

Master Station Software

Easy-to-use master station software is provided to help the user set up the recorder, retrieve records, view and analyze the data. This software is available for the Windows environment. The basic program functions include the following:

- Configuration and Calibration
- Graphical Display and Printing
- Communications between IEDs and local or remote master station computer.

Configuration and Calibration Software

This software unlocks the power of the recorder by allowing users to configure independent recorder functions and triggers within each recorder. TRANSCAN recording parameters may be modified by software, either from a local computer or remotely from the Master Station via a modem.

The software allows the functions of the recorder to be configured, including defining inputs, recording rate, pre- and post- abnormality period, maximum record length, record content, etc.

Trigger types and levels may be independently set for each channel. Trigger blocking (based on the value of an analog input) is implemented to avoid continuous triggering of voltage and frequency on a dead line.

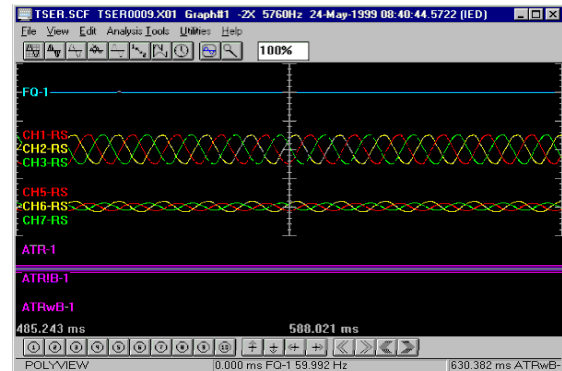
Communication Software

The communication software developed by Mehta Tech allows the user to communicate between a local computer, remote master station and the IEDs in the substation, via the IPCU.

The transmitted records, from either of the two independent recording functions, contain the data which the user has specified for the record. This data can include analog signal values, calculated values, and digital input status. The data files also include station name file number, date and time.

Graphical Display and Printing

After retrieval of stored data, the graphical display program is an invaluable tool in analyzing system disturbances. This software allows eleven user-definable display formats which can be saved for each IED. The display and analysis software is also the launching point for the various analysis tools listed below:



Optional Analysis Software

Mehta Tech has developed a number of optional software tools to help the user to analyze records. These include the following:

- Calculate symmetrical components (Negative, zero, and positive sequence)
- Calculate deviation from base frequency
- Calculate total harmonics (up to 48th)
- Calculate amplitude values of currents and voltages
- Calculate real and reactive power
- Calculate phase angle
- Calculate apparent line impedance
- Calculate distance to fault
- Import/export IEEE COMTRADE format