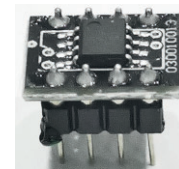


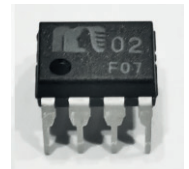
# Reference Series OP Upgrading Instructions

The Reference amplifiers offer the possibility of replacing the original OPs (MUSES8820) with even higher performance OPs (MUSES02), or with other OPs the customer prefers. This operation can be done quite easily, since the OPs are mounted on sockets and not soldered. We recommend the operation to qualified technicians.

In the following photo (mod. REF 150.4), you can see the 4 original MUSES8820 OPs highlighted in U2, U3, U4, and U5. They are made for SMT solutions, so they are mounted on PCB to fit the socket.

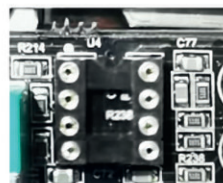


**MUSES8820**  
Mounted on PCB  
to fit the socket



**MUSES02**

By removing the original OPs you will be able to see the socket on the PCB where to install the new OPs. Pay attention to the correct position of the new OP, as shown in the following photos.



Socket on PCB  
without OP



**WRONG**  
Position



**CORRECT**  
Position

Take the same care when installing other OPs, as they may be discrete OPs like the following one. It is still important to insert the OP into the Reference socket in the correct position (you can see the socket pin marked here in the photo that must correspond to the signed OP terminal).

