This Optical disk jitter analysis software quantitatively analyzes the jitter (σ), discrepancies from the ideal average (Effect Length Error: ∆AVG), and various other items in every recording length (T) by acquiring data from an optical disk measured by the time interval analyzer in a personal computer. This software allows the clock cycle, ideal average, etc. to be arbitrarily set, and the data can then be graphically displayed or printed out to simplify comparison with the reference data. The software can be used to analyze waveform on a wide range of optical disks, including compact disks (CD), minidisks (MD), magneto-optical disks (MO), and digital video disks (DVD).

There are two ways to acquire data measured with a TA320 and TA520: either save the data on a floppy disk and then transfer it to a personal computer, or directly input the data to the computer from the time interval analyzer via a GP-IB interface.

Operating environment:
- Windows95/98, or Windows NT 4.0 or higher
- GP-IB board: Made by NATIONAL INSTRUMENTS

**FUNCTIONS**

- **Analysis Function**
  1. Effect Length Error (difference between the average of measured values and the ideal average), and the value of jitter (standard deviations: σ) are calculated for the respective data of Pit/Land of optical disk waveform. Offset errors for every recording length T can be automatically evaluated.
  2. Calculated results are displayed as tables and graphs (as shown on previous page), or can be printed out.
  3. Results can be compared against a criterion (reference data item).

- **Arbitrary Setting of Parameters**
  The clock cycle (T) can be arbitrarily set, and five types of T-values (CD, DVD1, DVD2, DVD3, MD) can also be set in advance. Analysis can be carried out for 1T to 16T (including plot-off function for 12T and 13T).
  The ideal average is automatically calculated taking T as a reference, or can be set arbitrarily.

- **Change of Window Positions for Each Clock Cycle**
  Window positions can be changed through key actions or with mouse operation.

**SPECIFICATIONS**

- **Readable data:** Binary type data measured with the TA320 and TA520 (WVF), Binary data saved using this software
- **Data acquisition:** Via floppy disk or communications through GP-IB interface
- **Display of analysis results:** Histogram display (graph display), vertical scale: log or linear, Delta average table, Jitter value (standard deviation) table, Judgment line display, and Independent/overlapping display for Pit/Land measured values
- **Analysis range:** Start cycle is limited to 1 to 3T.
  End cycle ranges from 1 to 16T.
- **Save/load functions:** Analysis data and the software settings can be saved or loaded.
  Saving or loading of average values only is also available.
- **Database function:** Data for each Pit/Land and the title to be given to the data can be controlled as a bundle.
- **Printing function:** Histograms, graphs, and tables can be printed out.
  The printing direction can be specified.
- **Judgment function:** This function sets the median and allowable range for a delta average and the criterion for standard deviation.
  With the judgment function, the judgment line is displayed on the graph and the data exceeding the criterion (NG) are marked in a different color.
- **Comments:** Comments can be attached to the analysis result.
- **Personal computer:** Those running Windows 95/98, or Windows NT 4.0 or higher
  GP-IB board: Those made by NATIONAL INSTRUMENTS.