NEW TEF25 ANALYSIS SYSTEM
Sound Solutions for Acoustical Problems

MORE POWER, LESS SIZE

The TEF25 USB Preamplifier along with Sound Lab software and your PC are all that you need to make TEF measurements.

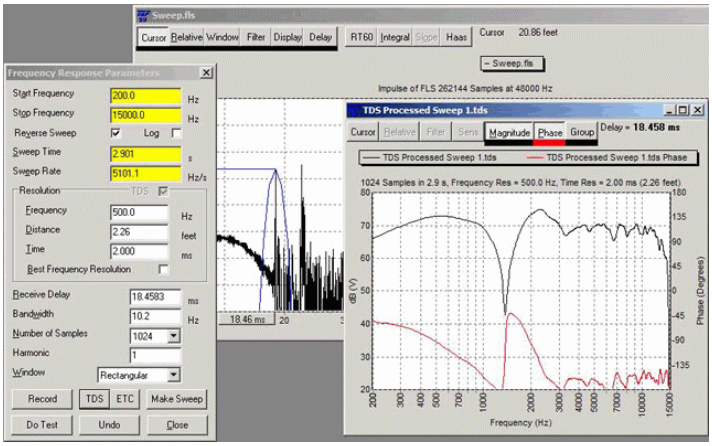
Included with the TEF25 is Upgrade Software module (SLUPG1) that allows use of all older Sound Lab software modules.

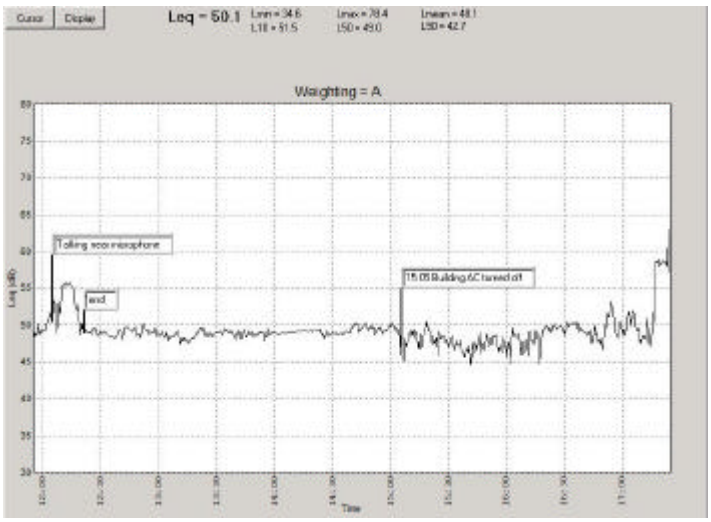
The TEF25 is easy to carry and can be powered directly from your PC's USB port.

True Dual Channel with accurate Phase Information, balanced inputs and outputs, phantom power and a noise floor of –130dBV.

NEW SOFTWARE MODULES

Sound Lab Post Processing module – (SLPPS60). Captures the raw data from a TDS Sweep and allows the user to post process directly from the impulse response. This provides all the traditional advantages of MLS, the ability to make one measurement and to post process the data for different time spans, change start, stop on frequency parameters, check Rt60 times, but with the signal to noise advantages of TDS. Truly the best of all worlds.





Sound Lab Noise Level Analysis module – (SLNLA60). **Now in Windows.** Analyze Environmental Noise, Statistical Noise and perform Detailed Noise measurements. Annotation tags have been added to allow events to be labeled and stored. A statistical display has been added to show the breakdown of Leq occurances. A pair of cursors can be placed to focus on areas of special interest. Capture fine time resolutions over long time periods. Leq measurements with one minute intervals over 24 hour periods are now possible.

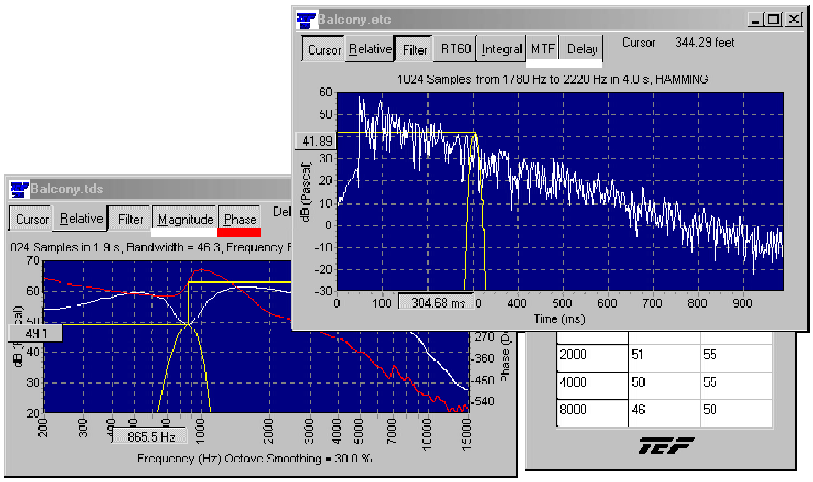
Small Room Acoustics module – (EZTH2). A FASTER and EASIER WAY to MAKE MEASUREMENTS in home theaters. The EZTune software module combines features from several existing TEF programs and then adds layers of automation to speed up typical tasks. See the EZTune Kit on page 3 for details.

TEF25 Kits with Sound Lab Software

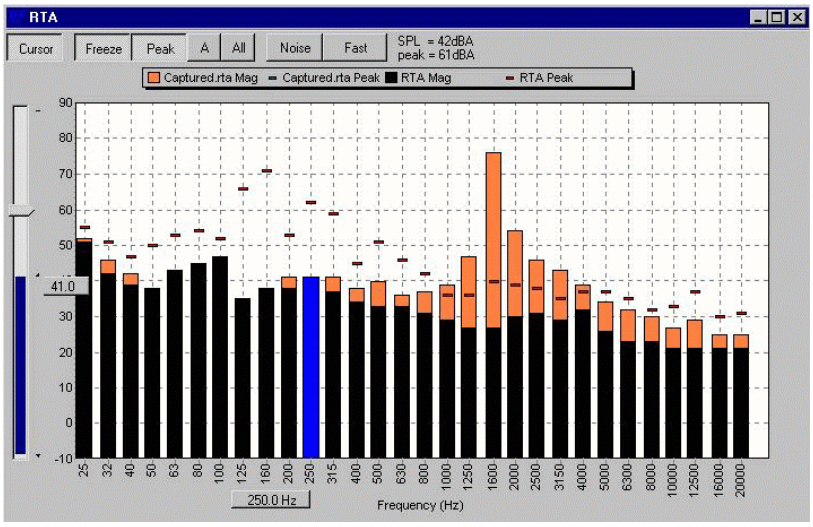
TEF25 Pro Kit (TEFPRO)

The TEF25 Pro Kit combines the necessary hardware with the most popular software to begin making TEF measurements for individuals working with Room Acoustics.

Included in the Kit is the TEF25 USB Preamp, our TEF04 omni measurement microphone, the upgrade software to run Sound Lab software on the preamp, plus the **TDSE** and **RTAE** Software modules.



TDSE is the classic TEF Program for measuring Time, Energy & Frequency, and includes key room acoustic measurements such as RT60, Speech Intelligibility and %ALCons. TDS has a higher signal to noise ratio than any other current measurement method, allowing testing in noisy environments without the need to run high power levels through the PA. And, with accurate time resolution, TDS is ideal for evaluating phase relationships, aligning clusters, evaluating reflections and to separate the direct energy from reflected energy in the room. It can also be used in the electrical domain, to evaluate the sound system chain before the amplifiers. TDS, an abbreviation for Time Delay Spectrometry, utilizes a swept sine wave for its excitation source.

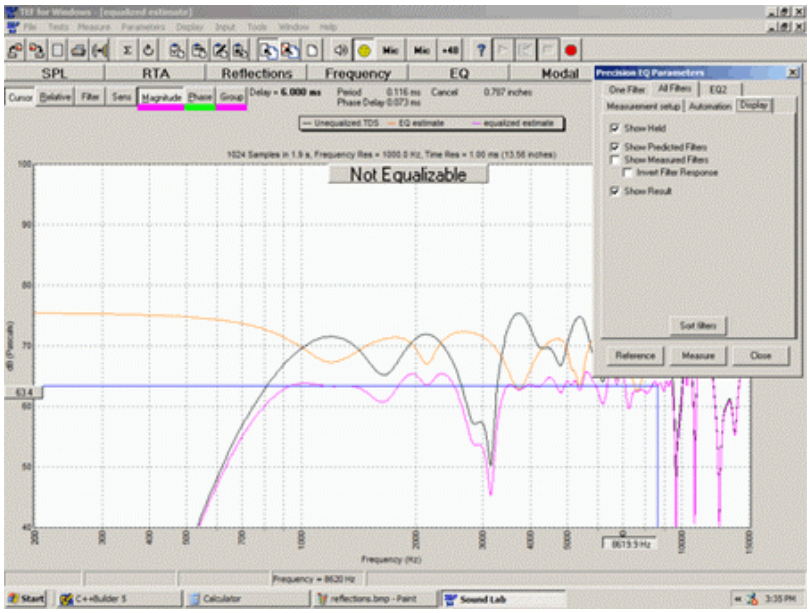


RTAE, Real Time Analysis, is a measurement of Energy vs. Frequency. It is typically utilized to either evaluate noise or with Pink Noise to evaluate the frequency response of a sound system**.** SPL is displayed in various decay rates and/or "Time Averaged" in A, B or C Weighting. A new STC feature allows a field evaluation of Sound Transmission Class, and the program includes noise measurements including SPL, NC, PNC, RC and NR. Resolution is user selectable in the program from octave to 1/24th octave, and the display can be shown as Bars or Lines. RTA is ideal for measuring events at low frequency, such as room modes and subwoofer performance in acoustical spaces. When used in dual channel mode, the RTA can also provide evaluation of frequency response directly from source music, rather than by comparison to Pink Noise.

TEF EZTune Kit (EZTUNETH2) -A Faster Way to Make Measurements

The EZTune Kit contains the Sound Lab EZTune module (EZTH2), an automated package for rapid testing of Home Theaters and other small spaces. Also included are the TEF04 microphone, a 20 ft audio cable, a Carry Case, a USB cable, an XLR/RCA adapter and the TK51 Audio Toolkit.

The EZTune module combines features from several existing TEF programs and then adds a layer of automation to speed up typical tasks. For those who wish to change the present settings, they are free to modify those settings to fulfill their needs. Staff can be send into the field with the default settings to quickly evaluate a room or sound system.



HOT KEYS are provided for the following:

Set Reference Levels. A large SPL display shows the C weighted SPL. A colored background starts out blue, changes to Green as you approach the home theater reference level of 75dB and then turns red if you go above 76dB SPL.
Measure Real Time Analysis. A powerful RTA module allows you to choose resolutions from 1 octave to 1/24th of an octave. Select various decay speeds, or use the THX recommended 20-second time averaging for best accuracy with pink noise. Display NC values in octave band mode.
Measure Reflections. While some of our competitors make pretty pictures and claim that they have time domain capability, EZTune utilizes TDS to resolve events down to 26 microseconds. Clicking on the Reflections button automatically finds the time of arrival for the direct energy, then shows you which peaks are significant specular reflections. Easy to read graphics show the time of arrival for each reflection along with its path length. An overlay mode makes it easy to see when acoustical treatments have successfully absorbed a reflection.
Measure Frequency Response. By pressing the Frequency Response button, the system will automatically identify the location of the microphone in the room, and then calculate the frequency response, phase and comb filters caused by specific reflections.
Predict Optimal EQ. By combining powerful aspects of our TEF Precision Equalization software (PEQ) with the automation in EZTune, we have developed the fastest, easiest way to measure a sound system and then to choose optimal settings for equalization. The display shows both the frequency response and a list of center frequencies for filters, filter Q and the recommended amount of cut or boost at each frequency.
McSquared Modal Calculator. Our good friends at McSquared Consulting have provided us with the use of their powerful room mode calculator that allows the user to quickly visualize the effects of room modes based on the room dimensions.

TEF USB PREAMP KITS

Comes With	EZTUNETH1	TEFPRO	TEFSYS1
TEF USB Preamp	*	*	*
TEF04 Mic	*	*	*
TEFCS Carry Case	*	*	*
MKCA20 Audio Cable	*	*	*
USB Cable	*	*	*
XLR/RCA Adapter	*		
SLUPG1 Software		*	*
EZTH2 Software	*		
SLRTAE60 Software		*	
SLTDSE60 Software		*	
TEF Training DVD		*	*
TK51 Audio Toolkit	*		

KIT COMPONENTS

TEF USB Preamplifier	For details and specifications, visit the Gold Line web site at www.gold-line.com.
TEF04 Microphone	For details and specifications, visit the Gold Line web site at www.gold-line.com.
TEFCS Carry Case	Rugged tech-weave material. Room for your laptop, analyzer, cables and more. Detachable and adjustable shoulder strap. Hide-away backpack straps. Plastic snap closures on flap. Removable computer pouch in main compartment.
MKCA20 Audio Cable	20 foot High Quality Male/Female 3 pin Neutrik XLRs with Gold Pins
USB Cable	6 foot USB/A - USB/B USB 2.0
XLR/RCA Adapter	3 Pin XLR Female to RCA Jack
SLUPG1 Software	Sound Lab Upgrade Software - Allows use of currently owned Sound Lab software. CD
EZTH2 Software	EZTune Software - Utilizes features from several TEF programs to analyze common problems and perform typical tasks quickly and easily. CD
SLRTAE60 Software	Sound Lab Software - Real time dual channel spectral analysis software provides 1, 1/2, 1/3, 1/6 or 1/12 octave displays. CD
SLTDSE60 Software	Sound Lab Software - Electroacoustic measurement software using Time Delay Spectrometry technology. CD
TEF Training DVD	TEF Soundlab Training 3 DVD set - The TEF Training Class condensed into 11 hours of class material. Contains the topics from the TEF Level 1 class. DVD
TK51 Audio Toolkit	Contains over 80 test signals, laid out in a logical progression for quick calibration and debugging of 5.1 channel systems with THX Surround EX. DVD

GOLD LINE
MANUFACTURED IN U.S.A. SINCE 1961
TEF

P.O. Box 500
West Redding, CT 06896
Tel: 203-938-2588 Fax 203-938-8740

Web: http://www.gold-line.com

Email: sales@gold-line.com