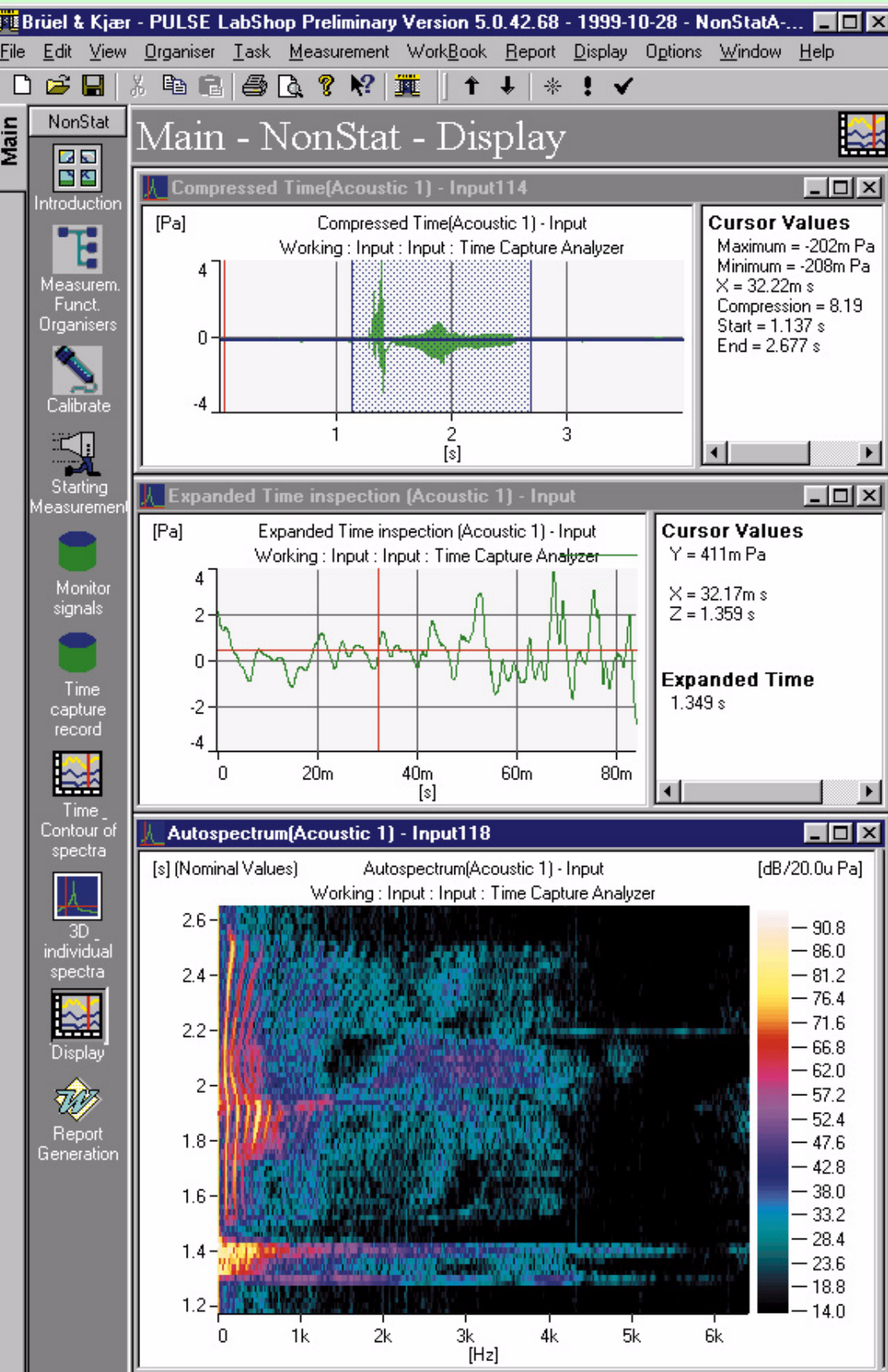


PRODUCT DATA

Time Capture — Type 7705 for PULSE, the Multi-analyzer System Type 3560



Time Capture Type 7705 is designed for the capture of long time signals in RAM and for their subsequent retrieval for post-processing or for data export.

Operation of Type 7705 is similar to the standard analyzers available in the base PULSE software, Noise and Vibration Analysis Type 7700.

7705

- USES**
- Capture, retrieval and export of sampled time data
 - Capture of long time records for Vold-Kalman Order Analysis using Vold-Kalman Order Tracking Filter Type 7703
 - Post-processing of long time records
 - Data export including Windows wave files (.WAV) at selectable sampling rate

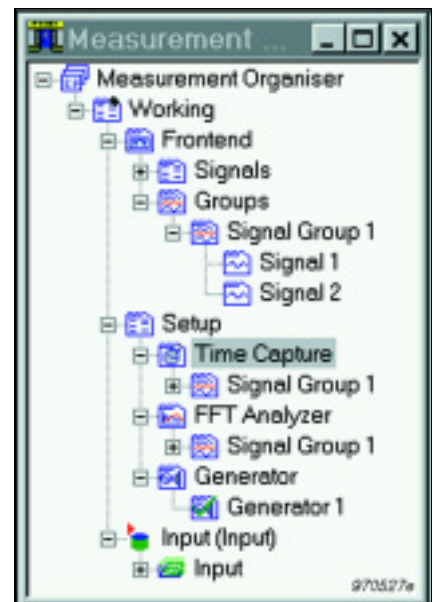
- FEATURES**
- Pre-processing of input data
 - All analysis is done as post-processing
 - Extraction of any selectable part of a recorded signal

Time Capture Analyzer

To use a Time Capture analyzer, you insert a time capture “analyzer” in the setup in PULSE’s Measurement Organiser and assign signals or groups of signals in the usual way. Input to Type 7705 comes from the measurement front-end. This can be one of the Type 2816 or Type 2825 frames or, if PULSE Interface to SONY DAT Type 7706 is installed, a DAT recorder. If Data Recorder Type 7701 is also installed, the input can also be data played back from disk. With Type 7705 you can extract any part of the recorded time signal for post-processing.

Type 7705 has a number of immediate applications:

- If Vold-Kalman Order Tracking Filter Type 7703 is installed in your PULSE system, you can perform Vold-Kalman order analysis on long time signals
- You can capture, post-process and view the signals
- Data can be exported in .WAV format – with a selectable sampling rate



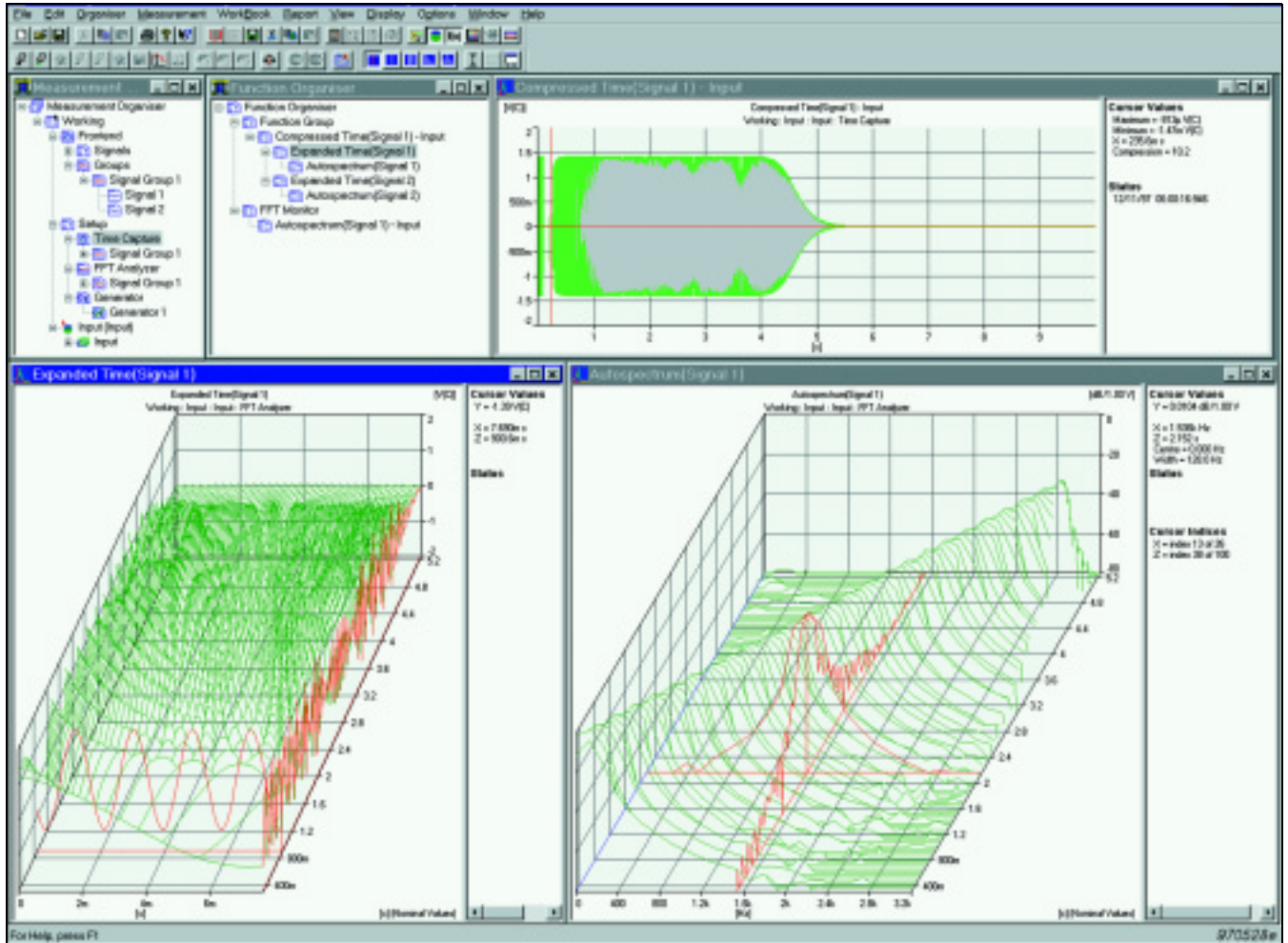
Input signals

All signals that are input to Time Capture Type 7705 can be pre-processed in the same way as in other LabShop Tool packs, i.e. double or single integration or differentiation, and A-, B-, C- or D-weighting can be applied to the input signals. When capturing time signals, you can specify a frequency range (25.6 kHz, 51.2 kHz, 102.4 kHz and so on) for post-processing.

Triggers

Triggers are used for starting and stopping the capture of time signals. Any virtual trigger (manual trigger, signal level, etc.) can be used as a start trigger, or you can select free-run, in which case capture starts immediately. You can also select any virtual trigger as the stop trigger. Alternatively, you can set the time capture to “Stop at End”.

Fig. 1 From a compressed time view, you can select the part of the signal you want to use for post-processing, synthesise a multi-buffer and display it as an Expanded Time function, and finally, for example, display the autospectrum. The sequence is illustrated in both the Function Organiser and in the arrangement of displays from top to bottom right



Post-processing

A Time Viewer implements the extraction and viewing of data from the captured time signal. By adding a Compressed Time function in the Function Organiser, you can display the entire time signal in a compressed view showing minimum and maximum values for a number of samples. Cursors allow you to select the start point and length of time signal from this display. The selected portion of the signal can then be viewed by inserting it as a sub-function and used as input to any post-processing function.

Real-time Performance

The real-time performance is dependent on your PC's capabilities, i.e., processor speed, RAM and number of DSP boards installed. The captured time signal is stored in the PC's RAM. The data transfer rate from DSP to PC depends on the PC's processor speed and loading. If the DSP runs out of memory due to slow transfer speed and overrun (loss of data) occurs, measurement stops and data that were captured before the overrun are transferred to the PC.

Specifications – Time Capture Type 7705

Type 7705 is a LabShop Tool pack for use with PULSE, the Multi-analyzer System Type 3560.

Requirements

- The PC requirements for Multi-analyzer System Type 3560 must be fulfilled
- Noise and Vibration Analysis Type 7700 version 4.0 must be installed

Recording

Frequency Span: 102.4 kHz, 51.2 kHz, 25.6 kHz, ..., 1.56 Hz
Record Length: 1 ms to 24 hrs. with indication of equivalent record size in samples

TRIGGER:

Start: Any virtual trigger or free-run

Stop: Any virtual trigger or Stop at End

See the System Data for PULSE, the Multi-analyzer System Type 3560 for further specifications

Ordering Information

Type 7705: Time Capture

The software license allows measurements on the number of channels covered by your software license for Noise and Vibration Analysis Type 7700 (A – F)

Brüel & Kjær reserves the right to change specifications and accessories without notice