ControlSpace® Designer™ software 4.4

Release Notes

4 February 2016

Revision: 1.0

General

This release of ControlSpace Designer software adds the following new features:

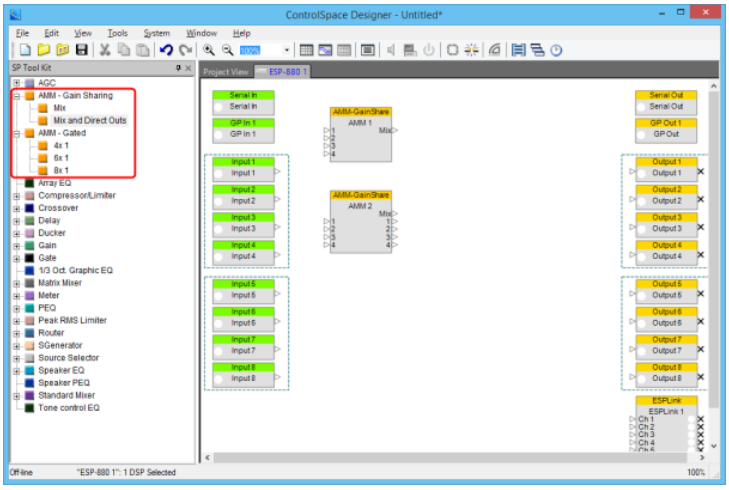
- Gain Sharing Automatic Microphone Mixer
- Support for Dante 32x32 Channel I/O on Fixed I/O ESPs (880/1240/4120/1600)
- Parametric EQ Enhancements
- Dante Dynamic Routing Feature Changes
- Miscellaneous

Gain Sharing Automatic Microphone Mixer

ControlSpace Designer software now supports gain sharing automatic microphone mixing (AMM). The new block "AMM - Gain Sharing" assigns gain values across multiple inputs such that the total gain of the system remains the same. Each input channel is attenuated by an amount equal to the difference between that channel's level and the sum of all channel levels, in dB. When using this algorithm, the strongest signals are attenuated the least, and the weakest signals are attenuated the most.

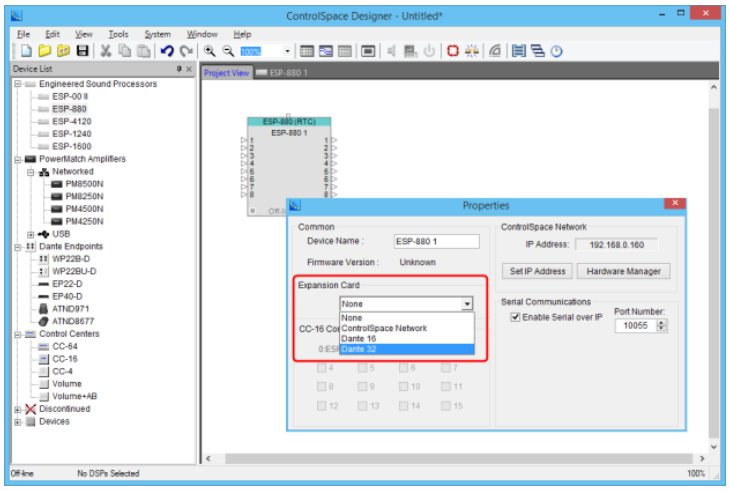
The SP Toolkit includes two types of gain sharing AMM blocks: One provides a direct output for each input in addition to the mix output, while the other provides the mix output only.

The existing gated AMM block has been renamed from "AutoMicMix" to "AMM - Gated" to distinguish it from the new gain sharing AMM block.



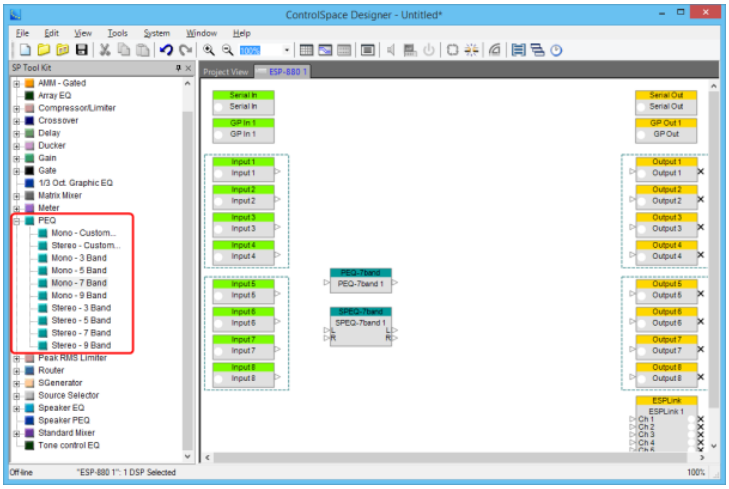
Support for Dante 32x32 Channel I/O

The ControlSpace Engineered Sound Processors ESP-880, 1240, 4120, and 1600 now support Dante 32x32 channel I/O architecture.



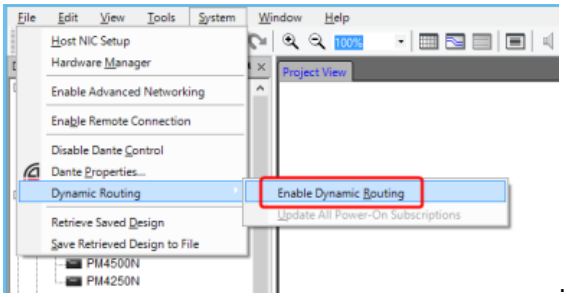
Parametric EQ Enhancements

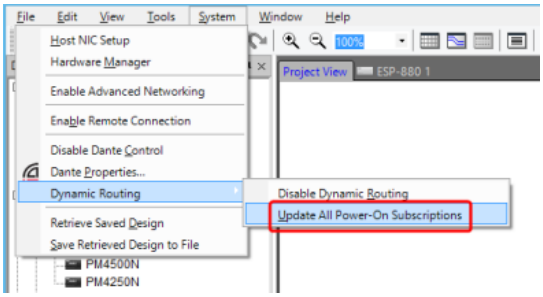
Parametric EQ now supports stereo as well as mono input. The SP Toolkit provides new blocks for 3-band, 5-band, 7-band, and 9-band PEQ for stereo input. It also includes new custom blocks for both stereo and mono inputs that allow you to specify the number of EQ bands, from 3 to 16.



Dante Dynamic Routing Feature Changes

ControlSpace Designer allows dynamic routing changes for ControlSpace Engineered Sound Processors and networked PowerMatch Configurable Power Amplifiers using Parameter Sets. Previous versions of CSD automatically enabled dynamic routing whenever Dante control was enabled. Version 4.4 disables dynamic routing by default, to prevent changes made outside of CSD from being lost at power-up. With the Dynamic Routing feature disabled, any changes made to the Dante routing will persist when the devices are rebooted, whether the changes were made using ControlSpace Designer or the Dante Controller utility. You can also set a 'Power-On' subscription to return the Dante routing to a specified state when the system is powered on





Miscellaneous

Dante™ and CobraNet™ connections are now presented at the base of devices in Project View and a new category of 'Network' devices has been added allowing network audio connections and topology to be more accurately represented in the Project View diagram.

The EQ database has been updated with new settings for Panaray® 402® Series IV, 802® Series IV and 502®A Series IV Loudspeakers.

Note: These updated EQ settings are provided for the SpeakerPEQ module on Engineered Sound Processors and PowerMatch amplifiers, but not fixed Speaker EQ module on Engineered Sound Processors.

Firmware

This release includes the following firmware: ESP-880/4120/1240/1600 (v1.610) ESP-00 II (v4.610), ESP-88/00 (v4.610), PMxxxx (v2.110), CC-64 (v1.120).

No update to CC-64 or CC-16 firmware from the previous release.

Minimum System Requirements

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

- Microsoft Windows 7 or 8/8.1 (32bit or 64bit)
- 1GHz processor (or better)
- 512MB of available RAM (1GB recommended)
- 512MB of available disk space (1GB recommended)
- Minimum resolution of 1366x768 WXGA
- 1 available USB port
- 1 available Ethernet port (100Mb minimum, 1Gb recommended)
- ControlSpace Designer requires Microsoft® .NET Frameworks 3.5 and 4.5 to be installed. If required, version 4.5 will installed automatically as part of the ControlSpace Designer installation. Windows 7 includes version 3.5 so no additional installation is required. For Windows 8/8.1, support for version 3.5 can be turned on using 'Turn Windows Features On/Off'.

  Note the installation of Microsoft® .NET Framework 4.5 requires an internet connection. Alternatively a full 'offline' version can be downloaded from here.

- ControlSpace Designer also requires the Microsoft® Visual C++ 2013 runtime library. If required, this will be installed automatically as part of the ControlSpace Designer installation.

Note:
Microsoft Windows XP OS is no longer officially supported but there are no known issues
Microsoft Windows 10 OS has not yet been fully tested but there are no known issues so far

Changes / Fixes since v4.31

Basic Operation/Update

1. An issue that prevented successful CC-64 firmware update when connected to the PC via a direct cable (not using a network switch) has been resolved.
2. Hardware Manager now correctly detects and supports firmware update via Ethernet when a PowerMatch amplifier is started in recovery mode. It is no longer necessary to use the bundled update utility.
3. Although a related issue was resolved some time ago, it was still possible for activity on the physical RS232 serial port to prevent ESP-00/88 processors from booting correctly. This no longer occurs.
4. When receiving a design file with multiple crossovers, the ESP-00/88 could fail to respond to ControlSpace Designer in a timely fashion and hence would be reported as 'disconnected'. A new stage in the upload process, 'Waiting for metering to start', has been added to allow the ESP-00/88 time to complete the necessary calculations. This is not required for the faster fixed I/O ESPs.
5. Sending changes to a networked PowerMatch amplifier via USB could cause it to revert to default settings when rebooted, this no longer occurs. USB only models were unaffected.
6. On download, it was possible to pair a networked PowerMatch amplifier in the design file with a hardware device of an incorrect type when the IP addresses were mismatched, this has been corrected.
7. The EQ database has been updated with new presets for Panaray 402 SeriesIV, 802 Series IV and 502A Series IV loudspeakers.
8. During the installation process, the installer for 'Dante Services for ControlSpace' is now only launched when required, removing the confusing dialog when the correct services are already installed.
9. For 4ch models of the PowerMatch amplifier, the Channel Range setting is now saved automatically when the device is set to 'Restore Last Settings' ensuring that the setting persists after reboot.

ControlSpace® Designer™ software

1. An issue that caused changes to the default gateway to be lost unless a change was also made to the project network address in the Project Network Settings form has been resolved.
2. The default gateway is now saved in the design file and restored with the other network settings when an existing design is opened. This reduces the risk of inadvertently changing the default gateway for remote devices when working with remote systems.
3. The default gateway is now included when network settings are saved as the default for new projects. Previously it was only the network address and subnet mask that were saved.
4. In Hardware Manager, devices listed in the batch update grid are now cleared automatically when devices are no longer discoverable in the main grid, since the update would fail.
5. Host addresses are now displayed correctly for devices in Project View following a merge of design files with different subnet masks.
6. The host address for devices with a default IP address are now displayed correctly in Project View when the subnet mask is set to a value other than \24.
7. VPN network adaptors (e.g. L2TP or PPTP) are now included in the Host NIC dropdown list when they are active on the host PC allowing traffic to be routed explicitly.
8. The existing gated automatic microphone mixer has been renamed to "AMM-Gated" to differentiate it from the new gain sharing automatic mic mixer, "AMM-GainShare".
9. New icons have been introduced for Parameter Sets and Groups.

Control Centers/Programming

1. In the previous release, the volume indicated on CC-16 hardware was off by 1 step size from the actual value. For example, when using the default settings +12dB was shown as Volume = 95 instead of Volume = 99.
2. The backlight time for the CC-64 was not being set correctly by the ESP when the system was rebooted causing the backlight time to revert to the hardware setting, this has now been resolved.
3. When devices were booted up in certain sequences it was possible that some of the LED rings on the CC-64 would not be illuminated correctly, this has now been resolved.
4. The CC-64 simulator now correctly indicates channels that are muted when the form is first opened.
5. Adding only individual parameters of a Delay module, such as Bypass, to a Parameter Set no longer causes a netlist load failure.
6. Volumes assigned to GPI, Serial Input and Timers that were set to –inf were being incorrectly saved as -8dB. This no longer occurs, but existing files will need to be updated.

Serial Control

1. The Serial Input module on Engineered Sound Processors is now working correctly with the physical RS232 port again. In the previous release it was only working for Serial-over-Ethernet connections.
2. An issue with v4.3 that caused additional characters to be added incorrectly when entering strings for the Serial Output module on Engineered Sound Processors has been resolved.
3. The serial control protocol has been updated to support Parametric EQs with customizable number of bands and support for the new Gain-Sharing AMM has been added.

Dante™ Network Audio

1. With previous releases, Dynamic Routing (changing Dante subscriptions via Parameter Sets) was active whenever Dante control was enabled. This included a power-on state for the Dante routing being captured and restored at power-up which could result in changes made outside of CSD being lost. Dynamic Routing is now a secondary option, disabled by default. When disabled, any changes made to Dante routing will persist when the devices are rebooted, whether the changes were made using ControlSpace Designer or the Dante Controller utility.
2. When Dynamic Routing is enabled, saved power-on subscriptions are now visible in the Properties Window and can be explicitly updated for all devices via the System menu, or per device or module (ESPs only) using the relevant right-click context menu.
3. Previously, 4ch PowerMatch amplifiers were only storing subscriptions for the lower 4 channels of the PowerMatch Dante card, but for the Channel Range selection to work correctly all 8 channels were required.
4. Dante subscriptions were not propagating correctly to PowerMatch amplifiers connected via USB unless the scan button was clicked, this has now been corrected.
5. The popup fader for the eighth channel of Dante Input and Output modules no longer extends beyond the form.