ENGINEERING DESIGNS

Give lifetime parts and labour warranties.

CD-PLAYER

24-bit laser, dual mono block switching DC power supply, no transformers, with multiple filter capacitor networks and reject high frequency capacitors. Isolate laser and transport from pc board. Current limiting resistor, zener diode, fuse and varistor on the laser circuit and a varistor hardwired in parallel with the on-off switch. Combine the CD-Player with a video output stage, so you can use it as a DVD player as well. Fast blow low amp fuses in all DC power supplies.

Amp

Same as above. Zener diode, current limiting resistor, fuse and varistor on output transistor circuits and tube circuits that are fused. No tonal controls, low pass filer controls, balance controls and no phono stage, separate power amp and pre amp. Crystal controlled oscillator circuit for the bass and treble controls.

Tuner

Same design using a crystal oscillator circuit. Use an adjustable high gain antenna with safety resistor and fuse on antenna circuit. Varistor hardwired in parallel with all antenna circuits to short voltage transients to ground.

Loudspeakers

Bi-polar speakers that are fused with no sub woofer amp.

Monitor and television. Same design, current limiting resistor, varistor, zener diode and fuse on the high voltage section, yoke and speaker circuits. Displays must always be fused.

Non-mylar keypads only, use daisy flywheel or golf ball printers only. Zener diode, current limiting resistor, fuse and varistor on the motor-solenoid networks. Isolate printer from the pc board. All cash registers use the hand held scanners for POS systems.

Wireless Internet, Wireless Security, Wireless CCTV, car alarms, digital clock radios with a buzzer to wake you up, digital voice answering machines, Anti-Theft Devices, Satellite Phones, Satellite Dishes, games and Static Electricity are in big demand by all consumers. Use the 800 MHZ to 3 GHZ spread spectrum technology for satellite phones, car alarms, wireless CCTV and wireless security.

Car alarm brain to use mercury tilt switches that are hardwired into the cars hood and trunk circuits. Use SCR’s instead of relays for the door lock circuits. Internal and external siren with no shock sensor to avoid false alarms, titanium batteries, glass break detectors, internal motion sensor to keep siren running if the thief remains in the car.

All products must use 3-prong polarized plugs with a very thick gauge of wire and insulation, Use fast blow low amp fuses only. All products must be 100% shock hazard free, fire hazard free and easy to service by being user friendly. Use idiot proof connectors, plug in modules, chassis ground only and design field replaceable units.

Use gold plated connectors and top quality electronic components.

Always manufacture in Canada, USA, England and Scotland only.

Products I like and I promote in my book are of the following:. Audioquest, PS Audio, Pass Labs, Cary, Crown, Monster, Convergent Audio Technology, Arcam, Audionote, McCintosh, Krell, Definitive Technology, B&W, Jeff Rowland, Tannoy, Magnepan, Martin Logan, JBL, Calvin Klien, Ralph Lauren, Tommy Hilfiger, Levy’s, British Telecom, Grinnell sprinkler systems,, Triplast Manufacturing, Checkpoint, RCA made in the U.S.A. only, Medeco, Schlague, Abloy, Frisco Bay, Rayban, TTX and Magnum Dynalab.

Satellite phone, satellite dishes, web hosting, email and wireless internet should be free for life with advertising, gambling, online retailing and web design absorbing all the costs.

All manufacturers should sell directly to their own retail stores, in order to avoid the middleman.

Use numerical control machinery by Cincinnati Milacron and robotics.