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ELAD FDM-DUO CURRENT STATUS RELEASE

Current release : December 6, 2017					
RX Demodulator	**TX Modulator**	**User Interface**	**USB Interface**	**FPGA**	**FDM-SW2 PC Software**
Ver: 1.49 Date: 11/23/2017	Ver: 1.28 Date: 06/06/2016	Ver: 4.71 Date: 11/23/2017	Ver: 4.09 Date: 06/11/2015	Ver: 2.00 Date: 07/30/2014	Ver: 1.150 Date: 12/30/2016

Previous release : September 8, 2017					
RX Demodulator	**TX Modulator**	**User Interface**	**USB Interface**	**FPGA**	**FDM-SW2 PC Software**
Ver: 1.48 Date: 09/08/2017	Ver: 1.28 Date: 06/06/2016	Ver: 4.69 Date: 09/08/2017	Ver: 4.09 Date: 06/11/2015	Ver: 2.00 Date: 07/30/2014	Ver: 1.150 Date: 12/30/2016

Highlighted firmware(s) : changes compared to previous firmware kit.

Suggested firmware update order:
1. RX demodulator
2. TX modulator
3. USB interface
4. FPGA
5. User Interface

Release notes: **December 6, 2017**

RX Demodulator Ver. 1.49 and User Interface Ver. 4.71

- Firmware update to support the new DUO-ART amplifier.

Release notes: **September 8, 2017**

RX Demodulator Ver. 1.48 and User Interface Ver. 4.69

- Improved noise blanker functionality.
- Firmware update to support the following accessories :
    - BlueDuo Android App,
    - EXTIO 232 interface (CAT port & analog band output),
    - new DUO-ART amplifier.

Release notes: **June 22, 2016**

RX Demodulator Ver. 1.30

- Firmware update for BlueDuo support.

User Interface Ver. 4.65

- Firmware update for BlueDuo support.
- Added the 30 meters band to the "Quick Mem" functionality which is accessible through the F1 button of the FDM-DUO front panel.
  Note that it is mandatory perform a "Set to Default" operation to enable it. You can do it with the menu 81 of the FDM-DUO. Please, refer to the user manual for more details, "4.2 – Reset" section under "4 – Quick Start" section.

Release notes: **June 6, 2016**

TX Modulator Ver. 1.28

- Solved a problem relative to CW transmission with the DTR signal and the CW IN menu set to P+DTR.

User Interface Ver. 4.63

- Added the AGC threshold setting to the E1 menus.
- Added the menu 58, "PTT ON CW", it allows to choose which action to do when the PTT of the microphone is pressed in CW mode :
    - preparation to CW message transmission (as happened until the version 4.58 of the UI firmware),
    - assertion of the output "PTT-OUT" on the rear panel of the FDM-DUO (this is the new feature).
- Added the CAT command TC "PTT ACTION FOR CW", relative to the menu 58.
- Added the CAT command SP to manage the split functionality.

Release notes: **April 14, 2016**

User Interface Ver. 4.58

- Resolved an issue regarding the internal memory management. This issue appears in the firmware version 4.56. Settings involved are :
    - AGC THRESHOLD (menu 4),
    - RX CW THRESHOLD (menu 43),
    - CW DECODE (menu 44),
    - FVO VALUE (menu 61),
    - and the CURRENT MENU NUMBER.

  If you did a firmware upgrade to version 4.56 or 4.57, please install the version 4.58 and check the settings listed above. Default values are :
    - AGC THRESHOLD (menu 4) : 4,
    - RX CW THRESHOLD (menu 43) : AUTO,
    - CW DECODE (menu 44) : OFF,
    - FVO VALUE (menu 61) : 0.

Release notes: **April 12, 2016**

RX Demodulator Ver. 1.29

- Auto notch modified, LMS algorithm revised.

TX Modulator Ver. 1.27

- Added PTT delay management for SSB, AM and FM modes.
- Solved a problem relative to CW transmission with the DTR signal and the CW IN menu set to P+DTR.

User Interface Ver. 4.57

- Added PTT delay management for SSB, AM and FM modes.
  This functionality allows to add a delay between the assertion of the PTT OUT signal and the beginning of the transmission. The same delay is present between the end of the transmission and the release of the PTT OUT signal. Added : menu 57 "PTT DELAY" and PD CAT command.
- Added the CAT command OW (same as OV command) compatible with the internal CAT (i.e. through RX USB port) limited to 16 bytes. OW command is therefore compatible with the SW2 software macros.
- DTR choice on CW IN menu is now saved in the FDM-DUO internal memory.
- Using RTS as PTT is now possible for AM and FM modes.

Release notes: **October 21, 2015**

RX Demodulator Ver. 1.24

- Solved a problem in the AGC setting.

TX Modulator Ver. 1.25

- Added support to transmit with DTR when the paddle is selected as CW input.

User Interface Ver. 4.48

- Added "P+DTR" choice to the 37 "CW IN" menu.
- Updated the CI (CW INPUT) CAT command.
- Solved a problem in the CW messages setting.
- Added support of the QSF-06 preselector.

Release notes: **August 23, 2015**

RX Demodulator Ver. 1.23

- Added autonotch function

TX Modulator Ver. 1.23

- Added new Tune tone functionality: Tune power out adjustable, Tune with enabled/disable PTT out to allow tuning with low power output.

User Interface Ver. 4.38

- Added Autonotch menu with sequential menu with E1;
- Added Menu 55 TUNE POWER to set the power during tune function independent from Power Out settings;
- Added Menu 56 TUNE PTT to enable or disable the PTT OUT during tune (if you want to let to bypass the power amplifier during tune set TUNE PTT to disable.
- On menu 37 CW IN now there is the possibility to modulate CW with DTR COM PORT.
- Menu 73 Backlight Change: it is possible now to disable the changing backlight color setting to N.

Release notes: **July 10, 2015**

RX Demodulator Ver. 1.20

- CW & CW reverse now available
- Signal strength measurement (as Stand-Alone) improvements

TX Modulator Ver. 1.21

- FM power output corrected (in previous versions power was half than expected)

User Interface Ver. 4.34

- CW+ & CW- (Reverse) new implementation,
- New Menu 12 set CW Mode,
- In alternative at Menu 12, F4 and F5 buttons now can also select CW+ and CW-,
- New MENU 54 can enable PTT as RTS of USB CAT port, works only in SSB mode
- New MENU 73 can disable BACKLIGHT CHANGING during TX, Remote (see Backlight set by DUO Manager)

Release notes: **July 02, 2015**

RX Demodulator Ver. 1.18

- CW Sidetone improvements: correcting clicks from previous version

 User Interface Ver. 4.33

- SWR Measurement inhibited lower than 0.5W direct power output (displayed --.--), max SWR clipped to 99.99
- New CAT commands RS, RI, WR, FP, RP

Release notes: **June 11, 2015**

FDM-SW2 PC Software Ver. 1.96Beta

- TCP server available.
- Fixed a crash when executing two instances of the ELAD FDM-SW2 software
- In the recording scheduler, when a new schedule is added the settings the same of the last entry

RX Demodulator Ver. 1.14

- Improvement in audio side-tone synchronization

USB Interface Ver. 4.09

- Start-up optimization

Release notes: **May 09, 2015**

FDM-SW2 PC Software Ver. 1.94Beta

- Improvement on REC and REC Scheduler to avoid missing recordings
- Support for transverter use
- new CW demodulation mode: CW reverse mode or called also CW-LSB
- Maximum recording file size to 128GB and preview recording time, (more than 4GByte .wav file is not standard and some programs can not recognize it)
- Automatic AGC now have adjustable Threshold

Release notes: **May 08, 2015**

FDM-SW2 PC Software Ver. 1.90Beta

- Solved a problem with settings save in offline mode
- Modified the S-meter scale

Release notes: **May 05, 2015**

FDM-SW2 PC Software Ver. 1.89Beta

- Solved a problem of not correct IF spectrum visualization
- Plot averaging range extended for the IF window
- UTC / Localtime option for the logbook.

Release notes: **April 30, 2015**

FDM-SW2 PC Software Ver. 1.88Beta THIS IS A MAJOR release update for FDM-DUO must be used with new fw.

UI User Interface Ver 4.30 * RX Demodulator Ver 1.12 *** TX Modulator Ver 1.20**

- FM modulation, Demodulation, squelch
- DATA filters for USB Mode 300 – 600 – 1000
- Experimental frequencies extended to 165MHz (LP=OFF, POUT=0dBm)
- New CAT commands
- RIT functionality
- SSM transmission optimization

Release notes: **March 27, 2015**

FDM-SW2 PC Software Ver. 1.75Beta

- Solved a problem with filename of a scheduled recording. Now it possible to set the scheduled recording file name using the wildcards
- Solved a delay problem with the mute.

Release notes: **March 16, 2015**

FDM-SW2 PC Software Ver. 1.74Beta

- Solved a problem in the recording scheduler

Release notes: **March 13, 2015**

FDM-SW2 PC Software Ver. 1.73Beta

- Solved a problem in the recording scheduler

Release notes: **March 09, 2015**

FDM-SW2 PC Software Ver. 1.72Beta

- Solved a problem in the recording scheduler
- If Omnirig control is active, the rig TX status is managed

Release notes: **March 06, 2015**

User Interface Ver. 4.21

- Solved a problem with "HIGH SWR" display

FDM-SW2 PC Software Ver. 1.71Beta

- Scheduled recording, added the repeat daily option

Release notes: **February 18, 2015**

FDM-SW2 PC Software version 1.70Beta

- Solved a problem with Notch 2 filter

Release notes: **February 11, 2015**

FDM-SW2 PC Software version 1.69Beta

- Solved a problem in the "Advance tuning" widow
- In Setup->External HW the path where the SFE/SPF-08 configuration is stored is now displayed

Release notes: **February 06, 2015**

FDM-SW2 PC Software version 1.68Beta

- ECSS and SYNC AM: buttons F (Fast) M (Medium) and S (SLOW) to control the PLL reactivity
- Direct frequency input with numeric keys possible in ECSS and SYNC AM
- In Setup->Tuning->Preset button table, possibility to choose the display of channel 1 / channel 2 settings
- A second marker with "Delta Marker" function is now available in the main spectrum window
- Audio Streaming & Web Control: solved a problem with the Port setting
- FDM Duo Settings Panel: added Volume, TX Power, AGC control

Release notes: **January 30, 2015**

FDM-SW2 PC Software version 1.64Beta

- New FDM-DUO Settings panel. When a FDM-DUO is connected through the RX USB port, the "FDM-DUO" button appears near the S-Meter
- FDM-DUO Advanced-TX. Added the "Play file" feature, to transmit the content of a wave (.wav) file.
- The frequency control in the Advanced tuning window now is displayed correctly in case of non-standard DPI settings

Release notes: **January 23, 2015**

FDM-SW2 PC Software version 1.62Beta

- ECSS and SYNC AM improvements

Release notes: **January 14, 2015**

FDM-SW2 PC Software version 1.52Beta

- Layout display selection (right click on the main window) now working correctly
- MONO button working correctly when the RDS windows is close
- ECSS and SYNC AM improvements

Release notes: **January 12, 2015**

FDM-SW2 PC Software version 1.49Beta

- Solved a problem with Filter BW settings and Preset buttons
- New option to Show/Hide the radio amateur band start and stop frequencies on the spectrum

Release notes: **January 09, 2015**

FDM-SW2 PC Software version 1.48Beta

- Tuning with a mouse click over the spectrum or waterfall available in "Lock To CF mode"
- SNR, SNR Average, Noise floor measurement available in marker string in main and IF window
- In the main window right click on spectrum graph and select "Marker On Screen"-> Show Advanced Measurement
- In the If Window right click on spectrum graph and select "Markers "-> Show Advanced Measurement
- Modified in the preset band button (160m, 80m...) feature
- Each button define a radio-amateur band, Start and Stop Frequencies are displayed in the spectrum graph
- For each band the active RX settings are stored when a preset button is pressed
- Solved the issue "In SW2-v1.46 the FFT window zooms back out every time the newt of the sequential files are started"

- New ECSS demodulation mode
- New Advanced TX panel for the FDM-DUO available is the TX mode is LSB, USB or AM

Release notes: **December 19, 2014**

RX Demodulator Ver 1.08

- Improved side-tone management
- Corrected some problems related to volume and mute during transmission
- Corrected some problems related to the side-tone in split or tune mode

TX Modulator Ver 1.16

- Improvement in the AM modulation
- Improved CW timing

User Interface Ver 4.17

- Minimum tune mode time set to 3s
- Solved some problems related to mute during transmission in memory and split mode
- Improved the compatibility with Ham Radio Deluxe software
  - "Ant1" and "Ant2" selection
  - Attenuation settings "ATT"
  - Noise Blanker status display "NB"
  - Noise Reduction status display "NR1"
  - Possibility to go in transmission with "TX" and "TX Alt" button
  - Possibility to set the tune mode with the "TX Tune" button
- Modified some CAT commands:
  - AC: read tune mode status
  - TX2: tune mode on
  - RX: tune mode off
  - NR: read noise reduction status
  - NB: read noise blanker status
- New CAT commands
  - NC: noise reduction
  - NK: noise blanker
  - GC: gain control
  - GS : gain settings
  - RF : reception filters
  - TB : transmission bandwidth
  - PI : pitch
  - VA : volume aux
  - VM : main volume
  - VT: side-tone volume

- o TP: transmission power
- o TT: transmission output
- o MT: mute during transmission
- o TU: tune mode timeout
- o MG: microphone gain
- o AN: antenna selection
- o AX: attenuation in transmission
- o TE: transmission enabled
- o CG: transmission compression gain
- o NT: transmission noise threshold

Release notes: **December 02, 2014**

FDM-SW2 PC Software Ver 1.43

- Solved a problem with scheduled recording

Release notes: **November 27, 2014**

FDM-SW2 PC Software Ver 1.42

- Solved a setup generation error
- CW NW mode available in memory file editor

Release notes: **November 26, 2014**

FDM-SW2 PC Software Ver 1.41

- Down converter works also for FDM-DUO
- Plot auto ref. feature modified.
- ELAD SPF-08 Support. (Setup->External HW tab)
- DX Cluster: Buttons to select a specific band
- DX Cluster: possibility to suspend the spot list update
- The software displays correctly regardless the DPI setting
- Option to disable low disk space warning
- Minor bugfixing

Release notes: **November 24, 2014**

RX Demodulator Ver 1.05

- Added a 5ms ramp at the beginning and at the end of the side-tone generation.

TX Modulator Ver 1.11

- Improvements in the internal signals management

User Interface Ver 4.12

- SPF-08 Support

Release notes: **October 29, 2014**

User Interface Ver 4.08

- Solved a problem with TX Input settings