Conference Room Lighting with The Watt Stopper ezDALI Controls and Universal Lighting Technologies DaliPro® Ballasts

The Watt Stopper Control Devices:

One (1) Watt Stopper ezDALI power supply: DPS150-1 for 120VAC systems, or

> **DPS150-2 for 277VAC systems**

One (1) Watt Stopper ezDALI Group & Scene Controller: DLCSS4

Although not addressed in this application note, The Watt Stopper also offers the ezDALI 4-Button Scene Switch (HDL4SS), which can be used as a secondary control unit in applications requiring three-way control. Please contact The Watt Stopper for information on this, and additional controls.

Wiring Details

Although power and control connections must be provided to each of the ballasts, the fixtures do not need to be wired as specific dimming groups. Dimming groups are established by programming procedures after all connections have been completed.

In the case of The Watt Stopper ezDALI system, two DALI control circuits are wired. First, a Class 1 circuit is created to link all ballasts and the DPS150-x ezDALI power supply. Then a separate Class 2 control circuit links the DPS150-x ezDALI power supply and the DCSS4 Group & Scene Controller. See figure below for an example of how the sample conference room could be wired using controls from The Watt Stopper.
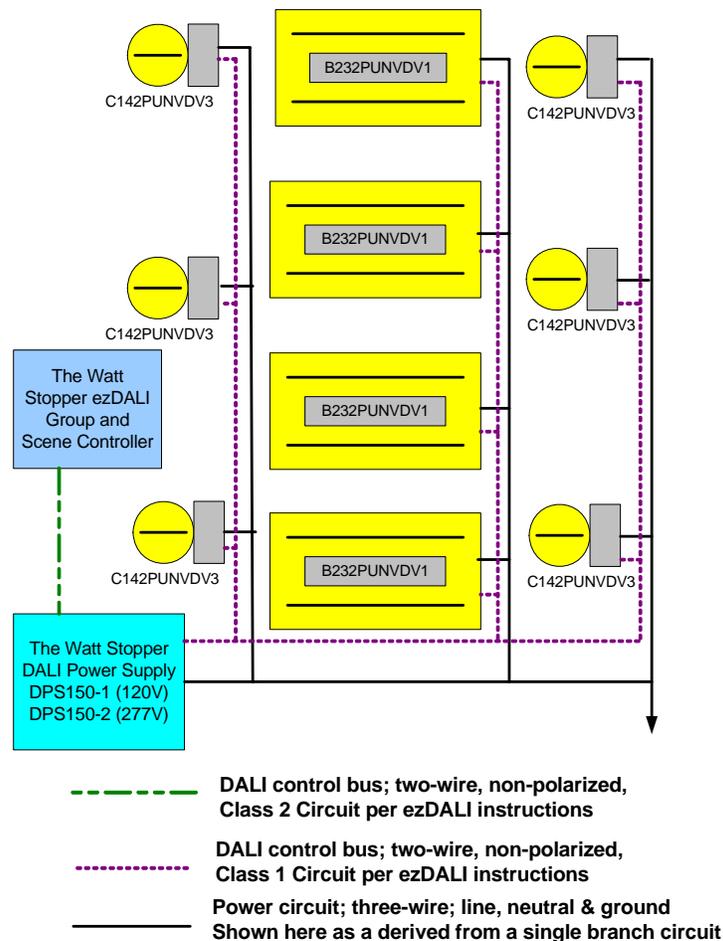

Fig. 1

The figure below provides power and control connection details for the Universal Lighting Technologies DALI ballasts. Please refer to materials provided by The Watt Stopper for detailed wiring instructions for The Watt Stopper ezDALI products.
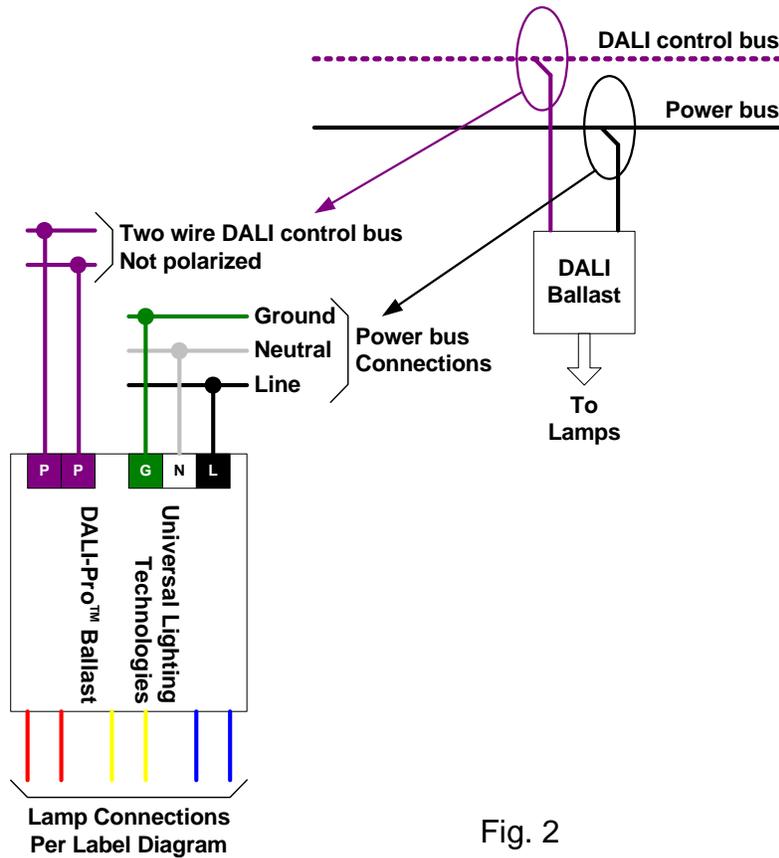

Fig. 2

The Watt Stopper ezDALI Group & Scene Controller

The Watt Stopper ezDALI DLCSS4 provides both group control and scene recall capabilities. The group control feature permits independent control (on, off, up or down) of up to four, user-defined fixture groups. The scene recall feature allows selection of up to four user-defined lighting scenes.

This Watt Stopper DLCSS4 has two columns of four buttons each, with a larger, ninth, button below both columns. The four buttons in the column on the left are group control buttons; those on the right are scene recall buttons. The larger button is a master (On/Off) controller. Button assignments are shown in parentheses.
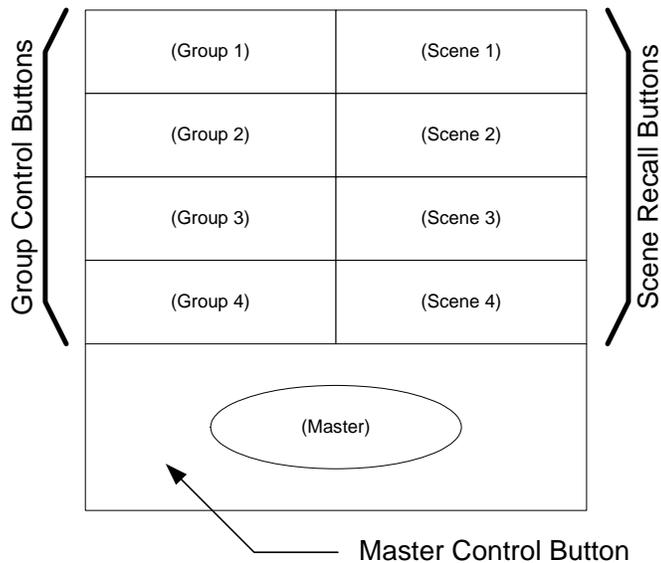
(Group 1)	(Scene 1)
(Group 2)	(Scene 2)
(Group 3)	(Scene 3)
(Group 4)	(Scene 4)

Group Control Buttons

Scene Recall Buttons

(Master)

Master Control Button

Fig. 3

Before the group control and scene recall buttons can be properly used, group and scene programming must be completed.

Programming Overview

Group and scene programming, using The Watt Stopper DLCSS4 is accomplished by a series of easy, and logical, processes. The basic sequence is outlined directly below; detailed instructions are provided in a later section, and in materials provided with The Watt Stopper controls.

GROUP PROGRAMMING

1.   **Prepare for programming**
2.   **Assign ballasts to groups**

SCENE PROGRAMMING

Note: Group programming must be completed before starting the scene programming sequence.

1.   **Establish a desired lighting appearance**
2.   **Save the desired appearance as a lighting scene**
3.   **Repeat steps 3 & 4 for a total of up to four scenes**

Once the group programming steps are completed, the buttons on the left hand column can be used to control the defined groups. When the scene programming steps are completed the buttons on the right hand column can be used to recall the stored scenes.

The larger (master control) button can always be used to issue global ON and OFF commands to the entire system.

Programming Objectives

It is always best to start a programming sequence with a specific result identified as the objective.

For purposes of illustration, the programming objectives of this example are to assign fixtures to groups as identified in the figure below, and to create and store scenes as described in the accompanying table. Note that in the case of The Watt Stopper DLCSS4, ballasts are assigned to one, and to only one, group.
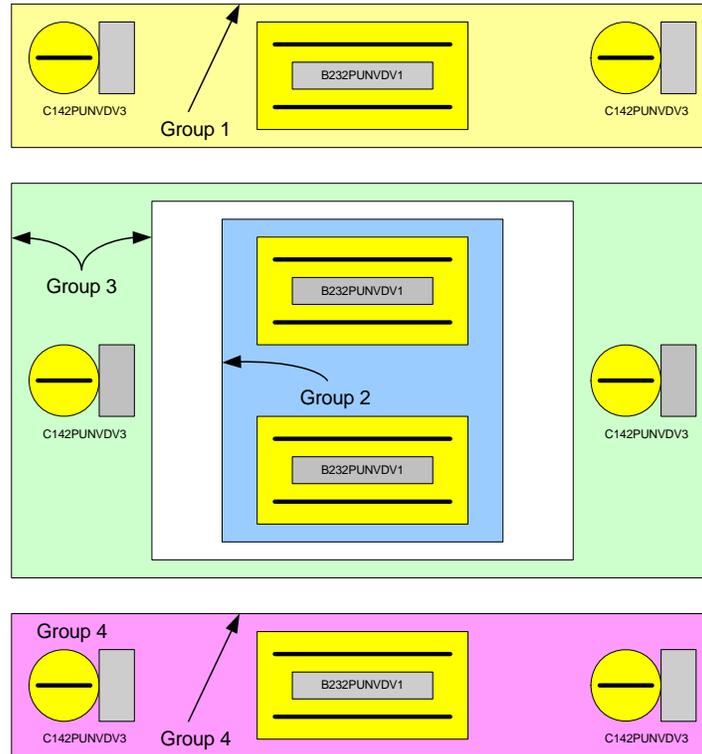

Fig. 4

Scene Schedule

Scene No.	Scene Name	Description
1	Maintenance	All ON, full bright
2	Presentation	Groups 2 and 4 OFF; Groups 1 & 3 ON at about ½ bright
3	Meeting	Groups 1, 3 and 4 OFF; Group 2 ON full bright
4	Daylight	Group 1 OFF; Groups 2 & 3 ON at about ½ bright; Group 4 ON full bright

Detailed Programming Instructions

The following paragraphs describe steps needed to commission a small room equipped with Universal Lighting Technologies DaliPro® ballasts and ezDALI controls from The Watt Stopper. Please obtain technical information from The Watt Stopper for a more detailed description of these procedures.

GROUP PROGRAMMING

1. Prepare for programming

    a. Remove the screwless cover plate by pressing the tab at the bottom, then lifting the plate up and away from the control assembly.

    b. The master control button is hinged at the bottom – swing it open to reveal the hidden programming buttons marked 'STORE' and 'SELECT'.

    c. Press and hold the STORE button for seven seconds

    – Observe: 1) all ballasts go to minimum output, 2) ballasts return to full bright one at a time, until finally, 3) all ballasts remain on a full bright

    e. Press and quickly release the SELECT button

    – Observe: all ballasts go to minimum output except one which remains at full bright.

2. Assign ballasts to groups

    a. Note which ballast is at full bright and determine which group it will be assigned to.

    b. Press and quickly release the selected group button (one of the four buttons in the left hand column). The small LED next to the group button will begin flashing, acknowledging the group assignment.

    c. Press and quickly release the SELECT button. The previously bright ballast will go to minimum output, and a new ballast will go to full bright.

    d. Repeat steps a – c until every ballast has been assigned to a group. Note: after the last ballast has been assigned to a group, the first one will relight providing an opportunity for reassignment. Once satisfied with all assignments go on to the next step.

    e. Press and quickly release the STORE button to exit the group-programming mode.

GROUP CONTROL

1. Press and quickly release a group button to turn a group ON (or OFF). Note: It is sometimes necessary to do this twice

2. Press and hold the group button to change its light level (make sure the group is ON first)

    – Release the button when the desired level is reached, or …

    – Release, then press and hold again to reverse the direction of change

SCENE PROGRAMMING

1. Establish a desired lighting appearance

    – Adjust the four groups as described in GROUP CONTROL to create a desired lighting appearance for the conference room.

2. Save the desired appearance as a lighting scene

    – Press and hold a scene button (one of the four buttons in the right hand column) until the small LED next to the selected button lights indicating the assignment has been accepted

3. Repeat steps 1 & 2 for a total of up to four scenes

SCENE CONTROL

1. Press and release the scene button corresponding to the desired lighting effect

Where to Obtain Help

For further information regarding The Watt Stopper ezDALI control, visit their website at **www.wattstopper.com** or call 1-800-879-8585.