MXE 2.1R1 Basic Setup Procedure

Updated: June 18th, 2013

The following is a helpful list of simple steps for a quick startup of the MXE 2.1R1 software.

This example illustrates the navigation path: **Menu > Submenu > Parameter = Value.**

1. Reset probe parameter:
   - Select **Probe** > **Settings**, and then select **Default config.** (F7). This resets the parameter to the default value of the probe.
2. Select the frequency of operation:
   - Select **EC Settings** > **Settings**, and then set the inspection **Frequency** (F7).
3. Encoder adjustment:
   a. Select **Scan** > **Inspection** > **Scan** (F8) = **Encoder 1**.
   b. Select **Scan** > **Encoder** > **Resolution** (F10), and then set the correct encoder resolution, which is usually indicated on the encoder casing (step/mm).
   c. Select **Scan** > **Area** > **Scan End** (F8), and then set the maximum length that you want to record.
   d. Select **Scan** > **Area** > **Scan Res.** (F9), and then set the scan resolution accordingly: probe with small coils = **0.2 mm**; probe with big coils = **0.5 mm** to **1 mm**.
   e. First, make sure the **Display** (F7) is set to **C-Scan**. Then, select **Display** > **Properties** > **Display Range** (F11), and set it to twice the coverage of the probe (for a one-to-one ratio on the C-scan, when the display is set to C-scan only).
4. Lift-off calibration:
   a. Balance the probe on an area of the standard without any defect or fastener.
   b. Scan the defect-free part, and then tilt the probe up off the standard while you continue rolling the encoder, in order to produce a lift-off signal (if possible, use nonconductive tape over the sample instead of lifting the probe).
   c. Freeze the instrument .
   d. Position the first vertical cursor on the image of the defect-free area, and then put the second vertical cursor on the lift-off signal.
   e. Adjust the lift-off using the rotation.
5. Gain and color palette adjustment:
   a. Scan the calibration defect.
   b. Freeze the instrument
   c. Select **EC Settings** > **Settings**, and then adjust the gain (F10) and vertical gain (F12) until the indication is visible on the screen.
   d. If a gain adjustment is not enough, you can adjust the color palette range. Select **Display** > **Color** > **End** (F8), and then decrease the voltage until you achieve a good contrast on the screen.
   e. If necessary, change the color palette: **Display** > **Color** > **Load Palette** (F10).
6. Save file and data:
   a. Save setup: **File** > **Save** > **Save Setup As** (F8)
   b. Save data: **File** > **Save** > **Save Data** (F9). You can also edit the name of the data file (F10). Press to quickly save the data.