



DUET Executive Speakerphone

Operating Manual

Thank you for purchasing the Duet Computer / Telephone Speakerphone by Phoenix Audio Technologies.

The Duet will become your high quality speakerphone for your VOIP communication, as well as your telephone communications.

Please refer to the instructions in this Operating Manual on how to connect and how to use the Duet.

If you have difficulties operating the Duet, or if you have any technical questions or comments, please send a detailed e-mail to support@phnxaudio.com. Please also visit our website at www.phnxaudio.com for more information and products' news.

Included with the Duet are:

1. A USB (mini B to A) cable. This cable will connect your Duet to your computer for your VOIP needs. This cable is all you need in order to operate and use the Duet with your VOIP applications.
2. Two RJ11 (4 position 4 contacts) to RJ11 cable (same connectors as your telephone handset). These cables will connect your Duet to a telephone that is equipped with a standard RJ11 type headset connector (typically IP telephones)*. Some telephones will work with one of the cables and some with the other one.
3. An RJ11 (4 position 4 contacts) to 2.5mm cable. This cable will connect your Duet to a telephone (or cellular phone) that is equipped with a standard 2.5mm headset connector*.
4. A 110-220VAC to 5VDC converter. This converter will provide power to the Duet if a USB connection is not available.

** Please consult with your IP Telephone provider or your telephone / cellular phone user manual for compatibility. Only devices that can use standard headsets (with either RJ11 connector or 2.5mm connectors) can be used with the Duet. Phoenix Audio Technologies is not responsible for any damage that will be caused to your equipment if it is not compatible with standard telephone headsets.*

Basic modes of operation:

- The Duet can work with your Desktop / Laptop computer and be your VOIP speakerphone
- The Duet can work with your telephone / cellular phone / PDA - connected through your telephone's headset jack, and become your external high quality speakerphone.
- The Duet can work with BOTH your computer and your telephone enabling three-way conferencing
- You can cascade several Duets to achieve larger room coverage. Please refer to the relevant chapter in this manual for detailed instruction.

Other connectivity features:

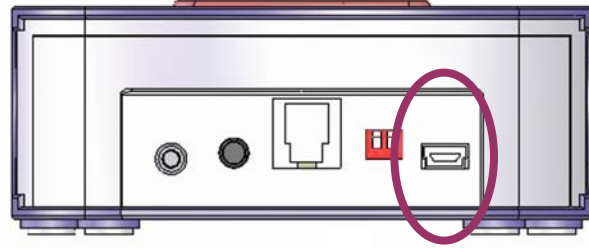
- By default, the Duet utilizes its internal microphone and loudspeaker providing high quality, hand-free / headset free communication.
- The Duet has a 3.5mm stereo jack for external loudspeakers / headphones. Connecting your speakers to the Duet will automatically disable the internal loudspeaker.
- The Duet has a 2.5mm headset jack so you can use your standard telephone headset and conduct a private conversation. Connecting the headset to the Duet will automatically disable both the Duet's internal microphone and internal loudspeaker.
- The Duet has a 2-slides 4-position switch that determines the sensitivity of the Duet's output going into your telephone. **This switch will have no effect on the signal level going into your PC** (available in V1 and newer).
- The Duet is powered through the USB port. In cases where a USB connection is not available, an AC/DC converter is provided (plugs into the Duet through its USB jack)

Operation features:

The Duet has Volume Up / Volume Down buttons, and a Mute button.

Computer connection

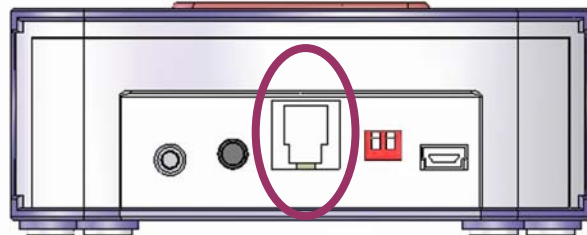
Plug the USB cable to the Duet on one side, and to your computer's USB port on the other side. The Duet will turn on (powered by the USB), enumerate as an PhnxMT202 device (AK4571 in older models) and start working.



Note: the Duet will enumerate as both your audio input device (microphone) and audio output device (speaker). You may want to set up the playback and recording level for optimum results. You may also want to make sure that the microphone is muted for playback (Windows only) – so that you don't hear yourself through your unit's loudspeaker. *We strongly recommend that you download the Audio Setup Utility from our website (www.phnxaudio.com); it will run on your computer in the background, identify the existence and validity of your Duet and set its level to obtain optimum results. If you prefer not to download the utility Please refer to the "How to Set Your Audio Levels" chapter at the end of this document for more details.*

Telephone connection

The Duet can connect to most telephones / IP telephones / cellular phones / PDA devices through the device's headset connection. Typically, IP phones have an RJ11 type jack for the headset connection. Most other phones have a 2.5mm jack for the headset connection.

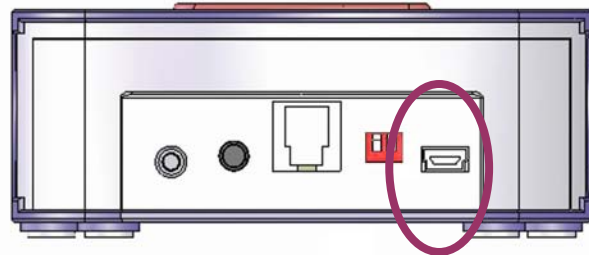


The Duet includes two types of cables to address these two types of headset connections: one type has an RJ11 connector (mini telephone) on both sides of the cable; the second has an RJ11 connector on one side of the cable, and a 2.5mm jack on the other side of the cable.

Note: two cables of type one (grey and black) are supplied with the Duet. The black cable works with some IP telephones and the grey cable works with other. If you connected one and you don't hear the dial-tone please try the other one.

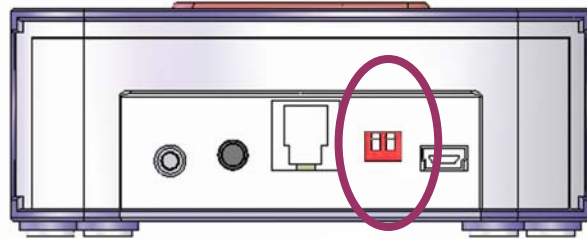
Chose the cable which is appropriate to your telephone, plug the RJ11 connector into the Duet and the other side of the cable into your telephone.





The Duet can be powered through the USB connection, when available. If a Computer / USB connection is not available, use the AC/DC converter that is supplied with the unit. The converter plugs into the unit's USB jack.



Setting up the telephone's input gain

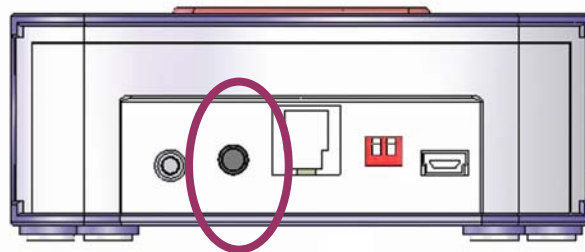
The Duet has a two-slides four-position switch that controls the level (sensitivity) of the Duet's output audio signal going into your telephone. If the gain is set too high the telephone input will clip the signal and the Duet will fail to cancel the Line Echo. As a result you may hear an echo returning when you speak. If the gain is set too low the other side may hear you too low. The unit is set when you open it at low gain which will work well with most telephones. If you get complaints that your voice is too low increase the gain as much as necessary until you start getting echo. Please use the following table for reference.



Switch Setting	Sensitivity Level
	+20dB
	+14dB
	+6dB
	0dB (Factory Set)

Headset / Headphone connection

The Duet is equipped with 3.5mm stereo Headphones / External Speaker connector. Connecting your PC's loudspeakers (or headphones) to the Duet will disable the Duet's internal built-in speaker. Your computer's sounds (music, VOIP communication, or any other) will be passed through to the external speakers, maintaining the same sound quality your computer can deliver with no degradation. The Duet will also send your telephone audio to the external speaker (headphones). While the internal speaker is disabled when using this connection, the Duet's internal microphone is still functional. This connectivity is useful if, for example, if you listen to music stored on your computer while wearing headphones, and the telephone rings – you can pickup the call without taking the headphones off. It can also be useful if you want to have a private conversation using standard headphones without the need to purchase a telephone headset.



The Duet is equipped with 2.5mm standard telephone / cellular phone headset connector. Connecting a headset to the Duet will automatically disable the Duet's internal built-in speaker and microphone. Your PC's



sounds (music, VOIP communication, or any other) will be converted to mono and sent to the headset's earphone, together with the audio signal receive by telephone. The headset connection is useful when you want to conduct a high quality private conversation using a standard telephone / cellular phone headset.

IP – Telephone bridge

With the Duet connected to both your computer and your telephone you can either conduct a telephone conversation using the Duet, or a VOIP conversation. The Duet will also allow you to connect and communicate with both your telephone party and your VOIP party at the same time. When such a simultaneous conversation occurs, the Duet will bridge between your telephone party and your VOIP party, and they can communicate with each other in addition to communicating with you.

This feature is very convenient if you are on a VOIP call and want to patch-in a person that has no access to a computer at the time. Simply call him/her using your telephone, while keeping the VOIP call alive. It is also useful if you want to record your telephone conversation on the PC (all you need is a recording utility on your PC).

Volume Up / Volume Down / Mute

When the Duet is powered, a blue light will illuminate through the buttons on top of the unit, indicating that the unit is on and operating.



Push the middle button (with the microphone icon) and the light will start to blink, signaling that the unit is in Mute Mode. In Mute mode the unit's microphone (internal or external if you use a headset) is blocked. Push this button again, and the light becomes steady, indicating that the microphone is open and live.

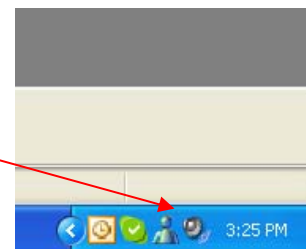
Pushing the Up Arrow and Down Arrow buttons, will increase / decrease the unit's volume. You can also control the input / output signal levels using your computer's volume controls (this will only affect you VOIP signal levels) or your telephone volume control (will only affect your telephone's communication signal levels). A prolonged push on the Volume buttons will increase / decrease the volume several levels – until you stop pushing.

The Duet will make a beep sound when a volume up / volume down are pushed, and a series of beeps when a prolonged push is performed (each beep signals one level of volume increase / decrease).

How to set the audio levels on your computer (Window)

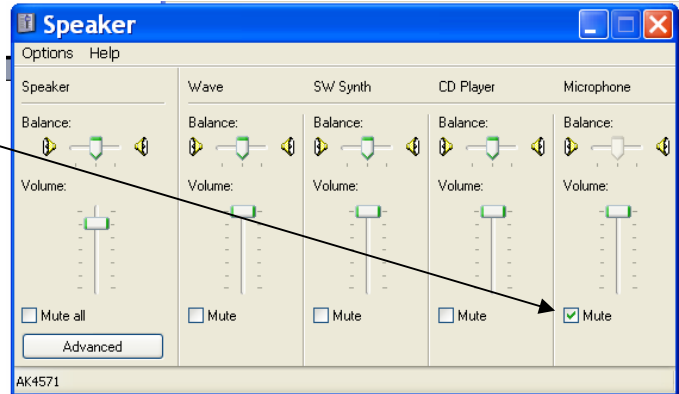
In most cases the Volume Control icon appears on the lower right hand side of your computer's monitor

If it does, double click it. If it doesn't, click on "Start", "Control Panel", "Sound Speech and Audio Devices", "Sounds and Audio



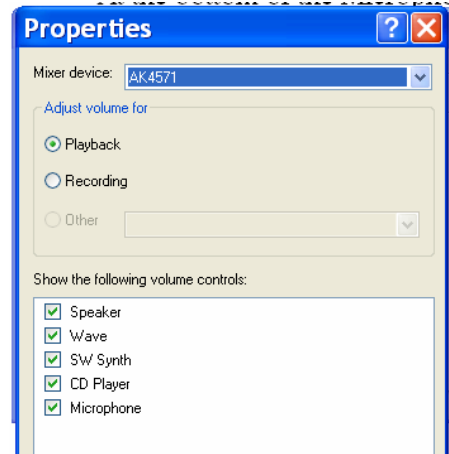
Devices”, select the Audio panel. Make sure that the default device for both the Sound Playback and Sound Recording is PhnxMT202 (AK4571 in old models).

Click on Sound Playback Volume.
At the bottom of the Microphone bar check the Mute box.



If there is no microphone bar, go to “Options”, “Properties”, and check the microphone box. Click OK and now check the mute button on the microphone bar.

Muting the microphone will prevent the feedback of your voice playing back through your loudspeakers.



Bring the “Wave” slide all the way up, and bring the “Speaker” slide one notch below full volume.

These slides will affect the volume level of your speaker. If this recommended setup is too loud or too quiet you can change it to fit your comfort level (you can also control the speaker’s level on the device itself).

Note: the computer volume settings will only affect the sound level when engaging communication through your computer. It will not affect the sound levels when you use the device with your telephone. The Volume control knobs on the device itself will affect both the telephone and the computer’s communication.

Now that the playback levels are set, click the “Options” menu; go to “Properties” check the Recording bullet and click OK.

Set the playback bar level at 1-2 notches below the full scale. This will control the recording level, or the level in which you will sound to the other side when conducting computer communication. If the other side complains that you sound too loud or too low you can change this setting for optimum results.

