

# AURORA INSTRUCTIONS & INFORMATION

(Using cool, long life, colored, Light Emitting Diodes as light source)

**A little history:** Danish physicist Rasmus Bartholin first described an optical property called birefringence\* in 1669. In 1970 Jordan Kirsch, patented the concept for a clock that used birefringent materials in a polarized light field to create beautiful colors. The result was a clock called SPECTRUM, later re-named and re-designed as the AURORA. It's a truly beautiful and ingenious use of the technology. The Museum of Modern Art selected the AURORA for its collection. Other polarized light clocks called the PRISMA™, & SPECTRA™ were designed and marketed for 20 years. They are much loved. In 1990, the marketer (HAMPTON-HADDON) of these products lost interest and discontinued them. Barry Gamble/ChronoArt immediately started a repair business for these clocks and 3 years later started manufacturing new Auroras.

**These clocks have always been expensive.** There are very few sources of these specialized, costly films we use and machining & polishing this unusual aluminum case is pricey & time consuming. We have tried to build this clock to fit our motto: *Conversation pieces that delight for a lifetime.*

**To set the time:** Gently push in on the bottom edge of the rear cover. The back is held in place with magnets and will drop off into your hand. We recommend using cotton gloves or a clean micro-fiber towel to avoid leaving fingerprints. You may turn the time setting knob in either direction to set the time. Replace the rear cover.

**Polishing the case:** Use aluminum/magnesium hubcap polish. Caution: Don't get this very abrasive cleaner on the acrylic face. Use a micro-fiber towel for the final rub down.

**Going on vacation:** Leave the clock plugged into power & use the button in the rear to dim the lights. The small warmth in the clock will keep moisture out.

**The lamps:** To add to the color variations a microprocessor drives 8 each of Red, Blue, Green and White Light Emitting Diodes. After 15 years, the LEDs will lose about 30% of their brightness. After 20 years, the clock motor will probably fail so send it in to the factory at that time for a new motor and lamps. The new AURORA runs cooler and will last longer.

**Setting the brightness:** The AURORA has a push button switch (black post) inside the back on the left side. There is a big ARROW pointing at the switch. You may want to dim it for a bedroom, a vacation, or for evenings in your living room. Push in the switch momentarily to change the brightness. Each push will dim the light in 5 steps. When it gets to minimum brightness on the next push, it will jump to maximum brightness. For earlier models: Each time you push down the bright-dim direction will reverse. If you wish to use the clock at very low brightness unplug the clock, wait 20 seconds, then hold in the button while plugging it in. This will smooth out color changing. Then set the brightness. It's a little tricky.

**Warranty & Repairs:** It's a good idea to keep the packaging for 90 days in case something goes wrong. Your clock is guaranteed against defects, under normal use, for 1 year on parts and labor from the date of purchase. All repairs are done at the factory. Some problems like the hands not lining up at 12:00, or slanted crosshair "+" on the front, can be fixed on the phone. To minimize the frustration of repairs on new clocks, we put them at the front of the line, so you get your AURORA back quickly.