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## TP-1380 LIGHT PEN SWITCH CONVERSION KIT

The TP-1380 Light Pen Conversion Kit is designed to add a new dimension to light pen interaction with Digital Equipment Corporation (DEC) computers. When moving a "tracking cross", in a "drawing" program, it is highly desirable to be able to control the point at which drawing begins and stops. This control may not be easily accomplished with an optical on/off shutter because the computer loses track of the "cross" when the shutter is off. Many users of DEC displays have improvised their own finger or foot-operated button which can be interrogated independently of the light pen.

The TENNECOMP Light Pen Switch Conversion Kit adds an additional input/output instruction to the processor to sense the PEN UP/DOWN switch on the TENNECOMP TP-1345 Light Pen. A very natural type of interaction results which is much like touching a pencil to a piece of paper to write. Two additional instructions add the capability to ENABLE and DISABLE the Light Pen Flag interrupt. This capability simplifies many display interaction programs. When the computer is turned on, the POWER CLEAR signal sets the standard DEC light pen condition of interrupt ENABLE so that old programs will run without modification. A Conversion Kit is not required with the TENNECOMP TP-1402 Display Control since it already contains the required logic. Instructions added are:

SKIP ON PEN DOWN
ENABLE LIGHT PEN INTERRUPT
DISABLE LIGHT PEN INTERRUPT

INSTALLATION:

The TP-1380 installs just below the DEC type 34D or 34H display control and is wire-wrapped to the SKIP BUS and to the PROGRAM INTERRUPT BUS on the 34D or 34H.

POWER REQUIREMENTS: +10 volts D.C. obtained from 34D or 34H