Overview

These release notes address the notable changes and information about the ControlSpace Designer software release version 5.15. Version 5.15 is a feature release that improves Version 5.14.1 with the following list of new features, changes, and defect fixes. New firmware is available for EX and ESP processors and PowerShareX amplifiers.

For additional information regarding 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 5.15

New Features 5.15

1. PSX amplifiers: PSXProxy - allows for the control of PowerShareX parameters using ParameterSets, ParameterSet Lists, Timers, Groups, GPI, Serial I/O, Serial Control, and controllers including CC-16/64/xD, and CSR 3.1.

    a.   ParameterSets – Each signal processing block of the PSX amplifier can be registered to a Parameter Set.

    b.   ParameterSet Lists – The parameters of each signal processing block of the PSX amplifier can be changed by recalling a ParameterSet via the ParameterSet List.

    c.   Timers - The "Level" and "Mute" parameters of each PSX Output block may be registered to a Timer.

    d.   Groups (Level and Mute) - The "Level" and "Mute" parameters of each PSX Output block may be registered to a Group. They may be grouped across multiple PSX amplifiers as well as with PowerMatch and PowerShareD amplifiers and controlled together by a master fader.

    e.   Groups (Signal Processing blocks) - The parameters of each signal processing block (such as two or more parameteric EQs) across multiple PSX amplifiers may be registered to a Group to synchronize their settings.

    Note: Except for Output blocks, PowerShareX and PowerMatch signal processing blocks cannot be added to the same group.

    f.   GPI - The "Level" and "Mute" parameters of each PSX Output block may be registered in "'Digital Control Input,' Digital Up/Down,' 'Analog (+) Control Input,' or 'Analog (-) Control Input'" of the "GP In" of EX/ESP processors.

    g.   Serial Input - The "Level" and "Mute" parameters of each PSX Output block may be registered in "Serial Input ON" or "Serial Input OFF" of the "Serial In" of EX/ESP processors.

    h.   Serial Control – PowerShareX devices can be controlled via serial commands sent over Ethernet using a TCP/IP connection via the RTC (EX/ESP processor) and a specified port number. *See the Serial Control Protocol 5.15 guide for more information.*

i.   CC-16/64/xD - The "Level" and "Mute" parameters of each PSX Output block or "Grouped" Output blocks may be registered to the "Volume Control" of ControlCenter controllers.

j.   CSR 3.1 - The "Level" and "Mute" parameters of each PSX Output block may be added to a canvas via ControlSpace Remote. Input and Output meters, ParameterSets, ParameterSet Lists, and Groups associated with PSX amplifiers may also be added to the canvas.

2. The PSXProxy requires either an EX/ESP processor or PC to operate. It is supported on the following processors:

   a.   EX-1280 / 1280C / 440C

      i   Up to 12 PSXProxies are supported

   b.   ESP 880 / 880A / 880AD / 1240 / 1240A / 1240AD / 1600 / 4120

      i   Up to 10 PSXProxies are supported on ESP-processors.

   c.   PC online with the ControlSpace Designer project file

      i   Recommended for larger systems. Up to 40 amplifiers have been tested.

3. New Tools menu option - "Run PSXProxy on PC".

   a.   This option is available for larger systems. It is forced on when the number of amplifiers in the design exceeds the threshold of the processor.

4. New Tools menu option - "CPU Resources"

   a.   This option displays the calculated CPU resources associated with an EX/ESP processor.

Changes

1. Updated device firmware:

   a.   EX (EX-12AEC/440C/1280/1280C)

   b.   ESP (ESP-880/880A/880AD/1240/1240A/1240AD/1600/4120)

   c.   PowerMatch (PM4250N/4500N/8250N/8500N}

2. Added a new help file topic: PSX Proxy.

3. ControlSpace Serial Control Protocol updated for v5.15.

4. Updated PSX "Measure Load" control panel UI options and performance for improved system diagnostics.

5. Prior to selecting devices for network connection when going online a new progress bar will display.

6. New progress bar information when retrieving a design file.

Defect Fixes

1. Fixed a defect that resulted in "Toggle Standby" option appearing enabled when offline.

2. Fixed a defect that resulted in EX-4ML/EX-8ML becoming unresponsive with CSD open.

3. Fixed a defect in the PowerShareX alarm UI that resulted in the detected impedance value overrunning the ohm symbol.

4. Fixed defects in the Matrix control panel of PowerMatch and PowerShareX amplifiers.

5. Fixed a defect in EX processors that resulted in the content of "Digital Control Input 1" of "GP In" becoming lost.

6. Fixed a defect that resulted in several MSA12X control becoming erroneously enabled.

7. Fixed a defect that resulted in the standby parameter for MSA12X not updating when changed via ParameterSet.

8. Fixed a defect that resulted in small values being reported when measuring the load of an output in PowerShareX amplifiers.

9. Fixed a defect for PowerMatch amplifiers where "Out 1" could not be registered to Timers 1 – 16.

10. Fixed a defect that resulted in certain operations of a CRR caused CSD to crash.

11. Fixed a defect that allowed two RTC devices to exist in a system design.

12. Fixed a defect that disabled the test button for "GP In 5" in EX processors.

13. Fixed a defect that resulted in subordinate output channels of V-bridge/I-Share/Quad registering to "Serial In" / "GP In" / "Timers".

14. Fixed a defect that resulted in some processor input blocks moving after connecting a CC-16.

15. Fixed a defect that resulted in parameters registered to "Volume" of a CC_16 not deleting appropriately.

16. Fixed a defect that resulted in the maximum value of Property of the controls of the CC-64 is reset to the default value.

17. Fixed a defect that resulted in the maximum value of Volume of the controls of the CC-16 is reset to the default value.

18. Fixed a defect that resulted in the maximum value of Volume of the controls of the CC-xD is reset to the default value.

19. Fixed a defect that resulted in the maximum value of Property of the controls of the CC-xD is not correct for PowerMatch or PowerShare-D.

20. Fixed a defect that resulted in the maximum value of the range setting of "GP In" in EX processors is reset to the default value.

21. Fixed a defect that caused a firmware error when "Get from device(s)" was used and an MSA12X stack was in the project file.

22. Fixed a defect that resulted in only the Project View sometimes being displayed after starting CSD.

23. Fixed a defect that resulted in the warning dialog not appearing after deteling a Dante endpoint block.

24. Fixed a defect that resulted in some MSA12X parameters not saving to the .csp file.

25. Fixed a defect that caused copy/paste parameters to not work for MSA12X.

26. Fixed a defect that resulted in the warning dialog not indicating old PSX firmware when scanning.

27. Fixed a defect that resulted in the adjustment of time in by the ntp in an EX processor is not performed.

28. Fixed a defect that resulted in telemetry information not sending to ControlSpace Cloud.

29. Fixed a defect that caused the mute in CC-64 simulator not reflecting correctly when controlled by CC-64 mute.

30. Fixed a defect that resulted in the limiter's threshold of PowerShare-D amplifiers not reacting to the mouse wheel.

31. Fixed a defect that caused "Copy Parameters" to not appear in the context menu for PowerMatch and PowerShareX amplifiers.

32. Fixed a defect that resulted in ParameterSet List selection by ParameterSet not working correctly on hardware.

33. Fixed a defect that resulted in a Limiter's gain reduction meters in PowerShareX amplifier freezing.

34. Fixed a defect in PowerShareD amplifiers that resulted in incorrect frequency responses when speaker presets were used.

ControlSpace Remote

This release will be compatible with ControlSpace Remote 3.1 - which will be released in June 2025.

Third-party Control available for download at BoseProfessional.com

Documents

1. Serial Control Protocol 5.15 is a communication mechanism for Bose Professional ControlSpace products to interface with third-party control systems.

2. PSX Amplifier: UDP Protocol document using UDP binary command language PSX Amplifiers UDP Control

Plugins

3. Crestron and AMX files
Crestron EX Series v3.2 (Also works for ESP-880A)
Crestron EX-8ML v1.0

Drivers for use with AMX systems, 1.0.12 (November 2022)

4. Q-SYS plugin
PSX Amplifiers: PSX_Amplifiers_Q-SYS_v1.03

Firmware Versions included with the 5.15 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 ESP-880/880AD/1240/1240A/1240AD/1600/4120	4.008	v3.0.1
EX-12AEC/440C/1280/1280C	3.008	(BK2) v3.0.3, (BK3) v4.1.0
PM4250N/4500N/8250N/8500N	4.013	(BK2) v3.0.1 (BK3) v4.1.0
PSX1204D/2404D/4804D	1.12.0.102	v2.1.5
PS404D/604D	1.721	v3.000
EX-4ML	2.020	v3.000
EX-8ML	2.020	(BK2) v3.0.0, (BK3) v4.1.0
EX-UH	2.020	v3.0.0
CC-64	1.120	-
CC-1D/2D/3D	0.914	-
MSA12X	1.060	v3.0.0
ESP-00 II (Variable IO Processors)	5.110	v3.0.1

*Dante FW version appearance within ControlSpace Designer has been updated from v3.000_build3 to v3.0.1 format, but these are not new firmware files

Known Issues, Defects, and Limitations

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

1. PSX cannot act as RTC/Main device

2. PSX Power-On state is always 'restore last settings' and this cannot be toggled off

3. All inputs wake up PSX from standby and you cannot limit it to fewer inputs

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

5. Operating "Control 1" knob of the CC-64 may cause a discrepancy between the value of the level of the Group displayed on the CC-64 and that of each Output displayed on the CC-64.

6. In rare cases, you may need to reboot an EX processor after configuring a DHCP address for telemetry information to be sent to the ControlSpace Cloud.

7. In rare cases within a large system, some PSX amplifiers will appear to be in standby in CSD; however, the monitoring tool and front LED of the amplifier indicate they are in Ready mode.

8. In large systems (40 PSX devices), when the user goes online in CSD there are some PSX devices which appear to be in standby but the front panel shows the devices are in Ready mode.

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, 7, 8, and 8.1 are no longer officially supported.

Classified as Public