IMAGICA Corp.
Adoption of the WVR7100 Waveform Rasterizer Improves Editing Efficiency in its Post Production Services

Overview	
Issue	In television program editing, waveform monitors are used for absolute valuation to match colors and to verify signal levels. However, conventional rasterizers are not able to deliver sufficient waveform precision and resolution.
Solution	The WVR7100 rasterizer resolves these waveform representation and resolution issues, making it possible to monitor detailed video signals. IMAGICA purchased six WVR7100 rasterizers for their Akasaka Video Center.
Merits	The ability to monitor detailed video signals leads to greater signal quality for the final packaged content. The intuitive user interface also reduces editing work stress.

Background:
Variety of Demands in the TV Program Editing Process

IMAGICA Corp. was founded as "Kyokuto Genzo Sho" in 1935 as the Japan's first motion picture film laboratory. The company has rapidly adapted to the revolution in film and video image technology, from cinema movies to television broadcasting, from videotape to DVD, and from analog to digital, supporting the ever changing post production industry.

IMAGICA Corp.'s Akasaka Video Center, is one of the pioneers in the HD technology, It handles TV program editing with its linear and non-linear HD and SD format rooms, HD/SD dual format rooms, and Audio Enhancement rooms. This facility is capable of addressing growing business demands using an ever increasing variety of methods to meet higher quality expectations in television programming.

When videotaping a show for a television program, it undergoes a "rough edit" to loosely prepare the video segments to be used for the show, and adjustments are performed to match to the broadcast length. During this stage, special effects are created, and/or subtitles, picture-in-picture and credits are added as needed. At this stage, audio enhancement is performed, in which background music, sound effects and narration tracks are added. This kind of post-production environment not only requires the ability to grasp the intentions of the creators and make composites and special effects quickly to realize their intentions, but also to have an eye for visual aesthetics and a flair for determining where to splice video images.

Challenges in Signal Measurement:
Waveform Monitor's Residual Images and Its Insufficient Resolution

Waveform monitors used in editing rooms are indispensable measuring devices for managing absolute color balance and signal levels. Although CRT-based waveform monitors have excellent waveform representation characteristics, the waveform focus can become blurred as the equipment ages. Also, since only a limited number of functions can be provided by a single unit, several monitors are often required to display the necessary numbers of waveforms, consuming valuable editing desk space.

In recent years, waveform rasterizers - video signal waveform monitors with multi-display capabilities - have become popular in the industry. IMAGICA Corp. also used rasterizer waveform monitors from

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other companies, but due to their waveform residual image problems and poor resolution, it was not possible to obtain sufficiently detailed information. IMAGICA Corp. also found that the control panel was not easy to use in these instruments, which limited productivity and caused editorial work stress.

Reason for Selecting of the WVR7100:
High Waveform Reproduction Precision and High Resolution

The Tektronix WVR7100 selected by IMAGICA Corp. is a waveform rasterizer that supports HD-SDI signals in its standard configuration and optionally supports SD-SDI and composite analog signals. The WVR7100 is also able to output to a high resolution XGA display. The FlexVu® display technology provides a tiled 4-screen display from 4 different monitors consolidated in a single unit. When asked why the WVR7100 was selected, Toshio Iwatate, IMAGICA Corp.'s Manager of the Engineering Group within the Technical Operations Dept. (Akasaka) TV Post Production Division, said: "To enable detailed video signal information monitoring for video editing, we wanted high precision and the suitable high resolution needed for the task. We performed trials in which the WVR7100 showed that it could satisfy those

WRV7100 embedded in an editing desk

requirements." He added: "Its intuitive controls reduced editorial stress."

Based on Tektronix's waveform image processing technology, the WVR7100 can show analog CRT style displays. Also, the FlexVu display, which enables combining waveforms, makes it possible to optimize the display for the application. Because the WVR7100 interface was designed based upon user feedback, the unit is easy to use.

The WVR7100 is the only HD rasterizer that is capable of gamut display (diamond, split-diamond, arrowhead), the Tektronix-patented *de facto* industry standard. Using a gamut display, customers are able to maintain component and composite color ranges within the gamut range appropriate for broadcast signals.

Summary:
Expanding Facilities with More Focus Toward Non-linear Editing

IMAGICA Corp.'s Akasaka Video Center mainly deals with television program editing, and due to the program characteristics, most required linear editing. Asked about the future business direction, Iwatate replies, "We'd like to expand our facilities

with more focus toward non-linear editing style. As television technology moves from analog to digital, from SD to HD format, regardless of whether editing in linear or non-linear style or becomes more complex, we want to be ready with the latest technology to help television show creators achieve their goals. The WVR7100 will help us regardless of the editing styles we use."

IMAGICA Corp.'s attention to detail is evident in their editing rooms and their customized editing desks. As an industry leader, IMAGICA Corp. has continued to deliver advanced services that meet the customer's high demands, and that is why the high reputation behind the company is also evident. The Tektronix WVR7100 is a perfect fit for the needs of IMAGICA Corp.