Improving Your Band Using TonalEnergy

Darby Cassaday - Deer Creek Bands
OkME Fall Conference
Oklahoma City University
October 17, 2019 | 9:45 am
Goals of presentation...

1. Overview of the TonalEnergy app
2. Practical applications in the practice room or small group setting
3. Practical applications in the large ensemble setting
TonalEnergy...

TonalEnergy is an all-inclusive, easy to use application designed for individual practice and/or large ensemble rehearsals that aides musicians to improve sound quality and intonation.

Tuning, volume, articulation, release, duration, and steadiness are the key elements of developing a beautiful tone quality. TonalEnergy is the first multi-purpose app that allows users of all ages to understand and improve every aspect of their sound.

TonalEnergy runs on iOS and Android platforms. $3.99
Main Menu...

1. Tuner
2. Sound Generator
3. Analysis
4. Metronome
5. Preferences
William D. Revelli...

“I don’t care if you’re in Carnegie Hall or on the 50 yard line, a C is a C, and in tune is in tune!”

- William D. Revelli

2/12/1902 - 7/16/1994

addressing students at Michigan State University
Tuner...

- Chromatic Tuner
- Control level of accuracy: Wide, Medium, Fine, Ultra-Fine
- Transposition can be set to Concert Pitch or any specific instrument
- Just or Equal Temperament
Student Friendly...
Sound (Tone) Generator...

- Can use a Pitch Wheel, String Tuner, or Keyboard
  - Keyboard as visual aide
- Can choose sound you want
  - Euphonium
- Can change Transposition
  - Beginning Horn students
Sound (Tone) Generator cont...

- **Create Drones...**
  - **Single Pitch**
    - Works with any age, singing or playing on full instrument
    - Vibrations on mouthpiece, head joints, “short horn”
  - **Intervals**
    - Remington Long Tones (or similar)
    - Young percussionists humming a Fourth or Fifth above a drone
  - **Chords**
    - This sound can become ensemble’s default sound
    - Wean off digital drones over time
  - **Choose between Equal or Just Temperament. Use Just when...**
    - Musical lines (sustains, high note, low note) in a lyrical phrase
    - “Sustained cadential points, final chords of any tempo, any sustained harmony where there is time for the ear to hear beats.” (Jagow)
# Chords of Just Intonation

All chords are based on root "C" which is "0" pitch. 
+ or - is cents rounded to nearest whole number

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Rewritten by Jeffrey Anderson
Analysis...

- **Waveform Window: Note Shapes**
  - Shape of notes (starts, ends)
  - Articulations (front side of notes)
  - Steadiness of pitch (sustains)
  - Can show shape of dynamics - rate of crescendos/decrescendos

- **Plot Pitch**
  - Evaluate accuracy of pitch through sustains and phrases

- **Spectral Frequency Analyzer**

- **Harmonic Energy Series**
  - Overtones and Resonance
Metronome...

- Choose sound (Beeps, Clicks, Voice, more...)
- Screen lights up or flashes with pulse
- Add Accent
- Change Meter (several to choose from)
- Choose Subdivision (several to choose from)
- Count-In
- Programmable presets
  - Can be used to create an accelerando and ritardando
File Recording & Playback

- Record yourself from any screen by swiping right from the left edge of the screen
- Create both audio and video recordings
- Import recordings
- Save/Edit recordings
Using external MIDI Keyboard

- MIDI Controller (keyboard) - Ex: Launch Key
- Lightning to USB adapter (Camera connection kit)
- USB cable to connect the MIDI controller (keyboard)
- Preferences > MIDI Settings > Allow Connections is ON
Apple Features...

- Available for iPhone & iPad
- Compatible with Apple Watch
  - Limited
  - Can turn metronome on/off from watch
  - Can adjust tempo from watch
- Add Siri Shortcuts
  - “Start Audio Recording”
  - “Start Metronome”
  - “Show Tuner”
  - “Show Sound Keyboard”
Android Features...

- Chromebooks can run TonalEnergy (Android apps)
Helpful Resources...

- Tonalenergy.com
- User Guide: https://tonalenergy.com/docs/tetguide/
- TE YouTube Channel - several helpful demo videos
  - https://www.youtube.com/user/TonalEnergy/videos
  - Tuesday Tune-Ups
- Darby Cassaday - darbycassaday@dcsok.org
References...

- Madden, John T. “From Carnegie Hall to the 50 Yard Line: Approach Concert and Marching Ensembles with the same ‘vision’”. Midwest Clinic. December 2004.
Acknowledgements...

- Jeremy Haas, OkMEA Band VP
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