

acoustilytix

Acoustilytix™ is a cloud-based automatic Ultrasonic Vocalizations (USV) scoring platform designed to expedite analysis of rodent bioacoustics. Acoustilytix™ is an easy-to-use tool that provides researchers with state-of-the-art USV scoring capability and call detection performance. Acoustilytix™ implements machine learning methodology in the USV detection and classification process and is recording environment agnostic. Acoustilytix™ serves a community-wide need for superior, automated USV scoring – alleviating the manual burden of USV analyses while facilitating and enhancing rodent- and mouse-based pre-clinical research reproducibility, validity, and translatability.

Acoustilytix™ offers the following benefits/ features:



Automatic USV Detection

Parses audio files and detects USVs with a detection sensitivity of 93% and precision of 95%



Remote Access

Cloud-based web browser accessibility for scorers to work simultaneously from any location



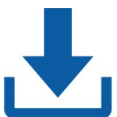
eLearning Training

Reduces scorer training time and produces more accurate and reliable hand scorers compared with unstructured training



Curated Analysis

Guides scorers and provides audio playback, color-coded spectrogram, acoustic parameters, and call type selection



Convenient Data Export

Exports data in downloadable .csv format



User-Friendly Data

Works out-of-the-box without any tuning or calibration



National Institute
of Mental Health

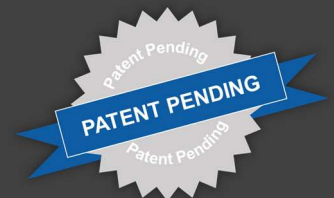
Expand the impact of research studies and workflows via a cloud-based automatic Ultrasonic Vocalizations (USV) scoring platform

The screenshot displays the Acoustilytix v0.5.81 web interface. At the top, there are navigation tabs for 'FILE LIST', 'UPLOAD NEW', and 'TRAINING'. A user profile 'Catherine' and a 'LOGOUT' button are visible on the right. The main content area shows a spectrogram for 'Segment: 24 of 162' (Call: 1 of 1). The spectrogram plots Frequency (Hz) from 0 to 125k against Time (s) from 6.985 to 7.025. A color scale on the right indicates intensity levels from -75.0 to -93.0. Two control panels are highlighted with red boxes: one on the left for 'Segment: 24 of 162' and another below it. Both panels include 'Volume Boost', 'Gain' (with 'AUTO-GAIN' button), 'Zoom Spectrogram (4.00x)', and 'Zoom Time Axis (1.00x)' controls. Below these are tabs for 'SCORE', 'DETAILS', and 'ADV. VIEW', a 'Primary Call Type' dropdown menu, and buttons for 'ADD CALL', 'MODIFY', 'CONFIRM', and 'REJECT'. A bottom navigation bar includes 'PREV CALL', '< PREV', 'GO TO', 'NEXT >', and 'NEXT CALL'.

- Customize the spectrogram
- Classify custom call types using a drop-down menu
- Add, modify, confirm, or reject USVs
- Analyze USVs with the spectrogram and audio playback
- Listen to USVs in audible range using the audio playback button.

Acoustilytix™ Status:

Technology Readiness Level:



For more information:
Reach us at acoustilytix.com/contact-us



www.crgroup.com