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# New software / firmware release

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| **date:** | 13/10/2011 |
| **from:** | Mirco Scotto |
| **document:** | reldoc_SWEHP-TS-1.47_11-09-20EN |
| **subject:** | New rel.1.47 of EHP-TS (ex NardaProbe) EHP-50C(1), EHP-50D and EHP-200/EHP-200A PC control software. |

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| **Software / firmware product:** | **EHP-TS Setup.exe** |
| **Description:** | EHP-TS software product allows the user to control Narda analyzers like EHP-200, EHP-200A, EHP-50C and EHP-50D by means of a Personal Computer.<br>The optical cable coming from the analyzer (Max length: 40m) can be easily connected to a PC USB port by means of the standard accessory USB-OC. If longer distance is required the optional 8053-OC optical to RS232 converter can be used for optical fiber length up to 80m.<br>A user friendly graphical interface includes commands to set all parameters.<br>To make things clearer, controls are grouped in five selectable sections while the spectrum measurement is continuously displayed and updated.<br>Both electric and magnetic field spectrum measurements can be displayed on the same graph.<br>Sweep, Mode, Limit and Appearance sections are used to set all measurement and display parameters while Data section, with the Marker controls, shows numerical results like field strength at the Marker frequency as well as at the frequency corresponding to the highest peak displayed.<br>The Wide Band field value is calculated with reference to the displayed frequency band.<br>ICNRP limits are already included while custom limits can be easily created by means of the “Make Limit” function.<br>Several units, as well as percent of limit, can be selected to display measurement results which, along with user comments, can be saved as either bitmap or text files to be easily imported in other software applications like spreadsheets or word processor.<br>In conjunction with EHP-200/EHP-200A analyzer this powerful software can display power density spectrum expressed in $W/m^2$ or $mW/cm^2$.<br>It is common practise to show power density as result of calculation using correlated units (magnetic field intensity calculated on the basis of an Electric field measurement) that can be accepted in far field condition only.<br>Power density spectrum shown by EHP-TS in “Dual” mode is calculated on real Electric and Magnetic field measurement and for this reason is valid in both far and near field condition.<br>Safety in working environments can be now assessed with minimum effort and high reliability.<br>Availability of lightweight devices equipped with WindowsTM operating system like UMPC, netbooks and similar devices, makes EHP-TS software the ideal solution to perform accurate on field spectrum analysis with minimum effort and light equipment.<br><br>The following applications are included in the EHP-TS control software:<br><br>**EHP50-TS :** low frequency spectrum analysis with EHP-50C or EHP-50D analyzer.<br>**EHP50 – Stand Alone mode :** analyzer setting and data downloading for EHP-50C or EHP-50D when operated in “Stand Alone” mode (no external connection).<br>**EHP-50C Update Firmware :** utility for EHP-50C analyzer firmware update.<br>**EHP-50D Update Firmware :** utility for EHP-50D analyzer firmware update.<br>**EHP200-TS :** high frequency spectrum analysis with EHP-200 or EHP-200A analyzer.<br>**EHP-200 Update Firmware :** utility for EHP-200 or EHP-200A analyzer firmware update.<br>**Uninstall EHP-TS :** utility to completely uninstall EHP-TS software package. |

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| | (1) – earlier versions of EHP50 analyzer (EHP-50, EHP-50A, EHP-50B) must be hardware updated to EHP-50C to operate in conjunction with EHP-TS control software. No update is available to the EHP-50D version. For information contact your Narda distributor. |

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| **Installation instructions:** | If a previous release of NardaProbe or EHP-TS (rel. 1.39 or previous one) software is already installed in your PC it must be removed by means of the "Uninstall Narda Probe" or "Uninstall EHP-TS" utility provided by the existing installation.<br><br>**Software installation:**<br><br>**Note: - In case of Windows Vista or Windows 7 operating system, software installation as well as running included applications must be executed as system administrator.**<br><br>In case the optical-to-USB converter, USB-OC, is used for the first time, or its driver has not been already installed in the system in use, before connecting any USB-OC adapter to the PC perform the following steps:<br>- Unzip the file "EHP-TS_147.zip"<br>- Run the unzipped file "EHP-TS Setup.exe" and follow instructions on the PC screen to complete the installation (default installation path is recommended).<br><br>In case the USB-OC adapter driver has been removed or never installed, the first time you connect the USB-OC adapter to the PC an automatic procedure to install the new hardware driver will start. Follow the procedure instructions and, by means of the "browse" button, select, as search path of the driver file, the following folder: C:\Programs\NardaSafety\EHP-TS\USB-WIN-XP (for XP or Vista O.S.) or C:\Programs\NardaSafety\EHP-TS\WIN7 (for Windows 7 O.S.).<br>Windows XP executes the driver installation procedure twice. Select the above mentioned search path both times.<br>After the successful driver installation a message will show that the new hardware is ready to be used.<br>The driver for the optional RS232-USB converter is provided too. If needed, the installation files, suitable for the operating system in use, can be found into the folder C:\Programmi\NardaSafety\EHP-TS\Driver USB-Serial. |

| **History:** | | **description** |
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| **EHP-TS Setup** | | |
| **Rel.1.47** | **20/09/2011** | Setup has been updated with the new release of the following applications:<br><br>- EHP200 rel. 1.76 dated 27/06/2011<br>- EHP50 rel. 1.44 dated 14/09/2011<br><br>New Firmware EHP50D rel. 4.03 and FPGA EHP50D rel. 0x22 dated 14/09/2011 have been added. |
| **Rel.1.43** | **06/04/2011** | Compatibility with the new EHP-50D analyzer has been implemented.<br>Setup has been updated with the new release of the following applications:<br><br>- EHP200 rel. 1.75 dated 21/12/2010<br>- EHP50 rel. 1.40 dated 06/04/2011<br>- EHP50C rel. 1.16 dated 06/04/2011<br><br>The name shown by the link has been changed from "EHP50C – Stand Alone mode" to "EHP50 – Stand Alone mode".<br>The name shown by the link has been changed from "EHP50 – Update Firmware" to "EHP50C – Update Firmware".<br>The firmware update utility for EHP-50D has been added: EHP50DUP rel. 1.02 |

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| | | dated 06/04/2011.<br>New Firmware EHP50D rel. 4.01 and FPGA EHP50D rel. 0x20 have been added. |
| **Rel. 1.36** | **16/11/2010** | Compatibility with Windows 7 operating system has been implemented.<br>Setup updated with new release of the following applications:<br><br>- EHP200 rel. 1.74 dated 16/11/2010<br>- EHP50 rel. 1.36 dated 16/11/2010<br>- EHP50C rel. 1.15 dated 4/11/2010<br><br>USB-OC and RS232-USB converter drivers for Windows 7 have been added.<br>A bug related to the "EHP50C – Stand Alone mode" link creation, in case of Chinese language O.S., has been fixed.<br>New rel. 1.20 EHP-200 Firmware has been added. |
| **Rel. 1.31** | **07/08/2009** | Setup updated with new release of the following applications:<br><br>- EHP200 rel. 1.70 dated 07/08/2009 (EHP200-TS)<br>- EHP50 rel. 1.32 dated 07/08/2009 (EHP50-TS)<br>- WIN32UP rel.3.11 dated 03/08/2009 (EHP-50 Update Firmware and EHP-200 Update Firmware)<br>- EHP50C rel. 1.13 dated 03/08/2009 (EHP-50C Stand Alone mode)<br><br>Modified setup for Administrator / User installation.<br>Modified setup for default installation path in "C:\Programs\NardaSafety" and shortcuts in "Start\Programs\NardaSafety" |
| **Rel. 1.25** | **23/06/2009** | Setup updated with new release of the following applications:<br>- EHP200 rel. 1.65 dated 23/06/2009 (EHP200-TS)<br>- EHP50 rel. 1.25 dated 23/06/2009 (EHP50-TS)<br>The new setup allows the user to select for installation EHP-50C applications only, EHP-200 applications or both.<br>In case of software upgrading the release number of applications going to be installed will be displayed as well as release number of old applications which will be removed.<br>Setup disk name changed from "Setup Narda Probe" to "EHP-TS Setup".<br>"EHP-50C" application name is changed to "EHP50C – Stand Alone mode".<br>Reference to Narda STS website has been updated. |
| **Rel. 1.10** | **04/02/2009** | Setup updated with new release of the following application:<br><br>- WIN32UP (EHP-50 Update Firmware, EHP-200 Update Firmware) rel.3.09 (04/02/2009). |
| **Rel. 1.09** | **24/12/2008** | Setup updated with new releases of the following applications:<br><br>- EHP200 rel.1.38 (7/10/2008)<br>- EHP50 rel. 1.11 (17/12/2008)<br>FTDI file updated (USB-OC driver) to install Virtual COM Port function as well as USB device. |
| **Rel. 1.08** | **24/06/2008** | First distribution |
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| **Applications included** | | |
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| **EHP50 (EHP50-TS)** | | |
| **Rel. 1.44** | **14/09/2011** | Display of calibration date and serial number of EHP-50D analyzer has been implemented.<br>A bug that could be cause of runtime error after saving or changing settings of the "appearance" section has been fixed.<br>Minor bugs have been fixed. |
| **Rel. 1.40** | **06/04/2011** | Compatibility with the new EHP-50D analyzer, providing simultaneous three-axis acquisition, has been implemented.<br>Dynamic range of the spectrum graph shown with EHP-50D has been extended to 120/140 dB. |

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| **Rel. 1.36** | **16/11/2010** | Compatibility with Windows 7 operating system has been implemented.<br>Slight improvements of user graphical interface.<br>Minor bugs have been fixed. |
| **Rel. 1.32** | **07/08/2009** | Improved graphical layout of some controls.<br>Minor bugs have been fixed.<br>Changed “Delta” unit to be the same as “Highest Peak” and “Marker”<br>Modified Peak and Wideband calculation to discard dc residual noise highlighted by the gray band.<br>Path of last stored txt or bmp file is now saved.<br>Max Hold function can be activated even when RMS acquisition mode is selected (Max (RMS)). |
| **Rel. 1.25** | **23/06/2009** | New functions:<br><br>- Display of both Electric and Magnetic field spectrum can be activated on the same graph.<br>- Predefined ICNIRP occupational and general public limits can be selected.<br>- Spectrum analysis can be displayed as percent of selected limit.<br>- Frequency axis can be displayed in linear or logarithmic scale<br>- Graphical Zoom, to be set by means of PC mouse, as been implemented<br>- Dynamic range of the spectrum display can be set to 100 or 120 dB.<br>- User comments can be added to text (txt) and graphical (bmp) files to be saved.<br>- On graph display of level and frequency corresponding to the marker position (tool tip text) has been implemented.<br>- Display of limit value corresponding to the marker frequency can be enabled by selecting the new command “Limit” which have been added to the “Marker” frame.<br>- A question mark button [?] have been added to display firmware release of the EHP-50C analyzer in use.<br>- Milli Gauss unit (mG) have been added<br>- Inhibition of spectrum display during analyzer battery charging.<br>- Marker position adjustment by means of PC keyboard arrow keys.<br>- Progress Bar is displayed, in Data mode, for RMS acquisition.<br><br>Further improvements:<br><br>Improved graphical layout of various controls.<br>Frequencies lower than allowed minimum, between 0 Hz and Max (5Hz, 1.2%Span), are highlighted by grey band on the graph.<br>A communication bug, due to the use of Unicode character set, has been fixed.<br>Minor bugs have been fixed. |
| **Rel. 1.11** | **17/12/2008** | - Improved decimal separator handling of files saved in text format. Regardless of PC setting, data included in txt file adopt the decimal separator “.” (dot) to allow the txt file to be easily imported in spreadsheet applications.<br>- A bug related to the axis scan selection has been fixed. |
| **Rel. 1.08** | **24/6/2008** | First distribution |
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| **EHP50C (EHP-50 Stand Alone mode)** | | |
| **Rel. 1.16** | **06/04/2011** | Compatibility with the new EHP-50D analyzer has been implemented. |
| **Rel. 1.15** | **04/11/2010** | Compatibility with Windows 7 operating system has been implemented. |
| **Rel. 1.13** | **03/08/2009** | Minor translation errors fixed |
| **Rel. 1.11** | **24/06/2008** | First distribution |
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| **EHP50DUP (EHP-50D Update Firmware)** | | |
| **Rel. 1.02** | **06/04/2011** | First distribution |
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| **WIN32UP (EHP-50 Update Firmware, EHP-200 Update Firmware)** | | |
| **Rel. 3.11** | **03/08/2009** | Minor translation errors fixed<br>Narda logo updated |
| **Rel. 3.09** | **04/02/2009** | Software updated to work with Chinese language operating systems |
| **Rel. 3.08** | **24/06/2008** | First distribution |
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| **EHP200 (EHP200-TS)** | | |
| **Rel. 1.76** | **27/06/2011** | Minor bugs have been fixed. |
| **Rel. 1.75** | **21/12/2010** | A bug related to the AUX mode displaying has been fixed. |
| **Rel. 1.74** | **16/11/2010** | Compatibility with Windows 7 operating system has been implemented.<br>Compatibility with EHP-200A analyzer has been implemented.<br>New function, Ohm unit, with automatic search and display of frequencies showing effective wave impedance calculation has been implemented.<br>Slight improvement of graphical user interface.<br>Minor bugs have been fixed. |
| **Rel. 1.70** | **07/08/2009** | Changed “Delta” unit to be the same as “Highest Peak” and “Marker”<br>Path of last stored txt or bmp file is now saved.<br>Max Hold function can be activated even when RMS acquisition mode is selected (Max (RMS)).<br>Improved graphical layout and label of some controls.<br>Minor bugs have been fixed. |
| **Rel. 1.63** | **28/05/2009** | New functions:<br>- Display of both Electric and Magnetic field spectrum can be activated on the same graph.<br>- Display of Power Density result when dual mode (E + H) is selected<br>- Display of Power Density spectrum when dual mode (E + H) is selected (both Power Density result and spectrum are based on real E and H field measurements)<br>- Predefined ICNIRP occupational and general public limits can be selected.<br>- Spectrum analysis can be displayed as percent of selected limit.<br>- Frequency axis can be displayed in linear or logarithmic scale<br>- Graphical Zoom, to be set by means of PC mouse, as been implemented<br>- User comments can be added to text (txt) and graphical (bmp) files to be saved.<br>- On graph display of level and frequency corresponding to the marker position (tool tip text) has been implemented.<br>- Display of limit value corresponding to the marker frequency can be enabled by selecting the new command “Limit” which have been added to the “Marker” frame.<br>- A question mark button [?] have been added to display firmware release, calibration date and serial number of the EHP-200 analyzer in use.<br>- Milli Gauss unit (mG) have been added<br>- Inhibition of spectrum display during analyzer battery charging.<br>- Marker position adjustment by means of PC keyboard arrow keys.<br>- Progress Bar is displayed, in Data mode, for RMS acquisition.<br><br>Further improvements:<br><br>Improved graphical layout and label of some controls.<br>Frequencies lower than EHP-200 minimum operating frequency ( 9khz) are highlighted by grey band on the graph.<br>Correlated units (mW/cm2 and W/m2) are grouped in the “Correlated” frame.<br>Bug related to PC Polish regional settings has been fixed.<br>Minor bugs have been fixed. |
| **Rel. 1.38** | **17/12/2008** | Improved decimal separator handling of files saved in text format. Regardless of PC setting, data included in txt file adopt the decimal separator “.” (dot) to allow |

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| | | the txt file to be easily imported in spreadsheet applications. |
| **Rel. 1.37** | **24/06/2008** | First distribution |