



Technical Rider

Stage

- Minimum stage size of 16X20 feet
- 1 stage light per performer
- 2 white parkan lights for the sonic butterfly strings
- Power strips for each musician
- Two 6-feet long, counter-height tables for VJ & DJ
- Projection screen mounted with the bottom of the screen a minimum of 5 feet above the surface of the stage.

Video

- A video projector with a minimum of 12000 ANSI Lumen rating and 16:9 Aspect ratio. If the ambient light in the room is not controlled or minimized a brighter projector or LED wall may be substituted.
- A projection screen with a minimum of 16 feet wide by 9 feet high. The aspect ratio of the screen should match the aspect ratio of the projector and the image should fill the whole screen area.
- Projector for mapping Sonic Butterfly
- Video cabling should be able to reach the VJ station on stage and connect to the projector via SDI cable for low latency with an SDI to HDMI converter box for VJ. If HD-SDI is available, this is preferred.

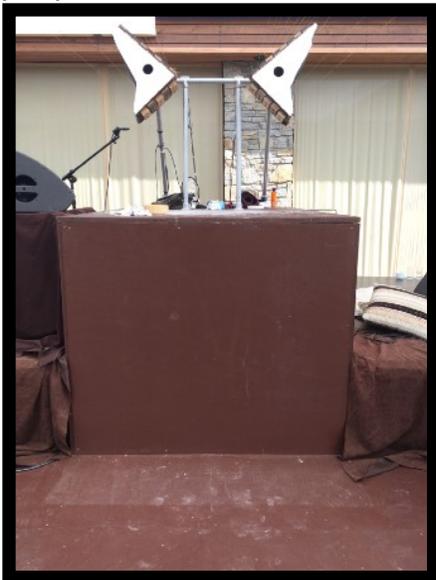
Audio

- A full range PA system proportional to the size of the audience
- 1 stage monitor per performer
- two DI boxes per musician (quarter inch inputs)
- One professional level 5-Piece Drum-Set with cymbals, hardware and sufficient micing to suit the venue. Kit should include bass drum, snare, 2 rack toms, 1 floor tom, 2 crash cymbals, one ride, and one HiHat. DW brand drums and Paiste cymbals preferred but not required.
- For Sonic Butterfly, Two 421 or 2 SM57 microphones which are placed directly into the resonating chambers as the pick-ups, one in each chamber.
- Two XLR cables for mics

Sonic Butterfly instrument

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.



It is encouraged 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.

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, we 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 string, 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.



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.**

General

- One dressing room with restroom nearby with Drinking Water & 1 meal per performer

Travel

- One roundtrip Airline ticket per performer, including 2 checked bags per ticket and checked bags for Sonic Butterfly
- One hotel room per performer for 2 nights (3.5 5 “star rating”)
- Transportation or Larger rental Vehicle

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