

Glossary

AC Coupling

A means to block the DC component of an input signal and to display only its AC component.

Acquisition Mode

A manner of acquiring the signal and constructing a waveform. The 222PS has four acquisition modes: normal, averaging, envelope, and continuous envelope. (See those definitions.)

Acquisition Sample Interval

The time between each sample the instrument acquires from the input signal.

Aliasing

A condition in which a waveform appears to have a frequency much lower than is accurate, because it has not been sampled often enough.

Attenuation

The sensitivity of a probe.

Auto-Baseline Trigger Mode

A trigger mode in which the instrument acquires and displays whatever data it can capture, regardless of whether a trigger event has occurred. This allows you to display information even when a signal is too small to trigger on.

Auto-Level Trigger Mode

A trigger mode in which the instrument determines the peak values of the incoming signal and sets the trigger level to its midpoint. This allows you to display a waveform without setting the trigger level.

Auto Setup

A function that automatically sets front-panel controls in a manner that depends on the signals applied to channels 1 and 2, speeding the process of setting up the instrument.

Averaging Acquisition Mode

An acquisition mode in which the instrument displays a waveform that is the point-by-point average of the last four waveforms acquired.

Baud Rate

The rate at which two connected electronic devices exchange data.

Brightness

The intensity with which the phosphor glows on the screen.

Calibration

The adjustment of instrument performance to meet published specifications or to verify such performance, according to external reference standards.

Channel

One input path to the instrument. When you connect a probe or cable to the channel input connector, you can conduct a signal into that input path.

Channel Coupling

The means by which an input signal is passed into a measurement channel. A channel can be AC coupled, DC coupled, or ground coupled. (See those definitions.)

Continuous Envelope Acquisition Mode

An acquisition mode in which the instrument continues to accumulate and display the positive and negative peak values of the signal until you press the **INIT** button.

Cycle

A complete, single unit of a periodic waveform.

DC Coupling

A means to pass both AC and DC frequency components of the input signal for display.

Deflection

The amount of movement of an indicating device, such as a meter needle or oscilloscope trace, due to some change in voltage, current, or resistance.

Display Sample Interval

The time interval between two points of the waveform on the screen.



Envelope Acquisition Mode

An acquisition mode in which the instrument displays the positive and negative peak values of the signal. An enveloped waveform shows the maximum and minimum variations in the signal.

Equivalent-Time Time-Base Mode

The time-base mode required to display a signal when the time base is fast—2 μ s to 50 ns. In equivalent-time time-base mode, the instrument cannot capture all 512 samples and display them in one pass. Therefore, the instrument depends on successive repetitions of the same waveform to fill the display with samples.

External Trigger Source

A trigger source derived from a nondisplayable signal acquired through the external trigger input connector on the rear panel of the 222PS.

Ground Coupling

A means to connect a channel input to a ground reference.

Horizontal Axis

Usually, the axis along which an oscilloscope measures the timing of a signal. The exception to this is XY mode. (See definition below.) The timing of a signal is usually measured in seconds-per-division, or fractions of a second-per-division.

Inverted Waveform

A waveform that is flipped along its horizontal axis, so that it appears upside-down.

Major Division

One mark dividing the screen either horizontally or vertically for measurement purposes. The 222PS has eight major vertical divisions and ten major horizontal divisions.

Memory

The ability of the instrument to store data such as waveforms, front-panel settings, and configurations.

Menu

A list of choices that you can select in order to perform some action, such as placing the instrument in a specific mode, or enabling or disabling a specific feature.

Menu Button

One of four buttons alongside the right edge of the screen that can be associated with a menu item. Pressing a menu button performs the action associated with the item next to it.

Menu Item

One of four action choices printed at the right edge of the screen, alongside the menu buttons. Pressing the button next to the menu item performs the action represented by that item.

Minor Division

Subdivisions of major divisions for more accurate measurement. Minor divisions are seen as marks along the horizontal and vertical center lines. The 222PS has five minor divisions in each major division in both directions.

Normal Acquisition Mode

The most commonly used acquisition mode, in which the instrument displays one sample point for each point it acquires.

Normal Trigger Mode

A trigger mode in which the instrument does not acquire or display a waveform until a trigger occurs. The trigger source, level, and slope must be set appropriately.

Peak-to-Peak voltage (Vp-p)

The voltage between the positive and negative peaks of a sine wave.

Peak Voltage (Vp)

The voltage between the mean or average value and the peak of the sine wave of an alternating voltage.

Probe

A device that allows you to transfer an electrical signal from an external circuit into the oscilloscope.

Readout

Information, appearing on the screen, that is associated with a signal trace. Readouts can be numeric values such as the volts-per-division or symbols such as the kind of channel coupling.

Record Time-Base Mode

The time-base mode used for most time bases. When a trigger occurs, a record of the waveform is acquired and displayed.

RS-232

A communication interface that can be used to control the instrument and capture data remotely from a computer.

Sample

One point of the waveform. Waveforms on the 222PS are made up of 512 samples.

Sample Interval

See *acquisition sample interval* or *display sample interval*.

Sampling Rate

The number of times per second that the instrument samples the signal it is receiving.

Scrolling Time-Base Mode

The time-base mode used for slow time bases (20 s to 0.1 s or 50 ms) when the instrument is using autolevel or autobaseline trigger mode. In scrolling time-base mode, no trigger is accepted. The first sample appears at the left edge of the display; the display fills from left to right. After the display fills, new samples appear at the right edge and the old samples shift left one point at a time to accommodate the new samples. The oldest sample, the one at the leftmost edge of the screen, is erased. This gives the effect of the waveform continuously scrolling across the screen from right to left.

Scroll-Scan Time-Base Mode

The time-base mode used for slow time bases (20 s to 0.1 s or 50 ms) when the instrument is using normal or single-sequence trigger mode. In scroll-scan time-base mode, the display begins to fill from left to right until the trigger position is reached. The trigger system cannot accept a trigger until these pretrigger samples have all been acquired. When the pretrigger portion of the display is filled, a trigger can occur. Until a trigger occurs, however, new samples are continually acquired; they are added to the right side of the pretrigger portion of the display and scroll off the display to the left. When a trigger occurs, the post-trigger portion of the display starts to fill from the left to the right. When the entire display is filled, it is erased, and signal acquisition begins again.

Seconds per Division

The number of seconds, or fractions of a second, represented by each major division on the horizontal axis.

Selected Channel

The channel affected by changes to the front-panel controls. The readout associated with a selected channel appears boxed on the 222PS display.

Self-Calibration

A procedure which fine-tunes a system for increased accuracy. The 222PS provides self-calibration routines for both channels, the external trigger source, and display alignment.

Setup

A specific configuration of front- and top-panel control settings.

Sine wave

The graphic plot of voltage against time of the normal AC waveform; the most common signal form.

Single-Sequence Trigger Mode

A trigger mode in which the instrument acquires one triggered signal, displays it, and then holds it until you press the **INIT** button to restart the sequence.

Single-Shot

Single-sequence.

Single-Sweep

Single-sequence.

Store Mode

A mode in which the instrument continues to display waveforms between trigger events. When not in store mode, waveforms are displayed until the next trigger event, or until the next display update—about 30 ms. If a trigger has not occurred by the next display update, the display is blanked.

Time Base

The number of seconds per division.

Time-Base Mode

The mode required to display a signal, given the time-base of the instrument, and occasionally also depending on other factors such as trigger mode, acquisition mode, and whether the instrument is in store mode. Possible time-base modes are *record*, *equivalent-time*, *scroll*, and *scroll-scan*. (See those definitions.)

Time-Out Feature

A feature that shuts off the instrument after two minutes without changes to the controls, when the instrument is running under battery power. This feature prevents the battery from being discharged when the instrument is left unattended.

Trigger

The event that tells the oscilloscope to start acquiring and displaying a waveform.

Trigger Coupling

See *Channel Coupling*.

Trigger Level

The voltage threshold that a signal must cross in order for the instrument to trigger.

Trigger Light

A light on the 222PS front panel, labeled **TRIG'D**, that indicates when the instrument has acquired a trigger.

Trigger Mode

The way in which the instrument acquires a trigger. The 222PS has four trigger modes: normal, auto level, auto baseline, and single-sequence. (See those definitions.)

Trigger Slope

The parameter that determines whether the oscilloscope triggers as the voltage of the displayed signal is rising or falling.

Trigger Source

The signal that provides the trigger event. The trigger source can be a signal acquired through either channel or an external trigger.

Trigger Position

The location of the trigger event relative to the waveform on the display. When the 222PS is in store mode, the trigger position can be at the beginning, in the middle, or at the end of the waveform. This allows you to view the waveform data distributed around the trigger point in three ways.

Uncalibrated Channel

A channel manipulated with the variable volts-per-division (**VAR VOLTS/DIV**) knob. This knob allows you to scale a waveform vertically so that it takes up an arbitrary number of vertical divisions. However, after this manipulation, the exact number of volts-per-division for that signal is unknown.

Vertical Axis

The axis along which an oscilloscope measures the voltage of a signal, in volts per division or fractions of a volt per division.

Volt (V)

The unit of potential difference. One volt is the amount of voltage needed to cause one ampere of current to pass through one Ohm of resistance.

Volts per Division

The number of volts (or fractions of a volt) represented by each major division on the vertical axis, except in XY mode, where both axes represent volts per division.

XY Mode

A mode in which both the horizontal and the vertical axes of the instrument represent volts per division. The signal acquired through channel 1 is displayed on the x (horizontal) axis, and the signal acquired through channel 2 is displayed on the y (vertical) axis.

Index

Symbols

- + sign
 - readout, 2-9
 - trigger slope, 3-69
- sign
 - readout, 2-9
 - trigger slope, 3-69
- = sign, readout, 2-7
- > sign, readout, 2-7, 3-76
- ~ sign, readout, 2-7

A

- AC coupling, 3-19
 - definition, G-1
 - readout, 2-7
- accessories, ordering, A-79
- accessory pouch, A-80
- ACQ, A-17
- ACQ button, 2-11, 3-3-3-4
- acquisition mode, 3-1-3-4, 3-27, 3-28
 - averaging, 3-1
 - continuous envelope, 3-2-3-3
 - definition, G-1
 - envelope, 3-2
 - menu, 3-3
 - normal, 3-1
 - selecting, 3-3-3-4
- acquisition sample interval, definition, G-1
- aliasing, 3-26-3-28
 - definition, G-1
- aligning display, 3-12-3-14
 - test pattern, 3-13-3-14

- alignment menu, 3-13
- amplitude
 - and triggering, 3-76
 - of uncalibrated signal, 3-76
- attenuation, definition, G-1
- auto baseline trigger mode, 3-28
 - and scroll time-base mode, 3-72
 - definition, G-1
 - with averaging acquisition, 3-1
- auto level trigger mode, 3-28, 3-72-3-73
 - definition, G-1
 - with averaging acquisition, 3-1
- AUTO SETUP, 3-5, 3-15
 - definition, G-1
 - with high-frequency signals, 3-6
 - with low-frequency signals, 3-6
- auto setup, button, 2-3
- auto trigger level, 3-70
- AUTOLVL:PUSH button, 2-5, 3-66, 3-70, 3-72
- autoset tests, A-41-A-42
- AUX FUNCT button, 2-12, 3-9, 3-12, 3-31
- auxiliary functions menu, 3-10, 3-12, 3-31, 3-38, 3-45
- averaging acquisition mode, 3-1, 3-28
 - definition, G-2

B

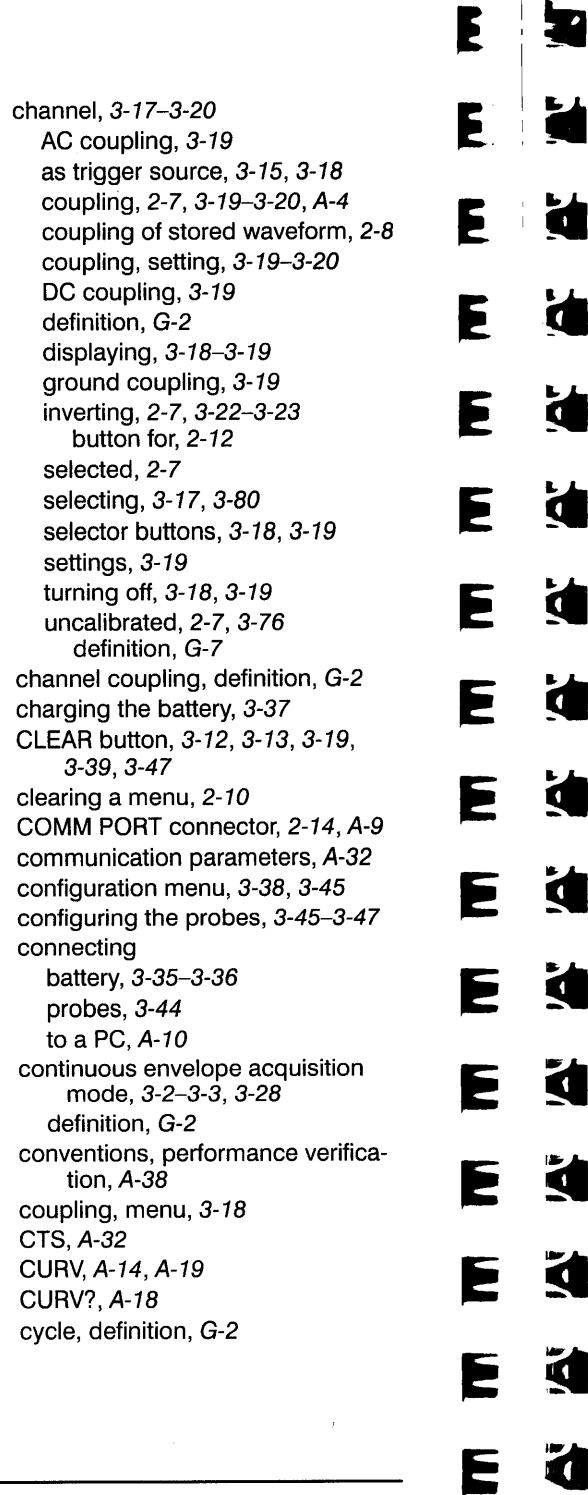
- BAT200, A-80
- battery
 - charging, 3-37
 - temperature, 3-37
 - connecting, 2-13, 3-35-3-36

deep discharge of, 3-40-3-41
 low charge indicator, 3-37
 operating with, 3-35-3-41
 recharging after deep discharge,
 3-40-3-41
 replacing, 3-39
 spare, A-80
 time out feature and, 3-37
 battery power, slow time bases with,
 3-26
 baud rate
 definition, G-2
 setting, 2-12, A-11-A-36
 baud rates, A-32
 BNC-female-to-dual-banana adapt-
 er, A-80
 BNC-male-to-dual-banana adapter,
 A-80
 brightness, definition, G-2
 brightness knob, 2-15
 BUT, A-15

C

cabinet feet, A-79
 calibrating
 channel 1, 3-11
 channel 2, 3-11
 external trigger input, 3-11
 instrument, 3-9-3-14
 calibration
 button, 2-12
 definition, G-6
 carrying case, A-79
 CAT200, A-11, A-33, A-80
 CAUTION
 statement in manuals, 1-2
 statement on equipment, 1-3
 CH1 button, 3-18, 3-19
 CH2 button, 3-18, 3-19

channel, 3-17-3-20
 AC coupling, 3-19
 as trigger source, 3-15, 3-18
 coupling, 2-7, 3-19-3-20, A-4
 coupling of stored waveform, 2-8
 coupling, setting, 3-19-3-20
 DC coupling, 3-19
 definition, G-2
 displaying, 3-18-3-19
 ground coupling, 3-19
 inverting, 2-7, 3-22-3-23
 button for, 2-12
 selected, 2-7
 selecting, 3-17, 3-80
 selector buttons, 3-18, 3-19
 settings, 3-19
 turning off, 3-18, 3-19
 uncalibrated, 2-7, 3-76
 definition, G-7
 channel coupling, definition, G-2
 charging the battery, 3-37
 CLEAR button, 3-12, 3-13, 3-19,
 3-39, 3-47
 clearing a menu, 2-10
 COMM PORT connector, 2-14, A-9
 communication parameters, A-32
 configuration menu, 3-38, 3-45
 configuring the probes, 3-45-3-47
 connecting
 battery, 3-35-3-36
 probes, 3-44
 to a PC, A-10
 continuous envelope acquisition
 mode, 3-2-3-3, 3-28
 definition, G-2
 conventions, performance verifica-
 tion, A-38
 coupling, menu, 3-18
 CTS, A-32
 CURV, A-14, A-19
 CURV?, A-18
 cycle, definition, G-2



D

DAC, A-16, A-19
 DAC?, A-18
 DANGER, statement on equipment,
 1-3
 data bits, A-32
 DC coupling, 3-19
 definition, G-2
 readout, 2-7
 decoding
 acquisition mode settings, A-26
 miscellaneous, A-26
 SEC/DIV setting, A-22
 trigger functions, A-24
 vertical settings, A-20
 deflection, definition, G-2
 DISPL button, 2-12, 3-21, 3-22, 3-79
 display, 2-6, 3-21-3-24
 brightness, 2-15, 3-23
 focus, 2-14
 intensity, 3-23
 inverting, 3-22-3-23
 menu, 3-79-3-80
 display menu, 3-23
 display sample interval, definition,
 G-2
 down arrow, readout, 2-7
 DSR, A-32
 DTR, A-32

E

envelope acquisition mode, 3-2
 definition, G-3
 equivalent-time time-base mode,
 3-27
 definition, G-3
 error codes, diagnostic, A-28
 EXT POWER INPUT connector, 2-15
 EXT TRIG INPUT connector, 2-15,
 3-66

external battery charger, A-80
 external power
 connecting, 2-15, 3-41
 operating with, 3-41-3-42
 external power AC adapter, 3-37,
 3-41-3-42, A-79, A-81
 external power indicator, 3-42
 external power source, 3-42
 AC, 3-42
 DC, 3-42
 external trigger, 3-66
 common reference, 3-11
 connecting, 2-15
 grounding, 2-15
 grounding, input voltage limit,
 2-15, 3-65
 probe for, A-80
 source, definition, G-3

F

firmware version, 3-31
 identifying, 3-31-3-33
 flow control, A-32
 focus knob, 2-14
 FP, A-17, A-19
 fp data, A-17
 FP?, A-18
 frame, A-14
 front panel, 2-2
 front panel encoding, A-20
 front-panel controls, with continuous
 envelope acquisition mode, 3-2

G

glitch, detecting, 3-2
 ground coupling, 3-19
 definition, G-3

readout, 2-7
ground symbol, readout, 2-7

H

horizontal axis, definition, G-3
horizontal controls, 2-5, 3-25
horizontal position
 knob, 2-6
 of magnified signal, 3-25
 of stored waveforms, 3-25
horizontal scale, with AUTO SETUP,
 3-6

I

ID, A-19
ID?, A-18
INIT button, 3-2, 3-15, 3-16, 3-61,
 3-73
instrument
 accessories for, A-79
 calibration, 3-9-3-14
 configuration, 3-5-3-8
 recalling, 2-12, 3-57-3-60
 saving, 2-12, 3-51, 3-55-3-60
 ID, 3-31
 serial number, 2-14, 3-31
 storing, 3-40
 turning on, 3-42
INTEN knob, 2-15, 3-23
inverted waveform, 3-22
 definition, G-3

L

levels, A-33

line operation, 2-15
log fp, A-17
logical front panel encoding, A-20
low battery indicator, 3-37

M

magnifying a signal, 3-29-3-30
 and time-base modes, 3-29
 horizontal position of, 3-25
 in XY mode, 3-29
 knob, 2-6
 readout, 2-9, 3-29
 stored waveforms and, 3-29
 time base of, 3-26
 trigger position in, 3-29
major division, definition, G-3
manual, organization of, *i*
maximum applied voltage, A-33
measuring signals, A-1
 fall-time, A-7
 floating, 3-17
 ground-reference, A-4
 peak-to-peak, A-3
 rise-time, A-7
 time, A-5
 voltage, A-2
memory, 3-55
 and power requirements, 3-51
 definition, G-3
 erasing, 3-52, 3-54, 3-58
menu, 2-9
 acquisition, 3-3
 alignment, 3-13
 auxiliary functions, 3-10, 3-12,
 3-31, 3-38, 3-45
 button, 2-10
 definition, G-4
 clearing, 3-53, 3-54
 configuration, 3-38, 3-45
 definition, G-3

display, 3-23, 3-79-3-80
 item, 2-10
 definition, G-4
 name, 2-10
 probe, 3-46
 self-calibration, 3-11
 trigger mode, 3-73-3-74
 trigger position, 3-71
 trigger source, 3-64-3-65
messages, A-33
minor division, definition, G-4
MODE button, 2-4, 3-73
modem, activating, 2-12
motor trigger, 3-67

N

nominal traits
 defined, A-65
 listed, A-65, A-68
normal acquisition mode, 3-1
 definition, G-4
normal trigger mode, 3-28
 definition, G-4

O

ON button, 3-37, 3-42
operator manual, *i*, A-79

P

packaging for shipment, 3-33
parity, A-32
peak voltage, definition, G-4
peak-to-peak voltage, definition, G-4

performance characteristics
 nominal. See *nominal traits*
 typical. See *warranted character-*
 istics
 warranted. See *warranted charac-*
 teristics
performance check, procedures,
 A-43
performance tests, A-43-A-64
 equipment required, A-44-A-46
 horizontal check, A-57-A-60
 preliminaries, A-47-A-48
 preliminary procedure, A-47-A-48
 prerequisites, A-43-A-44
 trigger check, A-60-A-64
 vertical checks, A-48-A-57
performance verification
 autoset tests, A-41-A-42
 general instructions, A-37
 horizontal check, A-57-A-60
 initial setup procedure, A-39
 performance tests, A-43-A-64
 purpose and extent of, A-37
 quick checks, A-37
 self cal tests, A-39-A-41
 trigger checks, A-60-A-64
 vertical checks, A-48-A-57
plotter/printer support, A-33
POS knob, 3-29
 for uncalibrated waveforms, 3-76
positioning XY waveforms, 3-80
printer interface, A-80
probe, 3-43-3-50
 10X, 3-43, 3-76, A-80
 1X, 3-43, 3-76, A-79
 accessories, 3-47-3-50
 attenuation, 3-43
 configuring, 3-45-3-47
 connecting, 3-44
 definition, G-4
 external trigger, A-80
 menu, 3-46
 storing, 2-13

R

RCL button, 2-11, 3-53
 readout
 > sign, 3-76
 clearing, 3-21–3-22
 definition, G-4
 displaying, 3-21–3-22
 magnified signal, 3-29
 saved waveform, 3-52–3-54
 store mode, 3-61
 stored waveform, 2-8
 trigger level, 3-69
 turning off, 2-12
 vertical, 2-6, 2-8
 READY, A-19
 rear panel, 2-14
 recalling a setup, button, 2-12
 recalling a stored waveform, button, 2-11
 record time-base mode, 3-27
 definition, G-4
 REF1, A-14, A-17
 REF1—REF4, A-16
 reference card, A-79
 remote communication, 2-14, A-9–A-36
 repair, 3-31
 packaging for shipment, 3-33
 replacing the battery, 3-39
 RS-232, 2-14, A-9–A-36
 command
 colon, A-13
 delimiter, A-13
 format, A-13
 semicolon, A-19
 terminator, A-13, A-19
 commands, A-13, A-14
 communication parameters, A-32
 error codes
 communication, A-28
 diagnostic, A-28
 error type, A-29
 error types, error codes, A-29

interconnection cables, A-34
 queries, A-13, A-18
 responses, A-13, A-18
 specifications, A-32
 status messages, A-28
 RS-232
 cable, A-80
 definition, G-5
 RT, A-32
 RX, A-32

S

safety, symbols, 1-3
 sample
 definition, G-5
 interval, definition, G-5
 sampling rate
 definition, G-5
 to avoid aliasing, 3-27
 SAVE button, 2-12, 3-52
 saving a setup, button, 2-12
 saving a waveform, button, 2-12
 scale factor
 horizontal, 2-9, A-1
 vertical, 2-7, A-1
 screen, 2-2, 2-6, 3-21–3-24
 brightness, 2-15, 3-23
 focus, 2-14
 intensity, 3-23
 markings on, A-1
 scroll time-base mode, 3-27–3-28
 and magnified signals, 3-29–3-30
 with single-sequence trigger mode, 3-16
 scroll-scan time-base mode, 3-28
 and magnified signals, 3-29–3-30
 definition, G-5
 scrolling time-base mode, definition, G-5
 SEC/DIV knob, 2-5, 3-26



seconds per division, 3-27–3-28
 definition, G-5
 fast settings of, 3-27
 knob, 2-5
 readout, 2-9
 setting, 3-26
 slow settings of, 3-27
 stored waveform, 2-8
 selected channel, definition, G-6
 selecting an acquisition mode, 3-3–3-4
 self cal tests, A-39–A-41
 self-calibration
 how to perform, 3-9–3-12
 menu, 3-11
 when to perform, 3-9
 serial number, 2-14, 3-31
 service manual, A-80
 servicing, 3-13, 3-31
 set-up, 3-5–3-8
 setup
 definition, G-6
 erasing, 3-58
 recalling, 2-12, 3-57–3-60
 saving, 2-12, 3-39, 3-51, 3-55–3-60
 horizontal position and, 3-55
 trigger level and, 3-55
 vertical position and, 3-55
 SETUP button, 2-12
 SGND, A-32
 shipping the instrument, packaging for, 3-33
 side panel, 2-13
 signals, A-32
 sine wave, definition, G-6
 single-sequence trigger mode, 3-15–3-16, 3-28, 3-73
 and store mode, 3-61
 definition, G-6
 single-shot trigger mode, definition, G-6
 single-sweep trigger mode, definition, G-6

SLOPE button, 2-4
 SOURCE button, 2-5, 3-64
 STA?, A-18
 start bits, A-32
 stop bits, A-32
 STORE button, 2-11
 store mode, 3-28, 3-61–3-62
 and normal trigger mode, 3-72
 and single-sequence mode, 3-61
 and trigger position, 3-70
 button, 2-11
 definition, G-6
 readout, 2-9, 3-61
 storing the instrument, 3-40
 STR1, A-17
 synchronizing signals, 3-66

T

Tektronix National Marketing Center, 1-1, A-79
 temperature
 and charging battery, 3-37
 and instrument calibration, 3-9
 test equipment required, A-44
 test signal, 3-15
 tilt stand, 2-16
 time base, 3-27–3-28
 definition, G-6
 fast settings of, 3-27
 slow settings of, 3-27
 with continuous envelope acquisition, 3-2
 with envelope acquisition, 3-2
 time out, 2-12, 3-37
 definition, G-7
 disabling, 3-38–3-39
 slow time bases with, 3-26
 time-base mode, 3-27–3-28
 and trigger mode, 3-16
 definition, G-6

- equivalent-time, 3-27
- record, 3-27
- scroll, 3-27-3-28
- scroll-scan, 3-28
- top panel, 2-11
- transfer options, A-30
 - via cable, A-30
 - via modem, A-30
- TRG, A-19
- TRG?, A-18
- TRIG COM connector, 2-15, 3-66
- TRIG POS button, 2-12, 3-71
- trigger
 - controls, 2-4, 3-63
 - coupling, 3-69
 - definition, G-7
 - definition, G-7
 - external probe, A-80
 - external source, 2-15
 - level, 2-5, 3-15
 - and probe configuration, 3-45
 - definition, G-7
 - indicator, 3-69
 - knob for, 2-5
 - readout, 2-9, 3-69
 - setting an explicit, 3-69
 - setting automatically, 3-70
 - light, 2-5, 3-16, 3-63, 3-66
 - definition, G-7
 - mode, 3-27-3-28, 3-71-3-74
 - auto baseline, 3-28
 - auto level, 3-28, 3-72-3-73
 - button for, 2-4
 - definition, G-7
 - menu, 3-73-3-74
 - normal, 3-15
 - setting, 3-73-3-74
 - single-sequence, 3-15-3-16, 3-73
 - motor, 3-67
- position, A-7
 - button, 2-12
 - definition, G-7
 - in magnified signals, 3-29
 - in store mode, 3-70-3-71
 - menu, 3-71
 - MID, 3-70-3-71
 - not in store mode, 3-70-3-71
 - POST, 3-70-3-71
 - PRE, 3-70-3-71
 - setting, 3-71
- slope, A-8
 - button for, 2-4
 - definition, G-7
 - negative, 3-69
 - positive, 3-69
 - readout, 2-9
- source, 3-18
 - and vertical position, 3-76
 - button for, 2-5
 - CH1, 3-64-3-66
 - CH2, 3-64-3-66
 - channel 1, 3-15, 3-64-3-66
 - channel 2, 3-64-3-66
 - definition, G-7
 - external, 3-66
 - external, ground, 3-66
 - menu, 3-64-3-65
 - setting, 3-64-3-66
 - VERT, 3-64-3-66
 - vertical, 3-64-3-66
- triggering
 - and amplitude, 3-76
 - automatically, 3-72-3-73
 - when, 3-72
- turning on the instrument, 3-42
- TX, A-32
- typical characteristics
 - defined, A-76
 - listed, A-76

U

- uncalibrated channel, 2-8, 3-76
 - definition, G-7
- user messages, A-33

V

- version number, firmware, 3-31
 - identifying, 3-31-3-33
- vertical axis, definition, G-8
- vertical controls, 2-3, 3-75
- vertical position, and trigger source, 3-76
- vertical scale, with AUTO SETUP, 3-6
- virtual instrument software package, A-11, A-80
- volt, definition, G-8
- volts per division
 - and probe configuration, 3-45
 - definition, G-8
 - readout, 2-7
 - variable, 3-76-3-78, A-7

W

- WARNING, statement in manual, 1-2
- Warranted Characteristics
 - Listed, A-72
 - Performance Conditions for, A-72
- warranted characteristics, defined, A-71
- warranty, 3-31
- waveform
 - averaged, 3-1, 3-3
 - enveloped, 3-2-3-3
 - frequency, 3-26-3-27
 - inverting, 3-22-3-23
 - normal, 3-1, 3-3

- recalling, 3-53-3-60
- saving, 2-12, 3-51-3-54
- stored, 2-11, 3-39, 3-51-3-60, A-2
 - channel coupling, 2-8
 - clearing, 3-53, 3-54
 - horizontal position of, 3-25
 - magnified, 3-29
 - memory location of, 2-8
 - readout, 2-8
 - recalling, 2-11
 - saving, 2-12
 - seconds per division, 2-8
- uncalibrated, 2-8, 3-76
 - definition, G-7
- wfrm data, A-14
 - byte count, A-15
 - checksum, A-15
 - fp data, A-14
 - mode byte, A-15
 - waveform data, A-15
- WP200, A-80

X

- XY mode
 - button, 2-12
 - definition, G-8
 - entering, 3-79-3-80
 - exiting, 3-80
 - horizontal positioning in, 3-80
 - magnified displays and, 3-29
 - positioning waveforms, 3-80
 - using, 3-79