

# TRANSDUCER CONFIGURATION TOOL MANUAL

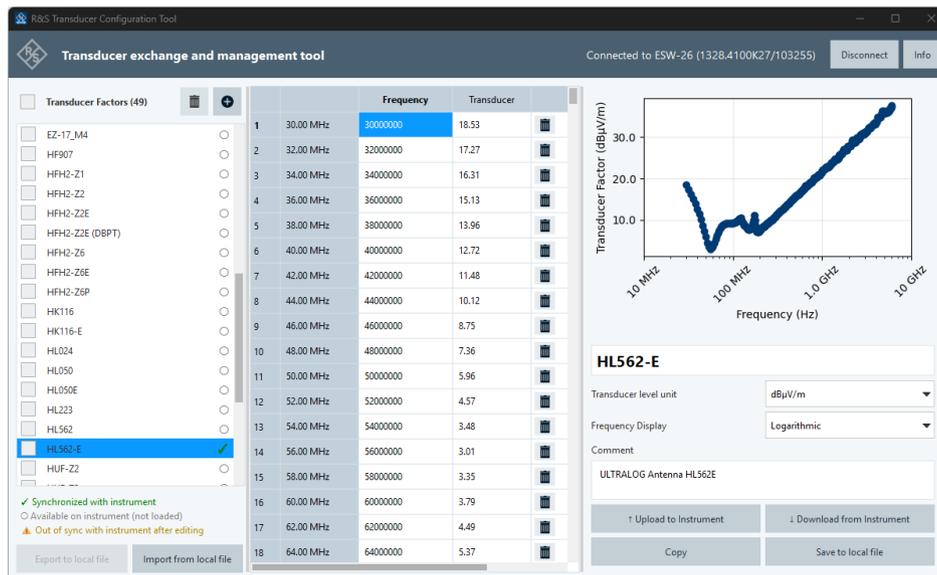
Software for exchange, editing and managing of transducer factors on and between receivers and the R&S®ELEKTRA software that allows importing of various calibration data.

## Products:

- ▶ R&S®ESW
- ▶ R&S®ESR
- ▶ R&S®EPL1000
- ▶ R&S®FSWT
- ▶ R&S®ELEKTRA
- ▶ R&S®ESRP
- ▶ R&S®ESU

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<https://www.rohde-schwarz.com/emc>



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# 1 Scope

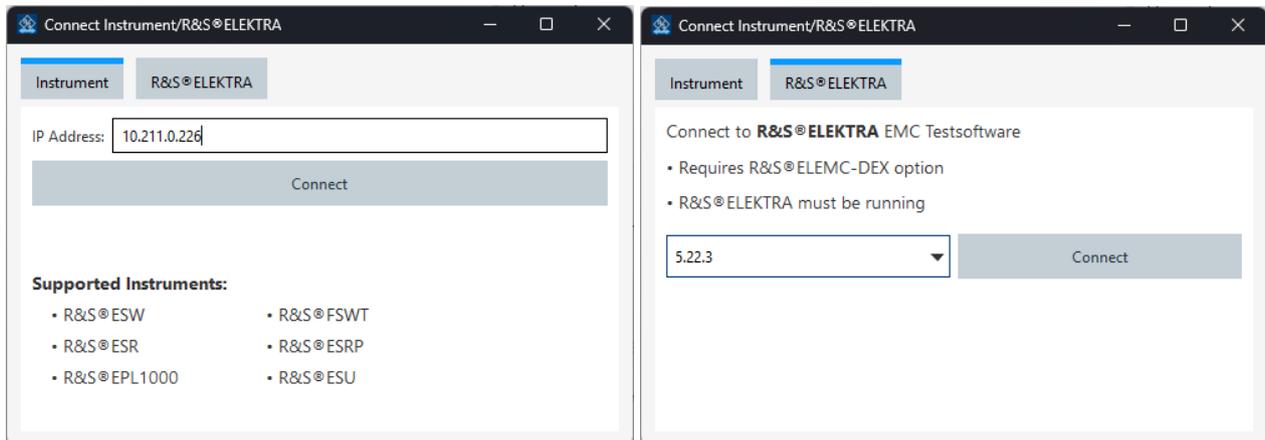
This tool is intended to support on transferring transducer data from and to local files to the R&S receivers and the R&S®ELEKTRA software. It allows editing, creation and deletion remotely on the instrument or software and enables transferring transducer data between files of all common formats and the receiver/software. Many common CSV or TXT based exchange formats for calibration data were implemented so allow importing of those data to the instrument or R&S®ELEKTRA software. Support file formats are: csv (most common for data exchange), tdf (format used on the instruments), s1p and s2p (commonly used for network analysis) and txt.

## 2 Software operation

### 2.1 Connection

Connect the instrument by entering the IP address. All instruments shows the IP address in the network configuration, accessible under SETUP > Network and Remote.

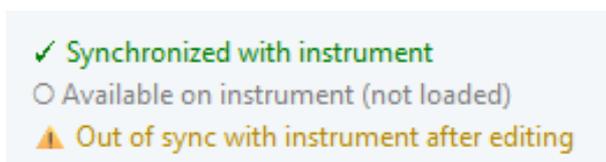
The connection with R&S®ELEKTRA requires the R&S®ELEM-DEX option and a running R&S®ELEKTRA software. Select the version you wish to connect to and click on the "Connect" button.



An open connection is shown on the top bar of the software indicating the current connected instrument.

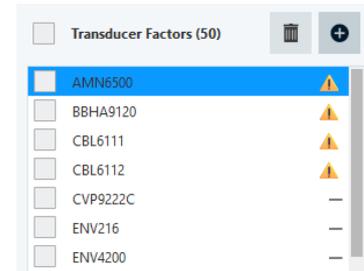
### 2.2 Loading transducer data

With a successful connection, all transducers are downloaded from the instrument/software, but only listed and not yet loaded. All transducers get the status "Available on instrument". Once clicked on it, the software loads the data and sets the status to "Synchronized with instrument". These factors which were loaded from a file, changed manually in the software or newly created, get the status "Out of sync with instrument". A manual upload with "Upload to Instrument" will set their status to "Synchronized with instrument".



## 2.3 Transfer from one device to another

- ▶ Connect with the device from which transducer data should be downloaded
- ▶ Click on all these factors that are required to download them from the instrument and set their status to "Synchronized with instrument"
- ▶ Disconnect and connect with the other instrument. All downloaded transducer factors will change their status to "Out of sync with instrument". Those that were not downloaded are not available any longer and can not be transferred.
- ▶ Upload the selected factors with the "Upload to Instrument" button for each transducer factor until they are all set as "Synchronized with instrument"



## 2.4 Editing transducer data

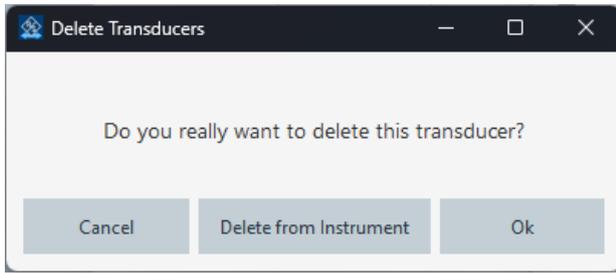
For each transducer factor, all frequency points and correction factors as well as the meta data (name, level unit, linear/logarithmic display and comment) can be edited in the software. After any change, the status of this transducer factor will change to "Out of sync with instrument after editing". Click on "Upload to Instrument" to synchronize with the instrument or click on "Download from Instrument" to revert all changes.

	Frequency	Transducer	
1	30.00 MHz	30000000	18.53
2	32.00 MHz	32000000	17.27
3	34.00 MHz	34000000	16.31
4	36.00 MHz	36000000	15.13
5	38.00 MHz	38000000	13.96
6	40.00 MHz	40000000	12.72
7	42.00 MHz	42000000	11.48
8	44.00 MHz	44000000	10.12
9	46.00 MHz	46000000	8.75
10	48.00 MHz	48000000	7.36
11	50.00 MHz	50000000	5.96
12	52.00 MHz	52000000	4.57
13	54.00 MHz	54000000	3.48
14	56.00 MHz	56000000	3.01
15	58.00 MHz	58000000	3.35
16	60.00 MHz	60000000	3.79
17	62.00 MHz	62000000	4.49
18	64.00 MHz	64000000	5.37

## 2.5 Deletion of transducer data

Select all factors in the table on the left and click on the delete button on the top (garbage bin). With click on "Ok", the factors are deleted only locally. A reconnect to the instrument will bring those transducer factors

back if they were synchronized with the instrument before. Click on "Delete from Instrument" to also delete them remotely.



## 2.6 Create new or copy of existing transducer

Click on the plus button above the transducer factor list to create a new empty transducer. Paste existing data from other programs as Excel or fill the frequency points manually.

A click on the "Copy" button creates a copy of an existing transducer factor that can then be changed in name and all other data.

In both cases, the newly created transducer factor is "Out of sync with instrument" and needs to be uploaded to the instrument to get into synchronization or save to a local file to avoid the new data getting lost.

**Transducer exchange and management tool**

Connected to ESW-26 (1328.4100K27/103255) [Disconnect] [Info]

	Frequency	Transducer
1	30.00 MHz 30000000	2.3
2	50.00 MHz 50000000	3.2
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		

**NEWANTENNA**

Transducer level unit: dBµV/m

Frequency Display: Logarithmic

Comment: Enter comments here...

[Upload to Instrument] [Download from Instrument]

[Copy] [Save to local file]

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