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VIBRAPHONE EMERGENCY KIT

Emergency Cable

To use the emergency cable, please plug the 25 pin computer connectors directly into your collecting rails.

Now connect a standard instrument cable to the ¼" female output on the other end of the cable.

Plug the cable directly into your amplifier, amplification gear, or PA system.

This way you bypass the K & K Mini Mixer or Midi Master and run your amplification system in passive mode.

Your audio amplification will not be as clean and smooth as with the K & K Mini Mixer or Midi Master, but it will take you through a gig in case there is a problem with either the Mini Mixer or Midi Master.

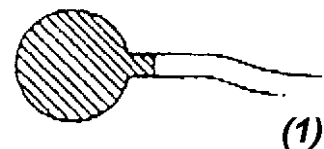
If there is a problem with a faulty pickup, please refer to the following section on how to mount a replacement transducer.

Mounting Single or Multiple Transducers

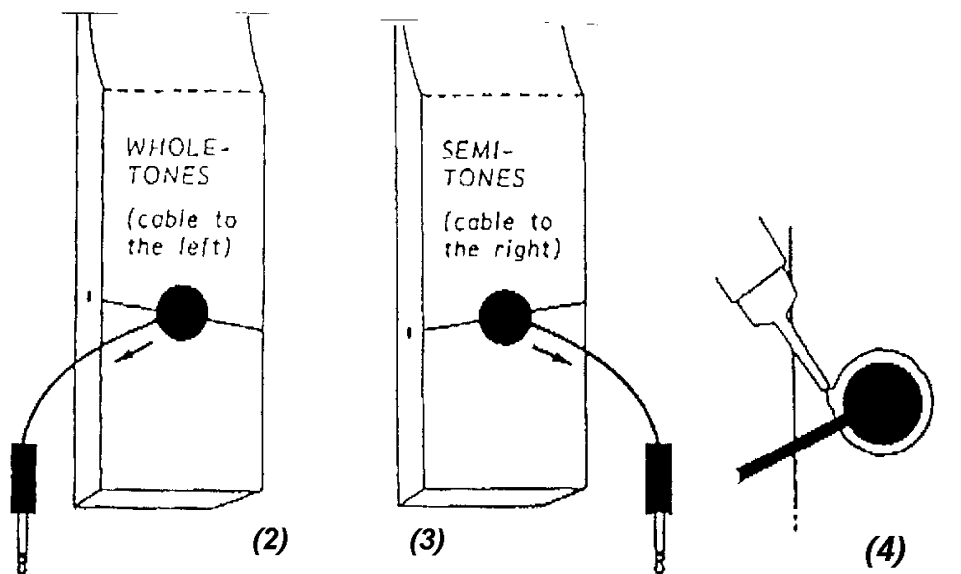
1: With golden or silver galvanized or lacquered bars you need to remove the galvanization layer or coating on the spots where the pickups are going to be glued on. Use the supplied sandpaper to sand down to the metal or wood. (This step is not necessary with "Musser Kelon" or fiberglass bars.) Sand a round area of about ¾" (20mm) diameter on your line in the center of the bar at the spots where the pickups are going to be mounted (see figures 2 and 3 on the next page).

2: After sanding, it is very important to clean all the sanded spots with rubbing alcohol or, even better, with acetone. Repeat this process several times until everything is absolutely clean.

3: Apply super glue to the metal side of the transducer. Spread the liquid over the entire surface with the tip of the tube. **Note:** Use a substantial amount of glue; the excess will ooze out on the edges, which is desired. Apply a small amount of superglue to the first 1/8" (3 mm) of cable near the transducer as well (as shown in illustration 1).



4: Press the transducer on the corresponding point of the note bar. Use the supplied pencil (eraser end) and gently apply pressure for 20 – 30 seconds (exact positions shown in illustrations 2 and 3). Spread the oozing-out glue all around the edge of the transducer with the tip of the glue tube (illustration 4) while you hold the pickup down with the eraser.



After you finished the gluing of all pickups, allow the glue to set for at least 30 minutes before you move the bars.

Note: The superglue will take even longer to completely set because it was applied quite thickly. However, tests showed that 30 minutes of drying time are enough to allow for moving and testing of the bars. Just be careful and do not play them hard yet.

Power Supply

If you need another power supply, please make sure to obtain a *12-volt, 0.5 Ampere model*. The DC plug has to be the *center plus* (opposite of effect units' power supplies!).

Troubleshooting

If ONE tone does not work, replace the pickup:

Cut transducer disk off the note bar with a sharp, thin-bladed knife or with a razor blade. Remove glue residue from tone-bar with sandpaper and clean the area with rubbing alcohol. Let dry. Attach new pickup according to mounting instructions.

One octave does not work:

- Unplug all transducers within the corresponding octave range. (F - F, F# - E, F - F). Make sure to unplug **ALL whole notes – plus - ALL half notes** before starting the test.
- Plug each transducer in separately. Test each tone one by one. If it works, unplug the transducer and go on to the next one. Continue this procedure through all the unplugged pickups. Like this, you will be able to identify the bad transducer(s). One defective transducer can cause the entire octave to cut out. Exchange bad pickup(s). (See above)
- If the octave still does not respond, there might be a problem with the Mini Mixer or with the connection cable. In this case, please contact K & K for further assistance.

Uneven volume of single notes:

- Check the trim-pot setting at the individual trimmers in the collecting rails. Adjust to your liking. Note: The fully counterclockwise setting is not zero volume. It is a reduction of the signal by about 30%.
- If one tone changes its volume after having worked fine before, it may be due to a weak gluing or a bad pickup. Try to carefully remove the transducer. If it isn't damaged, reattach it and test. If it is bent or otherwise blemished, replace it (see above).

Distorted audio sound:

- The vibraphone provides extremely high-level signal amplitudes. The initial attack loudness sustains for a long time without decreasing considerably. This is a unique phenomenon caused by the properties of the vibraphone bars. This occurrence might overload electronic components used in the amplification equipment. The problem usually occurs if the musician plays many notes at once (4 mallets) at high volumes or with heavy mallets.
- There are several remedies:
 - Turn down the volume trimmers of each individual octave inside the Mini Mixer.
 - Turn down the trim pots on the collecting rails.
 - Use lighter mallets.
 - Use a compressor limiter to limit the peak amplitude of the output signal. These units are available in your music store for \$100-200.
 - Make sure not to peak amplification components, such as effect units, preamps and mixing consoles.
 - Power amplifiers should have sufficient wattage to carry the immense workload.
 - Speaker cabinets: Pay special attention to the horns and tweeters. In a speaker cabinet, the high tone systems tend to distort first. Make sure to use units of good quality, strong enough and capable of tolerating the extreme amplitudes of the vibraphone bar. If possible use speaker cabinets without tweeters.

How to locate the unit in your signal chain that is causing distortion:

- Record your vib audio directly out of the Mini Mixer into a high quality cassette deck, dat, etc.
- Adjust record level clearly below peak.
- Record a short test tune.
- Listen and check for distortion at normal volume level.
- Add your effect units or mixer devices one at a time.
- Identify the source of distortion from the recording.
- If none of the devices cause the distortion, try different power amp or speaker cabinets for identification.
- If the above steps do not render results, distortion might be caused by K & K equipment. Please contact us for further assistance.

Buzzing sound of single notes:

- The short transducer cable may be in contact with the bar, frame, rubber-ring of post or with the collecting rail. Make sure to bend the cable in a way so that it is not touching anything.
- If the problem persists, the pickup might have been attached incorrectly. Try to carefully remove the transducer. If it isn't damaged you may reinstall it and test it. If it is bent or otherwise blemished, replace it (see above).

If you are experiencing problems with significant drop in volume, excessive distortion, or if the system completely fails to work:

- Check the DC wall adapter power supply with a voltmeter to measure the output voltage. It should read 12 –15 volt. If you do not have a volt-meter try a different wall adapter with these specifications:
 - Output voltage: 12-volt DC, 0.5 Ampere
 - Polarity of the plug: Center plus
- If the above steps do not render results, other equipment might be causing distortion. Please contact us for further assistance.