



APPLICATION NOTES



ALTAIR Standalone Chapter 10 Processing

INTRODUCTION

The Ulyssix ALTAIR software is known in the telemetry industry for setting up and monitoring Ulyssix Bald Eagle RF and Tarsus telemetry cards, but times have changed. Now ALTAIR, with a standalone Chapter 10 license, can process

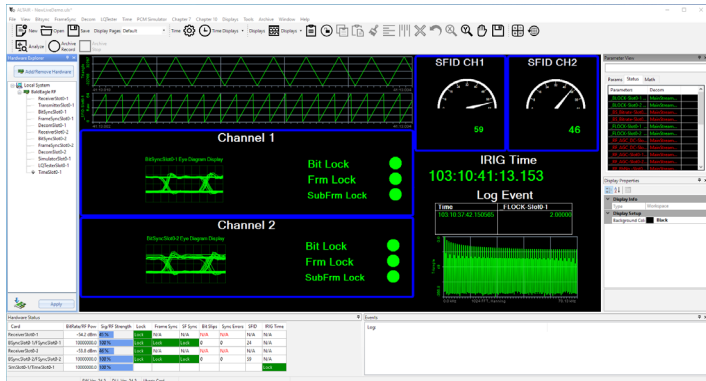


Figure 1

Chapter 10 files and Chapter 10 UDP packets into time tagged parameters and graphically display the results for analysis. ALTAIR can also save the time tagged parameters to MATLAB, CSV, or binary files or transmit the time tagged parameters via UDP. ALTAIR supports the processing of Chapter 10 PCM and Analog channels. Processing of other Chapter 10 packet types can be added to ALTAIR via customer request.

STANDALONE ALTAIR CHAPTER 10 IMPLEMENTATION

The ALTAIR Chapter 10 licensed feature processes Chapter 10 data received via a stored Chapter 10 file or via UDP packets. For either Chapter 10 source, the user configures ALTAIR exactly like they were acquiring data via Ulyssix hardware. The same ALTAIR .ulx configuration file used with hardware works with the standalone Chapter 10 license.

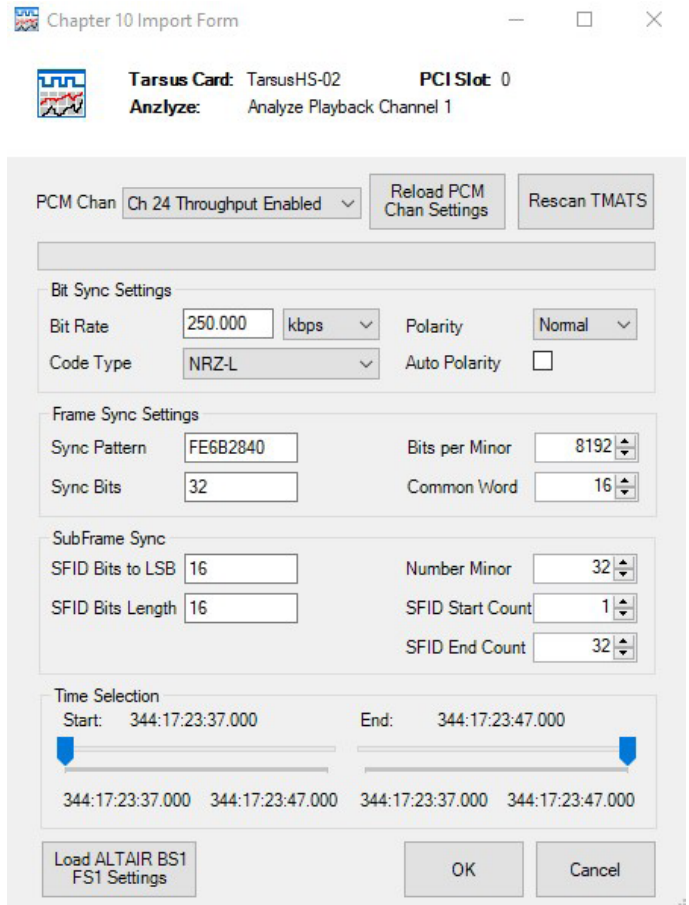


Figure 2

ALTAIR converts Chapter 10 files to the Ulyssix .tad file format using the Chapter 10 Import Form. As shown in Figure 2, the user first selects the Chapter 10 PCM Channel to import. Then ALTAIR loads the Channel's TMATS values into the form. If needed, the user can update the values in the form. After the data is converted to .tad format, ALTAIR plays the data using the Analyze Feature.

To configure ALTAIR to receive Chapter 10 UDP packets, the user configures ALTAIR to process the incoming data. For PCM Channels, configure the

Bit Sync, Frame Sync and Decom for the PCM eam. Next, the user configures the Chapter 10 UDP Receiver form as shown in Figure 3. The Chapter 10 UDP Receiver form lists the UDP

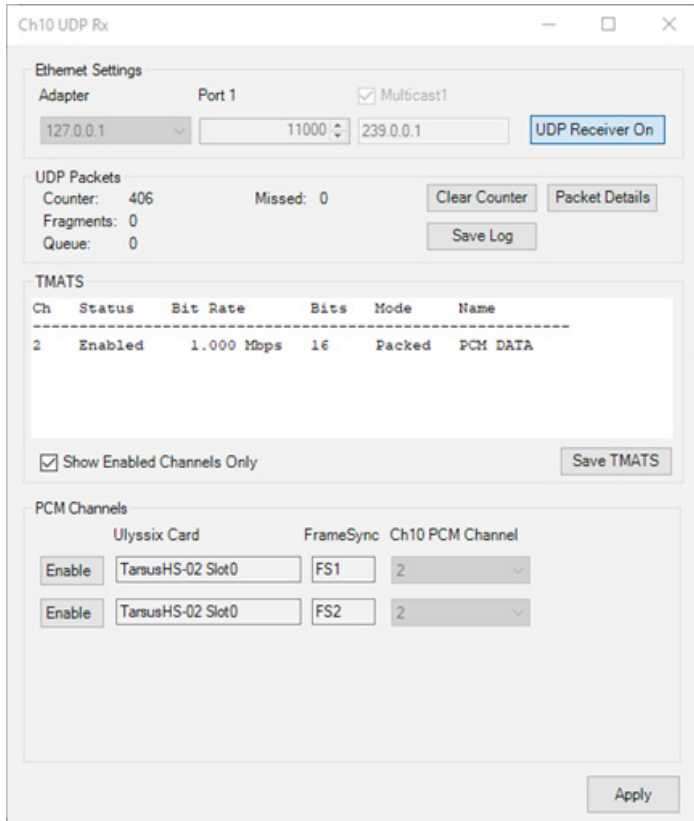


Figure 3

stream's Chapter 10 channels and allows the user to route the channels to desired ALTAIR channel.

ALTAIR CHAPTER 10 DISPLAY CAPABILITIES

ALTAIR processes the incoming Chapter 10 channels and generates time tagged parameters. The user can configure ALTAIR to apply engineering unit conversion or other math algorithms to the time tagged parameters. ALTAIR displays the time tagged parameters in draggable display widgets. Each widget is user customizable. The list of ALTAIR display widgets is shown in Figure 4.

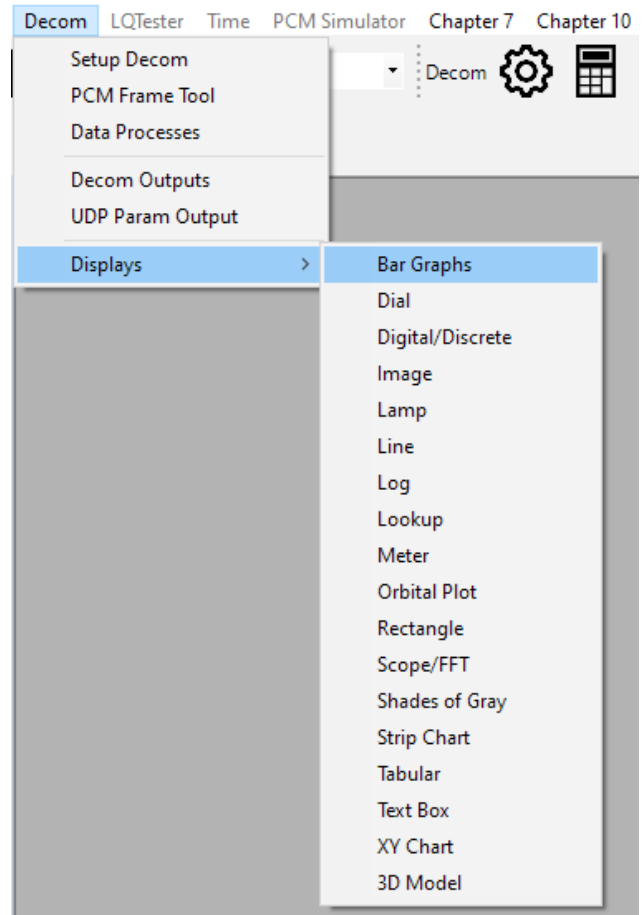


Figure 4

STANDALONE ALTAIR CHAPTER 10 SUMMARY

Ulyssix's ALTAIR software, with a standalone Chapter 10 license, gives the telemetry user the ability to process Chapter 10 PCM and Analog channels both during live testing (using the Chapter 10 UDP Ethernet Receiver) or post processing (using stored Chapter 10 files). The ALTAIR standalone Chapter 10 solution does not require telemetry hardware and is less than half the price of hardware-based telemetry solutions. ALTAIR software licensing capability allows for a 30-day temporary license for trial testing, or a permanent license tied to the computer MAC/NIC address.

Contact Glenn Rosenthal (glenn@ulyssix.com) for a demo of this and other Ulyssix capabilities.

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