

A Comprehensive Speech Development Tool

A specialized software program focused on the needs of speech-language pathologists and their caseloads, the Video Voice Speech Training System offers a variety of entertaining, motivational displays and games to help develop speech skills. Auditory feedback complements the visual displays, and sound effects heighten the impact of the games and cartoon rewards. The Version 3.0 software runs on computers with Windows 8, 7, Vista, XP, and 2000 operating systems.*

Vowel Production & Word Articulation

The Formant Matrix Displays' practice formats make learning correct vowel, R and S sound production and word articulation easier, and the Temporal Displays offer a framework for work on durational articulation errors. Coordinated voice capture and replay give the visual feedback even greater impact.

Nonsegmental & **Connected Speech** Training

P-A-R's cross time displays provide *live feedback* on the "invisible" elements of speech. Real-time response illustrates pitch, volume, duration and coarticulation in therapistdefined time frames. The Connected Speech display samples vocalization for up to 10 minutes and quantifies speaking rate and average pitch or volume.

Speech Development & Game Practice

The Fun & Games options offer numerous, colorful and entertaining games and displays that motivate kids of all ages. Selectable speech goals and adjustable operation make the games useful for multiple therapy activities, from basic vocal awareness to improving articulation skills.

Pitch & Intensity Measurement

The Assessment Displays quantify the pitch (Hz) and intensity (dB) features in a speech stream, and can determine fundamental frequency (F0). Over time, these samples can help you assess results of therapy with Video Voice's other graphic displays.

Recordkeeping, Reporting & Data Management

To help evaluate therapy progress, Video Voice's Reports and Analysis options provide various graphic and tabular reports showing performance in individual sessions or over time. You can view them on screen or print copies for your files. The Data Management functions let you transfer or remove model, score, IEP and other data for caseloads of up to 255 individuals per therapist.

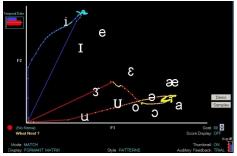
Consistent design, context-sensitive Help and other support features make Video Voice easy to learn and use. Flexible content and controls let you adapt operation to best meet your needs, whether your caseload contains children or adults.

THERAPY APPLICATION AREAS

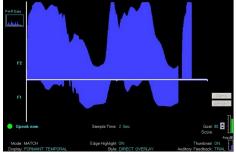
- ✓ Hearing Impaired ✓ Head Injury
- ✓ Stroke
- ✓ Articulation Errors

- ✓ Voice Disorders✓ Apraxia✓ Cerebral Palsy✓ Mental In
 - ✓ Mental Impairment
- √ Fluency
- ✓ English as a Second Language

Video Voice has two types of Formant Display for work on phonemes, words and even connected speech - "F2 vs. F1" and Multi-Frequency (F1, F2, F3). All *models are clinician-defined*, so you determine the program content and select appropriate therapy targets for each individual in your caseload.



Vowels "ee" and "ah" (Matrix Display)



"She sells sea shells" (Temporal Display)

In the lower frequency "F2 vs F1" Matrix Display, isolated vowels appear in general regions of the screen, and words have shapes based on their phonemic components. Speakers can practice matching model patterns or erasing them in the Gobble mode. In the Match Practice format, the model and trial appear on screen simultaneously for easy analysis of similarities and differences, with "instant replay" (Listen) available for review as needed. With a single button click, you can *change models "on the spot"* to let individuals practice using their own voice patterns.

The **Gobble** "eat-the-dots game's" *live feedback* is very powerful, allowing speakers to find and maintain articulator positions for difficult sounds like /r/. It also encourages repeated production of targets and stimulates vocal play.

While the Matrix displays are helpful for showing differences between sounds, they do not clearly illustrate timing or duration. For those type of errors, you can easily switch to the **Temporal F2/F1 Display** for any production. Its cross-time representation of speech helps remediate *durational articulation errors*. It also provides a way to practice segmental targets in a connected speech framework.

The Formant Multi-Frequency Displays provide visual feedback on speech's F1, F2 and F3 components of speech. They are very useful for work on /s/, /sh/, and

accuracy or errors in a cross-time Match

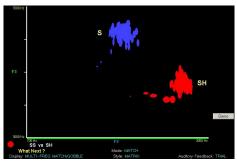
The **Multi-Frequency Formant** displays also have a matrix style that represents sounds as a relationship between their F2 and F3 frequencies. In the matrix display format, differences between sounds like

/s/ and /sh/ are markedly obvious.

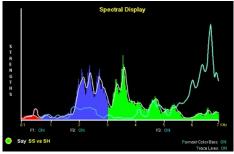
other sounds. There are e a sound spectrogram, a cross-time display of the three frequencies, Match and Gobble activities, and a live Spectral display.

The **Sound Spectrogram** shows the intensity in the F1, F2 and F3 frequency ranges for any vocalization, with greater intensities appearing darker in color. Video Voice also calculates average frequencies in each range across the production, displaying them as red, green and blue traces. The traces can be used to illustrate production

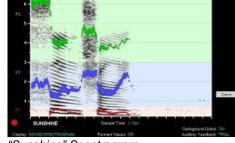
practice format.



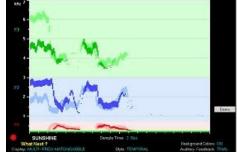
S & SH locations, F3/F2 Matrix Match



S (trace) vs SH (colors)



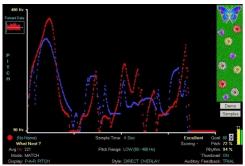
"Sunshine" Spectrogram



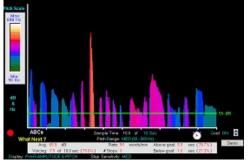
"Shun-shine" Multi-Frequency Match

The Multi-Frequency Spectral display offers live feedback on all three ranges of sound production in a single line. During vocalization, Video Voice concurrently determines the data averages across the ranges, and displays them as a muted trace line. At any point during voicing, you can capture a snapshot of the trace line and use it as a model for ongoing practice of a sound. In the display shown, the pale trace line illustrates accurate production of /s/, and the colored regions show the undesired /sh/. The immediate and transient nature of this display makes it well-suited for showing differences in sounds that can be sustained, like S/SH, or R/W/L. It can, however, also illustrate differences in phonemic pairs such as D/T, B/P and G/K sounds, produced in isolation and held for practice.

The P-A-R Displays are valuable for communicating many "invisible" aspects of speech: rising or falling pitch; loud vs. soft sounds; appropriate inflection of words or phrases; volume variation; changes in cadence or rate; duration of sounds; vocal stops; easy onset; continuous phonation; distorted and natural voicing; coarticulation of phonemes. You may choose either pitch or volume as the primary characteristic in these cross-time displays; rhythm is a secondary element of both.

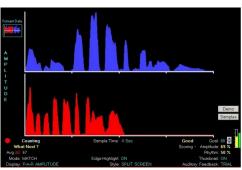


Rising and falling pitch levels



Connected Speech - Pitch and Volume

Selectable voice sample times from 1-10 seconds mean you can represent individual sounds, words or connected speech with these displays. Model and trial patterns are usually overlaid in the displays, but you can use the Split Screen display to separate the patterns for easier interpretation of errors. P-A-R pitch or volume models are also used as the basis for the Fun & Games P-A-R Game Zone activities.



Volume levels and timing, split screen

The Connected Speech displays are especially useful for *fluency training or* reinforcing changes in habitual pitch or volume. Sample times can be up to 10 minutes, in 10 second increments. After sampling, Video Voice reports the average pitch or volume measured and quantifies number of stops, percentage vocalization time above and below the therapist-specified goal, and approximate speaking rate (words per minute). You can choose between pitch only, volume only, or both for the display. With both, the display is an amplitude style, with pitch represented as colors in a spectrum. A variant, Streaming Speech, shows Hz and/or dB in a live, "marching" display with no time limit.

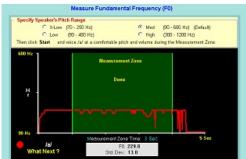
Auditory feedback reinforces most displays, with prompts for vocalization and replay of productions that let individuals both see and hear their productions. Voicing prompts, rewards and other audios can be personalized. *Cartoon animations* are available to reward good performance throughout operation. Many displays score trials against therapist-defined goals, with selective storage of scores for later review.

Assessment Displays

Pitch and Volume (Hz/dB) Measurement

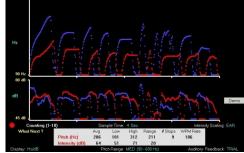
Video Voice's Assessment Display captures and quantifies pitch and intensity characteristics in a voice sample. Sample times are adjustable (1-10 seconds), and a "Zoom" feature lets you restrict the high, low and average Hz and dB readings reported to a selected part of a sample. You may alternate between the combined, full-screen display of Hz and dB together or each characteristic individually.

These displays can help you gauge results achieved with the other Video Voice activities. You may store the samples for reuse in subsequent sessions or to



Fundamental Frequency (F0) Measurement

provide a baseline for comparison with future assessments. You can print the graphic patterns and related tabular Combined Hz/dB Assessment summary as supporting documentation



for insurance providers, IEP mandates, or other institutional requirements, and add your own commentary to personalize the document if desired.

The Assessment Menu's **Measure Fundamental Frequency** gives you the ability to measure a speakers's habitual pitch. The vocalization can be quantified with vocalization of a single sustained vowel, or extracted from a connected speech stream, although the standard deviation reported will be higher in that case.



Driving Home (Less Volume)



Jumping Jack (Onset & Other Goals)



Voice-A-Sketch (Duration & Other Goals)

Video Voice's Fun & Games options offer a variety of entertaining and *highly motivating* games and graphic displays for work on most every aspect of speech.

Multiple goals in many games make them useful for different speech activities. There are games to help develop *pitch control*, learn appropriate *volume* levels, improve *breath control*, promote *vocalization on demand*, and produce *articulation* targets correctly. In all games and displays, you have control over the goals and objectives, including colorful reward animations and sound effects that add to the fun.

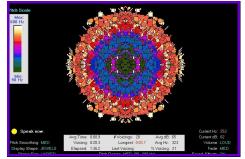
You can, for example, use **Voice-A-Sketch** for work on simple *phonation awareness*, vocal *onset*, *duration*, *easy onset*, *volume* and *articulation* sounds or words. A picture magically appears in blocks or drops down the screen when the speech goal is met. **Jumping Jack's** track meet has events for vocal onset, duration, volume, and more.

Among the possible activities are:

- ◆ See pitch levels in speech as colored brush strokes on the screen canvas with **Pitch Painting**.
- ♦ Watch boxes shrink and grow with volume changes in Magic Box.
- ◆ Practice onset control by playing ping-pong with **Speech Ball**.

- ◆ Speak with sufficient volume to keep a hot air balloon aloft in the sky in **Up**, **Up** and **Away**.
- ◆ Move a train, car or horse by vocalizing at the correct volume or producing a specific sound or word articulation target with **Chat-N-U-Go Choo-Choo**.
- ◆ Cruise down the road, but don't break the volume speed limit in **Driving Home**.
- ◆ Force an alien ship back into space with the right pitch, volume and/or duration in **Laser Master**.
- ◆ Say articulation targets to move an explorer around a cave and collect hidden booty in **Treasure Hunt**.
- ◆ Turn a giant character green by producing the right sound, either in isolation or co-articulated with others with the **R-Ticulator**.
- ◆ Make pretty patterns on a **Kaleidoscope** by practicing pitch control.
- ◆ Catch stars as they fall from the sky with accurate production of target words with Falling Star.

In some games, you can use previously stored models of articulation targets, or create them on the spot, and record scores achieved during practice. Video Voice keeps *related statistics and scores* for every Fun & Games activity, and you can review in printable, single session or cross-time reports of performance and progress with the Reports and Analysis facilities.



Kaleidoscope (Pitch & Volume)



Treasure Hunt (Articulation)

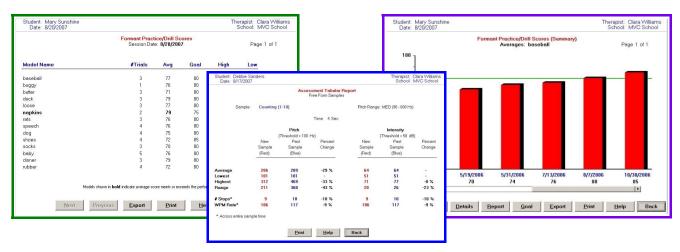


Up Up and Away (Volume & Duration)

Video Voice offers several options for preserving the results of therapy sessions. You can print both on-screen images and data collected in several report formats. Options include:

- ♦ On-the-spot copies of screen displays
- **♦** Single session score reports
- ◆ Cross-session score analyses (tabular and graphic)
- ◆ Assessment (Hz/dB) displays and quantified data
- ♦ IEP/therapy plan goal/objective summaries

You control the general contents and format of most reports, telling Video Voice to make them as simple or detailed as you wish. Choose *tabular reports* of high, low and average scores against defined performance goals or bar charts that *represent progress graphically*. In addition to the information Video Voice provides in its various report structures, you can add your own commentary to increase the reports historical or personalized, "take home" value. Report data can also be exported to other applications software for further analysis or other uses.



Data Management

Organizing and Tracking Caseload Information

Video Voice has a number of functions designed to assist you in organizing and managing your caseload information. You can *copy models* from one folder to another, which can streamline setting up model directories for your caseload. There are options for entering *therapy plans*, reviewing and *printing* directory contents, *deleting outdated data*, changing model properties, and updating caseload information. If multiple therapists are sharing Video Voice, the Data Management options allow data to be transferred from one caseload to another. If a facility uses the program on multiple computers, you can use the Import/Export function to *move caseload data* between them.

Customer Service

Ongoing, Responsive Support

Toll-Free Hotline

It's easy to get your questions answered or problems solved. Help from a real person with real answers is just a toll-free phone call away! Or, if you prefer, get assistance via email.

Software Updates

No-charge Version 3.x software updates are downloadable at your convenience from www.videovoice.com. Take advantage of improvements and new features, and your software will stay up-to-date for years to come.

Site License

Version 3.0 is *licensed on a per-computer basis*. Discounted pricing may be available for installation and use on multiple computers. Call for a quotation or to discuss your needs.

MICRO W VIDEO

Have questions or need more information?

2 Ridgemor Dr. Ann Arbor, M 48103 800-537-2182 mv@videovoice.com

www.videovoice.com

734-996-0626