

Sonic Butterfly Tech Rider

LOAD IN: Load in and setup will take approximately 8 hours. **Two - three stagehands will be necessary to assist. In addition, a tall A frame ladder and in many locations a Genie Lift or equivalent are REQUIRED. A tech call with the Purchasers team and the Artist is also essential prior to Artist's arrival to discuss this tech rider and a specific installation plan. Please share this document with the team and have them review it carefully before the tech call.**

STAGING: The harp's resonating chamber is held in place on the stage. The stage just for Sonic Butterfly must be at minimum a 4ft x 8ft riser and be 4ft tall to ensure that the strings will be over the head of the audience. The bottom of the harp chambers are 2.5ft above the stage. With a 4ft stage, the strings will start at 6.5ft and thus be above most people's heads.



I encourage you to have a much larger stage for space and weight as well as visual impact, and the stage **must be heavy enough** to stay in place. If there are more performers joining me, I suggest that a 16ft x 8ft staging platform be provided.

To keep the resonating chamber of the harp in place, it must be affixed to the stage with screws. Either it can be screwed directly into a wooden stage, a wooden platform can be built and added on top of a pre-existing stage or we can attach with ratchet straps a 4x8 sheet of plywood can be put on top of a riser, with a 2x4 that is cut into 2 pieces 4ft wide, so screws for the feet of the harp can be drilled into the wood, rather than the riser. Please note, that it is essential to affix the harp to the stage in some way. **Please provide a power drill for install and breakdown.**



In addition, a cable (that will be brought with the harp) is used to pull the harp back and down. The cable requires a fixed location to which to tie off and it is best if it is not on the stage but behind the stage. This cable takes a great deal of the pull (1000lbs or more) and is an important and essential part of the installation. In an outdoor venue, I recommend 2 circus tent stakes in the ground behind the stage or placing the stage in front of a solid tree that we can use ratchet straps to wrap the tree and attach to the cable. In an indoor venue, a good solution is 8x8 wooden pieces affixed to the stage to hold the cable in place.



Let's discuss to find the best solution to have the necessary materials and a plan ready before installation.

RIGGING: The strings (0.035 diameter brass wire that will be brought with the harp) will need to be attached to a fixed point **AT LEAST 60FT** from the harp base. A distance longer than 60ft also works, but not shorter. This fixed point can be a railing, roofline, truss, or an installed cable, pipe, or piece of wood. The string wraps around the fixed point 2 times and then wraps around itself as pictured below.



In outdoor locations, large trees can act as a great end point for the strings. 2x4s with 26 wood screws can be ratchet strapped into the trees. Please review these photos.



The string is spooled out from the end point and walked to the staging platform. First, it is loosely attached to the resonating chamber. Once all of the strings are in place (26 strings), they are then pulled taut one at a time by hand. There is very little tension put on each strings, roughly 50 lbs of pull per string, but the total for all the strings is approx. 1300lbs. Great care is taken to leave no trace, and in over 10 years, I have never had an incident.

TUNING: Wooden blocks (that will be brought with the harp) are attached to the strings with wing-nuts at exact distances to determine the pitch. To reach the strings for install of the tuning blocks, **a tall A-frame ladder or a Genie Lift and at minimum 1 stagehand will be REQUIRED.** Sonic Butterfly is a stringed instrument that needs tuning before each show. Please have the ladder or lift available throughout the event.



LIGHTING: The installation looks best when it is well lit. The strings are best lit by 4 parcans (only 2 pictured below, 4 is better!) from right beneath the resonating chambers, ideally with white light. **String lighting is required or the performance will not be possible, as the performer will not be able to see the strings to play.** The lighting make the strings look like strands of golden light. The brass conducts light beautifully, so the more light the better. Without light, the strings cannot be seen. The wings of Sonic Butterfly must also be lit (or projected upon). In addition, the performer(s) stands in front of the resonating chamber approximately 1/2 foot and will also need lighting, ideally with an amber, rose or blue gel.



PROJECTIONS: The Projection Wings, 2 white lycra wings that are roughly 6ft x 3ft, take front projections can either be lit as the picture above shows or have projections as seen in

photo below. A projector (short throw is fine) and a projection artist will be required to use the projection wings and their needs and costs will be covered by the Purchaser. Below is a photo of the Projection Wings.



LED WINGS: Currently, I can not fly the LED wings into a location. If I am driving to the event, the LED Wings are an option. I will need power for wings.



SOUND: Sonic Butterfly is an acoustic instrument but it requires a **quality sound system**.

Two 421 or 2 sm57 microphones are placed directly into the resonating chambers as the pick-ups, one in each chamber. The microphones then run through 1 delay pedal (brought by Andrea, and in this case you would need to provide her with reverb) OR Andrea can bring her own board with the effects already dialed in.

When using the delay pedal, it can then go through 1 DI or directly into the board. Please provide:

Good quality sound system with reverb and sound engineer to run the board

Speakers for the audience

Two 421 or sm57 microphones

Two XLR to 1/4 inch cables from mics to delay pedal (I have a Y splitter)

1 1/4 inch to 1/4 inch cable from delay pedals to DI

1 DI

1 cable from DI to the board

1 monitor

1 wireless headset mic (If I am speaking to the audience.)

OR

If you prefer to use Andrea's board with the effects already dialed in, she can give you a right and left send. Please provide:

Good quality sound system with reverb and sound engineer to run the board

Speakers for the audience

Two 421 or sm57 microphones

Two XLR cables for mics

Two XLR cables right and left send to either your board or speakers

1 wireless headset mic (If I am speaking or teaching to the audience.)

1 monitor

Power

If other musicians will be playing with me, please provide their sound needs as well as monitors with their own mix. Separate tech riders provided.

LOAD OUT: Load out takes approximately 45 minutes, and a stagehand is required. If load out must be done more quickly, it can be partially dismantled and carried off stage in about 15 minutes with the support of a team of stagehands. **A power drill will be required for breakdown.**

TECH CALL: A tech call with the Artist is the best way to understand this installation. Please arrange a call with Andrea Brook, 310.663.3732 and the production team.