

## BSS: Soundweb London

This module controls a "Room Combine" object in a Soundweb London program.



### GENERAL INFORMATION

**SIMPLWINDOWS NAME:** BSS Soundweb London Room Combine v4.2

**CATEGORY:** Mixer

**VERSION:** V4.2

**SUMMARY:** This module controls a "Room Combine" object in a Soundweb London program.

**GENERAL NOTES:**

Each object in a Soundweb London program is given an object number. You have to specify the object id of the "Room Combine" object that is to be controlled. (objectID parameter)

The TX and RX of this module should be connected to a "BSS Soundweb London Node v4.2.usp" module. This "Node" module needs to have its "Node" parameter set to the node of the Soundweb London device to control.

All analog input and outputs range from 0d to 65535d (0% to 100%)

When you subscribe to a State-Variable, the Soundweb London will send an unsolicited updates automatically whenever that state-variable is changed in order to keep the Crestron system in sync with the London without requiring extra effort from the programmer to set up 'polling', or requiring the Crestron processor to constantly check for updates. The first time the subscribe message is sent the Soundweb London will respond with its current state much like a 'GET' statement. The Soundweb London will keep sending updates until a 'UNSUBSCRIBE' input is pulsed. Normal practice would be to tie the Subscribe input to the TCP/IP connection feedback so that if a socket is dropped it will automatically sync when the socket is re-established. If using RS232, putting a 1 on the subscribe input will ensure true-feedback.

NOTE: The subscribe and un-subscribe signals must be mutually exclusive as transitions from low-to-high while the other signal is already high is not allowed. If this error state is encountered, an error message will be sent to the console.

**CRESTRON HARDWARE REQUIRED:** X-series or preferable 2-series

**SETUP OF CRESTRON HARDWARE:**

The demo program was created on a CP2E with TPS-4000

The Soundweb London is to be connected on a com port with a standard crossed cable and the following settings:

115200, 8, 1, N

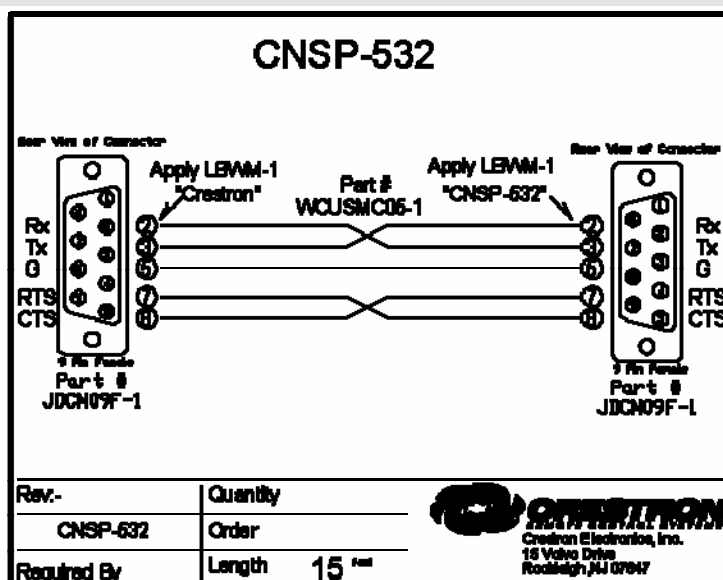
Or to use TCP/IP: Port 1023

**VENDOR FIRMWARE:** 3.06

**VENDOR SETUP:** Soundweb London Blu-160



## CABLE DIAGRAM:



## CONTROL:

Enable\_Feedback

D

Subscribe to all functions (state variables) of the object. When this signal is held HIGH all feedback will be real. On each rising edge of this signal the Crestron module will resync to the current state of the Room Combine object. Exact same function as 'subscribe' in previous Crestron modules. Renamed for clarity in this and all future BSS modules.

Disable\_Feedback

D

When this signal goes low, all subscriptions will be deleted from the Soundweb London and variable feedback will not be reported. Exact same function as 'unsubscribe' in previous Crestron modules. Renamed for clarity in this and all future BSS modules.

Chan\_Offset

A

Channel Offset: Used to determine which channels are controlled by this module. Use 0 for Rm1-8, 1 for Rm9-16, 2 for Rm17-24.

SourceMute\_Rm<x>

D

Toggles the current mute-state of the Source Mute SV for that channel. Each rising edge will change the mute-state

BGM\_Mute\_Rm<x>

D

Toggles the current mute-state of the Background Music Mute SV for that channel. Each rising edge will change the mute-state

|                  |   |   |
|------------------|---|---|
| MasterMute_Rm<x> | D | Toggles the current mute-state of the Master Mute SV for that channel. Each rising edge will change the mute-state  |
| SourceGain_Rm<x> | A | sets the Source gain for the currently selected input. -inf to +10  |
| BGM_Gain_Rm<x>   | A | Sets the Background Music gain for the currently selected input. -inf to +10  |
| MasterGain_Rm<x> | A | sets the Master gain for the currently selected input. -inf to +10  |
| BGM_Input_Rm<x>  | A | sets the Background Music input for the currently selected input. 0-24  |
| Partition<x>     | D | Toggles the partition state. Each rising edge will change the partition state   |
| Group_Rm<x>      | A | Used to manually assign the Group SV of each Room. Values are determined by the Room Combine object in Soundweb London Architect. Typically; 0 = unassigned (not combined), 1 = Group1, 2 = Group2, etc |
| rx               | S | connected to the "modulesRx" of the correct "BSS Soundweb London Node v4.2.usp" module  |

## FEEDBACK:

|                     |   |   |
|---------------------|---|---|
| SourceMute_Rm<x>_FB | D | Reports the current mute-state of the Source Mute SV for that channel when Enable_Feedback is HIGH                                      |
| BGM_Mute_Rm<x>_FB   | D | Reports the current mute-state of the Background Music Mute SV for that channel when Enable_Feedback is HIGH                            |
| MasterMute_Rm<x>_FB | D | Reports the current mute-state of the Master Mute SV for that channel when Enable_Feedback is HIGH                                      |
| SourceGain_Rm<x>_FB | A | Reports the current state of the gain fader for that channel when Enable_Feedback is HIGH.  |
| BGM_Gain_Rm<x>_FB   | A | Reports the current state of the gain fader for that channel when Enable_Feedback is HIGH.  |
| MasterGain_Rm<x>_FB | A | Reports the current state of the gain fader for that channel when Enable_Feedback is HIGH.  |
| BGM_Input_Rm<x>_FB  | A | Reports the current state of the BGM input for that channel when Enable_Feedback is HIGH.   |
| Partition<x>_FB     | D | Reports the current state of the Partition Reports the current state of the gain fader for that channel when Enable_Feedback is HIGH.   |
| Group_Rm<x>_FB      | A | Reports the current Group SV of that channel Reports the current state of the gain fader for that channel when Enable_Feedback is HIGH. |
| tx                  | S | connected to the "modulesTx" of the correct "BSS Soundweb London Node v4.2.usp" module  |

## PARAMETERS:

|          |   |
|----------|---|
| objectID | Specifies which objectID is to be controlled.<br>(3 bytes, for example: "\x00\x00\x01")<br>(get this information from the BSS programmer) |
|----------|---|

Max\_Rooms

Used to control the amount of strings sent when 'Enable\_Feedback' is triggered. Define this number as the maximum number of rooms this module will be controlling. The default is 8d which will subscribe to all 8 rooms. If the number of rooms is less than this then change this parameter to reduce the amount of traffic whenever 'Enable\_Feedback' is triggered.

**TESTING:**

**OPS USED FOR TESTING:** 4.003.0015

**COMPILER USED FOR TESTING:** 2.12.44

**SAMPLE PROGRAM:** BSS Soundweb London v4.2 Demo Program

**REVISION HISTORY:**

V1.0 Creation

V3 – BSS made changes to a number of modules.

V4.0 – Changed the RX\$ input on the Simpl+ modules to from a STRING\_INPUT to a BUFFER\_INPUT. Changed the room combine module so it requests the current value when it is done making changes.

V4.1 – Changed subscribing to two input signals one for subscribing and one for unsubscribing. Changed the module from an .usp file and an .umc file to just an .usp file.

V4.2 – Fixed rounding error, and updated help file.