

ITS RELEASES HD-SDI METADATA AUTHORING & DECODE SYSTEM

For immediate Release: Northridge, California, December 2, 2013-

Instrumentation Technology Systems (ITS) announced an upgrade to the widely accepted 6980G-HD/6041G-HD HD-SDI Video Inserters, the **KL option**. When the KL option is installed, the inserter is capable of adding two KLV metadata packs in the VANC space of any 720p, 1080i or 1080p (including 3G) video stream in real-time frame-to-frame. These packs can each transport data at rates of up to 14 Kbytes/second. Each KLV pack can carry a wide range of data organized in up to 64 separate fields. Each field can be defined as binary, ASCII, signed or unsigned integers, or single/double precision floating point values. This market leading capability enables customers to permanently synchronize imagery with relevant data and transport it all in a single stream rather than separate video and data streams that must be correlated later.



Concurrently with this hardware upgrade, ITS released the **KLV Software Toolkit**. The toolkit transforms the KL Option hardware capability into a user customizable tool for acquiring, transporting, displaying and extracting KLV data.

ITS is the first to deliver an end-to-end source-to-destination fully customizable metadata solution for HD-SDI without having to dig into the details of forming metadata packs. The KLV Software Toolkit is comprised of four parts that give the user full control over the design and format of data content, full control of data transport, display and extraction, a test vehicle to evaluate the metadata key design and a utility that can read, parse and format extracted data files frame-by-frame. The four software tools are:

KEYTEMPLATE©; A KEY CONTENT AUTHORING TOOL

The KeyTemplate©, an MS Excel workbook, enables the development of a complete KLV content design from key assignment through the detailed use of each byte and data format.

A key may be designed to be all binary data; a format with which the 6980G-HD/6041G-HD will do no processing, only insertion into the assigned KLV pack; transport only.

Alternatively, the key content may be fully defined with scaled values, decimal point assignments and text strings.

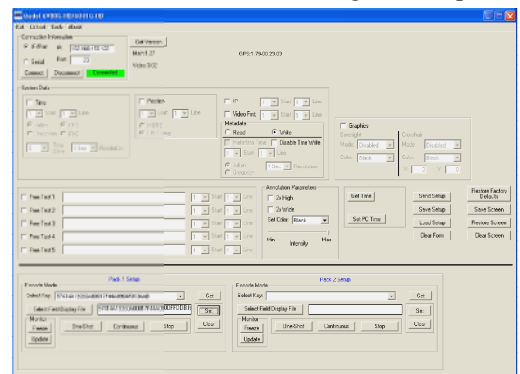
Field No.	Field Name	Field Type	Field Size	Field Format	Field Data	Field Value	Field Units	Field Range	Field Precision	Field Display	Field Resolution	Field Length	Field Status
1	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
2	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
3	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
4	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
5	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
6	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
7	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
8	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
9	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
10	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
11	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
12	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
13	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
14	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
15	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
16	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
17	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
18	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
19	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
20	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
21	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
22	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
23	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
24	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
25	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
26	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
27	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
28	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
29	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
30	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
31	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
32	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
33	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
34	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
35	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
36	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
37	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
38	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
39	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
40	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
41	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
42	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
43	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
44	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
45	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
46	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
47	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
48	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
49	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
50	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
51	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
52	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
53	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
54	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
55	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
56	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
57	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
58	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
59	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
60	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
61	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
62	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080
63	Time	Binary	10	1080	1080	1080	1080	1080	1080	1080	1080	1080	1080

CONFIGURATION UTILITY (KL VERSION); DATA TRANSPORT, DISPLAY & EXTRACTION TOOL

The KeyTemplate© design may be imported into the **6980G-HD Configuration Utility (KL version)**. The Configuration Utility has two modes, metadata write and metadata read. In write mode user can assign which pack incoming data is to be assigned, select which fields if any are to be displayed (monitored) on the video frame as data is being written to the KLV packs.

In read mode, the system can be instructed to extract the KLV content and pass it through to the Ethernet interface unprocessed; transport only. It can also be loaded with the key design. The user may then select which fields (one to all) that are to be parsed, formatted and displayed and where (row and column) on the frame the field should appear as each incoming KLV pack is extracted.

The Configuration utility may also be set to receive extracted KLV content over Ethernet from a receiving 6980G-HD (read mode) and save each block of content to a user selected file for later decode parsing and analysis.



KEY TEST

The **Key Test GUI** is used to read the KLV content design created by the KeyTemplate© and enable a designer/user

