WITE32™

Release Notes

Version 2.67

10/5/2001

Table of Contents

CHAPTER 1

INTRODUCTION

The 2.67 release incorporates the new features and bug fixes introduced after WITE32 2.66 release. (This document uses WITE32 2.66 release notes as a base line for comparison.).

CHAPTER 2

NEW FEATURES

2.1 Delayed Read Gate in Spectral Measurements

All spectral measurements are performed in a narrow bandwidth about 100 kHz. For this reason output signal of Spectrum Analyzer (Overwrite filter) has significant rise/fall time and delay as well. To read the amplitude of this signal in proper time, the special "spectral read gate" is generated. This gate is delayed and shortened comparing with the common read gate (22 μs delay and 12 μs shorter).

Note: "Spectral read gate" is used for spectral measurements only. It doesn't affect any other measurements. If sector becomes too short, the warning message "Error: TAA measurement through the overwrite filter failed. Probably read gate was too short" pops up.

2.2 New Signal Source in Guzik Signal Display

A new signal source is added to the *acquisition* list on the *Signal Display* dialogue box.

It is an *Envelope* signal. By selecting this source you can monitor the envelope, captured by the Envelope Memory board during TAA measurements.

2.3 Band Erase

1. Two new choices are added to the *Direction* frame in the *Band Erase Operation* setup:

   - *Interleave* – if checked, odd tracks are erased with Positive DC, and even tracks are erased with Negative DC.

   - *AC Erase* – if checked, Fluxes of the specified frequency are written.

2. The following are the two setups for *Band Erase* from the *Dashboard* (1) and for the *Band Erase Operation* from the production sequence (2).

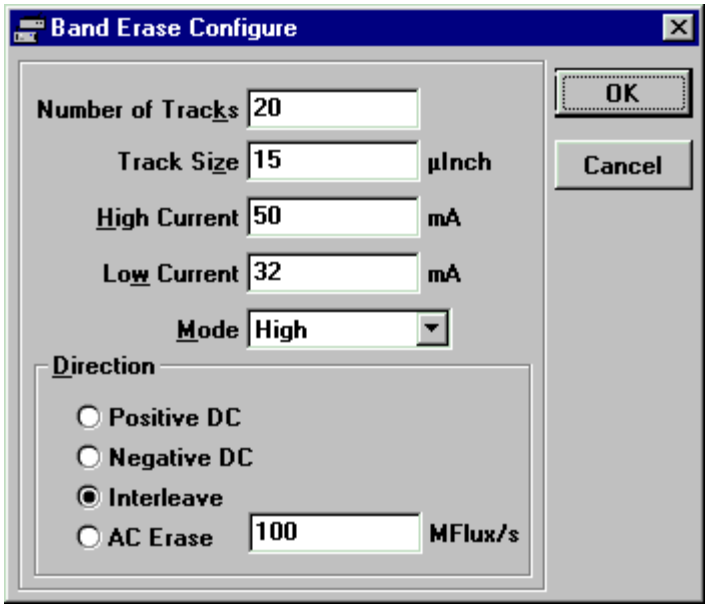


Figure 1 *Band Erase* Configure dialogue box for the *Dashboard*

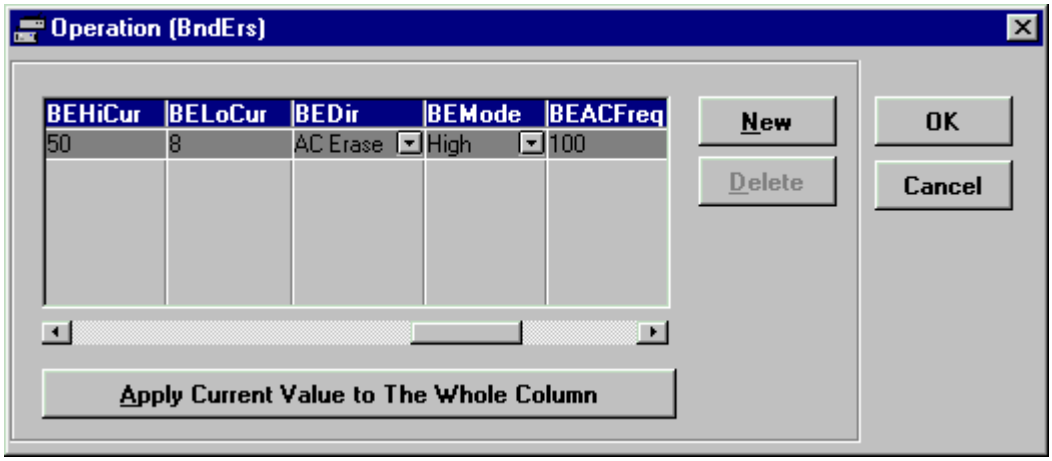


Figure 2 The *Band Erase Operation* setup in the *Test Sequence* frame of the *Production* dialogue box

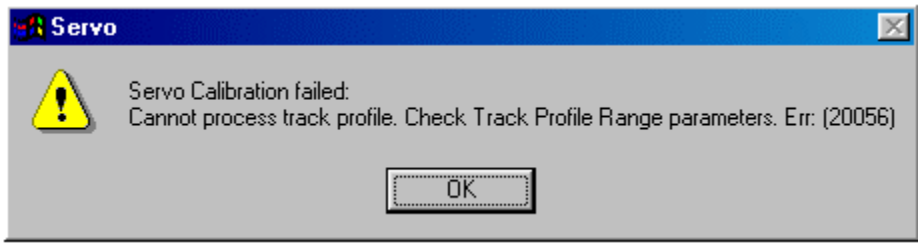
2.4 Servo Calibration for Servo-2 (applicable to 1701B spinstands)

1. The Servo calibration procedure is changed to calculate servo pitch as ServoPitch = (WriterWidth + ReaderWidth) / 6 instead of ServoPitch = WriterWidth / 2. It improves servo performance for the heads with high WriterWidth / ReaderWidth ratio.

Note: We recommend you to recalibrate servo after you upgrade to WITE32 ver 2.67 for better performance.

2. The servo calibration procedure is changed to perform the Servo Filter calibration using the signal from the media. This change improves the servo system dynamic range, but the calibration procedure takes more time.

3. The wording of the warning message is changed. If *From*, *To* or *Step* parameters in the *Servo Calibration* setup (*Track Profile Range* frame) are selected wrongly, and the WR Offset or track pitch calculations fail during the servo calibration, the following error message pops up:



In the previous revisions of WITE32 the "Component failure: Illegal argument %s%s(20052)" message was shown instead.

2.5 Write/Read Offset Test

Four new options are added to the *Write/Read Offset* setup dialogue box.

- *Apply to the Setup in the Current Zone* (default) – if checked, the calculated *Write/Read Offset* value is currently set in the system but is not saved to the Product folder. The measured Write/Read offset will be effective until you go to different Zone or Setup or stop the device. The *Write/Read Offset* test operates this way in all pervious revisions of Wite.

- *Save to the Setup in the Current Zone* – the calculated *Write/Read Offset* value is currently set in the system and is saved in the Product folder for this particular Setup.

- *Save to all Setups in the Current Zone* – if checked, the calculated *Write/Read Offset* value is currently set in the system and is saved in the Product folder for all Setups in the current Zone.

- *Save to all Setups in all Zones* – if checked, the calculated *Write/Read Offset* value is currently set in the system and is saved in the Product folder for all Setups in all Zones.

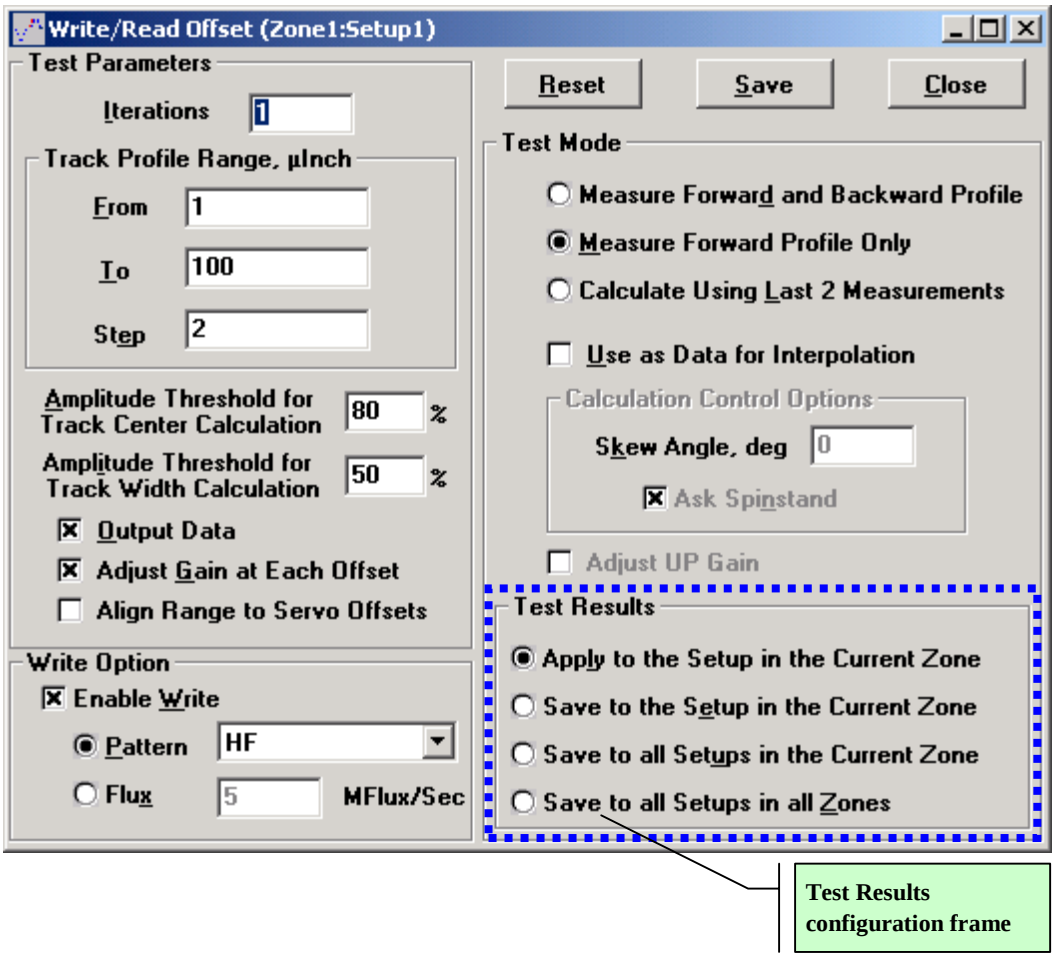


Figure 3 The *Write/Read Offset* setup configuration window

2.6 Guzik Graph

The Adjust property value (in the *Options* | *Preferences* menu, *Axes* tab) now can be saved.

2.7 Head Amplifiers

1. The following head amplifiers are initially supported in WITE32 ver. 2.67:
   - SR1795
2. The following head stacks are initially supported in WITE32 ver. 2.67:
   - LILIPUT - ARES_LILIPUT
   - SR1715ABA - ARES_1715
   - SR1761ACA - ELDORADO1761
   - CINNABAR_MAGELLA - MAGELLAN.

2.8 Spin Stands

This version supports the Spinstand Multiplexer configuration for 1701B spinstands.

2.9 EEPROM viewer (WEEPVIEW)

Two new features are implemented in the WEEPVIEW application.

1. WEEPVIEW reads and reports the parameters of the Guzik Boards that are installed in PCI slots of a PC (Guzik Host Adapter and Beetle) not only when RWA power is on but also when it is off.
2. The current revision of the Guzik Host Adapter driver (Windrvr) is reported in the PAL column. This revision is 5 for the 2.67 revision of WITE32.

2.10 Miscellaneous

1. If the *Part ID* field in the *Configure* | *Identification* window contains a string that starts from the "ANA" substring, the WITE32 updates this field to a string with format “ANAxxxxx_SCByyyyy”, where “xxxxx” is the Analog Box Serial Number, and “yyyyy” is the Spinstand Control Box Serial Number (if 1701B spinstand with SCB-02 connected).
2. The “TAA Stability Range” result of the Amplitude Stability test is renamed to “TAA Stability COD”.
3. The minimum *Track Size* in the *Configure* | *Device* dialogue box is reduced from 10 µInch. to 0.1µInch.
4. An additional diagnostic of Spectrum Analyzer frequency settling is implemented. Two warning messages: “Spectrum Analyzer: PLL 1 is not locked after initialization” and “Spectrum Analyzer : PLL 2 is not locked after initialization” pop up if the Spectrum Analyzer frequency has not successfully settled in time.
5. The PCIHACNF application is excluded from the WITE32 installation disk.
6. The *Track* textbox on the *Dashboard* displays up to six digits instead of five digits in the previous releases of WITE32.

CHAPTER 3

FIXED BUGS

The following bugs were discovered in WITE32 ver.2.66 or earlier, and fixed in WITE32 ver.2.67. The description below explains the bug behavior as it appeared in WITE32 ver.2.66.

3.1 Head Amplifiers

1. The following bug is fixed in the head stack driver:

   - 81G5014R2 - PUMA2 – BW Read Bandwidth property is described but not supported.

2. If a head amplifier name contains the hyphen symbol "-", the "Failed to open <HEADAMP NAME> in HDA.MDB. Syntax error in FROM clause" pops up during a new Zone or Setup creating.

3.2 Servo

1. In the *Write Servo Configure* setup window the *From* and *To* parameters are shown aligned to the microstep value, while these parameters have to be shown aligned to the *Servo Step* when the *Run Offsets Calibration* option is checked.

2. The *Write Servo* operation does not write the Servo signal if a PRML chip pattern is selected as a system pattern.

3.3 Miscellaneous

1. It is not checked whether the *Track Size* parameter in the *Configure* | *Device* dialogue box is in the allowed range.

2. The default value of the *Acquisition Time* from the *Digital Measurement* parameter collection is wrong. So it is substituted by the minimum value and shown in green when you open the *Control/Digital Measurements* dialogue box first time, before selecting/saving the parameters. As a result the Guzik PRML channel and digital measurements do not work.

3. There is an error in the Read Gate calculation that leads to the wrong (too long) hardware gate setting in the case of a very short gates of 25 bytes or less.

4. A lot of error messages pop up when you try to install the WDCP module from the *File* | *Select Modules…* dialog for the product, in which the IMAN driver is selected.

5. In the Triple Track profile test a user selected write current is ignored, and the default current is used instead. For low default currents the erasure is insufficient and the test gives wrong results.

6. The "Invalid State Changing Rule (Test) for Current State (Test)" message pops up intermittently when the *Test* counter on the *Dashboard* is set to "Loop" and the test is running infinitely.

7. The "Cannot enable direct I/O" message pops up on loading Weepview application under Windows2000, and the application does not start.

8. If the Read Bias Voltage mode is selected (*Control* | *Head Amp…* dialogue box), you cannot open the *Zone Data Editing* dialogue box for the *Read* current editing on the *Control* | *System* dialogue box. If you double click the *Read* label on the *Currents* frame, the *"Type mismatch"* error message pops up, and *Zone Data Editing* dialogue box does not appear on the screen.

9. If you press the *Reset* button on the *Control* | *System* dialogue box, the *Read* current value changes beyond the limits and appears in read.

10. The results of TAA calibration (*Calibration* | *TAA* dialogue box) are always saved. After TAA calibration finishes the "Calib Factor… "OK" or "Cancel" message pops up, but the program ignores your choice and always saves the calibration factor.