ControlSpace® Designer™ software 4.2

Release Notes

5 February 2015

Revision: 1.0

General

This release of ControlSpace Designer software adds support for the new ESP-1600, a 16 analog input variant of our fixed I/O Engineered Sound processors, and the new range of ControlSpace Dante™ endpoints:

ControlSpace EP22-D – 2-in, 2-out Dante endpoint

ControlSpace EP40-D – 4-in Dante endpoint

ControlSpace WP22B-D – 2-in, 2-out (balanced) Dante wallplate

ControlSpace WP22BU-D – 2-in, 2-out (balanced/unbalanced) Dante wallplate

Integrated support for the Audio-Technica ATND-971 Dante microphone has also been included.

Firmware

This release includes the following firmware: ESP-880/1240/4120/1600 (v1.160) ESP-00 II (v4.230), ESP-88/00 (v4.230), PMxxxx (v1.460). No updates to CC-64 or CC-16 firmware are required.

Note that from this release, if CC-64s are present on the network their firmware will need to be updated prior to going online.

Minimum System Requirements

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

- Microsoft Windows 7/8 (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 Framework 3.5 to be installed for Windows 8, available for download here. Windows 7 includes .NET Framework 3.5 so no additional installation is required.

Note that the Microsoft Windows XP operating system is no longer officially supported.

Changes / Fixes since v4.1

Basic Operation/Update

1. Project view devices and EQ files for the new RoomMatch® Utility RMU206, RMU 108 and RMU 105 loudspeakers have been added. (originally released in v4.12)
2. Limiter settings for the RoomMatch® RMS218 VLF-subwoofer have been revised. (originally released in v4.11)

Serial Control

1. ESP processors and PowerMatch amplifiers can now support up to eight simultaneous Serial over IP connections. Previously, only one was permitted.
2. For ESP processors the RS232 serial port and Serial over IP connections can now be used at the same time.
3. An issue that could cause PowerMatch amplifiers to miss serial commands when multiple commands were sent as a single string has now been resolved.

Dante™ Network Audio

1. This release includes support for the new ControlSpace Dante endpoints and the Audio Technica ATND971 Dante microphone. These devices can be added to the project view from the device list when offline, or will be automatically discovered and added to Project view following a ‘scan’. Unlike other ControlSpace hardware the endpoints do not have any programming and are therefore ‘online’ as soon as ControlSpace Designer is connected to the network. Any changes made to the device while offline will be sent automatically to the device once connected to the network.
2. The Dante Properties form is now accessible via button on the toolbar in addition to the existing methods.

Known Issues, Defects and Limitations

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

Signal Processing/Algorithms

1. The gain for a PEQ band in the ESP-00/88 SpeakerPEQ module is internally limited to 18dB despite the control panel allowing values of up to 20dB.
2. It is possible that some paths may not pass audio correctly when there are more than 3-4 AMM blocks in an ESP-00/88 configuration.
3. When using the 'advanced' filter parameters on the PowerMatch Array EQ module, clicking on an up/down button first will insure that all subsequent changes are made correctly. Clicking on a numeric field first incorrectly prevents subsequent changes being made, even though they appear to be working in Designer.

ControlSpace® Designer™ software

1. Since ControlSpace Designer v3.2 it has been possible to select which devices should receive the project file. When downloading it is important to ensure that the correct device is selected or an incorrect design file will be loaded without warning that the design is mismatched.
2. Project directory can cause performance issues in larger systems. When working with larger projects we recommend you close Project directory and then restart Designer.
3. When an input channel of the AMM module is set to 'Use Channel Settings' from another, the values are only updated when the properties window is opened. Either close and re-open the channel properties window, or re-select the source channel from the list.
4. Incorrectly entering characters into numerical fields, such as those found in the AMM control panel can cause unhandled exceptions.
5. The Select Timeout and Backlight Timeout property values are not maintained when performing a copy/paste on CC-16s.
6. Channel and module labels with quotes " or backslash \ will cause a 'CalcEspResource' error and should be avoided. This includes custom labels of Dante channels where these are permitted characters.

Control Centers/Programming

1. Custom mode operation on the CC-64 is not currently supported for ESP-880/4120/1240 processors.
2. Dynamically re-assigning selectors from different devices to a CC16 or CC64 does not work as expected – only re-assign selectors from the same device or use parameter sets.
3. Dynamically re-assigning gains/inputs/outputs from different devices to a CC16 does not work as expected, only re-assign volume controls from the same device or use Groups.
4. In systems with multiple ESPs, dynamically re-assigning a CC-64 or CC-16 control from a Group to an individual module, such as a selector or a gain can result in unexpected behavior. The CC-64 or CC-16 may continue to display updates to the Group value even after the control has been changed. The issue does not occur when changing the assignment from one Group to another, or an individual module to another.
5. Dynamically changing a CC-64 control assignment from a selector to output/gain and back to a selector can cause the audio from the output/gain path to cease.
6. '*' can be shown when navigating back to original channel on CC-16
7. In larger systems it is possible for the CC-64 to become unresponsive when recalling parameter sets that change its lock status or control assignment.

8. It is possible that ControlSpace Designer can become out-of-sync or lose communication with the hardware if large Parameter Sets are recalled in quick succession. Hardware functions correctly when ControlSpace Designer is disconnected.
9. Certain PowerMatch modules do not respond correctly to parameter changes or update ControlSpace Designer when triggered directly via ESP timer events. Use Parameter Sets instead.
10. Whilst most signal processing groups that span multiple PowerMatch devices are maintained when ControlSpace Designer is disconnected, Input PEQ, Array EQ and Band Pass modules are not.
11. The volume levels displayed on CC-64s can get out-of-sync if the same PowerMatch output is assigned to multiple CC-64s. This issue does not occur when using an ESP.
12. An issue can occur with grouped selectors in multiple ESP systems, whereby the CC-16 can appear locked or frozen. A workaround is to assign one of the group members to the CC-16 instead.
13. Mute-only group labels are not displayed correctly on the CC-64 when assigned to the control dynamically. Level+Mute groups behave as expected and using Parameter Sets is an alternative.
14. When changing CC-16/64 assignments via Parameter Set the stored 'Off at Minimum' property is currently ignored by the hardware, but the change is made correctly in Designer.
15. Parameter sets with commas in the label are not displayed correctly on CC-16 and CC-64 user controls.
16. CC-16s assigned to control objects on networked devices are not correctly synchronized to the current level or selection at power-up. Once changes are made, either via the CC-16 or invoking a parameter set, the CC-16 will be synchronized and will display the correct values.
17. Currently the Dante output polarity does not change in response to Timer, GPI or serial events, using a Parameter Set is a workaround.
18. When Parameter Sets that are assigned to CC-64/CC-16 controls span multiple devices and a subset of those devices have been rebooted, or disconnected/reconnected it is possible for incorrect parameter sets to be recalled on those devices. Scrolling through all the possible selections on the CC-64 or invoking a Parameter Set directly via serial command are possible workarounds.
19. Dante and CobraNet outputs can now be added directly to Groups, however an error will occur if the Dante or CobraNet card variant only has 8x input channels. Using gain blocks prior to the output is a workaround.
20. Changes made to ESPLink, Dante or CobraNet inputs/outputs via the CC-16 simulator are not correctly sent to ESPs, changes made via the hardware CC-16 work as expected.
21. When a PowerMatch output is assigned to an analog GPI pin on an ESP the maximum volume should be manually changed to 0dB to prevent the maximum level of the PowerMatch output from being exceeded.

Serial Control

1. System commands (such as Parameter Set recall, or Group level change) must now be sent to either the Main/RTC device or one of the devices included in the Parameter Set/Group, not to any device as it was before. This change is part of the optimization to allow support of larger systems.
2. Changing the port number or disabling serial-over-Ethernet on ESP-880/1240/4120 devices doesn't take effect until the second connection, or after a reboot.
3. PowerMatch input groups allow level adjustment via serial command SG n,l even though they are of Grouping Type " Mute".
4. If an intermediate value for the Redline pre-gain parameter is sent via serial command the same value will also be returned rather than the actual value it was rounded to.
5. ESP-880/1240/4120 devices will incorrectly accept additional connections to the serial-over-Ethernet control port rather than resetting the existing one. Any communication via those connection will be ignored.

Dante™ Network Audio

1. Multicast audio traffic must be filtered from any ports connected to ESP-00/88, CC-64 and preferably PowerMatch devices. Using 'Legacy_Hardware' mode is a convenient way to do this.
2. Dante interfaces are set to 'Obtain an IP address automatically' by default and will take an address from a DHCP server if present, otherwise they use a Link-local address in the 169.254.x.x range. For ease of setup we recommend using a DHCP server set to the same range as ControlSpace 192.168.0.x (avoiding the fixed addresses of ControlSpace devices).
3. Devices with Link-Local IP addresses may not be detected with multiple Network interface adaptors (NICs) active. Disable all other NICs or manually set the NIC to the Link-Local address.
4. It is possible in larger Dante systems using redundancy, where IP addresses are provided via DHCP, that a Dante card may not be detected correctly during boot. Using static or Link-Local (obtain automatically without DHCP server) addresses is a workaround.
5. In larger systems it can take up to a minute to discover all the Dante devices, or to remove all the Dante devices from the list after the network is disconnected.
6. Adding, removing or changing the card configuration of devices in Project View will not update the Dante Properties form while it is open. Close and re-open the form in order to see the changes.
7. Dante signal metering shown in the drag and drop routing view will fail to update correctly in larger systems with more than 16 devices.
8. Multicast flows created in Designer are always created with the maximum number of channels permissible for the device (typically 2 or 8), irrespective of the actual number of channels added in the routing view. This should be considered in bandwidth calculations.
9. Default channel labels for Dante Virtual Soundcard on Mac OS-X are not shown in Designer, but custom labels can be added. PC version works correctly.
10. Currently configuration and routing from within Designer is limited to Dante devices with a maximum of 64x64 channels.
11. In order to successfully configure and route audio to and from the Yamaha MY-AUD16 Dante card from within ControlSpace Designer firmware version 2.4.0 or later is required.
12. Renaming multicast flows on some 3rd party devices, such as the Atterotech unDIO range, can prevent subscriptions from being resolved. Deleting the multicast flow and re-creating is a workaround.

Refer to the relevant Dante Technical Notes, available separately, for more detailed information on setting up and configuring systems that include Dante audio networking.