

## AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS SINCE 1975

info@avtechpulse.com http://www.avtechpulse.com/ Tel: 888-670-8729 (USA & Canada) or +1-613-686-6675 (Worldwide) BOX 5120, LCD MERIVALE OTTAWA, CANADA K2C3H5

## LVA REPLACEMENT INSTRUCTIONS

- 1. Disconnect the power cord from the rear panel.
- 2. Let the instrument sit unpowered for at least one minute, to allow any stored charge to dissipate.
- 3. Remove the 4 screws that secure the top cover. Slide the cover off (towards the rear).
- 4. Locate the existing LVA assembly, shown below:



5. Remove (and save) the 3 screws (and associated washers) that attach the assembly to the bottom cover:



6. Gently pull the assembly away from the adhesive heatsink pad mounted on a copper bracket. Unscrew the 2 SMA cables connected to the LVA assembly:



Adhesive heatsink

7. Gently pull off the 2 white wire harness headers:



- 8. Remove the LVA assembly from the instrument.
- 9. Re-install the white wire harness headers.
- 10. Re-install the two SMA cables.
- 11. Re-install the three screws on the bottom cover. Adjust the assembly so that the 5 green resistors rest against the adhesive heatsink pad.
- 12. Re-install the top cover.
- 13. Re-install the power cord.
- 14. Test the basic operation of the instrument at +0.4, +4, +40, and +400V.

15. Update the attenuator calibration values in the firmware by sending these commands:

diag:eprom:float 10070 10.2 diag:eprom:float 10074 107.5 diag:eprom:float 10078 1099

16. The above three commands set the attenuation values used at +40V, +4V, and +0.4V respectively. If the actual output amplitudes are slightly too high or too low, the attenuation values may be adjusted by the user. For example, if the measured amplitude when set to +40V is too low, then the attenuation is higher than expected, and the value at EPROM address 10070 will need to be increased proportionally.

If anything is unclear, or further assistance is needed, please contact:

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