Dave, Mark, Orv,

I attached the user manual for both the model 1500 and model 1501 from Planar.

The 1500 model is capacative.  Capacitive touch screens work by sensing small changes in the electrical pattern over the touch screen surface. Your skin creates small electrical connections, and the touch screen software can interpret these to know exactly where your finger is located. Skin, or another conductive material is needed to make capacitive screens work properly. Using a stylus or other pointing device will not work. For instance, the iPhone touch screen is a capacitive screen.

The 1501 model that Perham chose is resistive. Resistive touch screen work by sensing any pressure by any object. It contains a couple layers of sensors and materials. There is a thin layer of a similar material that is the main part of the capacitive screen. It will detect small connections made when contacted by a conductive material. In this screen though, there is another layer of this conductive material that is very thinly separated from the capacitive layer. By touching the screen, you’re pressing down to create contact between the layers, and registering a touch with the computer. Many devices that use a stylus are resistive screens like the bottom screen of a Nintendo DS, or Palm handheld devices.

The previous article mentioned that they preferred SAW. Surface acoustic wave (SAW) is based on sound waves traveling across the surface of the touch screen.  When they are disrupted, the sensors know where you have touched.  For the programmer, a SAW screen can emulate a mouse just like you would expect it to. The SAW technology is what we prefer and use on most of our systems.

I thought the model 1501 resistives that they used worked just fine, but I'll try to investigate whether there is much price difference between the different types.

Ron