



FIRMWARE RELEASE NOTES

Version 6.2.147 (BrightSign XTx43, XDx33, HDx23, LS423)

Changes Since 6.2.94

End-User Notes

New Features

- Support for color emojis in HTML
- Support for IGMPv3 Source Specific Multicast streaming
- 802.1Q (VLAN) support
- (XTx43) PoE Type 1 support
- Support for ELO devices with the 2515-07 touch controller
- Full support for the 1920x540x60p video mode

Improvements

- Support has been reinstated for the following URL streaming parameters: `latency`, `vcdbsize`, `acdbsize`, `timeout`, and `jitter`.
- (XTx43, XDx33) Players now automatically output BT.2020 when a 4K monitor reports supporting it over EDID.
- Interactive Menu states now support transparency in icons/buttons.
- You can now format storage devices as exFAT in the **Diagnostics** tab of the Diagnostic Web Server (DWS).

- Clicking on the usage meter of a storage device in the DWS now also yields information about the file system in use.

Bug Fixes

- Enhanced Audio zones work again.
- (XDx43, XDx33) Players now correctly output 10-bit video (rather than downgrading it to 8 bit).
- HLS streams are now less likely to stutter at startup.
- Ticker zone text is no longer clipped when using certain fonts.
- (LS423) Video rotation is now supported up to 1920x1080x30p.
- (XTx43, XDx33) 1080i HDMI input that is upscaled to 4K now displays correctly.
- 3G modem support has been fixed.
- Secure Boot (Safe Mode) now works with firmware update files on exFAT-formatted storage devices.
- Clicking on the usage meter of a USB storage drive in the Diagnostic Web Server (DWS) no longer returns a 404 page.
- The DWS storage tab now correctly reports the characteristics of a storage device after it has been formatted using the DWS.
- WiFi packet capture on the DWS now works.
- Playback of HDMI Input from cable/satellite boxes no longer exhibits intermittent audio dropout issues.
- DVB Subtitles are now displayed with streaming video playback.
- Streaming from the same multicast IP address with multiple players no longer causes playback to fail.

- Enhanced synchronization now works with audio-only MP4 files.

Developer Notes

New Features

- Support for WebSQL and the Filesystem API
- New *roNetworkConfiguration.ConfigureDHCP*Server() method, which allows you to set up a DHCP server on the Ethernet port
- New *roDeviceCustomization.EncryptStorage*() method, which allows you to encrypt the contents of storage devices connected to a player.

Improvements

- New "usb_first" registry setting allows you to set the USB port as serial port 0. This is useful when using a USB-to-serial adapter for RS232 functionality on a Series 3 model.
- The *roVideoPlayer.PlayFile*() BrightScript method and `brightsign-properties` HTML attribute now support `jitter` values.
- When parsing media streams (e.g. with `SetPreferredAudio()`), you can now select the stream by program using the `prog` parameter.
- HTML `<audio>` tags now support the JavaScript `SetSyncParams` method and the `preferredaudio` attribute.

- (XTx43, XDx33) It's once again possible to have two rotated HTML videos with an area totaling more than 1080p. This will generate a warning in the log and may cause video artifacts.
- The *roAudioPlayer* object now supports the `SetPreferredAudio()` method.
- New `SetMaximumReceiveBytesPerSecond()` method allows you to rate limit file downloads. This method is available on the *roUrlTransfer*, *roAssetFetcher*, and *roSyncPool* objects
- New `SetMaximumSendBytesPerSecond()` method allows you to rate limit file uploads. This method is available on the *roUrlTransfer* object.

Bug Fixes

- Passing a string value (rather than an integer) to the `StreamFadeIn` parameter of the `brightsign-properties` HTML attribute no longer causes the player to crash (though this practice is still not recommended).
- A player will no longer crash/hang if it makes an AJAX request containing null or incorrect credentials to a URL that requires authentication.
- Seamless looping no longer fails with HTTP streams.
- Non-HTTP streams once again fade in by default.
- (XTx43) An encode/stream of the HDMI input no longer becomes corrupted over time.
- (XTx43, XDx33) Re-encoding a stream and streaming it out no longer fails after a period of time.
- Players no longer fail to display HTML video that doesn't have explicit dimensions.
- Attempting to play back non-HWZ video in Mosaic Mode no longer causes a crash.

- The `security_params` initialization parameter for *roHtmlWidget* has been fixed.
- Calling `SetURL()` more than once on an *roHtmlWidget* instance no longer causes the `load-finished` event to be returned twice.
- The *roVirtualMemory.AddSwapFile()* method no longer fills up all memory on the drive if you attempt to create a swap file larger than 4GiB.
- When parsing media streams (e.g. with `SetPreferredAudio()`), the firmware now selects the PCR and PMTs correctly.
- Players will no longer crash when closing a video window containing video with CEA subtitles.
- *roBtClientManager* can now correctly writes BLE characteristic strings that are greater than 184 characters long.
- The Eddystone-UID beacon format now supports the `tx_power` field.
- Switching from standard WiFi client mode to access-point mode and back no longer causes players to become unresponsive to ARP requests.
- The *roNetworkConfiguration.GetCurrentConfig()* method no longer causes memory leaks.
- (XTx43) Players now correctly echo the power allocation received in LLDP packets from power sourcing equipment (PSE).
- (XTx43) Players now correctly report themselves over LLDP as a class 4 powered device (PD).
- Players at boot now wait longer for the DHCP server before using the link-local address.