

Partner: Tridonic Atco
Model: BM-232
Device Type: DALI Lighting Controller



GENERAL INFORMATION

SIMPLWINDOWS NAME:	Tridonic DALI Buss Master.umc
CATEGORY:	Lighting Controller
VERSION:	1.00
SUMMARY:	This module contains the RS-232 commands to interface with a Tridonic BM-232 DALI buss lighting controller.
GENERAL NOTES:	<p>This module contains the RS-232 commands to interface with a Tridonic BM-232 DALI buss lighting module. It is extremely flexible, and allows control for just about any DALI setup.</p> <p>The Rule of Thumb to remember is up to 64 ballast/dimmer/relay short addresses per DALI Loop, 16 Groups of short addresses per DALI Loop, and 16 scenes per Scene Group. Some ballasts/dimmers/relays take up more than one short address.</p> <p>This module controls any of the 16 groups available. And, it also controls one definable group as the Scene Group (note: this has to be one of the available 16 groups). It can also be set to affect all ballasts (defining it as 0 or not defining it at all) with what is called a "broadcast command" – whether it be up/down or Scene control – in a MASTER panel situation.</p> <p>With this flexibility, some systems (with a lot of powerful programming) could be controlled from a single module. But, to simplify things, it would be much easier to control each room panel with one module per room. The Demo program shows how to do so with one module per room.</p> <p>This module does not assign short addresses to ballasts, nor does it apply group numbers to ballasts. These must be defined with an external program such as Tridonic's WinDim or something similar. But once the setup has been completed, the module provides for great flexibility of DALI run-time controls.</p> <p>The module provides for group control of any of the 16 groups available for light up, down and a percentage level. It also provides for scene control/saving of 16 scenes to any of the 16 groups based on an analog input called the "Scene Group". To this "Scene Group", all scenes are recalled and saved from.</p> <p>To recall a scene, simply pulse the scene number input, and the scene will be recalled for the scene group defined. To save a scene, press and hold the scene for 5 seconds, and all of the current levels of the devices within the scene group will be saved at that level for later recall to the saved scene number.</p> <p>If the Scene Group number is not defined or a zero is placed on the input, scene save and recalls will be done on all ballasts within the entire DALI loop. If a 1 is placed on the Scene Group input, all scenes will be saved/recalled only in group 1.</p> <p>In the demo program, there are 5 panels and one module for each panel. The Panel Type I includes 3 control groups (perimeter (G1), Wall (G2), and Down (G3) and Scene Group 4 which includes the all of the ballasts in Group 1, 2 and 3.</p> <p>Panel Type II includes Perimeter (G5), Down (G6), and Scene Group (G7).</p> <p>Panel Type III is a single group (G8) that can power up/down and can adjust up and down from current position.</p> <p>Panel Type IV is a single group (G9) that can Power up/down and select/save scene 1 and 2.</p> <p>Panel Type V is a single group (G10) that can Fade up and down, choose between Scene 1 and Scene 2, and can also go on and off. On is a Double tap on UP, and Off is a Double Tap on Down.</p> <p>The Master Panel does a Broadcast (all ballasts will respond) to Scenes 14, 15 and 16. You would program these scenes in each group to be "entering", "leaving", or "Vacation" as you see fit.</p> <p>These are just a few examples of the types of panels you can create from this module. There are certainly many, many more. Experiment, and find what works best.</p>

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CRESTRON HARDWARE REQUIRED:	C2I-COM, ST-COM, C2-COM-* or CNX-COM2
SETUP OF CRESTRON HARDWARE:	RS232 Baud: 19200 Parity: None Data Bits: 8 Stop Bits: 1
VENDOR FIRMWARE:	Unknown
VENDOR SETUP:	<p>All groups must be defined using other software such as WinDim prior to using this module. Take into consideration when assigning groups, that all ballasts / dimmers / relays that are to be controlled together should always be on the same "DALI loop".</p> <p>This Module is designed to have ballasts in groups that can be individually controlled, with an additional group called the "Scene Group", that contains all of the ballasts that are to be included in particular Scene (or preset) controls.</p> <p>In other words, you might have down lights, wall sconces, and track lights in one room. There might also be a relay that controls a single maintenance light. Obviously, you would want to control the down lights together, the wall sconces together, and the track lights together individually. And you would probably want to control each of these groups at the same time with single Scene or "Preset" commands. Now there is also the maintenance light to be considered. You probably would want to control that as just an on/off regardless of what Scene is active, so you would not include it in the Scene Group.</p> <p>To logically layout the about scenario, you might consider putting all of the down light ballasts in group 1, the wall sconces in group 2, the track lights in group 3, and the maintenance light in group 4. Then, you would want to put all of the down light, sconces and track lights in the Scene group 5, but not the maintenance light. If you had another room just like it on the same DALI Loop, define them as Down 6, sconce 7, track 8, maintenance 9, and the down, sconce and track lights in group 10 for scene control.</p> <p>If there is a single group of ballasts to be controlled in one room, assign them to one group, and use that same group number as the Scene Group.</p> <p>The module is very flexible, so there may be better ways to use it than was originally intended, the thing to remember is that any or all groups can be controlled from a single module based on the control given to it. And, scenes are defined to one particular group per module or All groups within the DALI buss being controlled.</p>
CABLE DIAGRAM: CNSP-124	<div style="text-align: center;"> <h2>CNSP-124</h2> </div>

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CONTROL:

Control_Group*	D	Pulse to select Group to Control, or put a 1 on a single input if only one group is to be controlled
Control_All_Groups	D	Pulse to select the control of all groups (and all ungrouped ballasts), or put on 1 on the input for something like a master panel if that module is only going to control All Groups
Scene_Group_Num	A	Analog input that specifies which group will be used for scene selection and scene saving. If a 0 or a dummy signal is placed on the input, it will control all ballasts using broadcast commands. If a 1 is set on the input, all scene commands will go to group 1
Light_On / Light_Off	D	Pulse to turn the active control group of ballasts on or off
Light_+ / Light_-	D	Press and Hold to ramp the active control group of ballasts Up or Down
Light_*	D	Pulse to send the active control group of ballasts to the exact level specified
Scene_Select*	D	Pulse to send the selected Scene Group to the scene selected, or press and hold to save the current levels of all of the ballasts to the selected scene.

FEEDBACK:

Control_Group*_Fb	D	Feedback indicating which control group is currently selected, and will therefore receive all level change commands (On/Off, Up/Down, %)

TESTING:

OPS USED FOR TESTING:	v3.137 (Release)
COMPILER USED FOR TESTING:	2.00.31
SAMPLE PROGRAM:	Tridonic DALI Buss Master Demo.smw
REVISION HISTORY:	V. 1.0