Overview

These release notes address the notable changes and information about the ControlSpace Designer software release version 5.13. Version 5.13 is a feature release that improves Version 5.12.2 with the following list of new features and defect fixes. New firmware is available for PSX amplifiers and MSA12X loudspeakers and is included with this release.

For additional information regarding the ControlSpace Designer software see: https://www.boseprofessional.com/en_us/products/software/signal_processing/controlspace_designer.html#v=controlspace_designer

Updates in ControlSpace Designer software 5.13 (Released March 2024)

New Features 5.13

1. PSX amplifiers: Added 4-priority, 4-source backup strategy features that has 3 modes
    a. Force: permanently assigns a source to a chosen input (Analog 1-4 or Dante 1-4). This source can then be applied to 1 or multiple outputs using the Matrix.
    b. Signal Presence: set an input as priority 1, and an input as priority 2. When signal on your priority 1 choice drops below the threshold level (-68 dBFS for example) the amplifier will 'failover' to priority 2. You can repeat for priority 3 and 4 as desired. This 'source' can be then applied to 1 or multiple outputs using the Matrix.
    c. Pilot Tone: set an input as priority 1, and an input as priority 2. This backup strategy mode has an adjustable pilot tone listening device. Inputs with a detected compliant pilot tone are granted with higher priority. Set the frequency and upper/lower threshold (in dBFS) of the pilot tone listening device. If no pilot tone is detected, the next priority (priority 2 for example) would be used. If you click 'enable alarm 1', the amplifier rear panel GPO (alarm out) can also be triggered.
2. PSX amplifiers: added Advanced Alarms setup to amplifier properties window. These additional alarms can be sent out the rear panel GPO (alarm out) after they are configured and enabled.
    a. Pilot Tone Voltage Alarm for outputs 1-4
    b. Pilot Tone Load Alarm for outputs 1-4
    c. Nominal Impedance Alarm for outputs 1-4

    Note: No AC Mains, Thermal Stress, Standby Alarms are always on, always sending out all 4 alarm GPO outputs. Short Circuit, per output, is always on, but only sends out of the effected output channel.
3. PSX amplifiers: added Analog Trim (-15 dB) to (+15 dB) feature to amplifier properties window to give users more adjustability.
4. PSX amplifiers: changed Digital Sensitivity adjustment in amplifier properties window from 4 steps: 0, -12, -20, -24 dBFS to an adjustment range between -48 dB and +12 dB adding more adjustability.
5. PSX amplifiers: added new Pilot Tone generator block to the fixed block diagram of each output. Pilot tone generators can be grouped. As one example, this Pilot Tone generator can

be used in conjunction with Pilot Tone Voltage or Pilot Tone Load alarm to test the parameters.

6. PSX amplifiers: Live impedance monitoring. The measure load test panel has been added to output blocks of PSX amplifiers. Right click the output block and select 'measure load' to open the measure load panel. Channel can be changed between output channels 1-4 if desired. Click 'capture' to capture and measure the load.
7. PSX amplifiers: V Clip limiter can be enabled and is fully adjustable for custom presets. V Clip values can be saved to a custom preset file. V clip limiters can also be grouped if you want to apply changes to multiple v clip limiters at the same time.
8. PSX amplifiers: updated firmware update procedure so the update provides more information during the update (sending the firmware file, XX % complete, writing the file to memory – XX % complete).
9. PSX amplifiers: updated input matrix to add input mutes to the left side of the matrix, and removed mutes from the 8 individual input blocks (4 analog, 4 dante)
10. EX/ESP processors: updated sinewave generator to go up to 22 kHz to support pilot tone configurations
11. MSA12X: Added Dante to analog backup strategy with 2 modes:
    a. Force: permanently assigns a source to a chosen input (Dante or Analog)
    b. Signal Presence: Set Dante as priority 1, and analog as Priority 2. If Dante falls below a threshold preset threshold level, MSA12X will change to Analog. When signal is restored above that threshold in Dante, it will return to priority 1.

Defect Fixes

1. Addressed issue where some Bose Professional speaker presets had incorrect limiter settings when amplifier channel output mode was set to 70v or 100V. Effected presets such as DesignMax DM3 models were limiting too early when set for 70V/100V output mode.
2. Resolved crashing in Windows 11 issue encountered in rare situations
3. Defect where a mute group containing PSX Dante inputs is incorrectly muting Analog inputs on the device instead.
4. Defect where devices with DHCP addresses are listed in batch network updates
5. Defect where a part of the UI on the control panel of the Limiter of the PSX amplifier may disappear, some builds of CSD 5.12 after copy/paste operation
6. Fixed defect where notes may hide wires
7. TCC2 GPO does not go high when the Call Status button is turned on while offline
8. Defect where Zoom combo-box is getting narrower every time toggling system-mute
9. Defect where EX1280C's VoIP output wiring points indicate mute state when MSA12X Dante Outputs are muted
10. Fixed issue where Unhandled exception on changing PSX output modes after coming offline
11. Fixed issue where Signal Generator mute of PSX is delayed immediately after going online

12. Fixed issue where Input and Output mutes of PSX are delayed immediately after going online
13. Fixed issue with mismatch of the Delay setting
14. Fixed issue where PSXService throws error on PC restart when there are changes to be saved
15. Fixed issue where Wires between logic blocks are removed by cut and paste of the logic blocks/wires
16. Fixed issue where Unchecked devices showing active update status when "Sort" is applied
17. Fixed issue where PSX relabeling outputs on a crossover object, output 1 assumes the label of output 2
18. Fixed issue where PSX Audio is muted when Signal Generator is on and no channels selected in Matrix
19. Fixed issue Mismatch of the selection of the "Audio Check" of the MSA12X. Closing audio check window will now mute audio check.
20. Fixed PSX issue Parameters needed to be disabled may be erroneously enabled
21. Fixed issue where Pilot Tone frequency should only show whole Hz, without decimals
22. Fixed issue where SpeakerPEQ align delay conversion is slightly wrong
23. Fixed issue where EX-4ML becomes unresponsive after saving/loading presets via command with CSD open
24. Ensured ArrayEQ parameters in CSD reflect changes made via SoIP

Changes

1. Moved PM4500N from current to 'Discontinued' in device tree view
2. Adjusted appearance and numbering of Analog/Digital inputs in project view for PSX amplifiers

ControlSpace Remote

This release is compatible with ControlSpace Remote 3.0.6

Third-party Control

Please note the available Crestron and AMX files at BoseProfessional.com
Bose EX, ESP, EX-8ML Drivers for use with Crestron Systems, November 2022,
Bose EX Driver for use with AMX, November 2022

Firmware Versions with 5.13 release

This release of ControlSpace Designer software requires a firmware Update for specific devices to go online. Updated firmware versions are noted with shading in the following table:

Device(s)	Device FW	Dante FW
ESP-880A (Fixed IO Processors) ESP-880/880AD/1240/1240A/1240AD/1600/4120	3.820	v3.000_build1
EX-12AEC/440C/1280/1280C	2.730	(BK2) v3.000_build3, (BK3) v4.000
PM4250N/4500N/8250N/8500N	4.010	(BK2) v3.000_build1 (BK3) v4.000
PSX1204D/2404D/4804D	1.11.0.162	v2.001_build5
PS404D/604D	1.600	v3.000
EX-4ML	2.000	v3.000
EX-8ML	2.000	(BK2) v3.000, (BK3) v4.000
EX-UH	2.000	v3.000
CC-64	1.120	-
CC-1D/2D/3D	0.914	-
MSA12X	1.056	v3.000
ESP-00 II (Variable IO Processors)	5.110	v3.000_build1

Known Issues, Defects, and Limitations

The following are the known issues and defects with this release. The information included here can be useful when troubleshooting issues with software or hardware operation:

PSX Amplifiers Settings in Device

1. PSX cannot act as RTC/Main device during phase 1
2. PSX cannot allow parameter sets, CC-xD, CSR controls to dynamically control the amplifier when the PC is offline during Phase 1
3. PSX cannot use timers
4. PSX Power-On state is always ‘restore last settings’ and this cannot be toggled off
5. All inputs wake up PSX from standby and you cannot limit it to less inputs

PSX Amplifiers Signal Processing

6. PSX amplifier's limiter behaves differently than PowerMatch or PowershareD, therefor custom limiter presets have been loaded in the Bose Professional Loudspeaker EQ preset files bank that come with CSD 5.13. They contain different values than PowerMatch or PowerShareD amplifiers.

Minimum System Requirements

The following are the minimum system requirements for using ControlSpace Designer software:

- Microsoft Windows 10 version 2004 or later
- 1 GHz processor (or better)
- 512 MB of available RAM (1 GB recommended)
- 512 MB of available disk space
- Minimum resolution of 1366x768 WXGA
- 1 available USB port
- 1 available Ethernet port, 100 Mbps minimum, (1 Gbps recommended)
- ControlSpace Designer also requires the Microsoft® Visual C++ 2019 runtime library. If required, this will be installed automatically as part of the ControlSpace Designer installation.

Notes:

1. Microsoft Windows XP, 8, and 8.1 are no longer officially supported.