SIMPLWINDOWS NAME:	Clipsal Status Request
CATEGORY:	Lighting
VERSION:	1.0
SUMMARY:	Requests the current status from up to 20 channels of Clipsal lighting
GENERAL NOTES:	This module is used in conjunction with the CLIPDIM and CLIPREL modules. This module allows up to 20 different channels of Clipsal lighting to be polled for level information. The outputs of the module (LEVEL-*) can be connected to the LEVEL outputs of the CLIPDIM and CLIPREL modules. In this way, those module can be updated with the actual state of the lighting levels. Typically, this would only be done upon startup of the Crestron system. After that, the CLIPDIM and CLIPREL modules will track any changes made on the Clipsal system without this module. If you are not concerned with the lighting levels on startup of the Crestron system, you do not need this module at all. 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. The Clipsal system is further divided into groups, where each group may contain multiple physical circuits. Since it is not possible to poll a group (as the different circuits could be at different levels), you must poll the individual circuits. For example, let's say group 5 contains 3 circuits defined at unit 8 - channel 1, unit 9 - channel 2, and unit 10 - channel 1. Group 5 is controlled from the CLIPDIM module. To update the status of group 5, we can poll one of the individual channels on one of the individual units. By polling unit 8 channel 1, we can establish the level for group 5. This module allows up to 20 separate units and channels to be polled. You must specify the UNIT-* parameter as a 2 digit hex number with no suffix. For 2, use 02. For 12, use 0C, and so on. You must specify the CHANNEL-* parameter the same way. Typically the channel parameter will be either 01, 02, 03 04. 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. In addition, commands cannot be routed directly from the Clipsal system to this module. They must first pass through the CLIPPRO module also. 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:

REQUEST-STATUS	D	Pulse to request the status from the units specified. Should only be needed on startup of the Crestron system
FROM-CLIPSAL-PROC	S	Serial signal to be routed from the CLIPPRO module
UNIT-*	P	Specifies which unit is being queried. Should be a 2 digit hex number with no suffix
CHANNEL-*	P	Specifies which channel on the respective unit is being queried. Should be a 2 digit hex number with no suffix
NUMBER-OF-ZONES	P	Specifies how many channels are to be queried. Should be a decimal number from 1d to 20d

FEEDBACK:

LEVEL-*	A	Analog signals representing the updated levels of each zone. Should be connected to the LEVEL output of the CLIPDIM and CLIPREL modules
BUSY	D	High while the status request is in progress
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