Task Windows

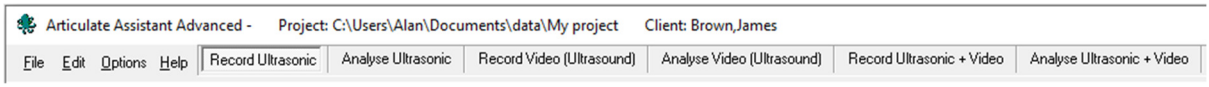
Contents

There are too many signal analysis windows to fit on one screen. AAA provides **Task Windows** configured to present a subset of windows appropriate for a particular task.

When AAA starts the default **Task window** is 

suitable for recording speech audio and ultrasonic (Telemed Micro or EchoB) data. The 

is designed for analysis. Other task windows are configured for recording different combinations of data and for analysis of different kinds.



Adjust an existing Task window

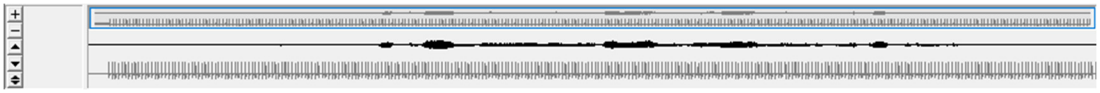
Task windows consist of subwindows. For example, the Record Ultrasonic task window is made up of the following:

Menubar - Main menu bar and task bar

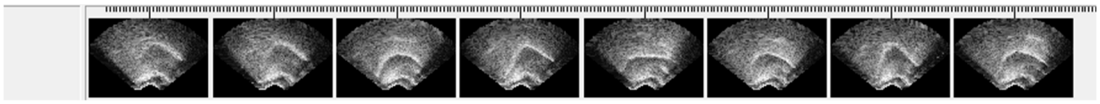
Prompt display

The price range is smaller than any of us expected.

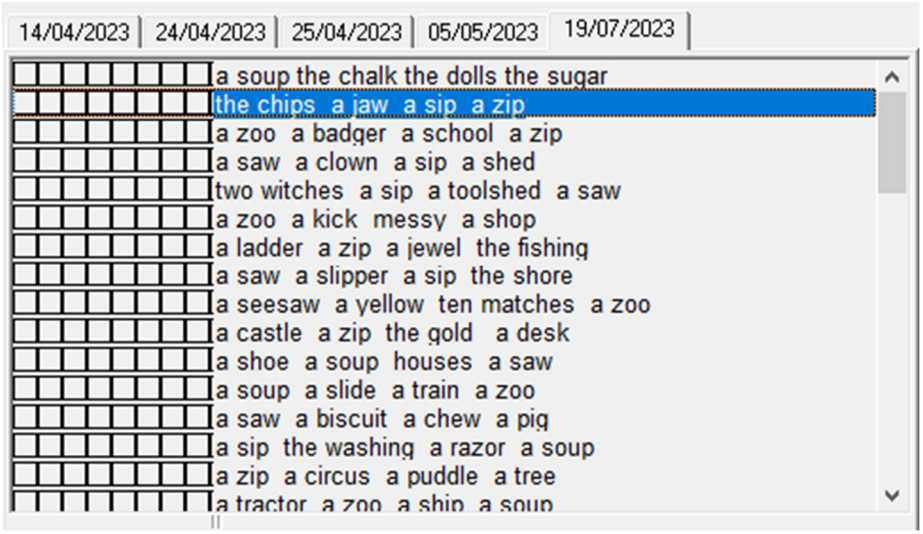
Waveform Chart



Ultrasonic Chart



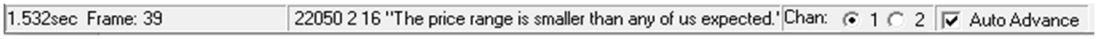
Prompts/recordings selection window



Ultrasonic display

Menubar – Button bar

Status bar



The size of each subwindow can be adjusted by clicking and dragging on the boundary between subwindows. Any adjustments are not saved unless performed in design mode (next section). The next time the design window is opened it will revert to the designed layout.

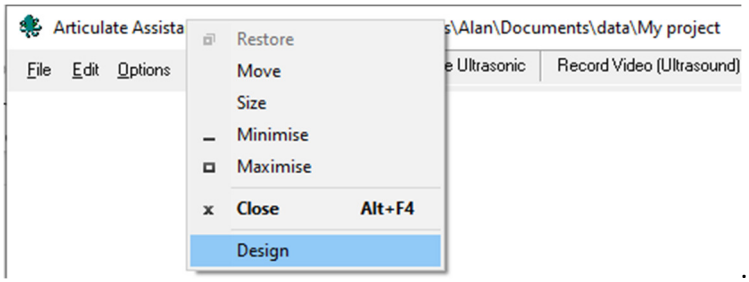
Design your own Task window

Designing a new task window or permanently adjusting subwindow sizes in an existing task window is done in design mode. Because this is an advanced function access to this function is concealed as a right-click menu option in the application caption bar.

> **WARNING:** A task window intended to record ultrasonic data must have an Ultrasonic Chart. A task window intended to record video must have a Video Chart.

Entering and Exiting Design Mode

In order to enter design mode click on the caption bar at the top of the AAA application with the right mouse button. Then select the 'Design…' option in the popup menu.



> **Note**: If there is more than one window with a caption bar (e.g. The '2-screen Ultrasound + Video' Task Window) then only the Caption bar with Articulate Assistant Advanced - written in it has the 'Design' option.

The 'Design Dialogue' list will then appear.

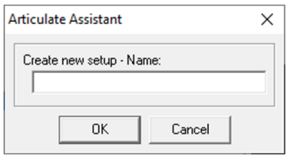
To exit design mode without saving any changes simply close the 'Design Dialogue by clicking on the ☒.

Save Design Change and position Task Window button

Saving changes must be done before exiting design mode. To save changes made in design mode, click the  right mouse button anywhere in the Task Bar to reveal the popup menu

Click '**Save "<Task name>"**' ('Save "Record Ultrasonic"' in this example). Saving always applies to the currently selected task window regardless of where you  right-click.

Click **'Save as New Setup'** to copy the current Task Window configuration to a new task window and leave the current task window unchanged. You will be prompted to give this new Task Window a name.



The new task window button will appear at the far right of the Task bar.

Click **'Move "<Task name>" left'** to shift the button position left in the bar

Click **'Move "<Task name>" right'** to shift the button position right in the bar

> **Note**: AAA will always open displaying the leftmost Task Window

Delete a Task Window

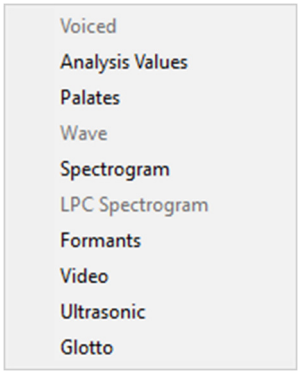
To delete a Task Window, first left-click to select the Task Window to be deleted. Then  right-click to bring up the menu.

Click **'Delete "<task window>" '** (e.g. 'Delete EPG "Feedback" ').

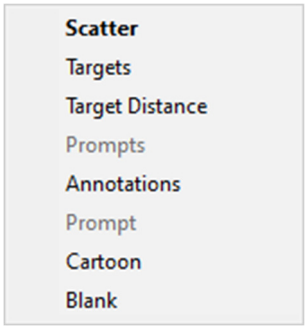
Subwindows - Charts, Panels, Bars and Displays

Task windows are made up of subwindows that dock together and can be resized and positioned to create an ensemble suited to a particular task. Modules fall into 4 categories as follows:

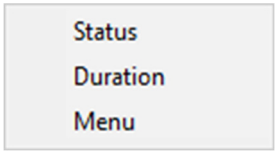
Charts. Any subwindow which has a display with a time axis .



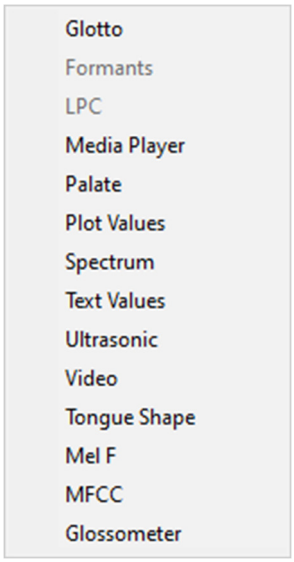
Panels. Subwindows that do not fall into the other 3 categories



Bars. Subwindows that cannot be resized in normal operation



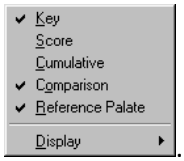
Displays Any module with a graphical display, which doesn't have a time axis



To create a new module, simply select it from the menu in the 'Design Dialogue'.

The ‘Menu Bar’ can be configured further by  right clicking in it to bring up the popup dialogue (**Error! Reference source not found.**). The top three options in this popup menu control the visibility of ‘Menu’, Task ‘Setup Buttons’ and ‘Buttons’. There is a submenu 

allowing each of the buttons to be enabled or disabled.

The ‘Palate Display’ also has a popup dialogue to control the visibility of elements of the display 

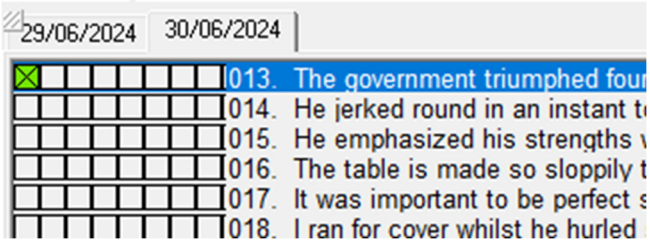
. The elements consist of:

- **Key**. Colour scale
- **Score**. Variability Index
- **Cumulative**. Cumulative contact check box
- **Comparison**. Palate comparison gauge

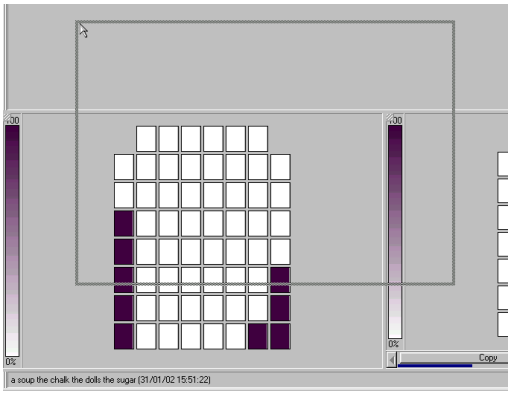
It is also possible to specify whether the ‘Palate Display’ is a ‘**Reference Palate Display**’. Note: Only one ‘Reference Palate Display’ permitted per ‘Task Window’.

Repositioning a module in a Task Window

To rearrange the modules in a Task Window, click and drag the  in the top left corner of the window (or the  at the left edge in the case of ‘Bar’ type modules).



A grey outline that will move about the screen and ‘dock’ in positions relative to other modules. When you are happy with the position release the mouse button. The relative size of the module can be adjusted as described in Adjust an existing Task window



It is also possible to move a module so that it exists in a separate window on its own. In fact this is the state of a new module created by selecting a menu option from the 'Design Dialogue'. To get a module to be separate from the main window , click and drag until the grey outline is not aligned with the other modules (as shown above) then release the mouse button.

Repositioning modules is an art that improves with practice.

Deleting a Module from a Task Window

To delete a module from a Task Window move the module so that it exists in a separate window on its own (as described in the previous section) then close that window by clicking on the .

Ultrasound / Video module

The Ultrasonic/Video module is a standard addition to the basic (Audio and EPG only) Articulate Assistant Advanced (AAA) software that enables the recording and analysis of Ultrasonic (high frame rate, raw pre-scan ultrasound) data and is compatible with Micro, Art and legacy EchoB systems (and SonixTouch or SonixTablet Ultrasonix machines running Exam version 5.7). This module also enables the recording of lip camera or ultrasound video output through the dfg2USB video capture card (and legacy cards, Adlink Angelo RTV, Imperx VCE Expresscard|54), or by importing pre-recorded ultrasound video.

The ultrasound module enables the following functions:

- Record ultrasound synchronously with audio (hardware required)
- Import AVI format ultrasonic/video files
- Review and play back ultrasonic/video sequence
- Add splines and set conversion scale for mm measurements
- Calculate and display analysis values based on spline distances and shapes
- Export spline data in Euclidean or Polar co-ordinates
- Export analysis values for labelled time points
- Export ultrasonic and video movies in AVI format
- Provides a workspace for superimposing, averaging and comparing tongue curves which have been extracted from different time points or recordings

- Export raw Ultrasonix/EchoB/Micro data for further analysis
- Carve vocal tract boundaries from tracked contours.
- Perform live tracking of lip or tongue contours up to 40 frames per second