

MIZ-21C SOFTWARE 1.4.1

Product Bulletin



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MIZ-21C Software 1.4.1 Product Bulletin

Zetec released *MIZ-21C Software 1.4.1*. This software version can be used on any MIZ-21C instrument that has operating system and drivers Full Flash Update (FFU) 1.1.1 or newer. Please contact Zetec Customer Service at CustomerService@zetec.com if you have FFU 1.0.9 or earlier. This product bulletin presents an overview of the new features and changes in this software version.

MIZ-21C Software 1.4.1 has three application modes depending on the MIZ-21C model:

- **MIZ-21C-SF Models:** Conductivity and Coating Thickness, Sub-Surface, and Surface Cracks.
- **MIZ-21C-DF Models:** Adds Bolt Holes to SF applications.
- **MIZ-21C-ARRAY Models:** Adds Surface Array to SF and DF applications.

Purpose of MIZ-21C Software 1.4.1

MIZ-21C Software 1.4.1 is the standard upgrade for users of previous versions of MIZ-21C software. This software release includes several new features and improvements.

Zetec's hardware and software development process is performed according to a quality system that is certified ISO 9001-2015. With this certified software development process, Zetec guarantees that changes between earlier MIZ-21C Software releases and MIZ-21C Software 1.4.1 have no consequences on the sensitivity and the accuracy of the recorded data or results processed by the software.

New Features in MIZ-21C Software 1.4.1

The following are the new features in *MIZ-21C Software 1.4.1*:

Surf-X Array Probe Data Tracker

The MIZ-21C can now track Surf-X Array Probe time acquired, Surf-X Array Probe distance acquired, and Electronics Module time acquired. These statistics are available on the probe info tab for Zetec Surf-X Array Probes.

Secure Data Purge

Support has been added for a secure data wipe of the internal SD card that meets DoD 5220.22-M with a three-pass process. There is an option in Tools to Wipe the Internal SD Card which will delete all data files, screenshots, and logs from the internal SD card. It will then write over all free space on the drive with zeroes, with ones, and then with random 0's and 1's. The process takes up to 4 hours. While the SD card is being wiped, the MIZ-21C will have a blue screen with white message that it is working. Avoid unplugging or turning off the instrument. After the wipe is done, the MIZ-21C will be powered down. When the MIZ-21C powers back up it will create empty directories for screenshots, datafiles, and logs.

There is an added setting in Tools and Options where the data files will only write to the secondary drive, SD card. If the setting is turned on and the unit tries to write data files to the OS drive, then a notice pops up if this is to be accepted or cancelled.

Rotating Scanner Display

A new impedance plane / sweep display has been added for rotating scanner data acquisition.

Bolt Hole Default Display

Modified the internal bolt hole technique templates to set the c-scan / impedance plane / sweep combination display as the default review display, and the new impedance plane / sweep display as the default acquisition display.

CSV Datafile Export

Added an additional information line to the csv datafile export. It will appear as the first line in the csv file and look similar to the following example:

Technique: Template - Bolt Hole 1 Freq, Sample Rate: 12500 per sec, Gain: 30dB, Motor Speed: 1800 rpm, Hole Diameter: 10 mm, C1 Frequency: 300kHz, C1 Drive: 12 volts, C1 H-Scale: 65.5 dB, C1 V-Scale: 65.5 dB, C1 Rotation: 111.0°, C1 Median: Off, C1 SNR: Off, C1 Lowpass: Auto (832 Hz), C1 Highpass: Auto (77 Hz), C1 Figure-6: 15 dp

B0338 & B0396

Fixed an issue where switching between similar techniques while acquisition data is in the buffer could cause the application to quit unexpectedly.

B0385

The high pass filter is now selectable from 0 Hz to 500 Hz, whereas before it was limited to 1 Hz at the lowest.

B0388

Modified the ISO worksheet to include test instrument serial number and to format the notes field top-left justified. FPGA and FFU fields are now centered.

B0389

Trans length measurements for bolt hole applications had been changed to reflect distance units rather than degrees in the previous software release. This has been returned to displaying degrees.

B0391

Fixed an issue where the text entry cursor did not always properly line up with the insertion/deletion point of the text being edited.

B0392

Improved ISO input impedance test to trigger at an optimum level and provide the best measurement results.

B0394

Fixed an issue with auto-setting the high-pass and low-pass filter cutoffs (Auto-filtering was a new feature introduced in the previous release). This issue only occurred when using French, Spanish, Portuguese, German, and Russian languages.

B0398

Fixed an issue for French, Spanish, Portuguese, German and Russian languages where csv export of datafiles would include commas both for separators and for the decimal values. All decimal values in csv export now use the '.' format.

Downloading and Installing MIZ-21C Software 1.4.1

For this or other MIZ-21C Software versions, please visit MIZ-21C Download at www.zetec.com

To upgrade the MIZ-21C software from **1.0.9 or earlier** to the new 1.4.1 version, the MIZ-21C must be returned to Zetec. Please contact Zetec Customer Service at CustomerService@zetec.com for a return authorization number.

Instructions (choose the option applicable to you):

(OPTION 1) To upgrade the MIZ-21C Gen2 sealed hardware to the new 1.4.1 version:

- On a USB drive create a folder “MIZ-21C” with subfolder “Updates”: \MIZ-21C\Updates\
- Copy the downloaded zip files (MIZ-21C.Application.1.4.1.24.install and MIZ-21C.System.1.4.1.24.install) into the “Updates” folder on the USB drive
- Insert the USB drive into the MIZ-21C and go to Tools > System Updates and click Update Software and Firmware
- If rolling back version, select ‘Uninstall’, and if installing new version, select ‘Install’
- Select from the list: MIZ-21C.System.1.4.1.24.install and click OK, then wait for shutdown
- The ‘Gears’ phase will begin, then wait for shutdown
- From Version Manager, select ‘Install’ and select: MIZ-21C.Application.1.4.1.24.install
- Select ‘Install’ and after 15 seconds it will complete with the ‘Install succeeded’ message
- Select ‘Open MIZ-21C’ and the Applications menu will open (Note: if the black Zetec logo persists for more than 2 minutes, then reboot the instrument)

(OPTION 2) To upgrade the MIZ-21C Gen1 non-sealed hardware to the new 1.4.1 version:

- On a USB drive create a folder “MIZ-21C” with subfolder “Updates”: \MIZ-21C\Updates\
- Copy the downloaded zip files (MIZ-21C.Application.1.4.1.24.install and MIZ-21C.System.1.4.1.24.install) into the “Updates” folder on the USB drive
- Insert the USB drive into the MIZ-21C and go to Tools > System Updates and click Update Software and Firmware
- If rolling back version, select ‘Uninstall’, and if installing new version, select ‘Install’
- Select from the list: MIZ-21C.System.1.4.1.24.install and click OK, then wait for shutdown (verify by noting that the fans are off)
- Press the Power Button to turn the instrument back on
- The ‘Gears’ phase will begin, then wait for shutdown (verify by noting that the fans are off)
- Press the Power Button to turn the instrument back on
- Wait for a few minutes, then one of two things will happen on restart:
 - – The application will boot to the normal Applications menu, WAIT 5 seconds for the screen to change to the Version Manager
 - – OR during the boot cycle the user will have a 5 second window to select between ‘Launch’ or ‘Manage Versions’, click Manage Versions to go to the Version Manager
- From Version Manager, select ‘Install’ and select: MIZ-21C.Application.1.4.1.24.install
- Select ‘Install’ and after 15 seconds it will complete with the ‘Install succeeded’ message
- Select ‘Open MIZ-21C’ and the Applications menu will open (Note: if the black Zetec logo persists for more than 2 minutes, then reboot the instrument)