

Echoflex Solutions Release Note

Elaho Power Control Processor Software

Product Line:

Power Control Processor Software

Description:

Version 3.1.1 System Software / Firmware

Power Control Processor Software Components

Elaho Relay Panel Firmware	3.1.1.111
Ethernet Option Card Firmware	3.0.1.111
Elaho Relay Panel Bootloader	3.2.1.105
Network Option Card Bootloader	2.0.0.9.0.2
DALI/0-10V Option Card Firmware	1.0.1.9.0.22
Echo Protocol	3.2.2.395
DALI/0-10V Option Card Bootloader	1.0.1.9.0.22
Contact Input Option Card Firmware	1.0.1.9.0.2
ERP Relay Firmware	3
ERP Dimmer Firmware	16/116
Echo MAC	18.3

Effective Date:

2019-12-12

Purpose

The purpose of this release is to improve large-scale system integration, emergency response time, and the firmware update process, and to correct software defects. The Power Control Processor is used in the Elaho Relay Panel Mains Feed and Elaho Relay Panel Feedthrough.

For any questions relating to the contents of this release or the behavior of this software, please contact Echoflex Solutions Technical Services using the information at the bottom of this page.



Note: A Forward-Phase Dimmer can be identified from the Power Control Processor of an Elaho Relay Panel Mains Feed (**[Enter]>About>About Output**). The software version of a Forward-Phase Dimmer will display as a three-digit number (for example, 116). The software version of a Phase-Adaptive Dimmer will display as a two-digit number (for example, 16).

Availability

This software is currently available in all shipping Power Control Processors and by contacting Echoflex Solutions Technical Services. If you encounter difficulties or need an upgrade, kit (part 7123K1024-3.1.1) includes a suitable USB stick with software pre-loaded.

Documentation

Current documentation includes the Power Control Processor Configuration Manual and various installation guides for the Elaho Relay Panel Mains Feed and Elaho Relay Panel Feedthrough products and their option kits.

Please keep this release note with your installation guide for descriptions of the newest features, changes, and bug fixes. Echoflex Solutions manuals are in portable document format (pdf) and are available for download at echoflexsolutions.com.

Echoflex Solutions Release Note

Power Control Processor 3.1.1

Compatibility

This release is compatible with the following Echoflex Solutions hardware and software/firmware:

- Ethernet Interface Option for panel products
- 0–10V Dimming Control Option
- DALI Control Option
- RideThru Option
- Elaho Inspire Stations
- sACN Protocol: Ratified input compatibility



Note: *To ensure correct functionality, your Power Control Processor and Ethernet Interface Option Card must be running the same software version.*

Key Enhancements in v3.1.1

- Initial release of Forward-Phase Dimmer
- Improved large-scale system integration
- Improved emergency response time
- Improved firmware update process
- Bug fixes

Key Enhancements in v3.1.0

- Energy reporting to ETC Paradigm Central Control Server systems
- Error reporting to ETC Conductor
- Removed space count limitation
- Bug fixes

Key Enhancements in v3.0.1

- Bug fixes (Streaming ACN reception)

Key Enhancements in v3.0.0

- Upgrade to version 3.0 of the Echo station protocol
- Add Open/Close pre-configured times to Timeclock
- Add "All-On" feature to quickly turn on all outputs for testing by holding down the Control button
- Bug fixes (including a critical fix to Streaming ACN support)

Key Enhancements in v2.1.2

- Add ability to manually set dimmer to forward phase mode
- Increase dimmer fade time (smoothing) for LED loads
- Bug fixes

Key Enhancements in v2.1.1

- Support 300W dimmer for Relay Panel Mains Feed
- Bug fixes

Echoflex Solutions Release Note

Power Control Processor 3.1.1

Software Upgrade Instructions

All Power Control Processors ship with the current version of software installed. The firmware of your Power Control Processor can be field-upgraded as needed. When new firmware is released, Echoflex Solutions Technical Services can supply the necessary files. Some USB keys may not be able to reliably update panels. If you run into this situation, contact Echoflex Solutions Technical Services and request a USB upgrade Kit (ETC part number 7123K1024-3.1.1), which includes a known-working USB key.



CAUTION: *To prevent configuration loss, you must follow an upgrade path when your Power Control Processor is running a software version lower than v2.1.0. First, update your processor to v2.1.0, and then you can update your processor to v3.1.1.*

1. Technical Services will send you the most current software in a zip file or on the USB key in the upgrade kit. If using your own USB storage device, unzip and save the software file (echo_relay.efw) to the device.
2. Insert the USB device into the controller.
3. Navigate to [File Operations].
4. Save the current configuration onto the USB device.
5. Select [Update Firmware]. If using the upgrade kit, the firmware will be located in the subdirectory on the provided USB key.
6. Select the firmware file. The update will automatically begin.

Issues Corrected in v3.1.1

PCP-47445	Application can fail to update from some USB keys
PCP-47438	DMX address of non-existent outputs is displayed as DMX start address
PCP-47427	"Emergency Active" not displayed during first 5-10 seconds after boot
PCP-47423	Energy management data collection can fail after system time disruption
PCP-47415	Secondary option card does not show version # in the About menu unless primary option is installed
ENOC-47240	Outputs can flicker when sACN source is reacquired
ENOC-47230	Allow a maximum of 25 simultaneous ACN connections
ENOC-47228	Panel can cease responding to network communication in system with more than 9 consoles
ENOC-47223	Concert can fail to retrieve configuration when more than 9 consoles are present on network
ENOC-47221	Cannot reliably update firmware via Web UI
ENOC-47213	Network option card can deadlock in specific circumstances while sending energy data
ENOC-47192	Network connection can become unresponsive on systems with many ACN time sources (>23)
ENOC-47187	Downloading config from Web UI inconsistent on busy network

Echoflex Solutions Release Note

Power Control Processor 3.1.1

Known Issues Remaining in v3.1.1

- PCP-47452 Playing a preset from front panel sends incorrect manual timing to other Echo hosts
- PCP-47444 After firmware update, backlight and contrast settings may be reset
Workaround: Re-configure backlight and contrast after a firmware update
- PCP-47434 When downgrading the panel from the Web Interface, the Network Card may not downgrade
Workaround: If a downgrade is required, initiate it from a USB stick
- PCP-47433 ERP does not receive sACN levels when patched to new universe
- PCP-47431 Flickwarn doesn't work if "on" event has not occurred before "off" event was configured
- PCP-47429 SNTP change can cause ERP timeclock events not to play
- PCP-47410 Update of Network Card may stick displaying 0%
Workaround: Although the update displays 0%, it is still functioning. Wait for the update to complete.
- PCP-47402 Noise on the DMX line can cause false indication of activity
- PCP-47396 ERP-UL:rapid toggling of manual control can cause mismatch between levels and output state
- PCP-47381 Relay Mismatch Error is not always shown
Workaround: Perform a Quick Rack Setup to ensure relay types installed match
- PCP-47364 Bad DMX connection can cause erroneous levels
- PCP-47359 Levels can not be set using the webUI if config contains relays assigned to unpatched spaces
- PCP-47353 ERP configured to wrong rack type reports incorrect voltage
- PCP-47345 A firmware update may stall with a freshly partitioned USB drive
Workaround: Force an update by holding down the enter and back buttons during boot and the update will proceed
- PCP-47332 Can set contacts to outputs >24 on an ERP Mains Feed rack
- PCP-47328 Exiting and re-entering file menu may be required for update if USB storage swapped
- PCP-47320 ERP configuration files do not display correctly in Microsoft Edge/Internet Explorer
- PCP-47318 ERP Does Not Match Conductor's Range Of Time Zones
- PCP-47309 When downgrading from v3.1 to a lower version, more spaces than are supported may be shown
Workaround: Reconfigure to use 8 spaces or less if a downgrade is necessary
- PCP-47283 sACN levels can get stuck in arbitration if DHCP lease expires and NOC reboots
- PCP-47267 When firmware is downgraded, configuration will not be maintained
Workaround: Save configuration to file before downgrading and load configuration from file when upgrade is complete.
- PCP-47257 Outputs with Circuit Numbers above 65535 will not have Energy Management Data reported to Paradigm/Conductor
Workaround: If using energy management, ensure all circuit numbers are set below 65536.
- PCP-47223 ERP UI can show non-existent sACN universe on patch screen
- PCP-47213 Sequences running in multiple spaces simultaneously can fall out of sync
- PCP-47209 ERP timeclock does not support custom DST transition times
- PCP-47187 If other sources are present, Timeclock Flickwarn may not function
- PCP-47101 ERP populated entirely with dimmers will not show missing dimmers in view errors
- PCP-39270 Upgrading from 2.x to 3.x must be done via USB, not from the Web UI
- PCP-38955 Sequence playback from non-timeclock enabled panel is interrupted by actions from other spaces in timeclock-enabled panel
- PCP-38850 Flickwarn does not occur for events in spaces not otherwise configured for this controller in Arch Setup
Workaround: A local circuit must be patched to the space that flickwarn takes place in

Echoflex Solutions Release Note

Power Control Processor 3.1.1

- PCP-38810 After a software downgrade, the timeclock "When" menu will not work restore defaults.
- PCP-38332 Upgrading from 2.1.0 or below may cause config loss & hang on upgrade
- PCP-35582 Racks running firmware below 2.1.0 must be upgraded to 2.1.0 before upgrading further
- PCP-35289 Rebooting too quickly after a configuration change can cause config loss
Workaround: Wait at least 5 seconds after changing a configuration parameter to reboot.
- PCP-35136 Releasing Set Levels does not shut off output from 0-10V card if no other sources present
- PCP-34085 Configuration will be lost if a rack is downgraded
Workaround: Save configuration to USB before upgrade or downgrade
- PCP-33313 Hot-plugging option cards may cause processor to lock up
Workaround: Do not hot plug or unplug option cards
- PCP-31749 Software update after removing option cards can cause firmware to appear "frozen" as the processor attempts to communicate with the missing option card.
- PCP-30872 Timed Events do not stop running sequences
- PCP-28602 Removing USB key while viewing files can cause display problems.
- PCP-26854 Events are not reliably saving to USB
- PCP-26405 Sequence does not stop until current step has completed
- PCP-26243 Deactivating preset in LatchLock mode leaves relay on but turns off level indicator
- PCP-26180 Relay Control web page does not automatically update
- PCP-26162 Cannot tell which timed event is active
- PCP-25919 Presets, zones, and sequences do not turn off relays when LatchLock mode is enabled
- PCP-25773 Setting range of levels from web page doesn't work when first address is larger than the second
- PCP-25658 Space combine or lockout status not shown in UI
- PCP-25652 Relay Control screen shows relays in red even after alleviating breaker trip
- PCP-24965 Configuring racks with different sequence types on Echo bus may lead to unexpected results
- PCP-24706 Pressing reset now fully resets attached accessory cards.
Workaround: Power cycle the brick.
- PCP-23837 Circuits set to "Latch-Lock" cannot currently be overridden by set levels.
- PCP-23824 DALI levels drop to zero during a firmware upgrade
- PCP-23818 DALI output cannot currently be configured to be linked to multiple pole relays.
- PCP-23813 Restoring defaults with valid level input in control of relays may result in levels being stuck on.
- PCP-23811 Changes to priority of momentary contact input do not take effect until the next change of state by the contact.
- PCP-23808 Disabling contact input for a relay while the contact is actively triggering the relay will lock the relay onto the current state.
- PCP-23785 Relay may change state during a software upgrade.
- PCP-22689 Altering Preset priority briefly causes stations to indicate Off
- PCP-22674 When Network Option Card is not installed, incorrect IP information may be shown.
- PCP-22518 ERP outputs a short voltage blip from panic output on reboot
- PCP-22410 Sequence steps are not recorded between hosts on the station bus
- PCP-22306 Resetting or powering off immediately after a configuration change may cause data to be lost
Workaround: Do not reset or power off immediately after a configuration change
- PCP-22172 Some USB Drives do not function with Echo Relay Panel
- PCP-22134 Station operation may be intermittent for a short period after configuration change
- PCP-22008 Entering a Non-Existent Circuit Number in the Set Levels screen prevents further entries
Workaround: Only enter valid circuit numbers

Echoflex Solutions Release Note

Power Control Processor 3.1.1

- PCP-19971 Relay Status Screen sometimes shows "â%^^" incorrectly
- ENOC-47236 NOC can reboot during file transfer
- ENOC-47185 Outputs can flicker when multiple sACN sources, in the same universe but with different priorities, are simultaneously acquired
- ENOC-47184 Downloading ERP configuration freezes sACN levels
- ENOC-47161 Energy MGMT stops working if conductor time is set back
Workaround: Reboot unit after setting time.

Known Issues Remaining in Echo Protocol 3.2.2

- EC-47077 Multispace off button occasionally flashes on when sequence is still playing
- EC-47074 Off actions using timing from an active preset rather than the 2 second standard
- EC-47063 Multispace hosts maintain preset status in previously-patched spaces
- EC-46888 Late joining occupancy sensor controls will assert their configured occupancy action even if associated group was already in occupied state
- EC-45629 Hold event configured with fade time for "set to color" actions fades intensity on hold
- EC-45596 Differing space/zone levels across bridge segments causes station indication to bounce between values
- EC-45462 "Uncombine All" may not uncombine all combined spaces on full Echo bus.
- EC-45338 Bus ID does not re-arbitrate if self powered device loses and later regains bus connectivity while remaining powered
Workaround: Power cycle the device after reconnecting to Echo bus
- EC-45202 Editing spaces affected by a Demand Response input momentarily sets spaces to false during true condition
- EC-44495 Products with Power on behavior can show active zone levels and activated Off status at same time
- EC-44432 Manual control from non native space does not trigger occupancy when occupancy action is multi-space
- EC-44154 Occupancy groups, vacancy inhibit, and photo inhibit do not support all spaces of a multi-space action
- EC-43350 Accessing the Config page on multiple simultaneous EchoAccess connections causes duplicate devices to be listed
- EC-43262 Vacancy action Preset activate can be missed after a grace restore has been triggered due to support for older Occupancy sensors
- EC-43138 On occasion large batches of patch config messages can fail to transmit correctly resulting in skipped addresses
- EC-43020 When two presets are active in the same space, preset indication toggles between both presets
- EC-42572 Unable to toggle sequence off from combined space that does not possess a sequence enabled output product
- EC-42401 Space Combine Toggle won't uncombine spaces without any host output products
- EC-38851 Late joining bridge results in oscillating mismatched Zone values if different segments have different values for same zones
- EC-38839 Late joining bridge results in oscillating mismatched statuses if different segments have different status for same spaces
- EC-38694 Zone status does not zero out after last output product for that zone changes to new space
- EC-35126 Space toggle when Zones are not at full sets Zones to 0 rather than all at full
- EC-34543 Sequence indicator toggles state rapidly when output device with sequence active late joins Echo bus with output device that has inactive sequence
- EC-28417 Station activity during sync period following connection of late joining output product incorrectly does not cause LED chase