

# EddyVision 8.0 Release Notes

July 19, 2015

These release notes document all changes from Rev 7.4 to Rev 8.0.

**Warning:** Files created and/or modified with EddyVision 8.0 may not be readable with earlier versions.

**EddyVision 8.0 has many major changes.**

**EddyVision 8.0 runs on Windows 7 or later. Windows XP is no longer supported. All development is done on Windows 7 and the qual was done on Windows 8.1.**

**The OMNI-200 will require an upgrade to the latest firmware if you are currently using a version prior to EddyVision 7.3.**

## 1. General

- 1.1. EddyVision 8.0 can now be used free of charge subject to a license agreement. HASP keys are no longer required. The user must agree to the license the first time the software is run. It can also be viewed via the **Help** menu in a module (eg **Help | DBMS License** in DBMS).
- 1.2. No installation program is required.
- 1.3. Array probe acquisition and analysis have been added. This required a major revamp of the system internals. Array acquisition using an OMNI-200 remote unit requires a new 205 probe module.
- 1.4. EddyVision 8.0 takes advantage of multi-core processors for tasks such as mixes and filters.
- 1.5. Rev 8.0 only runs on Windows 7 and later. Windows XP is no longer supported. It requires a DirectX 11.0 or later driver (usually preinstalled) and hardware.
- 1.6. There is no install program. The software is provided as a ZIP file that users can download. In Windows 7 Explorer, right-click on the ZIP and choose **Open With**

-> *Windows Explorer*. Then copy-and-paste the *EddyVision\_8.0* directory to the desired install location (we suggest *C:\corestar\EddyVision\_8.0*).

- 1.7. Many items that were previously stored in the Windows registry are now stored in the install. A key one is the list of recent projects. The software only makes registry changes in *HKEY\_CURRENT\_USER\Software\CoreStar*.
- 1.8. In tables, the mouse wheel now scrolls instead of the changing current item. Use up/down keys or LB to change the current row. With no modifier keys, the wheel is the same as hitting up/down arrow in the scroll bar. Shift+Wheel will page up/down. Ctrl+Wheel will go to the top or bottom of the table. For values that used to increment with the wheel, use the mouse buttons.
- 1.9. The EddyVision Control library, *controllib*, has been removed. This does not affect regular users. Third party applications can no longer control the CoreStar acquisition software. However, the SDK may still be used to write their own acquisition using CoreStar equipment and libraries.
- 1.10. It is now possible to create a project in the install directory so long as it is in *<install\_dir>\projects* (eg *C:\corestar\EddyVision\_8.0\projects*).
- 1.11. The Microsoft color chooser dialog has been replaced with a custom CoreStar version. This allows it to be embedded into certain dialogs and for others, the user can pop it up once and change multiple color options by clicking on them. An example is the main **OPTIONS** dialog **Colors** tab. Right-click a label to popup the chooser, but then you can left-click on other color labels to change them.
- 1.12. Many up-down range buttons now allow a dragging operation to quickly change the value. For example, in the OMNI-200 config **Sample Rate** button, if you click and drag up and down in the **Sample Rate** prompt, you can quickly change the value.
- 1.13. Got rid of annoying flickering in labels due to changes Microsoft made between XP and Windows 7. Some labels, such as the message areas at the bottom, will show "..." in the middle text (such as a long file name) that is too long to display.
- 1.14. The wheel can be used to zoom in various plot windows such as those for curves and filters.
- 1.15. Many labels will now modify their contents based on available space instead of just clipping. For example, the channel label in the lissajous will go from displaying **CH 1 600 KHz** to **CH 1** to just **1** as the width decreases.

- 1.16. The *Help | System Docs* and *Help | Project Docs* menus now simply open explorer in the appropriate directory.
- 1.17. Help now works in the caption of many dialogs. This is used for general information about the dialog.
- 1.18. When the pointer enters a label, the background color now changes slightly instead of setting the text color to blue. This is much easier to see.

## 2. Analysis

- 2.1. To support Array probes, filters are no longer separate channels. Rather, they can be applied to a channel. Previous setups will be automatically modified if possible. It is no longer possible to have more than one filter on a channel and extra ones will be discarded.
- 2.2. Mixes can only be done on raw data channels (i.e. you cannot mix a mix). Mix channels can have filters applied to them. A mix of a mix in older setups will be discarded.
- 2.3. Auto-analysis rules that used mix and filter channels should be checked carefully.
- 2.4. When reading old setups that need to be modified, a report showing the changes will be displayed. This should be rare.
- 2.5. Array probes required the addition of baseline filters to remove offset.
- 2.6. The RPC software has been completely rewritten and now includes a 3D surface display option. It is approximately 10 times faster than before.
- 2.7. RPC now simply offsets coils instead of reformatting the data.
- 2.8. Many operations have been updated to support group operations. For example, the lissajous can be used to span and rotate an entire group. See the help for each window for details.
- 2.9. A setup now stores the screen parameters for RPC.
- 2.10. A group label has been added to the lissajous and many labels rearranged to make room.
- 2.11. In the strip chart, the wheel now zooms around the current point. Use Shift+Wheel to scroll as in previous versions.
- 2.12. Changing the data set in an RPC window now works.

2.13. The wheel will now scroll reports.

2.14. The *Edit | Screens* dialog now has options for **Array** and **StripScan** displays. The **StripScan** is a 2D version of the 3D **Array** display.

### 3. DBMS

3.1. The **Choose Symbol** dialog has been redesigned to allow changing colors more easily. It also allows the user to select other Unicode symbols in the bottom rows.

3.2. Fixed Ctrl+LB select mechanism in maps. Right click to show the popup menu will no longer clear the selections.

3.3. Modified the selection mechanism in the legend. See built-in help.

3.4. Added a *Help | Project Docs* menu selection.

### 4. EddyAdmin

4.1. Added a font viewer so show the selected fonts.

### 5. OMNI-200

5.1. There is now a complete set of tester config templates under the *Probe* menu. This should provide a good starting point for various probes, especially ones with complicated configs such as Array.

### 6. Acquisition

6.1. You can now acquire while viewing RPC data in real-time.

6.2. Filters are no longer done during acquisition. This caused a large lag, depending on the filter width, in displaying the data. It was decided that it is better to see the current probe position in real-time. The filters will be applied when the tester is turned off. Mixes are still performed in real-time.

6.3. The **TEST OPTIONS** no longer has the RPC trigger channel and tolerance. You must set the trigger channel in the OMNI-200 config dialog and the RPM tolerance is in the **RPC Settings** dialog.

- 6.4. The RPC speed calibration is now in the RPC CScan.
- 6.5. A bug where changes in the **Summary** for the leg and operator were not saved to the next acquired files has been fixed. The system no longer reads the header from the last acquired tube when opening the next one. However, if you go off and look at other data, you must double check your summary, especially the user and leg, before acquiring the next tube.
- 6.6. The acquisition RPM is now properly stored.

## 7. MakeComp

- 7.1. Auto compute section labels now works even if the middle row is missing.

## 8. TLIST Dialog

- 8.1. The **Expanded TLIST** option in **OPTIONS** will now show the leg as well as the acquisition direction.
- 8.2. The **Cancel** button in the **TLIST** will now undo any changes. For example, if you change the cal number, data format or data directory, they will go back to what they were before you opened the **TLIST**.
- 8.3. When you choose a new cal in the **TLIST**, it will be set to the first entry unless it is open for acquisition in which case it will default to the last data file. A cal is considered open for acquisition if the data format is **CoreStar**, the data directory is the project's *ecdata*\ directory and the cal has not been ended in the **SUMMARY** (ie there is no *.EOD* file).

## 9. SETUP Dialog

- 9.1. The **View** menu allows choosing which field should be displayed.
- 9.2. There are new fields for the group (**GRP**), baseline filter (**BL**), bandpass filter (**F#**), coil type (**COIL TYPE**), and voltage conversion factor (**VCON**).
- 9.3. There is a **Groups** tab showing the channel groups and allowing operations such as mixing two groups.

- 9.4. Filters are now a column (i.e. **F#**) next to each channel. The number refers to a filter in the **Filters** tab.
- 9.5. The **BL** column refers to a baseline filter in the **Baseline** tab.
- 9.6. Right-click in the **CHAN#** field to popup a menu that allows selecting a group of channels. Changes in the **F#**, **BL**, and **BAL** fields will be applied to selected channels.
- 9.7. Both the raw data (in red) and filtered data will display in the lissajous. This allows the effects of a filter to be clearly displayed.