GUZIK PRODUCT BULLETIN

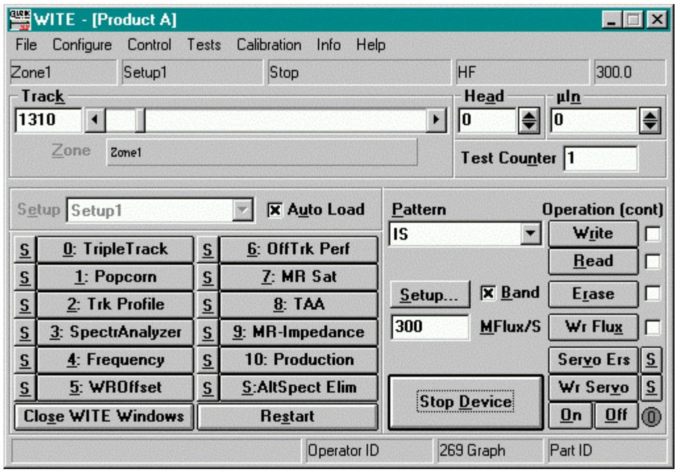
WITE32™

Windows Integrated Test Environment

Production and Engineering Mode

Digital Test Capability

Servo Support



Track 1310

Head 0

µIn 0

Zone Zone1

Test Counter 1

Setup Setup1

☒ Auto Load

Pattern IS

☒ Band

300 MFlux/S

WITE32 is the latest Guzik software package for Read/Write Analyzer (RWA) control. The open design architecture of the package provides flexibility and expendability to both user and designer. WITE32 is developed under Microsoft Windows 32-bit environment using Microsoft Visual Basic and Microsoft Visual C++. WITE32 has identical setups for engineering and production.

GUZIK
Technical Enterprises

Feature Support

WITE32 supports all features (such as PRML channels, Guzik servo, analog and digital parametric tests etc.) for current Guzik RWA models and all Guzik spinstands.

Open Software Architecture

WITE32 environment supports integration of user-defined external tests, called *external modules*. You can create external modules using Microsoft Visual Basic or Visual C++, using a simple interface protocol.

Results Output

WITE32 displays test results (including user defined tests) in a user-configurable spreadsheet style. You control the decimal point precision, fonts, width, and sequence of each displayed result. By enabling a history database (either locally or on a network) the results of all tests are stored in that database for manipulation (using Microsoft Access, or the data can be exported to any format that Microsoft Access supports, such as Lotus or Excel). The run-time results are kept in memory, which allows for faster execution of the tests.

Grading and Normalization

WITE32 production environment supports an unlimited number of grades, which are color-coded for easy reading. Simply dragging the grade definition line higher or lower in the stack performs grade prioritization. Grades are defined for both individual heads as well as entire head stacks. When a grade fails, you can easily check the failed parameters. **WITE32** normalization system can be enabled to generate correction factors that correlate results to a set of goal measurement criteria. User defined tests are included in grading scheme.

WITE32™ Standard Tests

Parametric Tests

- TAA Test
- Overwrite Test
- Asymmetry Test
- Pulse Width Test
- Parametric Test
- Read-Only Parametric Test
- Signal-to-Noise Ratio Test
- Spectral Signal-to-Noise Test
- Spectral Integral Signal-to-Noise Test
- Amplitude Stability Test
- Sector Amplitude Stability Test
- Resolution Delta Test
- Pulse Width Stability Test

Composite Tests

- Frequency Test
- Saturation Test
- Track Profile Test
- MR Saturation Test
- Pulse Profile Test
- Comparator Error Rate Test
- Off-Track Performance Test
- Set RPM Test
- Spectrum Analysis Test
- Triple Track Test

Error Tests

- Comparator Test
- Popcorn Test

MR Tests

- TAA Asymmetry Test
- Pulse Width Asymmetry Test
- Pulse Stability Test
- Write/Read Offset Test
- MR-Impedance Test
- WR-Impedance Test
- Head Polarity Test

NLTS Tests

- Pseudo-Random Sequences
- Alternative Spectral Elimination Test
- Third Harmonic Ratio Test
- MR Transfer Curve Test
- Alternate Overwrite Test
- NLTS vs. Write Current Test
- Signal/Noise Ratio Test

PRML Tests

- Sequenced Amplitude Margin (SAM) Test
- Sampled Values Distribution (SVD) Test
- Guzik Channel Optimization Test

Digital Parametric Tests (with RWA-2585 family)

- Digital Parametric Test
- Signal Profile

Spinstand Tests

- Servo Position Error Signal Test (PES Test)
- Off-track Modulation Test
- Scale Correction Test (Optional Purchase)

WDCP Tests

- Balancing (for 1701 and 312 spinstand families)

Spinstand 2002 Tests

- Balancing (for V2002 spinstands)
- XY Alignment
- Head Alignment

WCALC – WITE Calculator

- WITE Calculator for Tests

Optimization Tests

- System Optimization

2443 Wyandotte Street
Mountain View, CA 94043
Phone: (650) 625-8000
FAX: (650) 625-9325
E-mail: sales@guzik.com
http://www.guzik.com/

WITE32™ Optional Purchase Tests

WESA – Write Excited Sectored Amplitude Tests

New

- Separate Amplitude Asymmetry Stability
- Triple Amplitude Asymmetry Stability
- Write Induced Instability
- Pole Erasure

WATI – Adjacent Track Interference Tests

- Adjacent Track Interference Test

Micro-Actuator Tests

New

- Stroke Test
- Mechanical Frequency Response Test
- Micro-Actuator Loop Setup Test
- Micro-Actuator Loop Frequency Response Test

Perpendicular Parametric Tests

- Differentiator Optimization
- Roll-off
- Rise and Fall Time
- Saturation Asymmetry
- Amplitude Asymmetry

MSCAN – Media PRML Scanning Tests

- Extra Pulse Detection
- Missing Pulse Detection
- Thermal Asperity Detection

GMA Tests – Guzik Media Analysis

- Low Erase Current Test
- Multitrack Critical Erase Current Test
- Transitional Noise Test
- Critical Current Tests
- Missing Pulse Test
- Extra Pulse Test
- Undershoot Test
- Envelope Analysis Test

747 Tests

- 747 Comparator Error Test

Triple-Track Tests

- Triple-Track Signal-to-Noise Test (with 747 option)

GUZIK
Technical Enterprises

2443 Wyandotte Street
Mountain View, CA 94043
Phone: (650) 625-8000
Fax: (650) 625-9325
E-mail: sales@guzik.com
http://www.guzik.com/

REV05/2005 Guzik Technical Enterprises Part Number: 02-105694-05

WITE32™ Extensions

WDK32 – WITE Developer's Kit

WDK32 is a software package that allows you to create external test modules for WITE32 using Microsoft Visual Basic or Visual C++ revision 6.0. The compiled custom external module can be used in both Engineering and Production environment.

WDK32 Script – A Script Version of WITE Developer's Kit New

A script version of Guzik WITE32 Development Kit (WDK32) allows for interactive execution of all Guzik WDK32 functions including RWA and spinstand control functions, operations, and measurement functions. WDK Script, based on Microsoft Visual Basic for Applications (VBA) engine, is integrated into Microsoft Excel.

Using WDK Script you can execute any Guzik WDK32 function or subroutine interactively either from the VBA environment or directly from an Excel worksheet. You can write your own scripts, using all the functionality of Guzik WDK32 but without the complication associated with the WDK32 WITE external module interfaces, licensing and the necessity to have Microsoft Visual Basic installed.

WDDR32 – WITE Device Driver Template

WDDR32 is software package for developing device drivers for third party spinstands and connect them to Guzik RWA and WITE32.

DDK – PRML Chip Driver Developer's Kit

DDK is software package that allows for developing software drivers for PRML chip channels integrated into Guzik Read-Write Analyzers. The PRML chip drivers are developed using Microsoft Visual C++ programming language.

GUZIK
Technical Enterprises

2443 Wyandotte Street
Mountain View, CA 94043
Phone: (650) 625-8000
FAX: (650) 625-9325
E-mail: sales@guzik.com
http://www.guzik.com/

REV05/2005 Guzik Technical Enterprises Part Number: 02-105694-05