Smart Tune Mode

This new tuning mode for CyberEar does a super-accurate micro pitch raise using RCT's patented pitch raise technology. Even if the piano is a few cents off pitch, Smart Tune mode will predict the overpull so that each note ends up exactly on target. This often avoids an extra pass saving the tuner 20-40 minutes per tuning!
When should you use Smart Tune mode? Whenever the piano is more than .5 to 1.0 cents off pitch Smart Tune will help the tuning end up closer to the final target. If the piano will require another pass, for instance if it's more than about 20 to 30 cents off pitch it's usually better to use Pitch Raise mode.

However, you should still use Fine Tune mode if you are giving or taking the tuning exam, or if the piano is almost exactly in tune and you're doing a "touch-up" tuning (for instance you just tuned it a very short time ago).

Many tuners like Smart Tune mode so much they want Smart Tune to be the default tuning mode. To do this, tap Prefs menu at the bottom of the screen and choose Smart Tune in the Defaults: Start Mode popup menu.

To start Smart Tune mode in CyberEar, tap the tuning mode popup menu (may say Fine Tune or Pitch Raise). Choose "Smart Tune".

When you initiate Smart Tune mode you'll see a dialog box that's similar to the Pitch Raise mode dialog box, but there are several additions:

- Highest Tenor Note is the notes just below the first plate strut above the temperament. This note has to be higher than the Lowest Trichord.
- Lowest Tenor Trichord –The Lowest Trichord must be the same as or higher than the Lowest Tenor Note.
- Tenor Bichord(s): Number of bichords in tenor (above Lowest Tenor Note).
- Lowest Tenor Note is the note just above the plate strut that separates the bass and treble sections. The Lowest Tenor Note has to be the same or lower than the Lowest Trichord.

For Smart Tune mode, the Lowest Tenor Note and Lowest Trichord are the same on pianos without any bichords on the tenor bridge. *Be sure to check the "tenor Bichords" box against the actual piano!*

How does Smart Tune compare to Fine Tune mode?

Smart Tune uses the same spinner speed and other CyberEar spinner settings as Fine Tune mode since its goal is similar to Fine Tune, to execute the final pass on the piano. However, Smart Tune differs from Fine Tune in that it records the original pitch and uses automatic overpulls.

How does Smart Tune mode compare to Pitch Raise mode?

Pitch Raise mode's intent is to quickly get the piano close to pitch, preparing for a final pass. Pitch Raise mode intentionally leaves the piano slightly sharp (2-4 cents), which compensates for the piano's pitch falling the during coming days, which is normal after a large pitch change. Smart Tune on the other hand, targets A440 (or whatever pitch you've chosen in CyberEar's pitch popup menu). *The goal is for the piano to end up exactly on pitch.*

Smart tune tweaks the overpulls based on a number of additional factors:

1. Your input in the Smart Tune dialog box, the Highest and Lowest tenor note, and Lowest Trichord note. Based on actual piano testing, Smart Tune tweaks the overpull just above and below these notes.

2. The size and inharmonicity of the piano. Smaller pianos usually need more overpull than larger ones, and Smart Tune adjusts the whole overpull chart for each piano.

New Chameleon 3 pitch display
Chameleon 3 in version 4.3x and later displays the pitch offset for each note it records, A1 to A5. This offset is displayed in cents above each of the A1-A5 notes. The offset is relative to the tuning which would be calculated with the current Octave Tuning Style (OTS). If you change the OTS the cents offset in Ch3 will change slightly. This feature helps greatly to determine whether to use Fine Tune, Smart Tune or Pitch Raise mode.

Landscape Display

Pocket RCT 4.3x and later is capable of displaying all windows in either Portrait or Landscape mode. Windows Mobile 4.21 or later is required for full Landscape support. Pocket RCT will change the orientation view whenever the device changes orientation. Changing between Portrait and Landscape orientation is hardware dependent, for instance some devices switch orientation when a keyboard is slid out or when a special button is pressed. See your hardware documentation for details.

Most Windows Mobile devices have a control panel for changing orientation, see Start menu, Settings, System tab, Screen. (Screen may be called Screen Orientation or something similar).

Limitations:

- CyberEar has a special full-screen Landscape mode which takes over the menu area and shows an 88-note keyboard. This mode is accessible only from Portrait CyberEar.
- Custom EQ displays in Landscape mode but the user will need to scroll to view or use some functions.