

In the **Vocal Master**, part number R23, a thermistor located in the ac power supply, is likely to fail after a period of time. This thermistor is no longer available from Shure.

Where can a substitute part be purchased?

We recommend a CL-90 thermistor manufactured by Keystone Carbon Company. It is described as a negative temperature coefficient (NTC) inrush current limiter. It can be purchased from either Mouser Electronics or Digi-Key Electronics Catalogs.

Mouser Electronics-1-800-346-6873--Mouser Part No. 527-CL90 Price: \$2.56.

or

Digi-Key Electronics-1-800-344-4539--Digi-Key Part No. KC009L-ND Price: \$2.64.

What are the basic specifications of the thermistor?

The "cold" resistance is 120\* at 75°F. The steady state current capacity is 2 amps.

What is the purpose of the thermistor in the **Vocal Master**?

When the unit is first powered up, the thermistor limits the current that can flow in the power supply. This prevents possible damage to the loudspeakers by eliminating a turn-on transient (loud "pop").

Can the thermistor be eliminated from the **Vocal Master**?

Yes, if the user keeps the **Vocal Master Master** volume control set to zero when powering up the unit. This will prevent any turn-on transient from damaging the loudspeakers. Replace R23 with a piece of 20 gauge wire.

The light bulb used in the **Vocal Master** is often used in vacuum cleaners. The bulb is an incandescent lamp, model 15T7DC/1F or equivalent. The lamp operate on 115 to 125 Vac and draws 15 watts. The lamp has a D.C. (Double Contact) Bayonet base. The lamp diameter is 0.875 inch. The lamp total length is 2.25 inch

As of May 2007, the price of a replacement lamp was \$3.81. The link below was found using Google and searching for "lamp 15T7DC".

<http://secure.data-comm.com/DC/Detail.bok?no=158059>

The **Vocal Master** used 10" and 8" loudspeakers, not 12".

Search for a 10" full range loudspeaker that is 16 ohms and can handle a minimum of 25 watts.