EZCT-2000 Revision Log

**Rev 1.1 (08/18/05)**

Complete USB interface.

**Rev 1.2 (09/01/05)**

Correct phase angle error on PC display.

**Rev 1.3 (09/23/05)**

Add export data to Excel feature.

**Rev 1.4 (11/05/05)**

Change test plan “Save” Message

Change Test “Abort” command

**Rev 1.5 (01/05/06)**

Revise “Edit Header”

Add note pad

Ask for override before save shot

Allow 30 characters in header field

**Rev 1.6 (03/23/06)**

Correct “Abort” delay on RS-232C port

**Rev 1.7 (04/26/06)**

Interface to EZCT-S2

Add Run/Abort step under “Run Test”

**Rev 1.8 (08/08/06)**

Change “Saturation” to Excitation”

**Rev 1.9 (08/14/06)**

Plot Excitation curves from the first non-zero point.

**Rev 1.10 (08/26/06)**

Plot Excitation curves from the first non-zero point.

Include the first data point!

**Rev 1.11 (09/24/06)**

Found bug in file header. Editing more than 20 characters on the Operator’s field will corrupt data points.

**Rev 1.12 (02/28/07))**

Revised main menu

**Rev 1.13 (05/16/07))**

Add “Res & Excitation” Command to menu

**Rev 1.14 (07/24/07))**

1. Add Impedance to test report.

2. When we added “Res & Excitation” command to menu (in Rev 1.13).

We created a bug on “Ratio” only command. Rev 1.14 corrected this problem

**Rev 1.15 (09/27/07))**

1. Display and print 2 digits after dec point for knee point voltage.

2. Display and print 3 digits after dec. point for knee point current.

3. Correct “Marker” typo

4. Extend excitation chart at the beginning using the graph points.

**Rev 1.16 (10/14/07))**

1. Print PDF will work with Acrobat Rev 7.0.

**Rev 1.17 (04/14/08))**

1. Add Burden Calculation to the report.

2. Add Burden Calculation to the Test Plan

3. This Software version requires EZCT-2000 with firmware Rev 1.55

**Rev 1.18 (04/16/08))**

1. Allow Burden Test under “Res-Ext-Ratio” or “Res-Ext “only.

2. Set excitation test current to 1A when users select Burden test.

3. Set all Burden parameters to 0 when burden test is not selected.

4. Display “Transfer Test Plan, Please wait “ Message

5. Correct unit hanging up when user abort a test then restart new test

**Rev 1.19 (05/14/08))**

1. Allow user to set 50/60 Hz under “Set Up” menu.

2. Allow user to select date format (DD/MM/YY or MM/DD/YY)

**Rev 1.20 (06/11/08))**

1. Remove 50/60 Hz menu under test plan menu.

**Rev 1.21 (07/01/08))**

1. Found bug when export test report to EXCEL. The knee point voltage for the ANS 10/50 is the same as IEEE 45..

**Rev 1.22 (10/01/08))**

1. Add 0.2A and 0.5A range for the excitation test.

2. Create path for Test Plan and Test Record.

3. Phase angle of -0.1 will come out as “Out of Phase” on Excel test report. Correct this bug.

4. Cosine of 0.5 in Burden Calculation will display as 0.05 on the report. Correct this bug.

**Rev 1.23 (12/09/08))**

1. Export Freq to EXCEL

2. When phase angle reading is N/A, program display 639 degrees. Change to n/a

3. Square up the graph.

4. Create c:/vanguard/ezct-2000 directory

5. Executable file is EZCT-2000.exe

**Rev 1.24 (03/31/09))**

1. Change “BURDEN CALCULATION” to “CURRENT RATIO ERROR CALCULATION”.

**Rev 1.25 (07/17/09))**

1. Add EZCT-2000B to program

2. Change Test Plan creating menu

**Rev 1.26 (08/08/09))**

1. Allow user to arrange the summary test report

2. Include Insulation and Burden test in the summary page

4. Correct data table allowing to display 72 data points

**Rev 1.27 (08/14/09))**

1. Clean up Test Report output

2. Clean up EXCEL report

3. Allow export test report to text file

4. Identify device under computer control

5. Clean up test plan per device type

6. Clean up Retrieve test menu.

**Rev 1.28 (08/24/09))**

1. Change “Test Plan Path” and Test Record Path” headers.

2. Revise “Test Plan” menu

**Rev 1.29 (08/27/09)**

1. Allow user to bring up program by “Double Click” on test record.

2. Change “Select” to “Browse”

**Rev 1.30 (09/27/09)**

1. Allow user to re-run a test when test record is brought up.

2. Test record will remember the summary page arrangements

**Rev 1.31 (01/09/10)**

1. Add color to graph

2. Use date and time in test record file when retrieve test.

3. Export test plans to thumb drive

4. Clean up EXCEL & Text files.

**Rev 1.32 (02/07/10)**

1. Allow users to overlay graph.

2. Allow users to insert company logo. The Logo file is a 1000 x 100 bit map file. The default Vanguard file is located in the EZCT-2000 folder.

Users can select not to print the company logo by clearing the logo file path.

**Rev 1.33 (02/28/10)**

1. When EZCT-2000 users select “Burden Calculation”, the excitation current will be set to 1 A.

2. Found a bug when change test plan from EZCT-2000B to EZCT-2000. The burden flag was not completely cleared.

3. Allow user to extract test plan from test report.

**Rev 1.34 (03/10/10)**

1. If EZCT-2000/2000A does not request Burden Calculation in test plan, the burden information returned back to the PC should be set to zero.

The unit returned the burden setting from previous test

2. Recommend user to update EZCT-2000 firmware to Rev 1.80 and EZCT-2000A to firmware Ref 1.04

**Rev 1.35 (05/21/10)**

1. Allow import test plan from thumb drive

2. Increase font size on test report

3. Read thumb drive test records from EZCT-2000A, EZCT-S2A

**Rev 1.36 (04/09/11)**

1. The program will hang when user print a test record containing 2 of the same test. For example, two X1-X2 tests on the same record. This situation only occurs when the user used the EZCT-2000 under stand alone, saved the record and download 2. Computer control and run test using test plan will not allow this condition

**Rev 1.37 (04/18/11)**

1. Print Test Plan at the end of test record per SCE request.

2. Auto-Export to EXCEL, PDF, XML

3. Add “Re-Send” command

**Rev 1.38 (07/27/11)**

1. Revised summary page on EXCEL report.

**Rev 1.39 (08/17/11)**

1. Allow user to switch test plan between EZCT-2000 and EZCT-2000B

**Rev 1.40 (08/23/11)**

1. Fix logo file problem for window XP

**Rev 1.41 (12/29/11)**

1. Display 4 digits after decimal point for knee point current

2. Allow user to look at 128 test plan on the EZCT-2000

**Rev 1.42 (02/23/12)**

1. Remove Export to Excel command under File Utilizes

2. Update DLL file

**Rev 1.43 (05/15/12)**

1. Increase font size on test report

2. Found bug on resend command

**Rev 1.44 (05/18/12)**

1. Increase font size on screen test report

**Rev 1.45 (01/03/13)**

1. Interface to EZCT-2000C

**Rev 1.46 (04/06/13)**

1. Display excitation current next to knee point voltage

**Rev 1.47 (08/12/13)**

1. Add Pass/Fail to test report

**Rev 1.48 (10/15/13)**

1. Add COM port message for EZCT-2000C to “Setting Menu”

**Rev 1.49 (11/12/13)**

1. Change PC software to put test plan into EZCT-2KB and EZCT-2KC subfolder on thumb drive when use “Export Test Plan to Thumb Drive”

**Rev 1.50 (02/19/14)**

1. Found bug on P/F when the turns-ratio is exactly as the name plate. Program showed N/A. Corrected to P.
2. Add Resistor value Pass/Fail
3. Make graphic report on EXCEL independent of XML file
4. Move summary page setting to test plan menu

**Rev 1.51 (03/26/14)**

1. Center note pad on Summary page
2. Even out the summary page table column
3. Correct trace color on summary page when user down load test from units

**Rev 1.52 (06/10/14)**

1. Change Test plan menu to accommodate smaller PC screen size
2. Fix percentage error calculation when user do not enter CT name plate ratio

**Rev 1.53 (07/15/14)**

1. Print out Overlay to PDF report

**Rev 1.54 (12/05/14)**

1. A user can recall a test then proceed to test plan page by double click on the screen. If user save test plan, program will save it as EZCT-2000 test plan only. Make program save test plan correctly.

**Rev 1.55 (03/20/15)**

1. Add auto-detect for USB and COM port
2. Display message while searching for port
3. Install USB driver automatically

**Rev 1.56 (07/13/15)**

1. Correct color on excitation graph on PDF files

**Rev 2.0 (08/10/15)**

1. Release new software for EZCT-2000 series
2. Allow user to overlay 3 excitation curves

**Rev 2.1 (08/13/15)**

1. Rev 2.0 will not enable report printing. Correct in 2.1
2. Rev 2.0 will not allow Save and Overwrite file. Correct in 2.1

**Rev 2.2 (08/27/15)**

1. Make program remember and update COM port in Setting Menu. This feature will save the program from executing the Auto-Detect the first time it tried to talk to the EZCT-2000. This will speed up the connection.

**Rev 2.3 (11/14/15)**

1. Display busy message when program is processing shot.

**Rev 2.4 (03/21/16)**

1. Interface to EZCT-2KA
2. Add “File Utility” command to program
3. Extend the excitation graph to the 1V scale
4. Revised P/F report

**Rev 2.5 (05/02/2016)**

1. When add EZCT-2KA, software will not recognize files with”.tst-ezct2K” extension. Correct problem in Rev 2.5.

**Rev 2.6 (05/24/2016)**

1. Add auto – name plate for IEEE C57.13
2. Correct re-run issues on EZCT-2KA.

**Rev 2.7 (06/05/2016)**

1. Found bug on excitation graph on old EZCT-2000. Graph will connect last data point to the origin.

**Rev 2.8 (08/12/2016)**

1. Change font type on “file Listing” window
2. Rev 2.7 will generate the XML file when select pdf auto export. Rev 2.8 delete the XML file.
3. Fill out name IEEE CT name plate

**Rev 2.9 (11/20/2016)**

1. Program will not read some files from thumb drive. Correct problem
2. Excel files do not contain graphs unless XML file generation is selected. Correct problem.

**Rev 3.0 (11/30/2016)**

1. Add Error calculation option to the EZCT-2KA test plan