Release Notes

Tektronix

TG700 TV Signal Generator Platform 061-A032-55

This document applies to firmware version 4.1.

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Release Notes

This document contains information on new features, defect corrections, and limitations of firmware version 4.1 and 4.0 for the TG700. The document also notes certain non-intuitive instrument behaviors present in this release.

New Feature in Firmware Version 4.1

The following new feature enhancement was implemented with firmware version 4.1.

AGL7 (S/N J320101 and above). You can output a 48 kHz word clock signal from the CW connector by changing the internal cabling.

Improvements in Firmware Version 4.1

The following improvements ware implemented with firmware version 4.1.

HDVG7 Module

This release fixes an error that audio frame data in control packets of embedded audio are not set correctly when you change signal formats using a 74.25 MHz or 74.25 MHz/1.001 clock if audio sampling is set to Frame.

Preset

This release fixes an error that the setting changes are not reflected correctly when you recall a preset that audio level settings have only been changed.

New Features in Firmware Version 4.0

■ The system memory of the TG700 (S/N J320xxx and above) is expanded as follows:

Standard: 16 MB →32 MB
Option FP: 32MB →64 MB

This memory expansion allows you to use pre-installed signals in a wide variety of formats for the AWVG7. For Option FP, this allows you to download more pictures to the TG700 mainframe.

- The HDVG7 supports 720 50p format.
- SDP2000 (READER) is added in the Signal Library folder in the product CD-ROM. This software allows you to confirm parameters of a test signal.

Refer to the TG700 V4_0 Signal Library(E).pdf file in the Signal Library\Document folder for information on how to use the software.



CAUTION. The TG700 mainframe with serial number J32xxx and above requires firmware version 4.0 and later. If you install a previous version (Version 1.0 to 3.5) by mistake, the instrument will not work properly.

Addition and Improvement of Signal Files

The following signals are added:

■ AWVG7:

Test signals with the following formats are added; 1080 23p, 1080 24p, 1080 25p, 1080 29p, 1080 30p, 1080 50i, 720 23p, 720 24p, 720 25p, 720 29p, 720 30p, and 720 50p (GBR and YPbPr).

■ AVG7:

The 525RT_NS.DNL file is added in 525Beta format. When using the file, you can use the 100% Color Bars No Setup and 75% Color Bars No Setup signals by adding them to the COLOR BAR button.

The 525RT_NS.DNL file is added in 525Beta format. When using the file, you can use the 100% Color Bars No Setup and 75% Color Bars No Setup signals by adding them to the COLOR BAR button.

■ SMPTE RP219 HD/SD compatible color bar signal library and ARIB multi-format color bar signal library standardized by ARIB STD-B28 are added in the product CD-ROM.

The following signals are changed:

■ HDVG7:

Co-site Pulse (1080 25p), Equalize Test (1080 23p, 1080 23sF, and 1080 24sF) SDI Matrix (1080 23p, 1080 23sF, and 1080 24sF)

PLL Test (1080 23p and 1080 23sF)

40% Flat Field (720 24p, 720 25p, 720 30p, 720 50p, and 720 60p)

Addition of Sample Pictures

Two kinds of pictures (Waterfall and Water-Lilies) are added in the product CD-ROM with the following formats:

■ AVG7:

NTSC, NTSC No Setup, PAL, 525 Beta, 525 GBR, 525 YPbPr, 625 GBR, and 625 YPbPr

■ AWVG7:

1080/Interlace/GBR, 1080/Interlace/YPbPr, 720p/GBR, and 720p/YPbPr

■ DVG7:

525-270 and 625-270

■ HDVG7:

1080/Interlace, 1080/Progressive, 1080/Segmented Frame, and 720p







Water-Lilies

Use the TG7 Comm application software included in the product CD-ROM to download the signal or picture files to the TG700 mainframe.

The sample picture files (.PIC and .BMP) for the AWVG7 are provided in the ZIP format. Convert these files into the PIC or BMP format with a zip software tool before using.

Addition of Bitmap Files

Bitmap files of 75% and 100% color bars are added with the following formats; 525-270 of the DVG7, 1080 of the AWVG7, and 1080 of the HDVG7. The rise and fall times of these color bars are adjusted. These can be used as a background when creating a bitmap overlaid with a logo or picture using a paint tool.

NOTE. When overlaying a logo or picture, it is recommended that you limit the bandwidth of them properly using a filter feature of a paint tool not to occur large ringing.

General Limitations

This release has the following general limitations:

TG7 Setup Software

- You cannot perform the remote control and front-panel operation of the TG700 mainframe simultaneously.
- In the remote setup procedure, the setup resolution of timing clock delay is +/-1 clock.
- In using setup commands of Black 2,3 in the AGL7, do not send the Black2=HD sync (same as black3) and Black3=BB (same as black2) commands simultaneously while Frame Reset 1 is set to 2.997 Hz. This operation makes the Frame Reset 1 unstable. If this happen, reset the system by recalling Power On Default or Preset.
- You cannot control the AWVG7 signals with the following formats using the software; 720 25p YPbPr, 720 29p YPbPr, 720 30p YPbPr, and 720 50p YPbPr. In addition, some of added signals may not be displayed in the setup windows

TG7 Comm Software

- Do not change or delete the file name or folder name other than those downloaded by the user or signal files. It may cause a system error.
- You can change the name of user files (Signal files, Sequence file, Preset file, etc.) after you download them. Turning OFF and ON the power to the system is necessary to reflect the change to the system.

Resetting the Output Signal

When performed the re-read and/or re-setting of signal data such as format changing, preset recall, or signal-key assignment, signal output interruption or synchronization shock may occur.

Recalling Preset

The caution message displayed if there is any inconsistency in internal clock settings for HDTV format does not appear when recalling a preset.

Creating a User Program with Remote Commands

When transmitted a command requiring some period of time before the command execution completed (for example, changing a format or loading a preset), be sure to transmit the next command after the completion of such command execution.

Setting the Genlock Source

If you change the frame reset period in the AGL7 Genlock module after the genlock source is set to CW, the frame reset may not be selected properly. If this is the case, set the frame reset setting to CW again.

Signal Key and Frame Picture Key Assignment

- In assigning a downloaded signal to the front panel key, do not assign different format signals to the same key.
- Do not perform key assignment to the signal key of the signal currently output. Also, do not attempt key assignment while the message "No Signal Set Assigned" is displayed. To change key assignment settings of the OTHER key, change the settings while a signal assigned to a key other than the OTHER key is output.

Displaying the Alarm Status

In the alarm status display, the instrument displays an error message that has been detected in the past. In order to display the latest message, you need to access the other menu item and to return to the ALARM STATUS menu again.

Editing an ID Text

You can erase the last character in the entered text using the blank character. However, if you re-edit the text after ending the text edit mode by pressing the ENTER key, you need to access the OVERLAY submenu (or the main menu) and to return to the ID TEXT submenu again.

HDVG7 Module

Embedded audio except for 720 50p, 59.94p, and 60p formats are "UNCHECKED". Therefore, if you perform any of settings for embedded audio, the instrument may not output signals normally.