IP-9610 V02L007 Enhancement List

☐ Modified Items

No.	Affected region & Version	Description
1	IP-9610 Single Encoder IP-9610 Multi Encoder IP-9610 Codec (Encoder) (V01L001~V02L006)	Following bug has been fixed. Bug of input signal processing for 3G-SDI Level B has been fixed.
2	IP-9610 Single Encoder IP-9610 Multi Encoder IP-9610 Codec (Encoder) (V01L001~V02L006)	Following item has been modified. (This is NOT bug.) SDI embedded audio from some video recorders cannot be encoded because of error of parity check bit information for audio data in their SDI signal. Fujitsu has modified that encoder encodes SDI signal without checking this unaffected information for audio encoding.
3	IP-9610 Single Decoder IP-9610 Multi Decoder IP-9610 Codec (Decoder) (V01L001~V02L006)	Permissible range of swing of reference input has been expanded for tolerance improvement of video decoding.
4	IP-9610 Single Decoder IP-9610 Multi Decoder IP-9610 Codec (Decoder) (V01L001~V02L006)	Following bug has been fixed. Because of poor quality network conditions, there were few cases that error correction didn’t work well, decode error happened and past image stored in memories appeared. (Very rare case)

IP-9610 V02L006 Enhancement List (Released Date: August 6th, 2015)

☐ Modified Items

No.	Affected region	Description
1	IP-9610 configurations IP-9610 Single Encoder/Decoder IP-9610 Multi Encoder/Decoder IP-9610 Codec	Following bug in the basic software has been fixed. Some of IP-9610 manufactured in 2015 may have video blue back and audio lost issues because of mismatch of internal signal timing.

IP-9610 V02L005 Enhancement List (Released Date: December 24th, 2014)

☐ Modified Items

No.	Affected region	Description
1	IP-9610 All configurations IP-9610 Single Encoder IP-9610 Single Decoder IP-9610 Multi Encoder IP-9610 Multi Decoder IP-9610 Codec	Basic software has been modified that GNU Bash is not used for avoiding the vulnerability of GNU Bash (CVE-2014-6271, CVE-2014-7169 etc.).

IP-9610 V02L004 Enhancement List (Released Date: Jun. 16th, 2014)

☐ Modified Items

No.	Affected region	Description
1	IP-9610 Multi Decoder	Following error is modified. - The frame of slave decoder cannot sometimes synchronize to master decoder in using Multi Decoder. This issue is solved in this version.
2	IP-9610 Encoder/Decoder	Following error is modified. - You will be unable to download log file if you reloads WEB GUI repeatedly. This issue is solved in this version.
3	IP-9610 Multi Encoder	Following error is modified. - In generating TS at the encoder, if loading and writing ancillary data runs at the same time, IP-9610 with previous version will fail to transmit ancillary data. This issue is solved in this version.
4	IP-9610 Decoder	Following error is modified. - The screen of master decoder stays blue in using synchronization and ultra low latency. This issue is solved in this version.

IP-9610 V02L003 Enhancement List (Released Date: Oct. 18th, 2013)

☐ Modified Items

No.	Affected region	Description
1	IP-9610 Multi Encoder	Following error is modified. - In case of having different system rate between ENC1 and ENC2 under MPTS configuration for DVB-ASI output, PCR Jitter error was occurred. - In case of having different video sources (clocks) between ENC1 and ENC2 under MPTS configuration for DVB-ASI output, PCR Jitter error was occurred. (Independently of each ENC's system rate) Note: In case of using IP-9610 ENC and DEC, no error is occurred. (PCR Jitter Error may be detected if TS analyzer is inserted between IP-9610 ENC and IP-9610 DEC connection.)

IP-9610 V02L002 Enhancement List (Released Date: May, 17th, 2013)

☐ Modified Items

No.	Affected region	Description
1	IP-9610 Decoder	Following error is modified. - In case of audio decoding error, AV synchronization error was occurred. - In case of setting other modes in Reference clock settings except PCR, AV synchronization error and the audio skip were occurred. - AV synchronization error was occurred when IP-9610 Encoder sends “MPEG-2 AAC” stream to IP-9xxx/9xx Decoder (except IP-9610). - AV synchronization error was occurred when IP-9xxx/9xx Encoder (except IP-9610) sends “MPEG-2 AAC” stream to IP-9610 Decoder.
2	IP-9610 Decoder	Following error is modified. - In case of receiving ANC (Private PES), Decoder rarely output wrong ancillary data of 1 packet per 2~3 seconds.
3	IP-9610 Encoder	Following errors are modified. - In case of setting “MPEG-4 HE-AAC” for Audio coding settings of Encoder and including noises in the audio input source, the audio might be temporarily interrupted for few seconds up to 10. - In case of selecting “Private PES” for “Ancillary data format” and others except “None” for “Audio coding” settings, the same error might be occurred. (This error tended to be occurred by setting higher ancillary and audio bit rates.)
4	IP-9610 Encoder	Following error is modified. - In case of setting “Private PES” for “Ancillary data format” and others except “None” for “Audio coding” settings, video might stop output for few seconds. (This error tended to be occurred by setting lower video bit rate and higher ancillary/audio bit rates.)
5	IP-9610 Encoder	Following errors are modified. < Only detected on V02L001> - In case of setting “Ultra Low Latency (PPPP)” mode as the GOP structure, “ATSC-CC” mode of ancillary data couldn’t be set. - In case of setting “ATSC-CC” mode of ancillary data, “Ultra low latency” mode couldn’t be set.
6	IP-9610 Encodewr/Decoder	Following error is modified. < Only detected on V02L001> - In case of connecting IP-9610 Encoder and IP-9500 Decoder and “Pass-thru (SMPTE302M)” was set for “Audio coding” settings with “Ultra low latency” mode on the Encoder and Decoder, audio might not be output.

IP-9610 V02L001 Enhancement List (Released Date: December, 10th, 2012)

☐ New Features

No.	Item	Description
1	Additional Web browsers	In addition to IE8 and 9, Safari5.1.7 and Firefox16.0.2 are supported.
2	Ultra Low Latency	Supported “Ultra Low Latency (PPPP)” for Encoder and Decoder which enables approx.99ms over IP network. *Need the option license per unit for this function to be available.
3	Bit rate expansion (Video/System)	DVB-ASI: Maximum video bit rate is expanded up to 100Mbps. IP: Maximum system bit rate is expanded up to 80Mbps. (Unicast concurrent video streaming over IP can be distributed up to 4 locations within total 200Mbps.)
4	Additional audio bit rates	Following selections are supported for each mode. MPEG-2/4 AAC-LC mono:56kbps MPEG-2/4 AAC-LC 5.1ch:256kbps, 320kbps, 512kbps MPEG-4 HE-AAC V1 5.1ch:96kbps, 128kbps, 160kbps *In case of selecting “5.1ch” mode, channel 1 and 5 can be specified and channel 2, 3, 4, 6, 7 and 8 are disabled.
5	Carrier ID	Supported for sending Carrier ID in NIT (Network Information Table) which specifies each uplink sender, is standardized by WBU-ISOG (World Broadcasting Unions - International Satellite Operations Group).
6	Minimum video bit rate expansion of CSC422	Expand minimum video bit rate of CSC422 from 12Mbps to 8Mbps.

IP-9610 V01L010 Enhancement List (Released Date: March, 29th, 2012)

☐ New features

No.	Item	Description
1	New audio codec	New audio codec and mode are supported as follows - MPEG-2 AAC-LC, MPEG-4 AAC-LC, MPEG-4 HE-AAC v1 - MPEG-1 Layer 2 mono
2	Web browser	Compatible with Firefox 10

☐ Modified Items

No.	Affected region	Description
1	Synchronization among decoders	The following synchronization errors are modified in this version. - Using Dual Link HD-SDI, decoders cannot be synchronized. - When the video format is progressive (1080p or 720p), decoder-2 in Multi decoder cannot be synchronized with decoder-1 correctly. The video are occasionally shifted a few lines.
2	IP stream on DHCP condition	The following issue of corrupted IP stream on DHCP condition is modified in this version. - When IP-9610 get own IP address and the gateway address on DHCP, the IP stream is corrupted. When Encoder mode is worked on DHCP, PCR is discontinuous and the video on Decoder is frozen every few seconds. When Decoder is worked on DHCP, the video on Decoder are turned to blue every few seconds.