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Nx Talkshow Systems – Nx12, Nx6, iQ6, and Hx6

Version 7.0.0r   March 2019
- Allow user to set DTMF tone duration and pause between digits
- Double default DTMF amplitude. In the unlikely event this causes issues, it can be changed on the "Telco" page.
- Add GPIO status output for each hybrid
- Correctly handle newline characters from VSet/XScreen

Version 6.1.0r   January 2018
- All caller ID information is sent over Livewire Control Protocol

Version 6.0.0r   August 2017
- Added an option on the setup wizard web page to limit display of dialed digits on the VSet and other call management interfaces
  - Add option to wait for # or 5 seconds before considering dialing sequence complete
  - Phone numbers dialed *en bloc* are considered complete
- Fixed a crash if a phone number longer than 30 characters was dialed

Version 5.0.0r   April 2017
- Fix for VSet Call Controller and VSet6 or 12 in two-column operator mode
- Fix for GPIO ring indication getting stuck active when line sharing is used
- Fix for HTML GPIO indicators not working in some browsers
- Fix for a few missing line state icons on the status web page

Version 4.0.0r   July 2016
- Greatly reduced a glare window that could result in a new call's CLID information being lost
- Corrected an invalid conference on VSet handset
- Restored producer access to lines in Ready Hold queue
- Digits are displayed on VSet and Desktop Director as they are dialed
- Removed junk entries from V Set call history
- Outgoing call history is remembered for the duration of the current session

Version 3.0.0r   June 2015
- Fix crash when auto-answer to hold is enabled
- (developer support) Fix LWCP parser crash on commands that have no object specified

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Version 2.0.0r   March 2015

- Fix for callers being placed on wrong hybrid when controlled from PowerStation v1.2.5 or later

Version 1.9.0r   November 2014

- Hybrid adapt burst only plays once when putting a call on hybrid
- Default CPC setting is 250ms
- Added configurable delay to Tel webpage to prevent first digit of DTMF from being lost in case line is slow to present dial tone
- Fix for outgoing calls becoming stuck in "Pending Seize" for ETS-300 (Nx12 only) and Q.931 (Nx12, iQ6, Hx6) ISDN modes.
- Fix for issue preventing Assistant Producer session associated with a Producer-mode Desktop Director from dialing
- Fix for not being able to set "auto answer" and "lock to hybrid" from the webpage of an Hx6 or iQ6
- Fixed '500 server error' that could occur when requesting a reboot from the Tel webpage
- Changing IP address from system web page no longer returns an error
- Replace GPIO web page Java applet with javascript for faster load times and better compatibility
- Fix for Ringing GPIO output becoming stuck on when ring indication before CID was enabled
- Fix for Ringing GPIO output becoming stuck when POTS line sharing is enabled
- Fix for status displays that would temporarily display a line state as unknown or invalid
- Match visual and functional style across configuration web pages

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Hx6 and iQ6 only

- Added a screen saver
- Calling party name will be shown on VSets when available
- "EQ High" setting defaults to +6dB
- Correct display of "Log outgoing dials for redialing" on show setup webpage
- Added capabilities flag to let LWCP-based controllers know that hook flash is available on this platform
- Implemented hookflash on POTS lines.
  Requires Vset software version VSet-1.1.1-11625-rc2 or later

Version 1.8.0r   August 2013

Nx12 only

- In two-studio operation, lines removed from hold now properly show as unavailable in the other studio

Hx6 and iQ6 only

- Improved hybrid performance
- Decreased hybrid training time
- Increased VSet handset volume
- Improved VSet echo canceller
- Increased to-caller volume
- Increased Program on Hold volume
- Eliminate crackle on studio outputs when studio inputs clip
- Improved studio-side echo canceller performance
- Improved send-to-caller frequency response

Version 1.7.1r (Nx and Hx6 only)   January 2013

- Fix for AES 2-channel mode in the Nx12, Nx6, and Hx6

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Version 1.7.0r   December 2012

- First release of the Hx6 Telephone Hybrid
- Add option to turn off Adapt Burst from web page
- Added Vx's "fix line to hybrid" feature
- Redesigned sample rate converter to reduce aliasing noise
- Expanded frequency response of sample rate converter to improve THD measurements towards top of supported frequency range
- Make compatible with Broadcast Bionics' Xscreen call screening software
- Product names added to LWRP advertisements (affects especially iQ6, Hx6)
- Added support for LWCP's $trxi property
- Livewire Disable rewritten:
    - All old Livewire multicast subscriptions released
    - All new Livewire multicast subscriptions forbidden
    - Livewire GPIO disabled
    - Is remembered across reboots
    - Preserves Livewire settings that were in use
    - State is reflected on frontpanel (menu reworded)
    - When Livewire is disabled, Livewire source webpage replaced with enable page
    - Warning on Wizard webpage when Livewire is disabled, but audio settings require it

- Prevent subscription to high-speed Livewire clocks if Livewire clock priority is 0 (always slave)
- Correct source IP address for Livewire streams that have not been reconfigured since boot
- Ensure that Livewire streams are never sent with a multicast source address of 0.0.0.0
- Ensure that Livewire stream multicast sources are updated when network settings change
- Never subscribe to Livewire channel 0 or To:0
- Calling after seizing a line on hybrid from VX protocol remembers hybrid assignment
- Fix for some calls not dropping on reorder tone and with CPTD drop enabled
- Added an option to webpage to change timing of end-of-ring detection
- Changed the default timing of end-of-ring detection for Australia, Great Britain, India
- Telnet login text shows correct product names
- Fix link to syslog on html index page
- Standardized capitalization on webpages
- Nx12: Prevent a producer-mode director from sending DTMF when dialing with no line currently active
- Nx12: Associate a line with a control surface for dialing in many more instances.
- Fixed a resource management issue that could cause whole-system instability
- Fix a crash when telnet log 2 (HDpeb3086) is enabled
- Nx: Fix for a Desktop Director lockup

Version 1.6.0r   September 2011

- Added support for AP's EnblocDial command when using POTS lines
- Webpage meters calibrated

- Livewire Routing Protocol meter data is scaled correctly
- Corrected a problem with Busy All being used on two studios when some lines are not shared
- Nx12 and Nx6 now support the Livewire Control Protocol used by newer Axia products
- Software update is no longer aborted if browser refreshed System page very quickly after sending the update package
- Reordered webpage header to match homepage
- "Ring mute ignore" is resent after disconnecting and reconnecting a desktop director while ring mute is asserted
- Optimizations to Assistant Producer messaging
- Added the ability to assign names to lines
- Added option to ignore ring mute commands on a per-Desktop Director basis
- Added diagnostics to web interface
- Desktop Director stability fix
- Send dial key messages to any AP client attached to a director when the line is dialed
- Corrected meter levels in +9dBu and -9dBfs PML modes
- Only send extended-director status messages when in 4-column show mode
- Fixed a crash on the Livewire webpage
- Reduce system messages generated when new control interfaces connect
- Prioritize HDLC message transmission for DD stability with high load
- Fix for a resource management issue associated with restarting Assistant Producer
- Correct the ISDN clock source logic for lines that have not yet had an audio channel
- Allow studio to seize and enbloc dial lines that are below 'idle' state on ETS-300 ISDN
- Allow a clear of 'busy all' to clear all busied-out lines, regardless of line type
- Resolve line state differences with two studios using shared lines (locally or 2-Nx12 POTS line sharing) when each studio uses Busy All at the same time
- Reword GPIO input selection on setup wizard webpage
- Added option to exclude priority lines from Next queue (see webpage)
- Fixed crash when assigning line to hybrid before ISDN B-channel audio is available

Version 1.5.0r   October 2010

- Added support for Axia iProbe management

- Note that backing up settings currently only backs up Livewire-related settings

- Fixed a problem that prevented POTS line sharing from working
- Change to CPTD to improve detection of call progress tones with to-caller audio present
- Improved compatibility of ISDN message sent to callers of busied-out lines
- Corrected a condition that could cause a line to not be busied out when Busy All active
- Blocked/Unavailable caller ID was mistakenly redisplaying last call's valid caller ID
- Settings backup/restore page works properly with Internet Explorer
- Settings backup/restore page enhancements
- iQ6: studio's line handling state shown on status webpage (in addition to physical state)
- iQ6: resolved boot-time intermittency of some processing functions
- iQ6: Added PLL lock status to frontpanel

Version 1.4.0r   June 2010

- Corrected missing 'to caller' audio when the first caller of a large conference drops
- Incoming calls rejected due to Busy All now return the proper cause code on ISDN
- Busy All line status is now reflected on frontpanel and webpage
- Settings backup and restore added to webpage
- Status webpage updates without refreshing
- The Setup Wizard page loads much more quickly
- Axia Element control surface correctly displays state of shared POTS lines
- Corrected behavior when two Nx systems are sharing a POTS line and both systems are also using Auto Answer to Hold
- Speakerphone mode now toggles off when switching a Desktop Director between Talent and Producer mode
- System crash logs are now sent to the syslog server, if configured

Version 1.3.0r   March 2010

- Fix for studio-to-caller audio for second studio in Single and Single (Mono out) mix modes
- Added option to disallow moving locked lines between hybrids to Tel webpage
- Filled out help pages on web interface
- Fix stack overflow in LWCP message parser
- Resolved an echo canceller malfunction
- Adjusted contrast scale for new LCDs
- Frontpanel will show line status screen even if no line cards are installed
- Fix for CID differences in some regions of Canada

Version 1.2.1r   January 2010

Please note – this list of changes is not comprehensive

- Regional ISDN fixes
- Optional caller ID start indication on Telco web page
- Fixed DTAS caller ID interpretation
- Numerous web interface fixes and changes
  - More intuitive Livewire configuration
  - Livewire GPIO support
  - Audio level monitoring
  - Line allocation and priority status now available on Setup Wizard web page
  - GPIO input source on Setup Wizard web page
  - Fixed display of POH input sources on status web page
- Fixed missing 'to studio' audio on second show with Single Mono mixing
- Changing show mode no longer requires reboot
- Changing show lines or priority status no longer requires reboot
- Corrected operation of "Clock on BRI loss" option
- Added redial and phone book to Desktop Director UI
- Fixed hookflash function
- Added POTS line sharing between two Nx12s
- Enabled syslog support for error logging
- Added auto-answer option
- Fixed GPO 'ring in' indication
- Console controller talent/producer settings now save correctly
- Added mute and acoustic adapt commands to Assistant Producer protocol
- Fixes for Assistant Producer 'garbage characters' and 'duplicate messages'