

TDS 320 v2.04 from v1.xx (040-1504-00)

Version 1.xx to 2.00

New features:

1. The major feature enhancement for F/W ver. 2.00 was enabling or turning on the RS232 interfacing capability (if a TDS320 had Option 14 installed).

Version 2.00 to 2.01

1. Hardcopy Device Not Responding" notifier keeps appearing over and over.
2. An old waveform can remain on screen when certain settings are recalled.
3. Knob is not informed of reference waveform position changes made over GPIB.
4. NON is not recognized as an abbreviation for NONE.
5. The UNL command is not recognized.
6. Trigger placement is off by 200 ps at certain sweep speeds.
7. Subsequent DIAG:STATE EXECUTE command causes crash.
8. Paired cursor readouts stop working if power is turned off during diagnostics.

Version 2.01 to 2.02

Bugs fixed:

1. Trigger holdoff becomes incorrect when acquisitions are reset.
2. Holdoff is not restored after SPC calibration.
3. Cannot recall settings using WaveStar program.

Version 2.02 to 2.03

Performance improvements:

1. External trigger level range increased to $\pm 1.2V$ to $\pm 1.5V$. External trigger divide by 10 increased to $\pm 15V$.
2. Last measurement readout no longer lags behind others. Earlier versions would update the last measurement readout on cycle later than the other measurement readouts.

Now, all measurements are updated together.

Bugs fixed:

1. Measurements quit working randomly.

Version 2.03 to 2.04

Bugs fixed:

1. Vertical accuracy is off by 2.3% in XY display mode.
2. Autoset can set sweep speed to invalid value (TDS 310 only).
3. TIFF hardcopy contains bad data after an interrupted hardcopy.
4. Trigger level not restored at powerup when probes are attached.
5. Cursor position not restored when SET? is returned to the instrument.

TDS 420/460 v2.55 from v1.xx (040-1571-00)

Version 1.2 to 1.3

Bug Fixes:

1. Internal operation improved. Changes not noticeable by operator.
2. The trigger level when using AUX trigger sources is now set correctly. The level is fixed at 1.6V for all trigger coupling but AC, and is set to 0.2 for AC trigger coupling. The gain and offset values for AUX trigger source have also been corrected.
3. Video trigger in PAL, the selected line count is now correct.
4. Trigger (and all derived timing) is based on rising (trailing) edge of the sync pulse. Should be falling (leading) edge. Fixed by hardware change.
5. Holdoff in video trigger customer was following the holdoff set in the previous mode. It is now set to zero upon entering custom.
6. PAL line selected stops at 625 (313 for fld1 and 312 for fld2). NTSC stops at 525 (213 for fld1 and 212 for fld2). Also introduced a "requested line" feature that allows the selected line to return to a larger number when fields change (allowing a relaxed upper limit).
7. Vertical calibration improved.
8. Video Trigger diagnostic timeouts changed.

Version 1.3 to 2.5 (no version 2 below 2.5)

New features:

1. Roll Mode and triggered Roll Mode
2. Template Testing
3. Setup Save Status (Factory / User)
4. Intensified Real Time Samples
5. EPS Color Hardcopy (Tek Phaser Printer)
6. Vector Postscript Hardcopy (EPS Image)
7. EPS Monochrome Hardcopy
8. TIFF Hardcopy Format
9. 15k Record Length Standard (previously 5k), (opt 1M: 60k at S/N B020000 and up only)
10. Hardcopy Time and Date Stamping
11. Waveform Save Status (empty/full)
12. Trigger Level Bar
13. 26 Measurements with Snapshot Capability
14. V@T Paired Cursors
15. Zoom Horizontal Lock All Waveforms
16. Tek Secure

No significant bug fixes on record.

Version 2.5 to 2.5.1

Bug Fixes:

1. Invalid MFP interrupt error occurs at less than 1% rate; but no entry into the Error Log.
2. Error Log sometimes gets "trashed" or does not get cleared with the "clearerr" utility.
3. Slow trigger in NORMAL trigger mode bug.
4. Intermittent TBI diagnostics failure.
5. Loadopt hang up problem.
6. Trigger position gain calibration bug.

Performance improvements:

GPIB speed-up to improve CATS throughput.
Eliminate intermittent bus error which shows up in stress testing.

TDS 420/460 v2.55 from v1.xx (040-1571-00) cont.

Version 2.5.1 to 2.5.4

Bug Fixes:

1. Random noise can be displayed when using the FFT math option.
2. TDS400 real time clock loses year setting.

Version 2.5.4 to 2.5.5

Bug Fixes:

1. In ROLL mode there is a timing skew between channels. it becomes progressively worse as the record length is increased.
2. IIC clock calendar is not programmed correctly. It needs to be read and written twice for any transaction to be legal. Currently this is only being done once.
3. Code for FFT's is using improper instruction.

Version 2.5.5 to 2.6.0

TDS400A CPU and DSY boards were brought into the TDS420 and TDS460. The FW and option key disks had to be changed to accommodate the change. FW is not backward compatible to previous versions. No bug fixes.

TDS 4x0A v1.02 from v1.00

Version 1.0 to 1.0.2

Bug Fixes:

1. Ref to files writes incorrect header to some RLs.
2. Floppy driver does not wait for READY to assert.
3. Attempting to read floppy files created on Sparcs hangs instruments.
4. Paired cursor vertical values wrong after zoom turned off.
5. Vbar cursors do not work in tracking mode.
6. Vertical positioning in Roll Mode can cause incorrect CH3 & CH4 acquisitions and display.
7. Meas on math waveforms use incorrect Vert Scale on T/Div changes.
8. Acquisition averages rounding is funny.
9. Memory leak in Vxworks File System.
10. Vert scale incorrect when recalling a setup with a math waveform.
11. Remove Copyright info from Banner, add sticker instead.
12. RS-232 flagging must be switched On/Off in order to successfully set flagging.
13. TDS460A has blank display after boot-up. 142. fillTracePlanesHwActions incorrect for else branch (dsyHwActions.c).
14. Not enough adjust in horizontal position pot for PAL masher display board.
15. Landscape hardcopy for .BMP/.IBM formats does not work properly.
16. Rename of wildCardName in Hardcopy file utility not active soon enough.
17. Floppy READY delay (0.5 sec) not long enough for Panasonic drive.
18. Math waveform scaling incorrect on dual wfm math on startup.
19. Disk Full Error in File System. fdd retry failures show up in error log,

TDS 520/540 v2.16 from v1.xx (free upgrade)

Version 1.08 to 1.10

Bugfixes:

1. Improved internal diagnostic.
2. GPIB Pointer bug.
3. SPC Calibration improved.
4. Improved Acquisition Ram Test diagnostics.
5. Autoset enhancements.
6. Trigger Calibration fixed.
7. Stress Test bug.
8. Clock ghost on scope status display bug.

Version 1.10 to 2.09

Bugfixes:

1. Gated Measurements added.
2. FW updated to support interleave HW mod.
3. Unneeded Error Log entry when INIT 50 is pushed while in Delay Trigger Menu needs to be eliminated.
4. FiftyOhmLoss needs to be corrected from 0.99 to 0.9925.
5. Single-shot Waveform On/Off bug fixed.
6. A-D Converter thermal cutout changed from 75 degrees C to 85 degrees C.
7. Power-on copyright time-out bug.
8. Turn on Zoom with Ch1 and Ch2 on. Select Horizontal Lock=none. Move Horizontal position of Ch1. Turn Ch2 off. Turn Zoom off. Move Horizontal position of Ch1. Turn Ch2 on. The Trigger points of Ch1 and Ch2 are not aligned until the horizontal position control is changed.
9. Linearity zooming a peak detect waveform when the starting time/div is 100nS or 50nS for a TDS540, or 100nS for a TDS520, or at any valid equivalent time/div. This combination produced a display of scrambled data.
10. 2.5 X acq. linear interpolation over writes waveform, producing bogus data. This occurs with one channel, repet off, 20nS/div, acq mode=envelope or average, interpolation=linear.
11. Record length change only effects the active timebase. Therefore you can have a mismatch of record length between the main timebase and the delay timebase.
12. Timer related functions stop working after a WFMPRE or CURVE command is sent to the instrument. Time related functions include: auto-triggering, variable persistence display trigger-T slope updating.
13. Turn power off with cursors on. Turn power on. The general purpose knob cannot be attached to the cursors unless the cursors are turned off, then back on.
14. In delayed timebase, have a math form on a live channel, e.g. Ch1. Change the record length from a higher to a lower setting causes the math waveform to appear funny on the display.
15. CURVE command causes a bus error.
16. Result of "wfmpre:ch1" is not resendable to the scope.
17. If you are in main timebase, and go into the Delay Trigger menu, select trigger level, and do INIT 50, you will get both a popup warning message on screen and an entry in the error log. There should only be a warning, and no error log entry.
18. Several internal commands were improved.

TDS 520/540 v2.16 from v1.xx (free upgrade) cont

Version 1.10 to 2.09

Feature Enhancements:

1. Fine/coarse Knob Operation - "Coarse Knobs" indicator in upper right hand corner of display when shift is pressed.
2. Edge and Runt Trigger Level Bar.
3. Setup - Show either factory or user.
4. Save waveform - show either empty or active.
5. Paired Cursors.
6. Tracking Cursors.
7. Simple Limit test for Ch1-4, inside limit.
8. Limit test template creation.
9. Time qualified pattern trigger.
10. Real Samples Only (display style - intensified Samples)
11. Tek Secure.
12. Delay by events, then by time.
13. Area measurement.
14. Measurement Snapshot.
15. Phase measurement.
16. New hardcopy formats
 - TIFF (Tag Image File format)
 - PCX (PC paint mono image file format)
 - BMP (Microsoft window file format)
 - EPS Image (Encapsulated Postscript image - mono or color)
17. Hardcopy spooler.
18. Date/Time for hardcopy documentation.
19. With new front panel:
 - Probe gain and offset calibration for optional P6205.
 - Improve General Purpose Knob operation.
 - Easier Single-Shot - user can press "shift-Force Trigger" to put scope in "Stop After Single Acq Sequence" and then do one single sequence.
20. With Option 2F, Waveform integrate and differentiate. Simple FFT, FFT cursors.
21. With Option 13,RS-232 hardcopy

Version 2.09 to 2.14 (TDS520) and 2.13 (TDS540)

Bugfixes;

1. Power-on SRQ stays on with V2.13e and 2.14e. in previous releases, PON SRQ drops off on instrument powerup.
2. The waveform is horizontally shifted 8 points when Time/Dive changes.
3. With paired cursors on and no trace, scope locks up if General Purpose knob turned.
4. Change source channel for measurement snapshot, auto triggering is disabled.
5. Probe calibration is susceptible to noise by running at full bandwidth.
6. SPC reports false Balance error.
7. Scope locks up due to automatic bus arbitration time-out when limit test is on with long record length (≥ 5000 points), and user changes Time/Div.
8. Help text for Delay Trigger Time menu, where the ranges should be from 16nS to 250S, instead 4nS to 250S.
9. Cursor resolution bug.
10. SaveRef menu update bug.
11. Response to Front Panel is sometimes slow.

TDS 520/540 v2.16 from v1.xx (free upgrade) cont

TDS520 only: version 2.13 to 2.14

Bug Fixed:

1. Trigger offset for Aux1 and Aux2 is incorrect for AC, HF Rej, LF Rej, and Noise Rej is wrong. It only worked with DC Trigger and Coupling.

Version 2.14/2.13 to 2.15

Bug Fixes:

1. Average acq. mode algorithm wrong. Average weighting wrong, off by a factor of 2.
2. Hardcopy to HC100 or HC200 problem. Instrument locks up under certain scope setups with multiple measurements on screen.

Version 2.15 to 2.16

Bug Fixes:

1. Excessive noise on FFT Math waveform.
2. Intermittent lock up during power up.

Upgrade from 1.xx to 2.xx requires calibration with full adjustments

TDS 520B/540B see TDS7xxA from v4.0

TDS 520C/540C see TDS724C etc. v5.11 from v5.0

TDS 54xA 3.87 from v3.4

TDS544A: 3.4 to 3.7

Bug Fixes:

1. Fix bad instruction for FFT routines.
2. All console putChar routines will now time out due to transmitter not ready. This problem shows up as a power up lock- up unless a console is attached.

TDS540A: 3.8 to 3.8.2

Bug Fixes:

1. Persistence mode does not display waveform.

TDS520A/524A: 3.8 to 3.8.2

Bug Fixes:

1. Persistence mode does not display waveforms. Affects TDS520A only.

TDS540A/544A: combined to 3.8.3

Bug Fixes:

1. A power up initialization problem with the D2 memory results in invalid error being logged to the diagnostic error log.

TDS520/524A: 3.8.2 to 3.8.6

Bug Fixes:

1. Fixed problem of unit not powering up after being shut off for a short time (1 - 7 seconds)

TDS520A/524A: 3.8.6 to 3.8.7 and TDS540A/544A: 3.8.3 to 3.8.4

Bug Fixes:

1. If the user is looking at signals above 300Mhz and changes the input signal, the scope may lock up.
2. If the user runs diagnostics from the front panel and does a warm boot, the scope may begin buzzing (relays being rapidly turned on/off) and then lock up.

TDS 620/640 v2.06 from v1.01 (free upgrade)

Version 1.01 to 2.04

Features added:

1. Setup shows either factory or user.
2. Save waveform - shows either empty or active.
3. Paired cursors.
4. Real Samples only (display style - intensified sample).
5. New hardcopy formats:
 - TIFF
 - PCX
 - BMP
 - EPS
6. Date/Time for hardcopy documentation.
7. Probe gain and offset calibration.
8. Features added with Option 2F.
9. Features added with Option 13

Version 2.04 to 2.06

1. Bad Instructions for FFT routines.
2. All console PutChar routines will now time out due to transmitter not ready. This problem shows up as a powerup lock up unless a console is attached.

Upgrade from 1.xx to 2.xx requires calibration with full adjustments

TDS 620A v3.86 from v3.82 and TDS640A/644A v3.85 from v3.84

TDS620A: 3.8.2 to 3.8.6 and TDS640A/644A: 3.8.4 to 3.8.5

Bug Fixes:

1. A power up initialization problem with the D2 memory results in invalid errors being logged to the diagnostic error log.

TDS 684A v1.10 from v1.0

Version 1.0 to 1.01

Version 1.01 to 1.1

Bug Fixes:

1. 1.5nSec Jitter at fastest acquisition rates.
2. User warning and error log entry for loss of acquisition cal data.
3. TRIGGER:DELAY:TIME: ACTUAL? added for GPIB access to real delay times.
4. Runt trigger skew calibration correction for CATS.
5. User initiated diagnostics crash mode correction.
6. Aux trigger slope update correction.
7. Shortened power up diagnostics to allow re-enabling for customers.

TDS 684A v4.3 from v1.xx (TDS68U01)

Version 1.10 to 4.2 (TDS68U01 same as B-model)

New features:

1. 1 nS Peak Detect
2. Dual Window Zoom
3. Channel Deskew
4. Time-out Pulse Trigger
5. Spreadsheet MathCad data output formats
6. Color Deskjet printer support

Version 4.2 to 4.3

Changes:

1. Now compatible with Panasonic Floppy Disk Drive (TWINS article pending).

Bug Fixes:

1. TDS600B can wait for 750mS + 505mS for floppy ready or 750mS when should not. (This was the change made to make the TDS600B's and Panasonic FDD compatible.)
2. TDS600B digFisoShortPipeDiag failures.
3. Lorena (TDS600B) runs after delay 0.1% off at slow times/div
4. Acquisitions lose sync with trigger.
5. TDS600B info files instr string says TDS684B, others supported.
6. wfm files are no longer compatible.
7. Simple floppies created on a Sparc (workstation) can not be read on instrument.
8. Stress test enhancements to correct stress crashes.

Upgrade from 1.xx to 4.xx requires calibration with full adjustments

TDS 744A/784A v1.1 from v1.0

Version 1.0 to 1.01

Bugs Fixed:

The bug fix list is:

1. Interleave problem at 25nS/div and 500K record length.
2. Cursor Tracking not working.
3. ET Average mode truncated bug.
4. Intermittent lockup during user-initiated diagnostics.

Version 1.01 to 1.10

Instavu Acquisition Feature Update:

1. Auto Trigger Mode now available in INSTAVU Acquisition.
2. Faster Update of Acquisitions (almost 4 times faster) in Equivalent Time Mode for single channel.
3. Allow INSTAVU operation in Delayed Trigger acquisition.
4. Force Trigger is now operational on INSTAVU Acquisition Mode.

Bugs Fixed:

1. Trigger point shift by 2 nS and 4 nS from main trigger to INSTAVU in Delay mode.
2. Paired cursor vertical values wrong after exiting "Zoom mode".
3. Logic Trigger loses trigger when going 'in' and 'out' of logic trigger. Subsequent to triggering using logic trigger mode, and changing to EDGE mode and re-entering LOGIC trigger mode, the oscilloscope loses its trigger. The only way to trigger again is to go back and set logic thresholds again.

TDS724A, TDS744A, TDS754A, TDS782A, TDS784A v4.21 from v1.x (TDS7U01)

Version 1.10 to 4.0

1. Wider time range for variable persistence (from 250 ms – 10 s to 32ms to 10 s) enables better visualization of fast changing waveforms, especially in Instavu mode.
2. Channel Deskew - Aligns input signals by nullifying differences in timing created by unmatched probe or cable lengths. Enables better measurement accuracy.
3. Time-out pulse trigger - Allows the DSO to trigger on transitions that do not occur when they are expected to occur.
4. HP Color Deskjet Printer Support
5. Support for TCP202 Direct Readout Currents Probes. Allows measurements in Amperes and Watts (Volts * Amperes).

Version 4.0 to 4.1

No changes, only new products added.

Version 4.1 to 4.21

Bugs Fixed:

1. Acquisition error after repeated Volts per div changes leaving acquisitions in a state where the data appear garbled.
2. 4ns jitter in Fastframe Delayed Runs After mode

No new features have been added

NOTE:

set-files on floppy from v1.xx cannot be read with v4.xx

Upgrade from 1.xx to 4.xx requires calibration with full adjustments

TDS724C, TDS754C, TDS784C v5.11 from v5.0

Version 5.0 to 5.11

Bugs Fixed:

1. The eye diagram Autoset always set the trigger level based upon the mask source channel voltage level.
2. If the TDS was powered off with Extended Acquisition on, a power up error message, "Invalid Selection" would occur. Nothing was wrong with the TDS, but the error message could cause a customer to think something is wrong.
3. Probes would not calibrate on the Aux channels of 2+2 scopes.
4. When the operator moved the horizontal position knob the mask tests and histograms looked like they were not working properly.
5. NTSC field triggering was not working correctly in version 5.0 firmware.
6. The extinction ratio measurement had an artificial lower limit of $5\mu\text{W}$ in its calculation. This could cause invalid measurements on some customer signals.

New features:

1. There is now an on screen pass/fail indicator available in the mask counting menu.
 - This pass/fail readout provides an easy to see visual indication of mask failures.
2. The mask testing can now be stopped after a requested number of waveforms has been acquired. - When testing communication devices, many customers want to perform the mask test for a fixed number of acquisitions.
3. Mask Autoset can now set to a user defined mask based upon the boundaries of a standard mask. - This enhanced Autoset capability allows the customer to modify an existing standard mask and still use Autoset. This feature will also allow customers to use the optical reference receiver filters with a user defined mask.
4. The standard mask Autoset function now sets the waveform baseline by adjusting vertical position, not vertical offset. - This change makes it easier for customers to make slight adjustments to their signal's vertical position relative to the mask.
5. The user can now turn off the hardware and software portion of the optical reference receiver (ORR) filter with the filter: enabled/disabled menu button. - This operation previously took two separate keypresses. Now a customer can quickly evaluate his signal with the ORR filter on or at full scope bandwidth.
6. The 250 MHz or 20 MHz bandwidth limit filters will now remain on when doing a standard mask Autoset on low data rate telecom signals. - Some customers prefer using a bandwidth limit filter to make it easier for their signal to pass the mask test. Autoset previously turned the filter off.
7. A readout of the calibrated P670XB OE probe serial number was added to the status page. - This additional readout allows customers who have option 3C or 4C to easily identify which probe is calibrated with their TDS.
8. An additional menu item, "Ethernet", is available under the communications mask type pop-up. - This new menu groups all the Ethernet masks logically and makes them easier to find.
9. The Gigabit Ethernet mask has been updated to the current, revised version (IEEE Draft P802.3z/D3) - As the Gigabit Ethernet standard matures, this change ensures that our products contain the current mask testing requirements.
10. Two masks for the 100Base-T Ethernet standard were added. - These masks address the requirements of customers designing FastEthernet devices.
11. Six masks for the 10Base-T Ethernet standard were added. - These masks address the testing requirements of customers designing 10 Mb/sec Ethernet devices.
12. The standard mask Autoset algorithm for DS1, DS1A, DS1C, DS2, and DS3 signals has been improved. - This improved Autoset algorithm will address some customer signals that failed to set correctly in the standard masks.

TDS724C, TDS754C, TDS784C v5.11 from v5.0 (cont)

13. The AMI isolated triggers have been corrected to match telecom standards. The isolated ones patterns are listed in the comm trigger help screen. - The isolated ones trigger patterns are now correct for all standards.
14. For ITU-T AMI signals, the isolated ones trigger capability was changed to triggering on an all ones signal. - The ITU-T standards such as E1, E2, and E3 are typically tested with an all ones signal, not an isolated ones signal.
15. A "time details" version of the DS3 mask was added to the T1.102 mask standards.
- This new DS3 mask shows more signal details in the center of the pulse by expanding the mask to use the entire width of the TDS display.
16. Two new ITU-T masks, ITU-T DS1 and DS3 were added. - These masks existed in the CSA/11800 and have been requested by our customers.
17. A new mask for SMPTE 259M-D, 360 Mb/s serial video was added. - Addresses a new serial video standard.
18. The speed of the TDS User Interface and GPIB has been improved. - Customers should see a typical 1.5 times improvement in execution times versus the original TDS 700C/500C models.
19. A new capability allows the user to move the histogram box vertically or horizontally.
- This improvement makes moving the histogram box easier for the customer. Previously they had to move the histogram box boundaries in order to move the box.

TDS 820 v2.03 from v1.06 (free upgrade)

Version 1.06 to 2.0

New Feature:

1. Adds Option 13 and 2F capabilities.

Version 2.0 to 2.01

Bug Fix:

1. Fixed Trigger DAC Settling time which was not processed correctly.

Version 2.01 to 2.03

Performance Improvement:

1. Modification to the deskew parameter allows it to range up to 200nS when used with the New Acquisition board or later versions.

Upgrade from 1.xx to 2.xx requires calibration with full adjustments

TLS 216 v1.00 to v1.03

Version 1.0 to 1.01

Bugfixes:

1. A power up initialization problem with the D2 Memory results in invalid errors being logged to the diagnostic error log.

Version 1.01 to 1.02

Bugfixes:

1. Delay Skews do not update.
2. Vertical position from Front Panel can wrap the trace. Modified cod to properly set limits based on the zoom/non-zoom mode selected. Vertical Position range is now +/- 10 divisions, up from +/- 5 divisions.
3. VertPos range incorrect after recall.
4. Zoom on, VertPos menu greyed out.
5. Dip switch #3 suppressed all FP diagnostics. Provided a reasonable set of powerup tests so that the #3 Switch no longer needs to be set to skip diagnostics. This also enables Front Panel diagnostics. This will add 20 seconds to powerup.
6. Hardcopy in Single Seq. doesn't always match display.
7. CH1:POS? always returns 0.0. This is as it should be. Users should be using GROUP<x>:POS? for the query the user expected. No code change.
8. Remove Patent info from banner, add sticker instead. Removed the Patent: list from the banner. Will require adding a sticker to the product.
9. FISO cal constants lost, NV memory problem?. Added a menu popup at powerup which tells the user when NV cal constants have been reset, i.e. a new SPC is needed.
10. WFMPRE:GROUP<x>: YMULT? resolution incorrect. Changed resolution from 0.001 to 0.0001 so users can determine original V/Div settings via GPIB.
11. Several manufacturing specific bugs were also corrected.

Performance Improvements

1. Power up diagnostics are now enabled, so powerup takes about 20 seconds longer than with previous releases. Diagnostics are now available from the Front Panel menu selections. After 1.0.2e is installed Processor Dip Switch #3 needs to be set in the closed position (is left open now) so that powerup and front panel diagnostics will be enabled.
2. Manufacturing will add a "patent sticker" to the instruments to compensate for the removal of patent information from the Banner screen.
3. Users should note that if the vertical position in zoom mode is set to greater than 10 divisions, it will be clipped to 10 divisions when going to non-zoom mode. When zoom mode is selected again, the vertical position will remain at the non-zoom value, though the displayed position may be the original zoomed value. Changing either the VertScale or Vert Position will re-synchronize the display trace with the reported vertical position value.

TLS 216 v1.00 to v1.03 cont

Version 1.02 to 1.03.

Bugfixes: none

Performance improvements:

The FW was revised to make TLS216 compatible with the new Panasonic FDD.