SIMPLWINDOWS NAME:	Clipsal 20 Zone/20 Scene
CATEGORY:	Lighting
VERSION:	1.0
SUMMARY:	Stores/recalls up to 20 different scenes of up to 20 different zones
GENERAL NOTES:	This module will work in conjunction with the CLIPDIM and CLIPREL modules. While those two module s allow a single dim or relay zone to be manually controlled, this module allows the current levels of up to 20 of those zones to be saved as a scene. This scene can be recalled at any future time, and this will update the CLIPDIM and CLIPREL modules with the new lighting level.

Different fade times can be set using the FADE-TIME-UP, and FADE-TIME-DOWN inputs. The valid fade times are 0, 4, 8, 12, 20, and 30 seconds. As soon as a scene is recalled the LEVEL-* inputs will be adjusted to their final values. (You will not see them ramping to their new levels). Therefore, if you manually adjust a zone while it is ramping as part of the preset, the lights may go to an unexpected level.

This module can be used for up to 20 zones (groups). You must enter, as a parameter in the module, (NUMBER-OF-ZONES), the number of zones you are actually using. This must be entered as a decimal value with a d suffix. So for 8 zones, use 8d. For 12 zones, use 12d. You must still define all 20 GROUP parameters, and put signal names on all 20 LEVEL-* inputs.

A Clipsal lighting system is divided into applications. You must define which application is being controlled using the APPLICATION parameter on the module. This parameter is a 2 digit hex number with no suffix. For example, for application 56 (decimal), use 38. For application 2, use 02.

In a Clipsal lighting system, multiple channels on multiple modules can be set to have a common "group" number. All channels with the same group number will behave as if they are the same zone. Each of the group numbers must be entered as a parameter in the module. They are entered as a 2 digit hex number with no suffix. For example, for group 1, enter 01. For group 12, enter 0B. For group 20, enter 14. Typically, the group numbers will be the same as the group numbers entered in the CLIPDIM and CLIPREL modules.

Commands cannot be sent from this module directly to the Clipsal system. They must first pass through the module CLIPPRO. This module will format time the commands to be sent, as per the requirements of the Clipsal system.

Note that these modules require the use of Simpl+ modules (which are embedded inside of the modules). Therefore these modules can only be used with generation CNX systems.

CRESTRON HARDWARE REQUIRED:	CNXCOM, ST-COM
SETUP OF CRESTRON HARDWARE:	The port should be set as follows:

Baud Rate - 9600
Parity - None

Data Bits - 8
Stop Bits - 1

VENDOR FIRMWARE: 3.x3

VENDOR SETUP: A Clipsal PC Interface module must be used with firmware version 3.x3 or later installed. Also, the SETUP-CLIPSAL input on the CLIPPRO module must be pulsed before feedback will be processed correctly.

CABLE DIAGRAM: CNSP-121

CONTROL:

LEVEL-*	A	Analog signals routed from the CLIPDIM and CLPIREL modules. They represent the current level of each zone being stored and recalled
SCENE-*	D	Selects which scene is to be recalled
FADE-TIME-UP/DOWN	D	Press and hold to adjust the fade time. The current fade time will be reflected at the FADE-TIME output
SAVE	D	Pulse to save the current levels at the LEVEL-* inputs, with the current fade time at the FADE-TIME output, to the scene selected at the SCENE-*-FB output
APPLICATION	D	Specifies which application the selected groups are on. Should be a 2 digit hex number with no suffix
GROUP-*	P	Specifies which groups are included in the scenes. Should be a 2 digit hex number with no suffix.
NUMBER-OF-ZONES	P	Specifies how many zones are being used. Should be a decimal number from 1d to 20d

FEEDBACK:

SCENE-*-FB	D	Indicates the last scene that was selected
FADE-TIME	A	Indicates the fade time (in seconds).
TO-CLIPSAL-PROC	S	Serial signal to be routed to the CLIPPRO module

OPS USED FOR TESTING:	5.09.07x
COMPILER USED FOR TESTING:	SimplWindows Version 1.30.01
SAMPLE PROGRAM:	CLIPTSTE
REVISION HISTORY:	None