

HANDS-FREE LITE and TWIST-A-TRONIX

Animatronic Puppet & Balloon System

V3 – Oct 31, 2012

Thank you for purchasing Hands-Free LITE / Twist-A-Tronix. The product will allow you to control a puppet or balloon sculpture by remote control or to program it for full animatronic playback at any time from a computer.



Your system includes:

- HF LITE (Base with Battery, tube with servos and mouth plates)
- Transmitter Box (4 AAA batteries not included)
- 3 Balloon Alternative Mouth plates
- 2 Mono Cables (for programming and playback)
- Stereo to Mono / Mono Splitter (for playback of Tracks)
- Wall Adapter for charging base unit (good for all countries)
- (You may need to convert the plugs to foreign users)
- Sheet of Foam to cut out and fit around your puppet (see videos)

FITTING A PUPPET TO THE HF LITE



For adapting a puppet to your Hands-Free Lite setup, we recommend you use only specific Axtell puppets. Other puppets, because of weight and construction could cause strain within the unit and burn out the servos. The dodo, parrot, crow, buzzard, rooster, Verna, Vern, vulture, the baby birds, as well as the Possum and other puppets as we test and list them on the website <http://www.axtell.com/hflite.html> are the only puppets warranted.

Foam inserts (cut by you from the sheet provided) help give stability and fill out the puppets.

Foam pieces may be taped in place prior to putting the puppet on, or in some cases stuffed in around the pole inside the body after it has been put on the HF lite armature. See our tutorial video for details on the website.

POWER INFORMATION

CHARGING BASE

Make sure base unit is turned off (Left = off. Right = on)

Charge the base unit by plugging in the adapter to the wall and the jack in the base unit. There is a small peep hole next to the on / off switch. Inside the hole is a light indicator. (Green = full charge, Red & Green together = low battery voltage, Orange = actively charging)

When fully charged, orange light turns off. No other light will show with switch in the off position.

When the switch is turned ON, the lights will indicate low or full charge per above.

TRANSMITTER BOX

Install 4 AAA batteries into the transmitter.

Turn switch to the on position to operate. (Down = off, Up toward mouth button is ON)

LIVE OPERATION (REMOTE CONTROL)

Turn on the transmitter first, then base unit. Wait for a few seconds for transmitter communication to base receiver.

Hold the unit in your left hand with the wheel under your thumb and the button under your index finger. (You may prefer another holding method but for our instructions this works best).

There are 2 controls the mouth button and Head-turn Wheel.

When finished power down the base unit first then the transmitter.

When not using the transmitter remove the batteries to prevent corrosion.

The Transmitter has been disguised as a colorful box with a storage area and a flap lid. You may put items inside such as pet food for a bird, non-metallic glitter to toss onto a balloon as magic dust, or just pretend to pull some food out of it for your puppet.

You are now set to operate the puppet or your balloon sculpture as a living creature! There are 3 mouth plates for some alternative balloon characters.

We have balloon twisting tutorials and other videos on our web pages.

Please send us your photos and videos so we can share them with other customers! Thank you for your purchase.

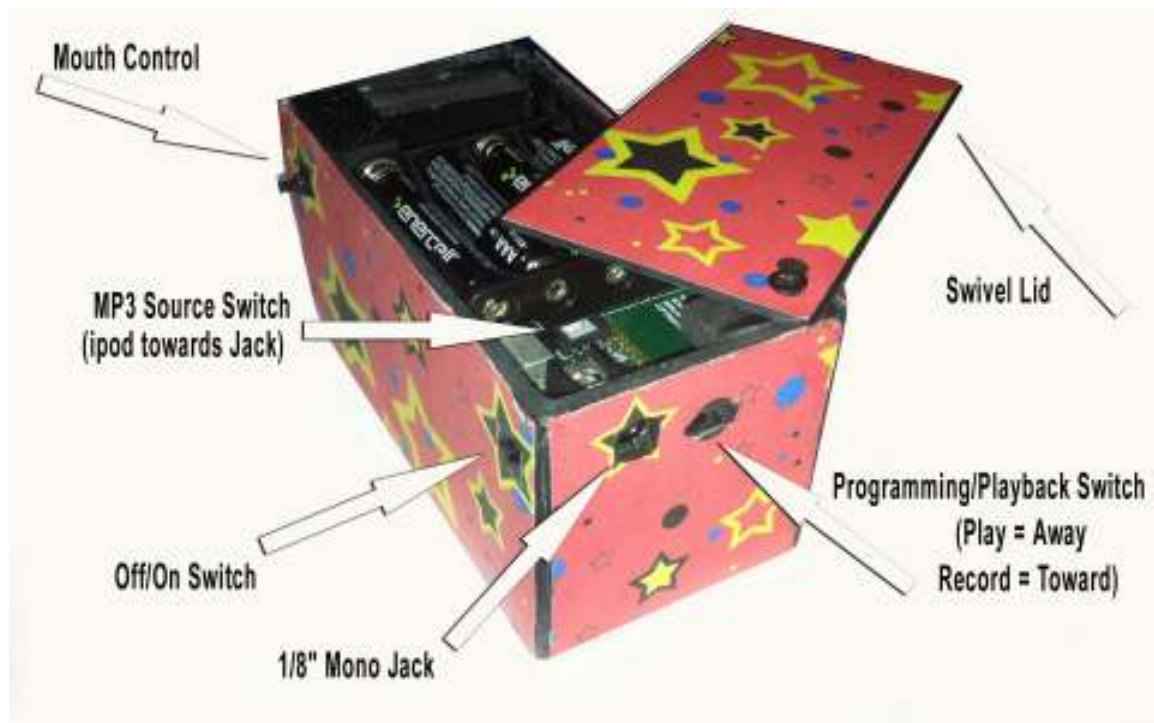
Tech Support is available by email at support@axtell.com or by calling 805 650-2134

PROGRAMMING INSTRUCTIONS

Programming your own “Magictrax” type routines for your puppet or balloon character is exciting but technical. You will need to have patience and allow yourself plenty of time to learn the process. Go to our website to see the complete tutorial videos at <http://www.axtell.com/hflite.html>

SET UP FOR PLAYBACK

The Transmitter Controller looks like a decorated box used to store magic balloons, bird feed, or any other small gimmicks you might want to use in your show.



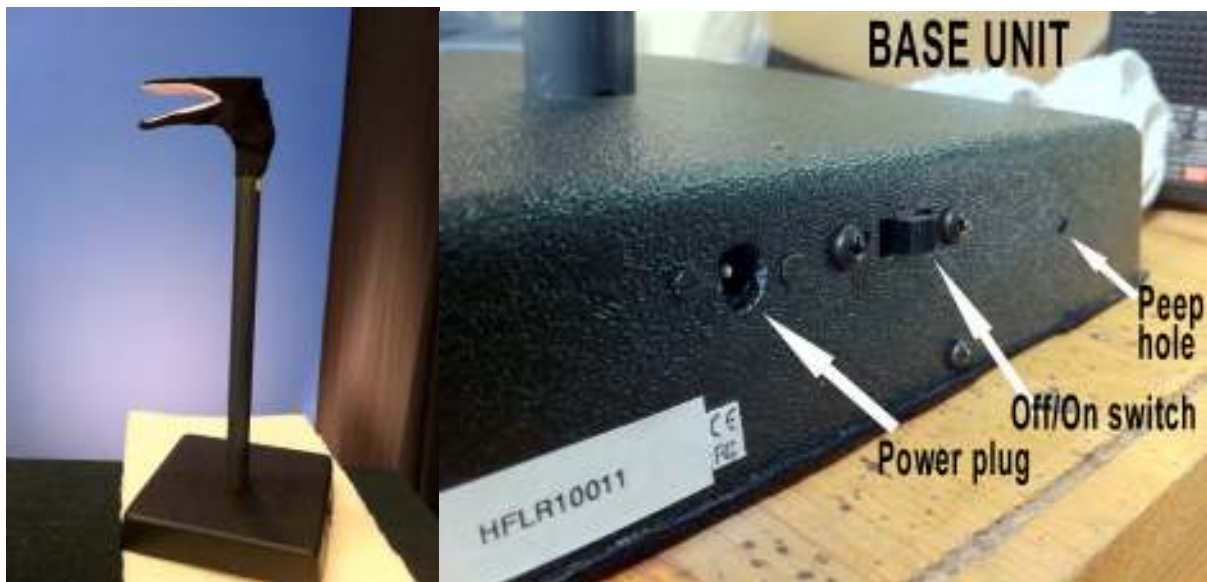
Besides the advanced circuitry, there is a jack on the end for a 1/8” mono audio cable, and a switch next to it (for playback and programming or recording). The way to remember directions of the switch is “Play = Away”, “Record = Toward”. This refers to away from or toward the jack.(When you are using the controls in the “live” mode, also make sure the playback switch is in the “Toward” position).

The mp3 source switch is inside the box and can be set to playback the mp3 Magictrax from either an iPod or from other sources such as a PC or non-iPod Mp3 players such as the Creative Zen. (Switch toward the Jack for an IPOD).

The transmitter is powered by four AA batteries. These should be changed every couple of shows, but you can visibly see the power level by looking inside the box. By the mouth switch there is a green LED light (full power) or a red LED light (needs battery change) status lights.

When a MagicTrax is playing there is also a green LED inside the box by the 1/8" jack which lets you know your track is sending a good data volume level.

The base unit also has a peep hole: green is charged, red means time to recharge, and an orange light appears as the unit is being charged. When fully charged, the orange light will extinguish.

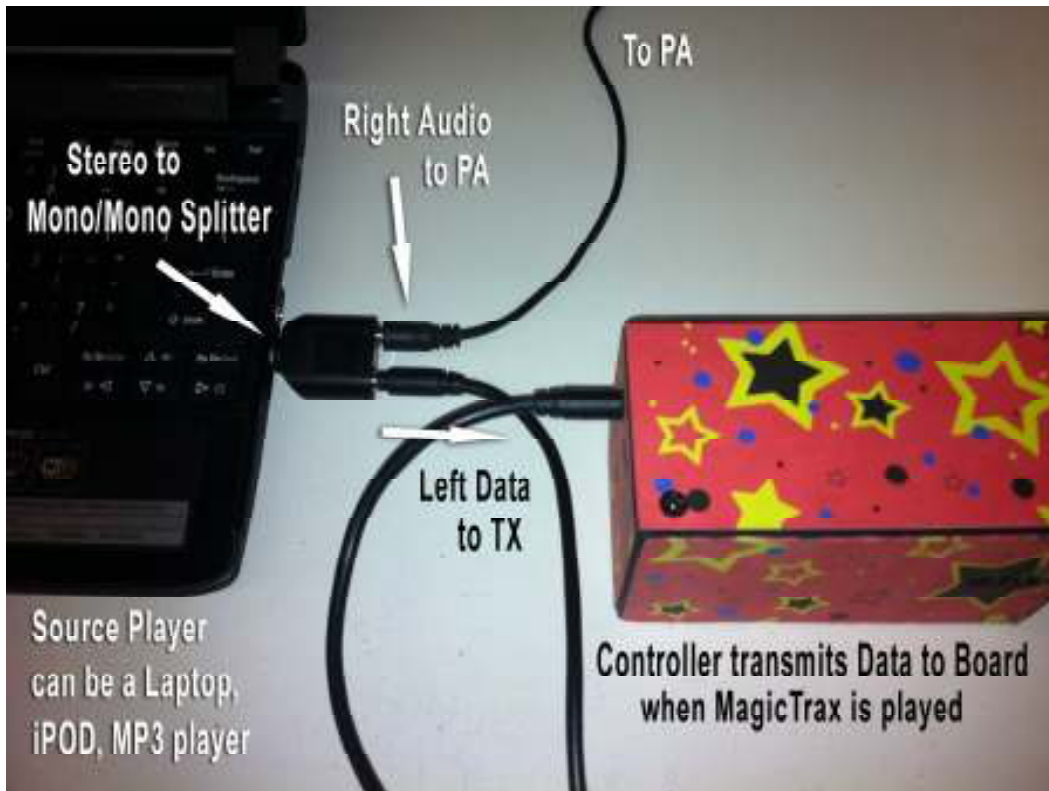


CONNECTING TO PLAYBACK SOURCE

In this example we will be playing from the PC netbook that we sell at Axtell Expressions already set up with software needed. Since it's not an iPod the mp3 source switch (inside the transmitter box) will be AWAY from the Jack.

NOTE – A “MagicTrax” is a stereo audio file with the audio on the Right Channel Only (Voice, music, sound effects) and the Data on the Left Channel (motion programming). The mp3 combines the audio with the data in perfect sync.

Insert the STEREO to MONO / MONO splitter into the Audio OUT jack of the PC / Mp3 Player (the headphone jack). Put 1/8" Mono Cables into both jacks on the splitter. The Right channel will go to your PA System so your audience can hear the routine (the right jack is usually marked or a gold color on the splitter) and the Left channel cable will plug into the jack on the Hands-Free Controller. You are now set up to playback a MagicTrax routine. Turn on the Controller Power, and when the data is received from the MagicTrax it will transmit to the puppet character wirelessly.



Open an Axtell MagicTrax in any audio or media player software such as Windows MEDIA PLAYER. With both the Base unit and the Controller turned on and the controller connected to the Mp3 Source properly, the base will respond with motion synced to the routine.

NOTE – you will need to learn what proper volume settings are required for your specific player. Too little or too much volume from the MagicTrax will affect the playback of the motion data and cause the base to jitter or act erratically. Finding and remembering the settings of your preferred player is a very important responsibility, so make note of these settings.

PROGRAMMING YOUR OWN ROUTINE

You will need to record your programming on a computer using sound recording software. “Audacity” is our recommended audio editing software and is available free on line at <http://audacity.sourceforge.net/>



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STEP 1: Record and edit your audio. This can include the voice of the character, music and sound effects. You will need to have expertise in this area or hire someone who does. The more professional it sounds, the better. We offer Studio Services at Axtell Expressions. Contact us at gjackson@axtell.com for more information.

STEP 2: Make sure the Audio File is MONO and balance or pan it to the RIGHT Channel.

STEP 3: Connect a 1/8" mono audio cable to the Microphone Jack on the PC and the other end into the Controller. The Controller Switch near the jack should be set toward the Jack. (Note – turn off the controller when moving the

switch) Depending on the Audio Software and the Computer you are using, you may notice a loud buzzing noise. That is the sound of the data. Obviously you need to quiet this so you can hear the audio during programming. We have 2 solutions:

1. Plug in a set of audio ear buds into the audio out jack on the computer. The Audio portion that is panned right can be heard clearly in one of the ear buds, and the other ear bud will have the data noise. Insert the audio bud into one ear and ignore the other side.
2. The other option is to plug the STEREO to MONO / MONO Splitter into the audio out jack on the computer and connect a 1/8" mono audio cable to the RIGHT AUDIO mono jack in the splitter, and plugged in to a PA system to hear the audio.



STEP 4: Click on the RECORD Button on the Audacity Toolbar to begin recording your data. (NOTE – allow a little blank room at the beginning of your audio so you have time to pick up the controller. You can trim off this front end later to clean it up).

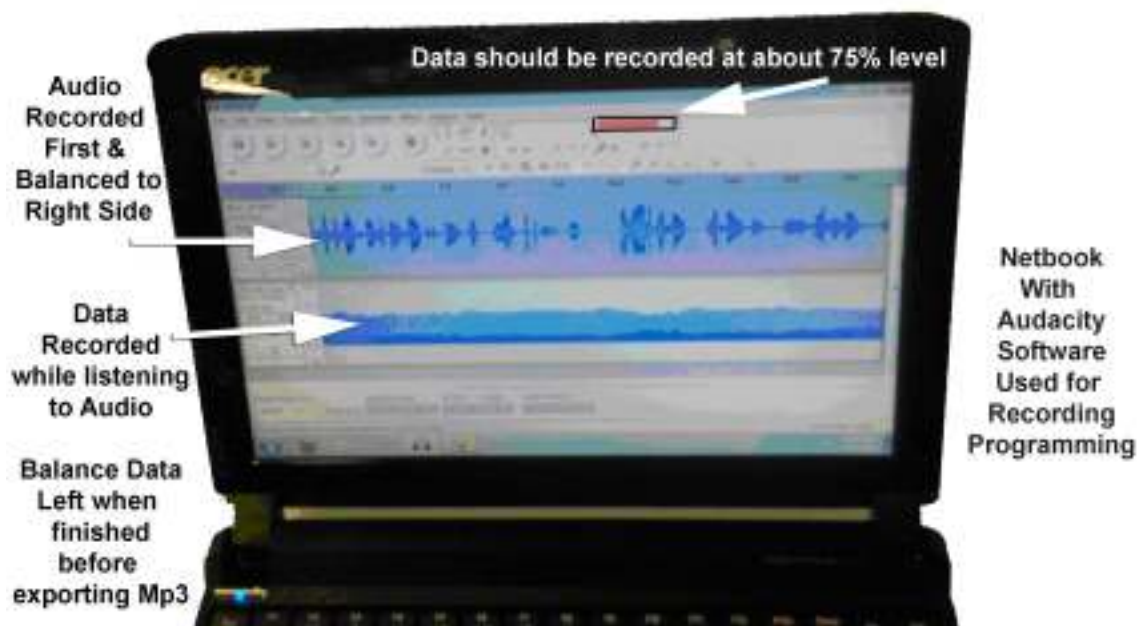
Notice the data waveform is a large block, very different from the audio waveform. Keep the Data record volume level at about 75% as shown.

During recording / programming, you are going to move the controls on the transmitter box just like you would normally do in a Remote Control LIVE presentation. The movements will be recorded in the audio software. Click the STOP button in the software to finish recording.

STEP 5: Align the audio with the movements and edit the beginning and ending of the tracks so they are exactly the same length. To align any time delay between the audio and the puppet movement, highlight the data track and slide slightly (usually to the left). Then playback your tracks. Adjust until you are satisfied.

Don't forget to trim both the beginning and ending of the tracks so both the audio and data are exactly the same length.

STEP 6: Pan the balance of the Data Track to the LEFT



STEP 7: Export the audio track as an Mp3 file to a place on your system where you will be able to find it. (Note – before you can export Mp3 files from Audacity you will need to download and install the free LAME encoder available on their website).

You should now be able to playback the track from any Mp3 Player following the instructions above.

You can use POWERPOINT, or OPEN OFFICE IMPRESS (Free) as your mp3 player giving you the added benefit of a large on- stage display of your track names. If you have many tracks in a show you can create slides that display text with key information on them.