

PRODUCT DATA

PULSE™ Time Data Recorder — Type 7708 Including PULSE Data Recorder — Type 7701

While real-time analysis provides the ultimate data acquisition solution for many measurement situations, there is still a need for time data acquisition and post-processing. A PULSE Data Recorder is a flexible and economic solution for time data acquisition.



USES AND FEATURES

USES

- Recording time data to disk

BENEFITS

- Random access of recorded data – no tapes to spool
- Ranging not required when using Dyn-X acquisition modules
- Superior alternative to tape-based systems

FEATURES

- Time history profiles for verification of recorded data
- Live monitoring of signals
- Simple and intuitive controls
- Easy hardware setup spreadsheet with copy/paste from Microsoft® Excel®
- Export in a wide variety of formats
- Dynamic range up to 160 dB using Dyn-X input modules
- Optional data review and trim before save

General Description

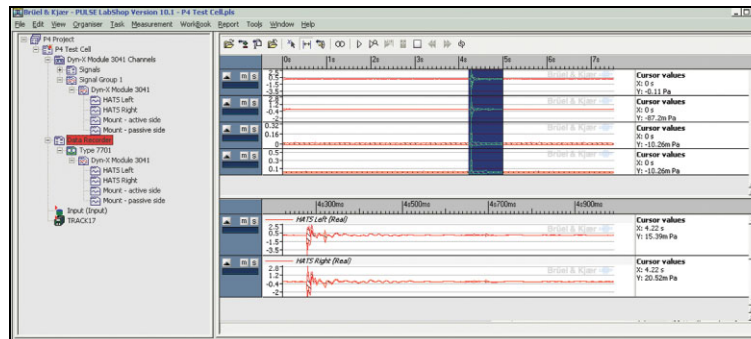
PULSE Time Data Recorder meets the needs of customers who prefer to record time data, either to postpone their analysis decisions to a later time, or to archive time histories when doing real-time analysis.

Fig. 1
Time Data Recorder
Type 7708



Hosted on a standard laptop, the multichannel data recorder package can either run stand-alone (Type 7708) or as a component embedded directly into PULSE projects (Type 7701).

Fig. 2
Type 7701 used as a
component in PULSE
LabShop to make a
data recorder project.
PULSE Time Type
7789 is used to display
the time histories



With its intuitive user interface and incorporation of state-of-the-art Dyn-X technology, Time Data Recorder can be used directly with all portable PULSE front-ends. Time Data Recorder is an economical replacement for instrumentation tape recorders for portable or in-vehicle recording from one to hundreds of channels directly to hard disk. Whether in the field or in the office, the time files produced can be post-processed in PULSE.

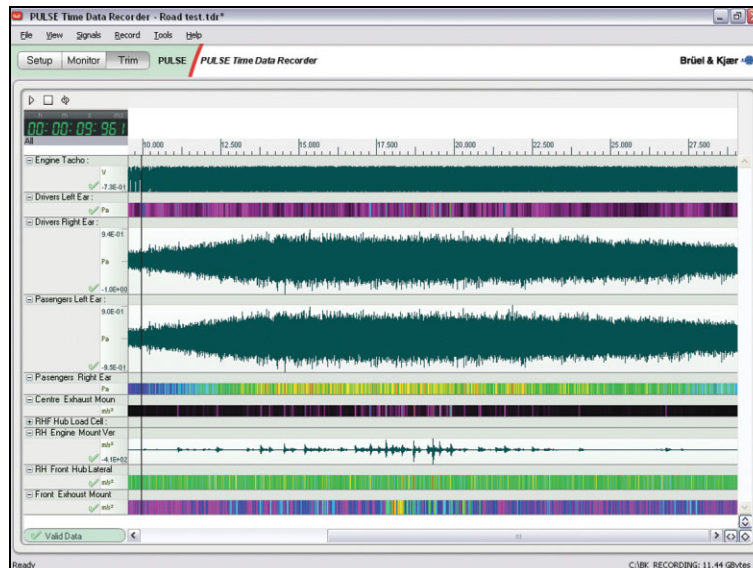
For detailed information about how Dyn-X technology can help you with your measurements, please see System Data Sheet BU 0228.

User Interface

The acquisition setup is simplified by using a spreadsheet interface where complete channel information can be copied and pasted between rows for multiple channels that share (nearly) identical setup. Values in cells can also be duplicated in adjacent cells by dragging across multiple cells.

During setup and recording, all active channels are monitored with the input level meter and the level history, which helps identify channels with intermittent problems. For more detailed monitoring, a channel can be selected for display as an oscilloscope display or real-time spectrum display. As an added diagnostic tool, the selected channel can also be monitored through the PC's audio output.

Fig. 3
Time edit screen in
Type 7708



Monitoring of data can continue during recording, while cable problems and overloads are automatically detected and notified by the software.

You can choose to save the recordings automatically, or to switch to the trim (time edit) screen immediately after the recording has stopped.

You can then select the range of the recording to save permanently by manually dragging a range. The selected range can then be optimised by using the playback controls to listen to the selected range in single play or loop mode.

Specifications – Data Recorder Type 7701 and Time Data Recorder Type 7708

BASEBAND FREQUENCY SPAN

Type 7701: 1600 Hz – 204.8 kHz in 2ⁿ (1, 2, 4, 8, ...) sequence

Type 7708: 50 Hz – 204.8 kHz in 2ⁿ (1, 2, 4, 8, ...) sequence

FREQUENCY SPAN

Max. 204.8 kHz per channel (hardware module dependent)

CHANNEL × BANDWIDTH

The maximum rate is dependent on the acquisition hardware and PC configuration but a total rate of 1200 kHz can be expected from a typical system and rates exceeding 2 MHz are obtainable on specially configured PCs

DISPLAYS

Type 7701: Channel monitor, channel level meter

Type 7708: Channel monitor (time or FFT), channel level meter, channel level history, elapsed time, RPM profile, tachometer

TRIGGERING

Type 7701: A recording session can be started manually or using a trigger (single or repetitive trigger). Each time a trigger occurs, a new data track is recorded for a specified length of time

Type 7708: Start and Stop of a recording can be controlled manually or using a trigger, via a time delay, a predefined signal level, or at a specified RPM

EXPORT FILE FORMATS

I-deas Time History File (ATI), Universal File (UFF Binary or ASCII, PC or UNIX), TEAC (.hdr), MAT (.mat), WAVE (.wav, 16-, 24-, 32-bit), TDF (.tdf), HEAD (.hdf)

RESAMPLING ON EXPORT

4096 Hz, 8192 Hz, 11025 Hz, 16384 Hz, 32000 Hz, 32768 Hz, 44100 Hz, 48000 Hz, 65536 Hz, 88200 Hz, 96000 Hz, 131072 Hz, 262144 Hz, 524288 Hz

Type 7701 requires Type 7700, 7770, or 7771

Ordering Information

Type 7708-Xy PULSE Time Data Recorder

Including:

- Type 7701-X: PULSE Data Recorder

Type 7789-A PULSE Time

Including:

- Type 7701-N: PULSE Data Recorder
- Type 7708-N5: PULSE Time Data Recorder
- Type 7705-N: PULSE Time Capture
- Type 7789: PULSE Time

“X” indicates the license model, either N: Node locked or F: Floating
“y” is any number between 1 and 16 – the number of channels supported by the license, (for example, 7708-N5 indicates a node-locked 5-channel license). A 16-channel license supports an unlimited number of channels

OPTIONAL ACCESSORIES

Type 7450-B Security Key for USB Port

Type 7789 PULSE Time

TRADEMARK

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