

Display Data Files and Event Data Files

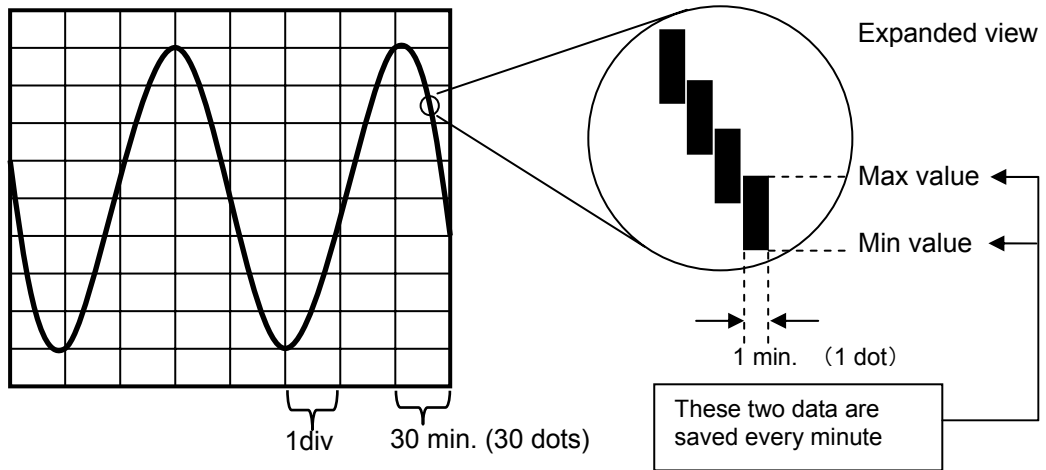
1.1.1 Display Data

■ Overview of Display Data Files

Display data is measured data used to display waveforms.

Waveform display data is saved as dots, consisting of the maximum and minimum values within the data measured at the measurement interval during the time that is equivalent to 1 dot on the time axis.

As data can be saved over a long period of time using a relatively slow sampling interval (0.5 sec to 20 min.), it is equivalent to a file from a conventional chart recorder.



Display data file overview diagram (given a waveform update rate of 30 min./div)

In the example in the overview diagram above, the waveform display is updated one dot at a time every minute.

With the DX102/104/204/208, measurements are taken at a maximum of once every 125 ms when in Normal mode for a total of 480 measurements per minute.

With the DX106/112/210/220/230, measurements are taken at a maximum of once per second when in Normal mode for a total of 60 measurements per minute.

The maximum and minimum values (2 data) from the data measured (480 data on the DX102/104/204/208 or 60 data on the DX106/112/210/220/230) in 1 minute (the time it takes to update 1 dot on the display) are saved in the display data file.

In other words, even if a rapid change occurs over the duration of a minute, the DX series instrument can solidly capture that peak value.

The relationship between the waveform display update interval (time equaling approximately 1 div on the time axis), data save interval, and data save period is shown in the table below.

Waveform Display Update Interval	Data Save Interval	Display Speed (Estimate)
15 sec/div	0.5 sec	2460.0 mm/h
30 sec/div	1 sec	1230.0 mm/h
1 min/div	2 sec	615.0 mm/h
2 min/div	4 sec	307.5 mm/h
5 min/div	10 sec	123.0 mm/h
10 min/div	20 sec	61.5 mm/h
20 min/div	40 sec	30.7 mm/h
30 min/div	1 min	20.5 mm/h
1 hrs/div	2 min	10.2 mm/h
2 hrs/div	4 min	5.1 mm/h
4 hrs/div	8 min	2.5 mm/h
10 hrs/div	20 min	1.0 mm/h

*15 and 30 sec/div can only be set on the DX102/104/204/208

1.1.2 Event Data

■ Overview of Event Data Files

Event data files are for saving data at a specified sample rate for detailed analysis on a PC. They are used for saving data when trouble occurs, especially when you want to analyze it in detail.

■ Event Data Sampling Interval

DX series instruments load data to A/D at the measurement intervals below.

The interval at which these data are saved is called the *sampling interval*.

If you set the sampling interval the same as the measurement interval, all data loaded into A/D is saved to memory. However, the sampling interval cannot be set shorter than the measurement interval.

Model		Measurement Interval	Event Data Sampling Interval
DX100	DX102	125/250 ms	Select 125/250/500 ms, 1/2/5/10/30/60/120/300/600 sec * An interval shorter than the measurement interval cannot be set
	DX104		
	DX106	1/2 sec	Select 1/2/5/10/30/60/120/300/600 sec * An interval shorter than the measurement interval cannot be set
	DX112		
DX2000	DX204	125/250 ms	Select 125/250/500 ms, Select 1/2/5/10/30/60/120/300/600 sec * An interval shorter than the measurement interval cannot be set
	DX208		
	DX210	1/2 sec	Select 1/2/5/10/30/60/120/300/600 sec * An interval shorter than the measurement interval cannot be set
	DX220		
	DX230		