Gruen - Teletime - Historic Wristwatch - World's First "Field Effect" Liquid Crystal Display - (circa 1973)

WNS-6070-4106 - Gruen - Teletime - Front Case Close Up View

WNS-6070-4106 - Gruen - Teletime - Full Front View

WNS-6070-4106 - Gruen - Teletime - Full Left Front View

WNS-6070-4106 - Gruen - Teletime - Full Right Front View

Case: Gold Plated Barrel Case measuring 39 mm across, 41 mm with the crown, 36 mm lug to lug. Back is marked gruen, Base Metal Bezel, Stainless Steel Back, Make in U.S.A., 52031, 'To Replace Cell Lift Up'. The crown is at the 3 o'clock position.
Dial: A copper pearl circular central section with a rectangular display window. Signed Gruen and Teletime.
Movement: Battery operated movement made in the U.S.A.
Strap: Stainless Steel U.S.A. Expansion bracelet.
Comments: World's first "Field Effect" LCD wristwatch.
Item ID: WNS-6070-4106

Brief History of the Gruen Teletime Wristwatch:

The Gruen Teletime was the world's first wristwatch using a modern "field effect" liquid crystal display (LCD). The Gruen Teletime was released for sale in 1973.

Gruen's long history of watchmaking came to a halt in 1977 (a victim of the 'Quartz Revolution').

The Gruen Teletime wristwatch had the first modern LCD display (which is very similar to most LCD displays used on wristwatches and other electronic gadgets today.)

The "field effect" LCD display in the Teletime applies a tiny current to a thin sheet of liquid crystal material, causing the liquid crystals to align, "polarizing" the light that passes through. When the light passes through another polarizer, the display turns dark where the liquid crystals are aligned and remains a lighter color where the liquid crystals are in their natural random orientation. These electronically controlled black on gray regions are arranged to form digits. A four digit time display like the one on the Teletime has three seven segment digits, one two segment digit and a full colon, for a total of 24 independently controlled display regions. This technology has continued to be used almost unchanged from its original form of more than 40 years ago.