How to Guide

Ancillary Data Inspector

WFM6120/7120 Version 5.0.2 Software

The latest firmware version 5.0.2 offers customers with the DAT option for the WFM7120/6120 series waveform monitor an ancillary data monitoring feature called ANC Data Inspector (Figure 1). This display simplifies the previous Ancillary data display which required the user to know the DID (Data Identifier) and SDID (Secondary Data Identifier) in order to inform the user that this type of Ancillary data is present in the stream. Now with the Watch List of the Ancillary Data Inspector enabled the user can see automatically all the ANC data present within the signal. The instrument can continually watch the signal for any changes in the presence of the data and alert the user to these changes.

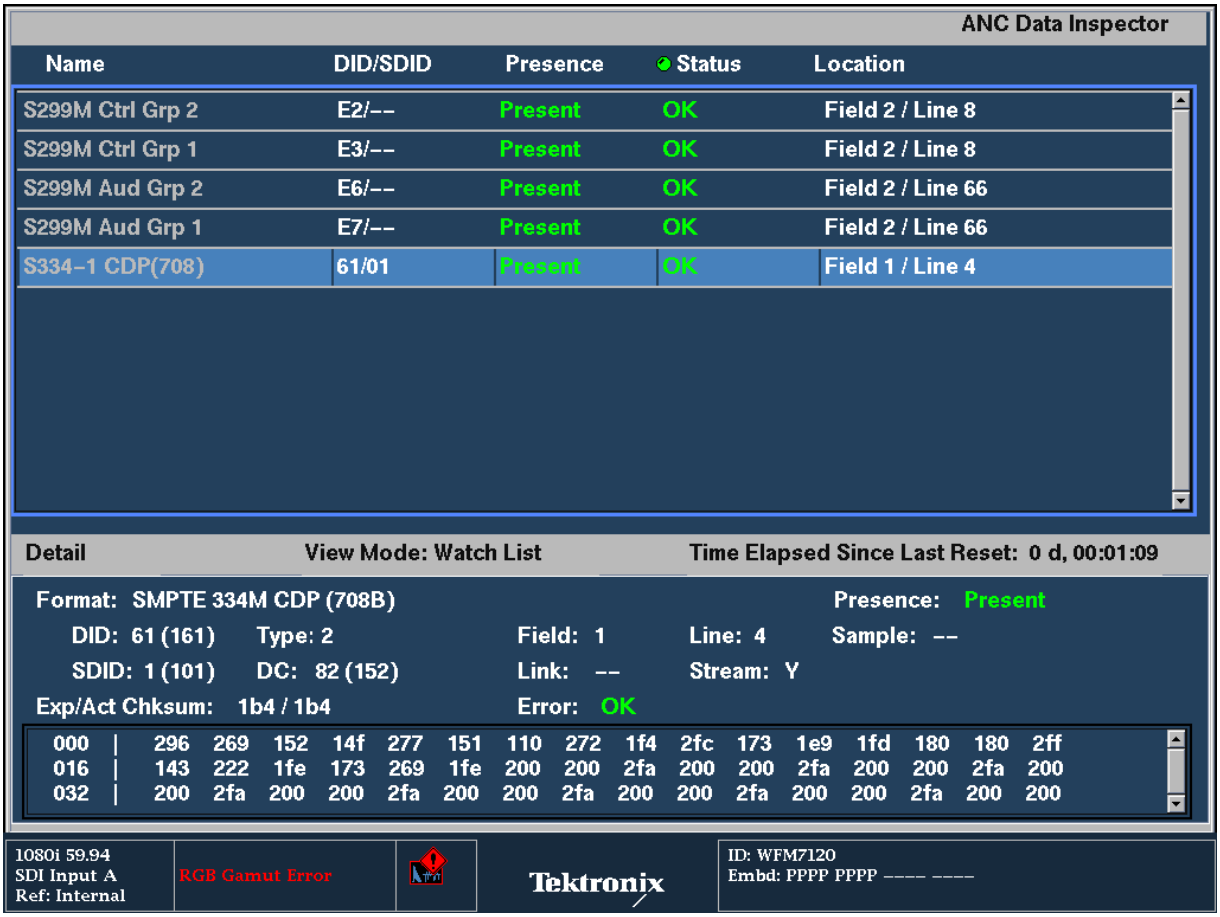

Figure 1. Ancillary Data Inspector.

How To Enable Ancillary Data Inspector

1. Select one of the tiles (1, 2, 3 or 4) and press the **MEAS** button.
2. Select **FULL** to make the display full screen, pressing **FULL** again will toggle back to FlexVu™.
3. Press and hold the **MEAS** button to display the menu.
4. Move up and down the menu using the Arrow Keys or General Knob to the **Display Type** menu.
5. Move right and Select **Anc Data Disp.** from the measurement selections (Figure 2).

Figure 2. MEAS Display Type menu for ANC Data Display.

Configuring Ancillary Data Inspector

1. Press and hold the **MEAS** button to display the menu.
2. Move up and down the menu using the Arrow Keys or General Knob to select the **View Mode** menu.
3. Select **Watch List.**
4. Press **MEAS** to dismiss the menu.
5. Move up and down the menu using the Arrow Keys or General Knob to select the ANC data type of interest.
6. Press **SEL** to toggle between the two windows.
7. Press **MAG** to expand the Detailed information on the ANC data type selected.

TIP

In the Watch List mode only Ancillary Data packets that are present in the signal and user selected types of interest will be displayed. This allows the user to quickly and easily see what ANC data types are present within his signal. This simplifies the previous needed operations to search through the specific data types and to be familiar with the DID and SDID of each ANC data type.

Configuring Ancillary Data Inspector Watch List

1. Press the **CONFIG** button to display the menu.
2. Move up and down the menu using the Arrow Keys or General Knob to select the **ANC Data Display** menu.
3. Move to the right and select the **Watch List.**
4. Press **SEL** to enter the menu (Figure 3).
5. Move up and down the menu using the Arrow Keys or General Knob to select the ANC data type which the user wishes to monitor.
6. Press **SEL** to select the ANC data type of interest.

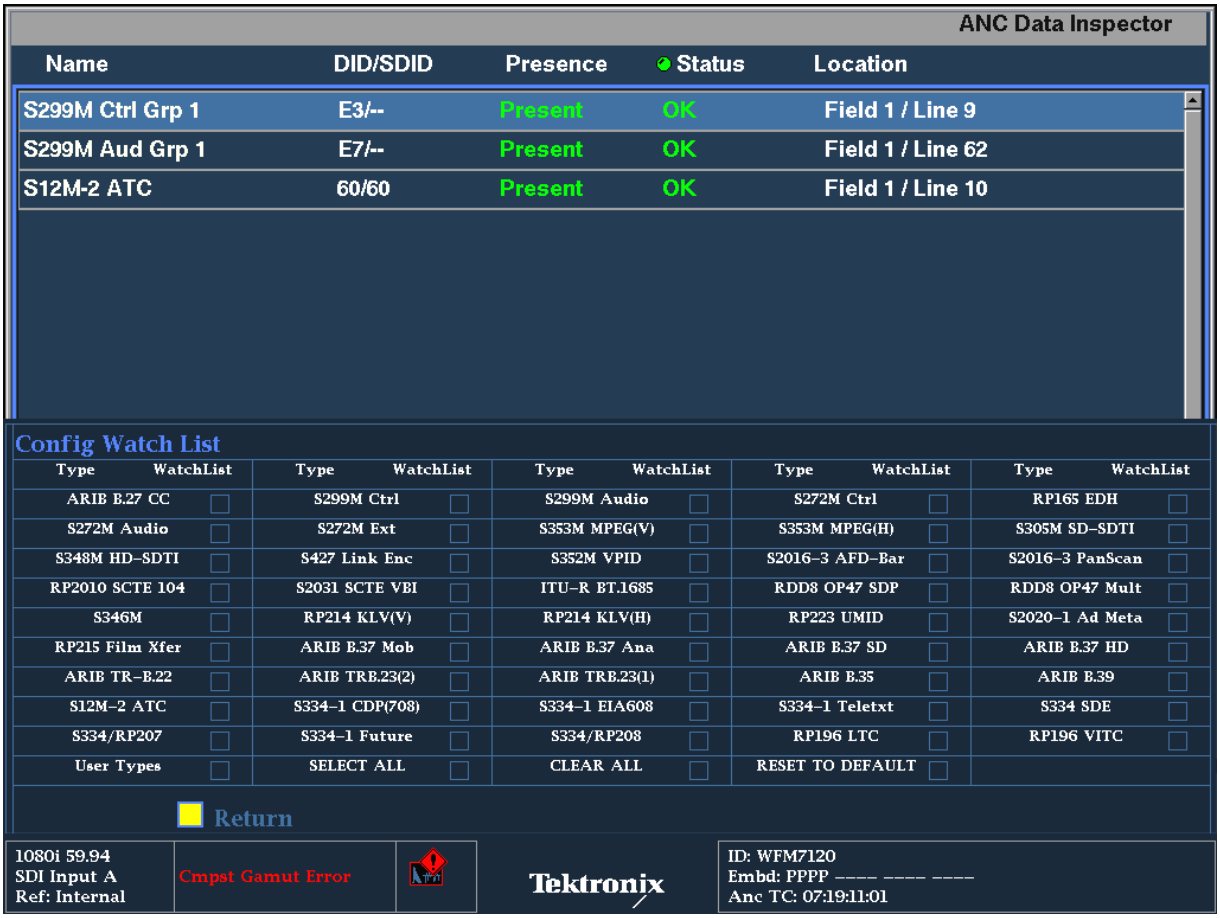

Figure 3. Watch List Configuration menu.

FAQ

What does it mean when an "Unknown Packet" is displayed in the ANC Data Inspector?

An "Unknown Packet" means that the ANC Data Inspector has detected the ancillary packet which is defined neither by SMPTE RP-291 nor by User Data Type. This prevents the user from missing any ancillary packets present within the signal.

FAQ

How does a customer enter their own DID and SDID like they did in the previous version of software?

In most cases the user does not have to enter the DID and SDID anymore because we provide a simple list of all the currently standardized DID and SDID formats and will automatically search through the signal to find the data types which are standardized in SMPTE RP291. If an Ancillary data packet is not defined by the RP291 standard it still will be shown with the display as an “Unknown Packet”. However if the customer has their own specific DID and SDID they wish to verify they can create their own user data type which is now performed in the configure menu.

To Configure a User Data Type

1. Press the **CONFIG** button to display the menu.
2. Move up and down the menu using the Arrow Keys or General Knob to select the **ANC Data Display** menu (Figure 4).
3. Move to the right and select **User ANC Types.**
4. Up to 8 different user ANC types can be configured.
5. Move to the right and enter a **Name** for the ANC Data Type.
6. Select the **DID** and **SDID** hex values for the ANC data type.

Note: If you wish this data type to be present in the Watch List. Please remember to add the User Types selection within the Watch List configuration.

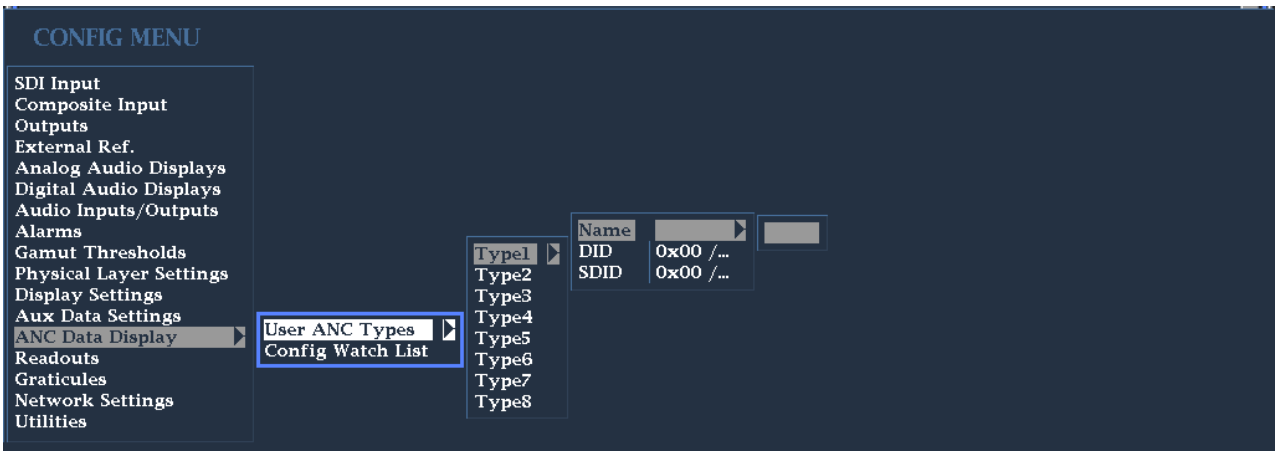

Figure 4. User ANC Type Configuration Menu.

ANC Data Inspector and CaptureVu™

ANC Data Inspector can be used in conjunction with CaptureVu to enhance the capabilities of the display. Either capture the current signal or restore a previously captured signal from a USB stick to the instrument. Now a complete Frame of video data is stored within the buffer of the waveform monitor.

Configuring ANC Data Inspector with CaptureVu™

1. Select one of the tiles (1, 2, 3 or 4) and press the **MEAS** button.
2. Press and hold the **MEAS** button to display the menu.
3. Move up and down the menu using the Arrow Keys or General Knob to select the **ANC Data Display** menu (Figure 4).
4. Press and hold the **CAPTURE** button to display the menu.
5. Ensure that **Capture Type Buffer** is selected use the Arrow Keys or General Knob to select Buffer mode.
6. Move up to **Delete & Capture** using the Arrow Keys and Press **SEL** to execute a capture of the signal.
7. Once the capture is complete move down to **Display Mode** and select **Buffer Only**. Another load of the data will commence and once complete a new segment will be shown on the ANC Data Inspector display (Figure 5).
8. Press **Capture** to dismiss the menu.

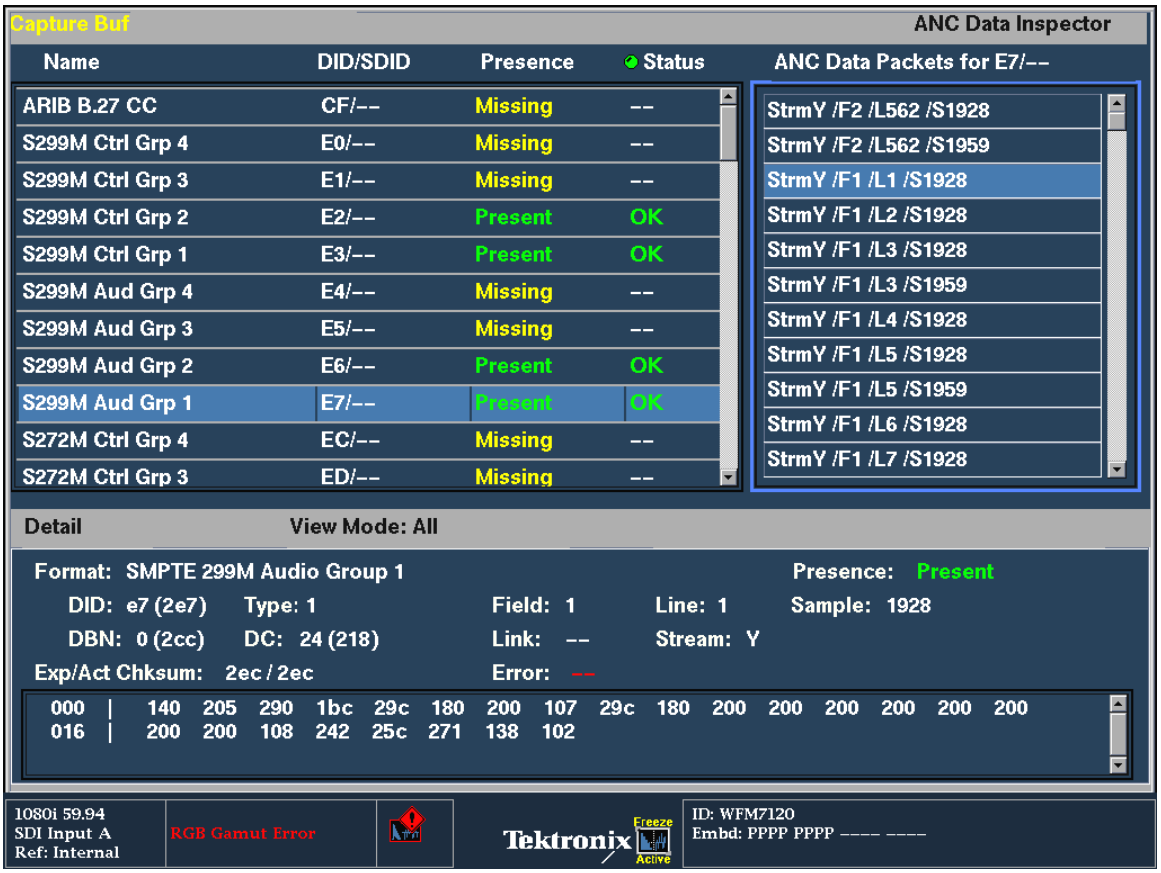

Figure 5. ANC Data Inspector in Buffer mode.

Using CaptureVu all the ANC data packets are now shown for the complete frame of stored data for each of the present Ancillary Data types present. This allows an engineer to investigate problems within the signal and verify that the ANC data present within this buffer is correct. Use the Arrow Keys to navigate the various windows and MAG to expand the Detail view of the ANC Data user words.

References

- WFM6000/7000 Series Waveform Monitors
- WVR6000/7000 Series Waveform Monitors

Data Sheets, Fact Sheets and additional product materials can be found at:

www.tektronix.com/video_test/signal_monitors.html

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06/09 AR/Tek 2PW-23513-1

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