

Talk Assistant v2.1 User Guide

May 19, 2015

Event Table

	Type	Duration	Unit	Start Freq (Hz)	End Freq (Hz)	Level(dB)	Phase (Deg)
1	Tone	1.0	Seconds	10000	200000	0	0
2	Tone	1.0	Seconds	20000	200000	0	0
3	Rest	1.0	Seconds	10000	200000	0	0
4	Tone	1.0	Seconds	30000	200000	0	0
5	Tone	1.0	Seconds	40000	200000	0	0
6	Tone	1.0	Seconds	50000	200000	0	0
7	Tone	1.0	Seconds	75000	200000	0	0
8	Sweep	10.0	Seconds	100000	200000	0	0
9	Sweep	10.0	Seconds	200000	10000	0	0
10	Click	1.0	Seconds	50000	200000	0	0
11	Tone	1.0	Seconds	40000	200000	0	0
12	Sweep	1.0	Seconds	60000	200000	0	0
13	Click	1.0	Seconds	90000	200000	0	0
14	Rest	1.0	Seconds	10000	200000	0	0
15	Tone	1.0	Seconds	150000	200000	0	0
16	Tone	1.0	Seconds	100000	200000	0	0
17	None	1.0	Seconds	10000	200000	0	0



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1 Overview

Talk Assistant is used for the configuration of compatible **icTalk** units, prior to deployment. It may also be used to operate an **icTalk** unit, after it has been deployed. It is a PC program, which allows the user to set the mode of operation for the unit, program the sound events which the unit will output when triggered, trigger/stop sound output, and update the firmware.

This document outlines the operation of **Talk Assistant** version 2.1. For more detailed information on **icTalk**, please refer to the ***icTalk User Guide***.

2 Main Display

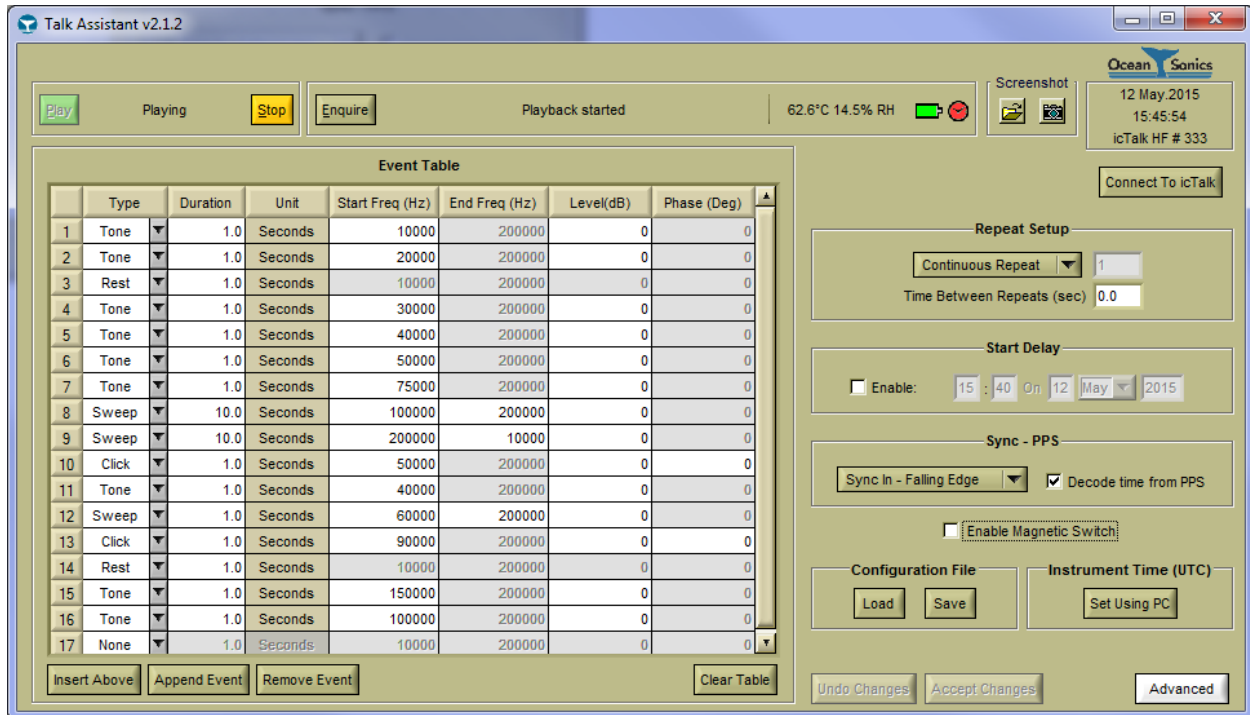


Figure 2-1: Main Display

The main display of **Talk Assistant** allows access to all setup and control functions available to **icTalk**. All buttons whose functions require a connection to the device will be disabled while no unit is connected. If the connected unit does not support certain functions, those functions will remain disabled even after a connection has been established.

The status line, above the event table, will display a status based on the responses received whenever commands are issued.

The upper right area of the screen displays the current date and time on the computer running **Talk Assistant**, as well as the type of device connected, and the serial number of the unit.

3 Using the Software

This section describes how to use the software to connect to an **icTalk** device, and how to configure and control the device from the software.

3.1 Starting the program

Start-up of **Talk Assistant**, as with other Windows applications, can be done from the Windows Start menu, or a shortcut can be created to start directly from the desktop. It can be found on the start menu under:

Start->All Programs->Ocean Sonics->Talk Assistant

3.2 Connecting to an icTalk Device

In order to use an **icTalk** device, we must connect to it. This utility supports connections through a COM port on the PC. **Talk Assistant** will remember the previously connected unit, and try to automatically establish the connection when started. If the automatic connection is unsuccessful, the **Connection Setup** panel will open automatically. If the desired connection is to a different unit, or the panel was closed, the panel may also be opened by pressing the **Connect To icTalk** button.

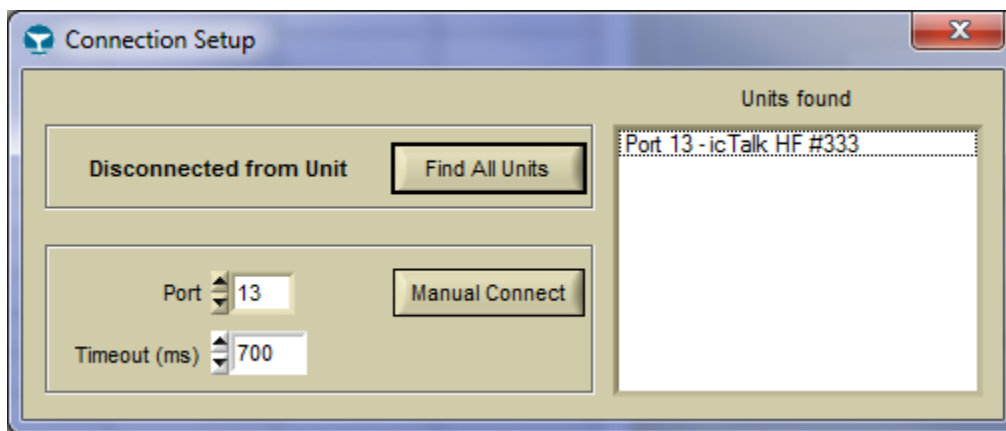


Figure 3-1: Connection Setup

If the COM port is known, it can be typed into the **Port** field, and the **Connect** button can be pressed to connect to the device.

If the COM port is not known, the **Find All Units** button can be pressed, which will search for any connected units. Any devices found will be listed in the **Units found** list. Double clicking on a device in this list will connect to it.

3.3 Job Setup

The screenshot shows a 'Job Setup' interface with three main sections:

- Repeat Setup:** Contains a 'Number of Repeats' dropdown menu set to '1' and a 'Time Between Repeats (sec)' input field set to '0.0'.
- Start Delay:** Features an 'Enable' checkbox (unchecked) and a date/time selector showing '17 : 03 On 12 May 2015'.
- Sync - PPS:** Includes a 'Sync In - Falling Edge' dropdown menu and a checked 'Decode time from PPS' checkbox.

At the bottom of the interface is an 'Enable Magnetic Switch' checkbox, which is currently unchecked.

Figure 3-2: Job Setup

The job setup is automatically read from **icTalk**, when a connection is established. The settings are updated when **Accept Changes** is pressed. The current settings in the unit can be retrieved by pressing **Undo Changes**.

The parameters which can be configured include:

Continuous Repeat/Number of Repeats: The number of repeats is how many times the event table will repeat before stopping. If continuous repeat is selected, the events, once started, will play until a “Stop” command is sent.

Time Between Repeats: The duration, in seconds, of the delay between cycles of the event table.

Start Delay: The start delay is the time when playback will start if enabled. Note that the unit must be in “Playing” mode to start. The unit is put into “playing” mode by pressing the **Play** button. The start delay time is set in Local Time.

Sync – PPS: The sync PPS settings are used for the PPS (pulse per second) input/output settings. “Sync In” will have the **icTalk** sync to a PPS source of the same polarity (Rising or Falling edge), while “Sync Out” will cause the **icTalk** to generate a PPS signal for other devices to sync to. If this setting is set to “Disabled”, **icTalk** will ignore the state of the sync pin.

Enable Magnetic Switch: This toggles whether the magnetic switch can be used to begin playback of the event table.

3.4 Editing the Event Table

The screenshot shows a software interface titled "Event Table". It contains a table with the following data:

	Type	Duration	Unit	Start Freq (Hz)	End Freq (Hz)	Level(dB)	Phase (Deg)
1	Tone	1.0	Seconds	10000	200000	0	0
2	Tone	1.0	Seconds	20000	200000	0	0
3	Rest	1.0	Seconds	10000	200000	0	0
4	Tone	1.0	Seconds	30000	200000	0	0
5	Tone	1.0	Seconds	40000	200000	0	0
6	Tone	1.0	Seconds	50000	200000	0	0

Below the table are four buttons: "Insert Above", "Append Event", "Remove Event", and "Clear Table".

Figure 3-3: Event Table Controls

Sound output from the **icTalk** is controlled using an event table. Available events are tone, sweep (linear), rest (silence), and click.

Events can be added to the table by pressing the **Insert Above** or **Append Event** buttons below the chart.

Removing an event is done by selecting the event, then pressing **Remove Event**.

Clearing all events is done by pressing the **Clear Table** button below the table.

The table is "refreshed" by retrieving the event data from the **icTalk** instrument. The entire table can be reloaded from **icTalk**, by pressing the **Undo Changes** button.

These actions can all also be performed by selecting the appropriate items from a menu that appears when right clicking the table.

When all changes are complete, and the events are as desired, the changes can be sent to **icTalk** by pressing the **Accept Changes** button.

3.5 General Controls

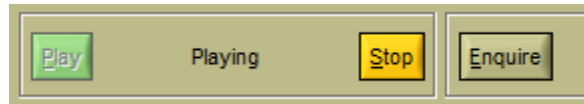


Figure 3-4: General Controls

Sound output can either be stopped or started using the button controls available on the main display (**Play** and **Stop** buttons). The device information (firmware version and serial number) can also be refreshed at any time by pressing the **Enquire** button. Between the **Play** and **Stop** buttons, the current playback mode of the connected **icTalk** is displayed, when available.

3.6 Taking Screenshots



Figure 3-5: Screenshot Controls

Screenshot controls are contained in the screenshot section near the top right side of the main display. Pressing the folder button will select the folder to which screenshots will be saved, and pressing the camera button will take the screenshot. The screenshot will be saved as `TalkAssistant_Unit#_yymmdd_hhmmss.bmp`, where `#` is replaced with the serial number of the connected unit (or 0 if none is connected), `yymmdd` is the date, and `hhmmss` is the time of day.

3.7 Configuration Files

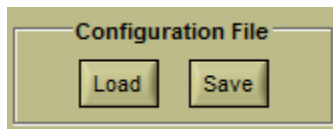


Figure 3-6: Configuration File Controls

Configuration files are files with the extension “.tlk” which contain a set of events and setup for an **icTalk**. **Talk Assistant** can store these files from the event table/settings, by pressing the **Save** button. These files can also be loaded when connected to an **icTalk**, by pressing **Load**.

When files are loaded, you must click **Accept Changes** or **Play** in order to send the new settings to the **icTalk**.

3.8 Instrument Time (UTC)

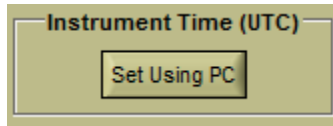


Figure 3-7: Instrument Time Control

The time of the **icTalk** can be set using the **Set Using PC** button. This will set the time of the **icTalk** to the time on the computer running **Talk Assistant**.

3.9 Advanced Settings

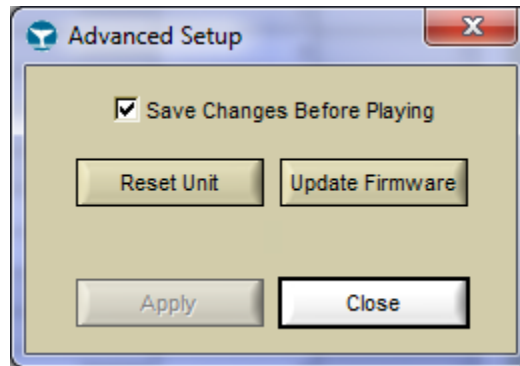


Figure 3-8: Advanced Settings

Talk Assistant's advanced settings can be opened by clicking the **Advanced** button, on the lower right of the panel. The advanced settings include the ability to reset the **icTalk**, and update the firmware. It also includes the option for whether clicking **Play** will automatically send any setup changes (**Save Changes Before Playing**).