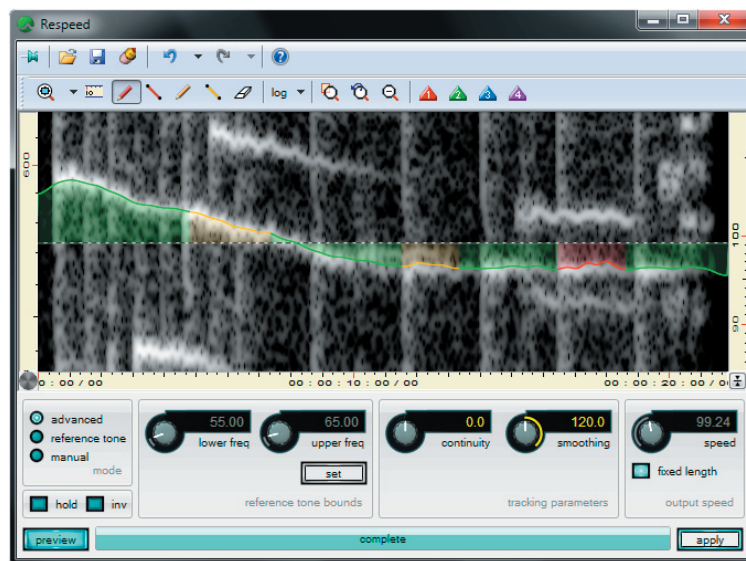# Eliminating speed fluctuations...

CAM20: Respeed™

Speed errors can be caused by many problems. Examples include faulty tape recorder transports, sticky tapes, electrical problems in analogue recording devices, and off-centre holes in disks that lead to wow. In each case, the recording or the replayed audio exhibits speed changes with respect to what would have been recorded or replayed had the fault not existed.

The solution

Respeed automatically identifies - or allows the user interactively to identify - unwanted speed changes contained within the presented audio. Once these have been determined the track may be processed many times faster than real-time. The result is greater pitch stability and, when used on speech signals, improved intelligibility. However, musical pitch variations such as vibrato and glissandos are left unaffected.

Respeed incorporates three modes of processing, including an Advanced mode that handles many tracks without user intervention. In addition, a powerful range of tools are provided, and these allow the user to adapt the process for almost any track or combination of tracks that contain speed errors.

Correction is not limited to wow. Respeed will address random speed fluctuations and even continuous rises or falls in speed caused by problems such as failing batteries in analogue recorders. This is particularly useful when recordings suffer from wandering buzzes and hums, so Respeed can also improve the results obtained from many other CEDAR Cambridge modules.