix battery types. Do not mix old batteries with new batteries.

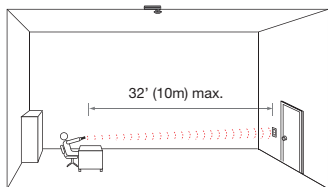
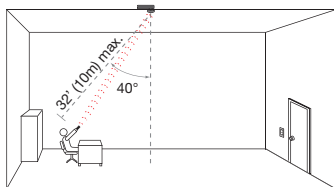


# OPERATION

The LMRH-105 uses IR technology to wirelessly send control signals to the DLM system. Point the handheld remote at any IR enabled DLM device within its range and press a button to send signals to the DLM network. To identify an IR enabled device, look for a dark translucent lens on the face of the device.



## Transmitting range



## Default Functionality: Plug n' Go™ (PnG)

As shipped, the rocker paddle and scene buttons control all loads on the DLM local network. To change the loads that are controlled by the LMRH-105 and to record scenes see UNIT ADJUSTMENT.

## Button Functions

Press the top of the rocker paddle to turn load(s) ON. The blue LED on the paddle also turns ON. Switched loads turn ON. Dimmable

loads turn ON to the last light level set before they turned OFF. Press the bottom of the rocker paddle to turn load(s) OFF.

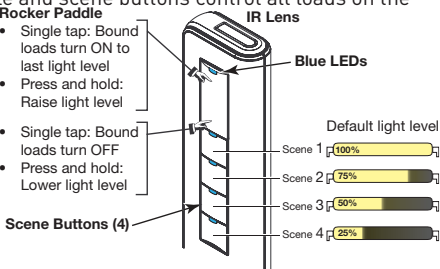
Dimmable loads ramp down or up in response to pressing and holding the top or bottom of the paddle. ON/OFF loads turn OFF when the ramp level dims below 50% and turn ON when the ramp level rises above 50%.

To recall a scene press one of the four scene buttons.

### Rocker Paddle

- Single tap: Bound loads turn ON to last light level
- Press and hold: Raise light level
- Single tap: Bound loads turn OFF
- Press and hold: Lower light level

### Scene Buttons (4)



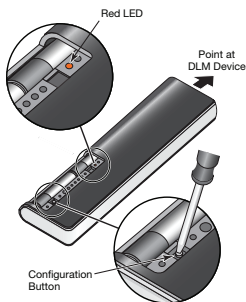
## Battery Life

To conserve battery life, the LMRH-105 shuts down 5 seconds after the last key press unless the DLM local network is in configuration mode (Push n' Learn, PnL).

## UNIT ADJUSTMENT

The LMRH-105 is pre-set for operation as described in the Default Functionality section. Adjustment is optional.

A "configuration" button allows access to the WattStopper Push n' Learn™ technology to change the operation of the LMRH-105.



### Step 1: Enter Push n' Learn (PnL)

- Locate the configuration button inside the LMRH-105 battery compartment.
- Point the LMRH-105 at a DLM IR device.
- Press and hold the configuration button until the red LED in the battery compartment begins blinking (approximately 3 seconds), then release the button. Make sure the LMRH-105's red LED continues to blink\* then observe the following:
  - The Red LEDs on all other DLM devices on the network start blinking rapidly (2x/second). The LEDs continue to blink until you exit PnL.
  - All loads on the DLM local network turn OFF immediately after entering PnL. After 1 second, load 1 turns ON.

### Step 2: Load Selection

A quick press on the LMRH-105's configuration button turns OFF load 1 then turns on the next load in sequence. Keep pressing the configuration button to step through all the loads connected to the DLM local network.\*

The blue LED is lit brightly on all switch buttons, scene buttons, dimmer paddles, and sensors that are bound to the load that is currently ON.

- \* All the blue LEDs on the LMRH-105 flash rapidly if the LMRH-105 does not have proper IR communication with the local network. Make sure to aim the LMRH-105 toward an IR enabled device that is in range when you press the configuration button.

- To bind the load to one of the buttons and/or the paddle on the LMRH-105, press the desired button making sure that the LED turns ON brightly.
- To unbind a load, press the button. The LED goes dim to indicate the button or paddle on the handheld remote no longer controls this load.
- A quick press on the configuration button turns ON the next load.
- Repeat until the paddle and scene switches are bound to the loads you want them to control.

**Note:** more than one load can be assigned to the paddle or a scene button and a load can be assigned to multiple devices and buttons in the DLM network.

### Step 3: Exit Push n' Learn (PnL)

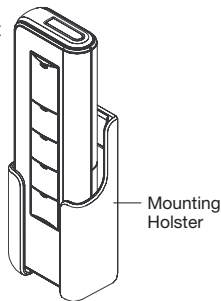
- a. Point the LMRH-105 at a DLM IR device.
- b. Press and hold the LMRH-105 configuration button until the red LED in the battery compartment stops blinking (approximately 3 seconds), then release the button. The red LED on the local network devices stop blinking to indicate that the network exited PnL.

### Recording Scenes

The LMRH-105 comes from the factory with scenes 1-4 pre-recorded. By default scenes 1-4 control all loads on the DLM local network. The default light levels are shown in the Default Functionality: Plug n' Go section.

To change the recorded light levels for any of the scenes simply adjust the lights in the room to the desired levels and then press and hold the desired scene button for 5 seconds.

- If there are lights in the room that you want turned OFF for a particular scene, make sure that those lights are OFF when you record the scene.
- If there are lights in the room that you want to be unaffected by the scene, then you will need to unbind those lights from the scene button by following the instructions listed under UNIT ADJUSTMENT.



### MOUNTING

The LMRH-105 comes with a holster, screws and an adhesive strip for mounting.

# RESET PROCESS

**Load binding clear** - To un-bind the rocker paddle from all loads:

1. Do not point the LMRH-105 toward any DLM IR enabled device.
2. Press and hold the configuration button in the battery compartment until the red LED goes solid ON (approximately 10 seconds).

**Device reset** - To re-bind the LMRH-105 rocker paddle to all loads (its default PnG state):

1. Do not point the LMRH-105 toward any DLM IR enabled device.
2. Press and hold the configuration button in the battery compartment for 20 seconds.

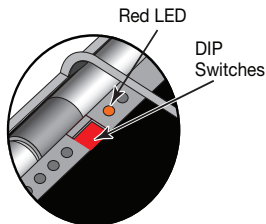
**System Reset** - This reset returns ALL DLM devices to their factory default PnG settings. All system settings will be reset; all customized binding relationships will be lost. All PnG functionality will be restored. To return all devices on the DLM local network to PnG using the LMRH-105:

1. Point the LMRH-105 at an IR enabled DLM local network device.
2. Press and hold the configuration button in the battery compartment until the red LED starts blinking to put the DLM local network into PnL (see Step 1 in UNIT ADJUSTMENT for details).
3. Press and hold the configuration button for approximately 20 seconds, until the red LED on the DLM devices resume blinking rapidly (approximately 2x/second). Release the configuration button.

## Changing controlled scene numbers

To change the scene numbers that the LMRH-105 controls, use the DIP switches inside the battery compartment.

Scenes	1-4	5-8	9-12	13-16
(default)				
Setting	off off	off on	on off	on on
Switch #	1 2	1 2	1 2	1 2



# TROUBLESHOOTING

<b>LEDs on the remote don't light</b>	<p>Press any button. If an LED doesn't light:</p> <ul style="list-style-type: none"><li>• Check to see if the LED is actually lit, but very dim. This is normal. Press the top of the paddle or any button to fully turn ON the button or paddle LED.</li><li>• Check batteries. Replace if needed.</li><li>• Remove the batteries for 5 minutes. After 5 minutes, reinstall the batteries and try again.</li></ul>
<b>The wrong lights are controlled</b>	<p>Configure the buttons to control the desired lights using the Push n' Learn adjustment procedure.</p>
<b>Remote LEDs turn ON and OFF but light levels don't change or switch</b>	<ol style="list-style-type: none"><li>1. Make sure the DLM local network is not in PnL.</li><li>2. Be sure you're pointing the remote at a DLM IR enabled device that is within range. To test, see if you can put the network into PnL using the remote from your current position.<ul style="list-style-type: none"><li>• If successful, exit PnL and go on to step 3.</li><li>• If not successful, move closer to the IR enabled local network device and more directly in front of it, or try pointing toward a different IR enabled device.</li></ul></li><li>3. The scene button may be set for the same light level. Try a different button. Re-record the scene if two scenes are duplicated.</li><li>4. Make sure the buttons are bound to the loads you want to control. Configure the buttons to control the desired loads using the Push n' Learn adjustment procedure.</li></ol>
<b>Button LED blinks; light levels don't change</b>	<p>The button is not bound to any load. Configure the buttons to control the desired loads using the Push n' Learn adjustment procedure.</p>

## **WattStopper®**

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