

# USING THE 28 PIN SURFACE MOUNT CLIP WITH THE LOW VOLTAGE ADAPTER BASE (#ASOIC28/LV)

The 28 pin surface mount clip with the low voltage base (#ASOIC28/LV) are designed to provide a connection solution which allows the EPROM+ programming system to support 28 pin parallel EEPROM and FRAM devices which are attached to existing circuit assemblies. In most circumstances parallel memory devices are difficult to reliably access if they are connected to existing circuitry due to the interference of the attached components. In some cases, such as equipment counter applications, the parallel devices are mounted on a separate circuit assembly which does not include additional components to interfere with reading and programming operations.

## INSTALLING THE LOW VOLTAGE BASE INTO THE PROGRAMMING UNIT

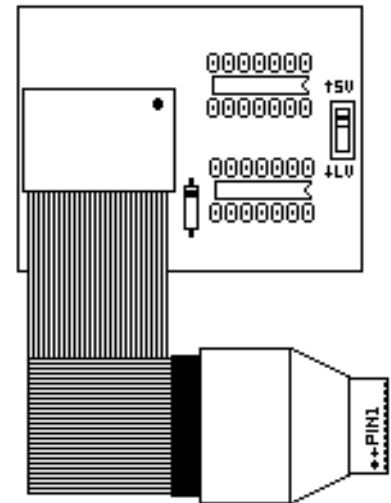
The LV base is installed into the 32 pin ZIF socket on the AR-32A programming unit by lifting the handle on the ZIF socket to about 45 degrees. This releases the socket assembly and allows the insertion of the 32 pin LV base. Insert the adapter base such that the 5V/LV switch is on the right. Once the adapter base is flush with the ZIF socket, release the handle to lock the assembly in place.

## SELECTING THE OPERATING VOLTAGE

The operating voltage of the selected part is determined by the 5V/LV slide switch on the adapter. The EPROM+ software will indicate if the switch is to be set to the LV position. If no setting is indicated, set the switch to the 5V position. **NOTE:** Select the desired device and set the switch before attaching the clip to the part.

## ATTACHING THE CLIP TO THE PART

To attach the ASOIC28 clip to the part first identify PIN#1 of the part. PIN#1 is usually indicated by a dot, notch or dimple on the device. Do not attach the clip until you are certain of the location of PIN#1. One corner of the ASOIC28 clip is marked with a RED DOT. The RED DOT is PIN#1. Squeeze the clip until the jaws are sufficiently separated to straddle the part. Align the RED DOT with PIN#1 of the part and gently place the clip with the jaws open over the part and flush with the circuit assembly. Release the clip. Be sure that the clip contacts align with the pins of the part and that the clip is held firmly in place. The clip is now attached and the system ready for use. To remove the clip simply squeeze and lift it off the part.



## INFORMATION ABOUT READING AND PROGRAMMING PARTS

In most circumstances the ASOIC28 with the LV base will allow normal reading and programming of EEPROM and FRAM devices. A 12 inch cable is provided as this enhances reliable communication with the part by preventing signal distortion which is common in long parallel cables. **NOTE:** FRAM parts are far more sensitive to connection generated noise than EEPROM parts. This is due to the technology employed plus the reduced operating voltage. When the ASOIC28 cable is attached to an FRAM part be sure to attach the clip with a minimum of vertical movement or scraping of the clip connections on the part leads. If the clip is shifts position on the FRAM part or is not properly aligned, it is possible, although unlikely, that the data in the FRAM part will be altered. You may use the following procedure to minimize clip movement when attaching to an FRAM part. 1. Open the clip jaws as wide as possible. Align and make contact with one open jaw side with the proper side of the chip. Do not allow the opposite jaw to contact the chip at this time. Now position the opposite jaw such that it is aligned with the alternate chip side. Release the clip and proceed.

## CANON COUNTER ASSEMBLY INFORMATION

The ASOIC28/LV will allow you to read, edit and program the parallel eeprom and fram parts used on Canon copy machine counter assemblies. There are two common eeprom parts used on these assemblies. These are the 2817A and 28C64. Both of these devices are 5 volt parts and require that the interface board switch be set to 5V. The interface also supports counter assembly fram parts. These are the MB85R256 and FM18L08. Both of these devices are low voltage parts and require that the interface board switch be set to LV. **NOTE:** The FM18L08 has a standard storage capacity of 32K bytes. When attached to the Canon counter assembly, the assembly circuitry forces the part to a maximum capacity of 8K bytes. In order to successfully access and work with the part while attached to the assembly, you must select a custom part which limits the device size to 8K. The part number you must choose is CANON18L08.