

Setting Up the Display

DISPLAY SETUP

Press  to view the DISPLAY SETUP menus (see page 11–6) and select from:

- Standard or XY Mode
- Single, Dual or Quad grids
- Persistence
- Dot Join
- Display and grid intensities
- “More Display Setup” menus.

Standard or XY Display?

Standard Display Mode (*menus page 11–6*) allows presentation of source waveforms versus time (or versus frequency for FFTs).

XY Display Mode (*menus page 11–9*) compares and contrasts one source waveform with another, and is used when selected traces have the same time or frequency span (time/div) and horizontal unit (in seconds or Hertz). XY is automatically generated as soon as two compatible traces are selected. If incompatible traces are selected, a warning message is displayed at the top of the screen. And if compatible traces are not matched in time, their XY diagram will be displayed showing the shifting in time or in frequency between them. (The ΔT or Δf indicator is displayed in the Displayed Trace Label at left-of-screen.)

Persistence

In Persistence Mode, the oscilloscope can display points so that they accumulate on-screen over many acquisitions. Persistence can be used in either Standard or XY display. Eye diagrams and constellation displays can be made using persistence, and the most recent sweep can be displayed as a “vector” trace over the Persistence display. Persistence is activated by selection of the “DISPLAY SETUP” “Persistence” menu (11–6).

See: “Picturing Signal History”, in the *Hands-On Guide*, for more details on using Persistence.



Which Grid?

All four possible traces can be shown at the same time on separate grids. When Parameters are used, the parameter-style grid comes into play automatically. Other grid styles, illustrated on the following pages, offer the choice of a variety of ways to view one or more traces in either Standard or XY Mode.

Standard and XY Display Grids


Single

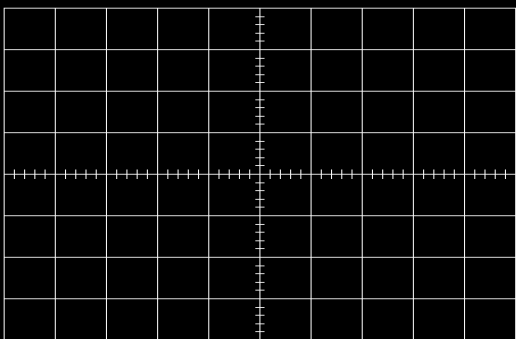
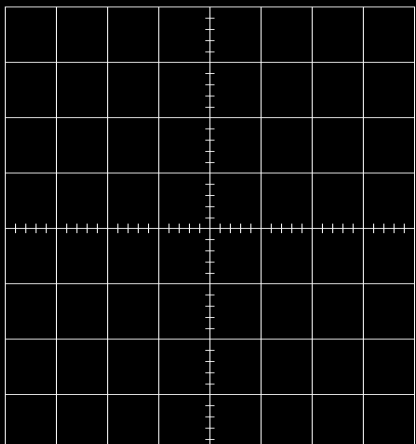
DISPLAY SETUP

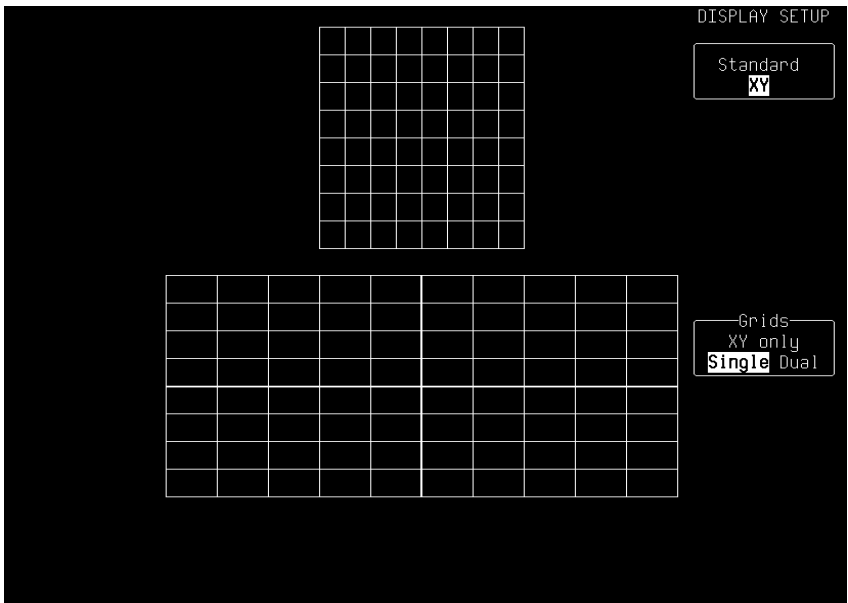
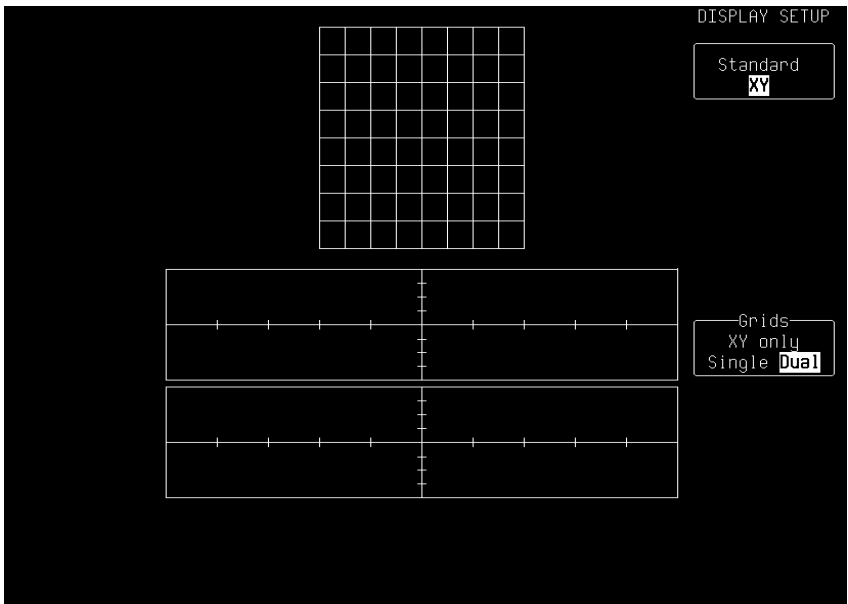
Standard
XY

Grids
Single Dual
Quad

<p>Dual</p>	
<p>Quad</p>	



<p>Parameters</p>	<p>DISPLAY SETUP</p> <p>Standard XY</p>  <p>pkpk (1) mean (1) sdev (1) rms (1) amp1 (1)</p>
<p>XY only</p>	<p>DISPLAY SETUP</p> <p>Standard XY</p> <p>Grids XY only Single Dual</p> 

XY Single	 <p>The screenshot shows a dark background with two grid patterns. The top grid is a 10x10 square grid. The bottom grid is a larger 10x10 grid with a central vertical line. On the right side, there are two menu boxes. The top one is labeled 'DISPLAY SETUP' and contains 'Standard' and 'XY' (highlighted). The bottom one is labeled 'Grids' and contains 'XY only', 'Single' (highlighted), and 'Dual'.</p>
XY Dual	 <p>The screenshot shows a dark background with two grid patterns. The top grid is a 10x10 square grid. The bottom grid is a larger 10x10 grid with a central vertical line and tick marks on the horizontal axis. On the right side, there are two menu boxes. The top one is labeled 'DISPLAY SETUP' and contains 'Standard' and 'XY' (highlighted). The bottom one is labeled 'Grids' and contains 'XY only', 'Single', and 'Dual' (highlighted).</p>

DISPLAY SETUP — Standard

DISPLAY SETUP

Standard
XY

Persistence
OFF On

Dot Join
OFF On

Grids
Single Dual
Quad

W'Form+Text
intensity
90 %

Grid
intensity
60 %

With “Standard” selected, these menus appear:

Persistence

For activating Persistence (*see next menu*).

Dot Join

To select Dot Join “ON” — connecting the sample points with a line segment — or “OFF”, when only the sample points are displayed.

Grids

For selecting the number of grids.

W'form + Text intensity

Adjusts the screen intensity for the waveform and associated text, using the attributed menu knob.

Grid intensity

Adjusts the screen intensity of the grid, using the attributed menu knob.

Note: If “W'form + Text intensity” is turned down to 0 %, the waveform and text disappear! Press the DISPLAY button to return automatically to 90 % intensity.

DISPLAY SETUP — Standard — Persistence “On”

DISPLAY SETUP

Standard
XY

Persistence
OFF On
(InFinite)

Dot Join
OFF On

Persistence
Setup

Grids
Single Dual
Quad

W' Form+Text
intensity
90 %

Grid
intensity
60 %

With both “Standard” and “Persistence” “On” selected, these menus appear:

Persistence

Activates Persistence. When “On”, this can be cleared and reset by pressing the CLEAR SWEEPS button or by changing any acquisition condition or waveform processing condition.

Dot Join

To select Dot Join “ON” — connecting the sample points with a line segment — or “OFF”, when only the sample points are displayed.

Persistence Setup

To access the “PERSISTENCE” Setup menus (*see next page*)

Grids

For selecting the number of grids.

W'form + Text intensity

Adjusts the screen intensity for the waveform and associated text, using the attributed menu knob.

Grid intensity

Adjusts the screen intensity of the grid, using the attributed menu knob.

Note: If “W'form + Text intensity” is turned down to 0 %, the waveform and text disappear! Press the DISPLAY button to return automatically to 90 % intensity.

PERSISTENCE

These menus appear when “Persistence Setup” is selected from “DISPLAY SETUP”.



Persistence

To select whether persistence is applied to all or to the top two traces.

Persist for

For selecting the persistence duration, in seconds.
The number of sweeps accumulated — up to 1 million — is displayed below the grid.

DISPLAY SETUP — XY

When “XY” is selected from the first menu, these other menus appear.

DISPLAY SETUP

Standard
 XY

Persistence
OFF On

Dot Join
OFF On

Grids
 XY only
Single Dual

W' Form+Text
intensity
90 %

Grid
intensity
60 %

Persistence

Ativates Persistence. When “On”, the other menus here do *not* change.

Dot Join

To select Dot Join “ON” — connecting the sample points with a line segment — or “OFF”, when only the sample points are displayed.

Grids

For selecting the grid style.

W'form + Text intensity

Adjusts the screen intensity for the waveform and associated text, using the attributed menu knob.

Grid intensity

Adjusts the screen intensity of the grid, using the attributed menu knob.