

How to enable the 9410/20/30/50 series LeCroy DSOs firmware options by installing the Option KeyGAL.

What is required?

1. Screwdriver
2. Pre-programmed 16V8-15 KEY GAL. See the group files section for the proper JED file for your scope.
3. Chip remover or small screwdriver.
4. Anti-static wrist strap.

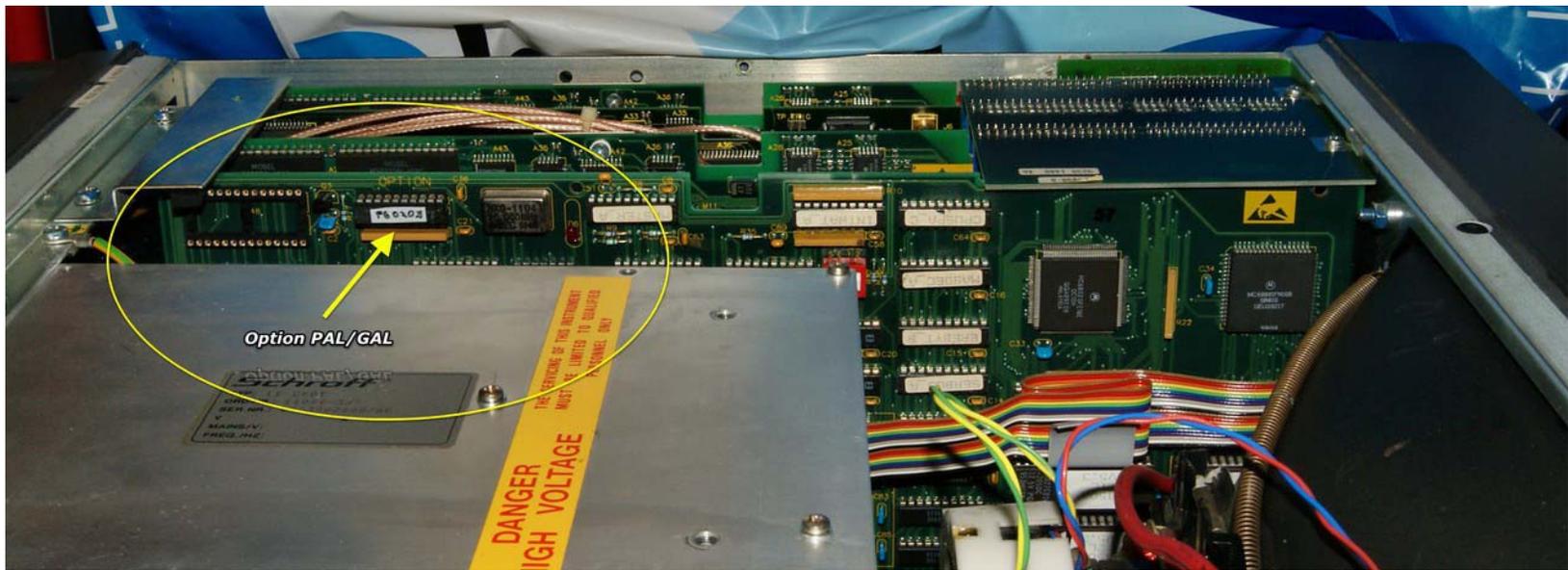
Disclaimer: The LeCroy_Owners_Group can not take any responsibility for any issues that may arise during the installation of the GAL IC. You are on your own and it will be assumed that you know what you are doing when you attempt to install the Key GAL part. If in doubt of your abilities find someone that can do this for you. A local computer technician that knows hardware or a TV repair shop or even a local Ham radio operator should be able to help.

Now that we have the legal stuff behind us lets upgrade that scope!

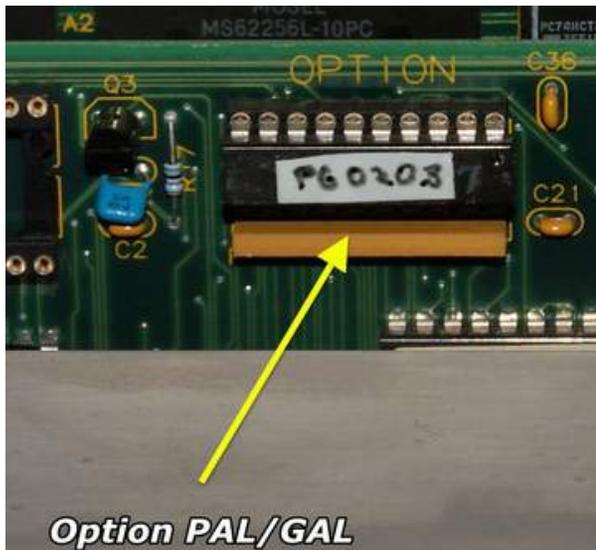
1. Disconnect power to the scope by removing the power cord from the rear of the instrument. Connect your wrist strap to a metallic point on the oscilloscope frame.
2. Locate the OPTION GAL socket on the CPU board. It should look similar to the picture on the next page. If there is an IC in the socket use a chip puller to remove it. Note that depending on the chip type and manufacture the part may be able to be re-programmed, but save the part for later after you are sure that your new chip will do the job.

Note that in the pictures the front of the scope is to the right and that the notch on the OPTION socket also faces towards the front panel to the right. There is a silk screened outline of the chip on the CPU PCB.

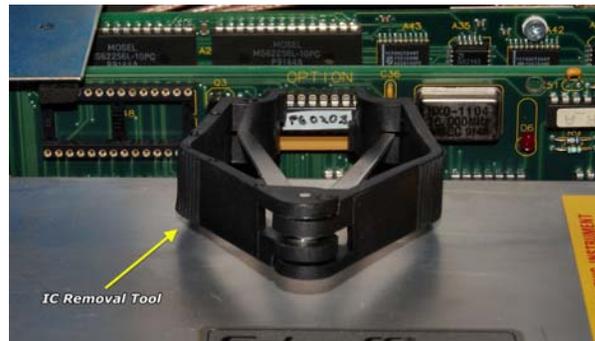
The OPTION Key GAL MUST be installed so that the notch lines up with the outline on the PCB. If the part is installed backwards it will be destroyed and damage may occur to the CPU board!



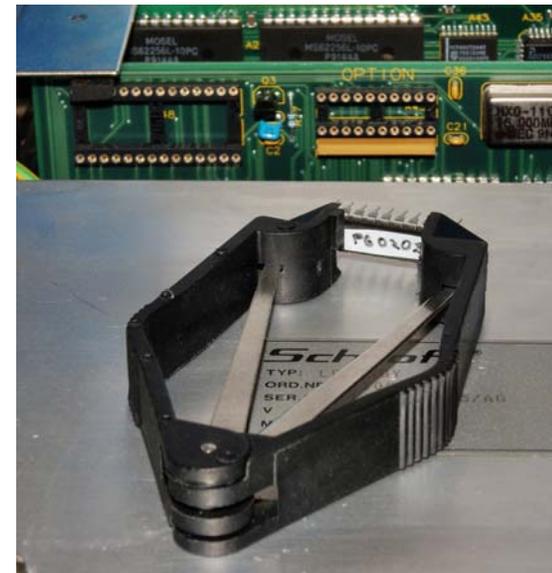
Option PAL/GAL



Option PAL/GAL



IC Removal Tool



Note that a small flat blade screwdriver can be used to pry the IC from the socket. Pry under the chip a little at a time from each end until the chip pops out. **Don't forget: Notch Right!!!!!!**

When completed double check your work making sure that no pins are bent under the chip, and the chip is correctly positioned in the socket.

Disconnect your antistatic strap, install the scope top cover and you should be good to go.