

Audio

Mastering your audio track correctly is key to getting the best results from your PicoTalk. The left audio channel must contain only the vocal track, no other background music or sounds. If you're only animating one character then you can use the right channel of the audio track for these sounds. If you're animating two characters, the right channel of the audio track must be used for the second character.

Audio Volume

The volume level of the audio going into the PicoTalk must be as high as possible for the best results. If you're using a portable CD or MP3 player, make sure the output volume is at max. If you have the ability to edit the sound, be sure to normalize the audio level to the point just before clipping occurs.

One Character

Simply record a sound track and play it back through the PicoTalk. If sound effects or music are required, they must be in the right audio channel only.

Two Character Conversation

A two character conversation will almost certainly require some audio editing. One character's voice track must be in the left channel, and the other in the right.

Audio Editing

Audacity is an audio editing program available for free from <http://audacity.sourceforge.net/>. The program is available for both mac & pc, and it's fairly easy to use to create your own two-character audio track, or to add effects to a single character track. Be sure to use the Normalize function in the Effect menu to increase the audio level to almost maximum. If you're intending to play your sound file on an MP3 player, you'll also need to download the Lame MP3 encoder. See the Audacity website for more details.

Troubleshooting

Mouth only moves to some of the audio

Try increasing the volume on your source, or increasing the sensitivity of the PicoTalk. If that's still not enough, the audio will most likely have to be edited and increased in software.

Mouth moves even when the character's not talking

Make sure only the voice is in the left channel of the audio. You can also try reducing the PicoTalk's sensitivity.

There's a hum in the audio

Could be a ground loop. Make sure the speakers, audio source, and PicoTalk are all plugged into the same circuit.



Operating Manual Talking Skull

www.frightideas.com

Opening the Skull

1 REMOVE THE TWO SCREWS IN THE BACK OF THE SKULL

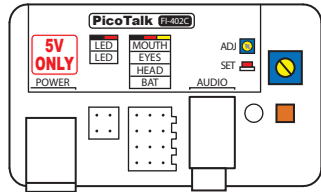


2 CAREFULLY REMOVE THE BACK HALF OF THE SKULL



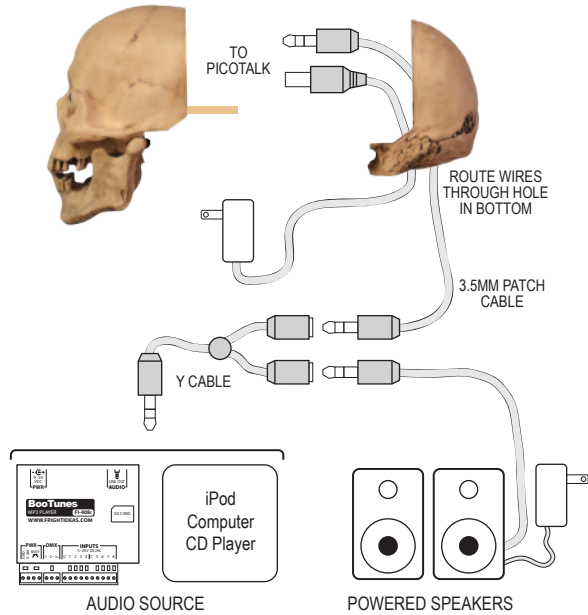
3 LOCATE THE PICOTALK CONTROLLER

Inside the skull you'll find a PicoTalk - the "brains" of the Talking Skull. You'll need to connect the included power supply and audio cable to the PicoTalk.

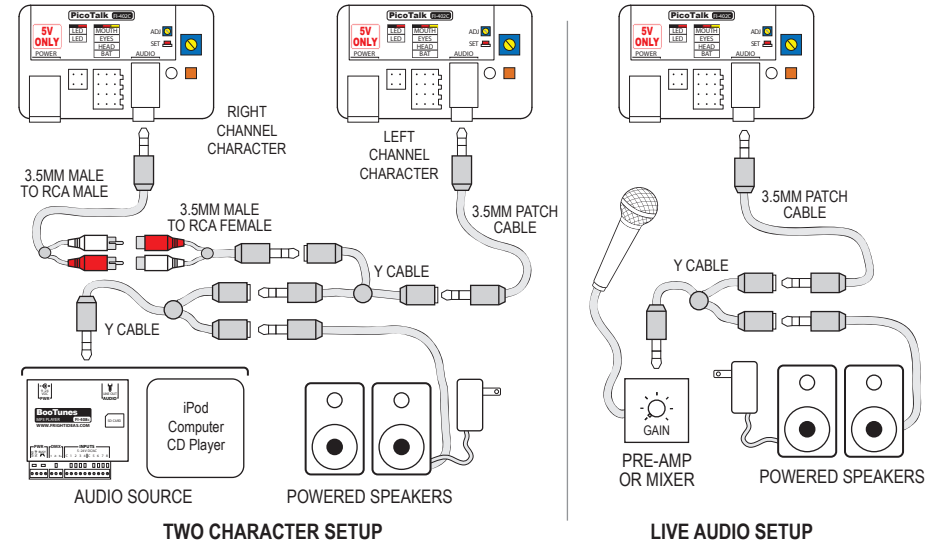


DO NOT MISPLACE THE POWER SUPPLY THAT SHIPPED WITH YOUR TALKING SKULL. YOU MUST ALWAYS USE THE INCLUDED 5VDC POWER SUPPLY. ANYTHING ELSE WILL DAMAGE YOUR PICOTALK AND THE SERVOS.

Connection Diagrams



TYPICAL SETUP



Programming

The Talking Skull ships calibrated and ready to use. You can start a partial calibration if you find the need to adjust the audio sensitivity, the amount of eye/head movement, or the eye LED brightness and behavior. Note that the LED eyes and head turn are optional upgrades and are not installed on all skulls.

To start a partial calibration, tap the SET button while the PicoTalk is plugged in. The LED will blink as shown below. Tap the SET button again to move to the next step.

PARTIAL CALIBRATION START	
x1	Random Movement - Turn ADJ to select how often the eyes and head will move. Note that the amount of random movement shown represents the character's idle state. The amount of movement will double when the character is speaking.
x2	Audio Sensitivity - Turn ADJ to adjust the sensitivity to the audio. Play the audio track into the unit, the mouth should start moving. Start with ADJ turned fully counter-clockwise, then turn it clockwise bit by bit if the mouth isn't moving to all the words.
x3	LED Brightness - Turn ADJ to adjust the maximum brightness of your LED eyes.
x4	LED Eyes Mode - Turn ADJ to adjust the behavior of your LED eyes. Make sure your audio is playing. See the diagram below for the different modes.

