

Costs mentioned in this guide are just estimated prices, especially on used equipment. Electronic equipment is generally prohibited on historic/vintage rallyes, popular in England and growing in the US. Therefore the Curta, Halda, Heuer setup which was dominant in the 60s has caused prices of these pieces of equipment to raise in direct proportion to their scarcity.

I. TIME (CLOCKS)

- 1. TIME SIGNAL RECEIVER:** Needed to accurately set your clock. The Timekube from Radio Shack is no longer available, however any short wave radio receiving 5, 10, and 15 MHz will work, \$30 and up.
- 2. CLOCKS:** If you are just starting out rallying, a good digital wristwatch is probably good enough for now and many have stopwatches built in, \$15-60. Self setting clocks from \$20. Hand held stopwatches or countdown egg timers are a help for some on-time systems, \$10-30. Heuer is generally considered the best of the mechanical hundredths reading clocks, used only \$300-1200. Breitling, Meylan, Minerva, Waltham, & Smiths also made hundredths clocks (some dashmount), used only \$20-50.
- 3. SPECIAL CLOCKS:** There are several digital hundredths/seconds reading clocks made for checkpoint use with multiple memories or count down features for Pan Am use. **CP:** Timewise, \$225, Alfa, \$150 & 200, Accusplit & Hanhart stopwatches \$140-180. **Count down:** Monaco systems w/20 leg sequential timer, \$350. Alfa-Pro also counts down.

II. SPEED (CALCULATORS)

- 1. UNEQUIPPED CLASS:** (Check your local rules) Don't bother with a slide rule (if you can find one) the Stevens wheels, \$20-30 were specially designed for TSD calculations. A book of tables: Gene Henderson, Larry Reid, Mike Stimson, \$20-40, or print your own with a spreadsheet program.
- 2. SORT OF EQUIPPED:** (Check your local rules) Non-programmable calculators are better than the above equipment (if allowed in your class) and are also needed for use with computers, \$5-25. Turbokurta (TI 74 with custom module) \$150-250.
- 3. EQUIPPED CLASS:** Programmable calculators, \$50-300 (the HP 48 has a built in clock), Curta was the best of the mechanical calculators, used only \$500->. Laptop computers, \$500-3000. PDAs, \$80-600.

III. DISTANCE (ODOMETERS/COMPUTERS)

- 1. ODOMETERS:** Brantz Retrotrip 3 runs \$360. Halda Twin Master or Trip Master are the best of the old mechanical odometers, used only \$500->.
- 2. CLASS B/L BOXES:** (ODOMETER/CLOCK) Electronic devices with hundredths/seconds reading clock and adjustable odometer. Timewise, \$550, or Alfa, \$300/450 w/ driver display, (Zeron used only).
- 3. PRO BOXES:** (ODOMETER/CLOCK) Designed for use on Performance rallyes, they generally have the same features as a B-Box, plus some limited calculating ability which will put you into class A/E on T&Ds. Timewise, \$550, Alfa, \$370/500 w/ driver display, Brantz \$480, Terratrip \$275-505 or Coralba \$310-1050. (Zeron used only).
- 4. CLASS A/E BOXES:** (COMPUTERS), Timewise, \$1025, and Alfa, \$670 are generally the only new computers available. Chronar Mecos is still available, \$925. Zeron was the dominant computer of the 70s and 80s with several models, \$200-\$400 used only. Some people have gone the home brew route, just remember the mechanical end (box, switches, display, etc.) is a lot harder than just writing the program (\$200-400). Autonav, Halda SpeedPilot, Heuer/RoBo, Rallecomp, Tommy Box & Whitmore should be considered antiques. You would not be competitive with any of the other equipment but would still have to complete in the same class.
- 5. IMPULSE UNITS:** (ODOMETER) Needed for mileage impulses for any of the above computers, B-boxes, or odometers: Darby Prodrive which uses three clamps to hold on to the edge of your road wheel, \$400, Revere Jones & Alfa EZ-Pulse drives just bolt to the center of a hubcap or plate, \$100-125, EZ Wheel drive has a plate bolt up to modified lug nuts, \$500. Hall effect wheel drive mounts a magnet ('Rare Earth' is preferred) to your wheel/CV joint and a sensor switch to the suspension, \$30-90. Speedometer pickup uses a photo electric switch in a modified Halda T-gear (used only \$120?).

IV. MISCELLANEOUS

- 1. READER BOARD:** A reader board is absolutely necessary if you are going to be consistently competitive. The Stevens Rallye Reader, \$50, was so good nobody gave it much competition, or you can build your own out of wood, electrical, plumbing or plastic supplies, about \$20.
- 2. RALLYE KIT:** Should include at least: pens, hiliteres (several colors), tape, rubber bands, bungee cords, extra batteries, minutes per mile chart, reference material, etc. about \$20-50.
- 3. CLIPBOARDS:** If you want a double width clipboard, most art supply or stationary stores carry one, which you can cut down to fit your car for about \$20. For about \$30 you can make a custom one out of Plexiglas. (Don't go any thicker than 1/8", you want it to crack if you ever have an accident!)
- 4. MAPS:** Thomas guides (\$15-30), Delorme map books (\$15-20), etc. Maps on computer CDs, \$20-50. GPS (Global Positioning Systems) (\$80-1000).
- 5. INTERIOR LIGHTS:** Chartlite, \$50, Hella or Osram gooseneck, \$20-40, flashlights, \$5-30.
- 6. EXTERIOR LIGHTS:** Hand held spotlight, \$10-40, good quality headlight upgrades, fog lights or driving lights, \$50-500 per set (Bosch, Cibie, Hella, Piai).
- 7. POWER OUTLET SPLITTER:** Several companies make two way splitters and three way boxes to power reader board, spot light, interior light, radar detector, etc. \$10-20. Always run power to computers directly from the battery, and with a **fuse!**
- 8. SPECIALTY EQUIPMENT:** Compass, \$10-300, and binoculars, \$50-500 are needed for Pan Am rallyes and can sometimes be helpful on other types. 120VAC to 12VDC lighter socket adapter helpful to test equipment at home, \$10.
- 9. BOOKS ON RALLYING:** The Road Rally Handbook by Clint Goss 1993, \$35 and How to Rally and Win (Bob Radford \$10) are the only books still in print. Worth getting if you can find them: The Complete Rally Book by David Hebb 1979, & Rallying to Win by Jean Calvin 1974.

V. SOURCE LIST FOR RALLYE EQUIPMENT**I. DEALERS**

Arizona Curta Exchange - (602)892-7980 - (Buys & sells Curtas)

Autochron - cliveg@dial.pipex.com - <http://www.autochron.co.uk/> - 44(0)1494 758887 - Providence Cottage, Parrotts Lane, Buckland Common, Nr. Tring, Hertfordshire, HP23 6NX England UK - (Brantz dealer, some used equipment)

Belmog Morgan Parts - Hedwig Rodyns - belmog@skynet.be - <http://www.belmog.com> - (0)3/489.06.36 - Anton Bergmannlann 28 2500 Lier Belgium

Competition Limited - comptltd@htonline.com - <http://www.hioutputbulbs.com/compt.htm> - (734)464-1458 - 2243 Sosna Dr, Pinckney, MI 48169

Don Barrow Rally Navigation - don@donbarrow.co.uk - <http://www.donbarrow.co.uk/> - 44 1625 429092 - Don Barrow, 'Sandymount', 4 Sandy Lane, Whirley, Macclesfield, Cheshire. SK10 4RJ. England UK.

Four Star Motorsports - Info@fourstarmotorsports.com - <http://199.243.164.22/fourstar.nsf> - (905)877-1733 - 345 Guelph Street Georgetown, Ontario Canada - (Terratrip, Fastime dealer)

Haldaman - Martin Jubb - Haldaman@aol.com - <http://members.aol.com/CWillis97/haldaman.html> - 0117-909-9769 - 8 York Close, Stoke Gifford, Bristol BS34 8NU England UK. - (Buys, sells, repairs Haldas)

Holden Vintage & Classic - holden@holden.co.uk - <http://www.holden.co.uk> - 01885 488488 - Linton trading estate Bromyard Herefordshire HR7 4QT England UK

Joe Boucher - joerally@aol.com - (805)343-0141 - P.O. Box 1185, Nipomo, CA 93444

P-Sport - pete@p-sport.com - <http://www.p-sport.com> - 602-266-5732 - 1343 E. Clarendon Ave. Phoenix, AZ 85014 - (Coralba dealer)

Quality Components - information@quality-components.co.uk - <http://www.quality-components.co.uk/> - 01905 356600 - Units 16 & 17 Three Springs Trading Estate Vincent Road Worcester UK WR5 1BW

Revere Jones - revrally@aol.com - (626)791-9433 - P.O. Box 2881 Covina, CA 91722 (Odometer pickup)

StopwatchesUSA - info@eaiusa.com - <http://www.stopwatchesusa.com> - (800)770-8010 - 567 Commerce St. Franklin Lakes, NJ 07417 - (Hanhart, EAI, Colt, Casio stopwatch dealer)

Sube Sports - <http://www.subesports.com> - (714)847-1501 - 17161 Palmdale St, Huntington Beach, CA 92647 - (Terratrip dealer)

Susquehanna Motorsports - Ken Beard - kenbeard@nfdc.net - <http://www.susquehanna.com/susq/ttrip.htm> - (717)993-2215 - 3955 Shangrila Road, Stewartstown, PA 17363 - (Terratrip dealer)

T & D Rally Performance - Stu Helfer - (510)527-8787 - 7604 Errol Dr, El Cerrito, CA 94530

Vintage Rally Equipment - info@rallyequipment.com - <http://www.rallyequipment.com> - (604)683-6517 - 1204-1500 Howe Street, Vancouver, BC V6Z 2N1, Canada - (Brantz dealer, some used equipment)

Greg Lester - 74343.332@compuserve.com - (330)836-9003 - 90 Devon Lane #201 Akron OH 44313-6847.

2. MANUFACTURERS

Accusplit - <http://www.accusplit.com> - (800)935-1996 - 2290A Ringwood Ave. San Jose, CA 95131. Stopwatches.

Brantz - Geoff Crossland - <http://www.brantz.co.uk> - (0)1943 880499 - Rallye computers, odometers and clocks.

Chronar System - Ed Rachner - (206)481-0748 - 15202 164th Ave NE, Woodinville, WA 98072 - Rallye computers.

Coralba - coralba@swipnet.se - <http://home7.swipnet.se/~w-72265/index.html> - Coralba Box 5032 S-691 05 KARLSKOGA Sweden +46 586 54715

Glenn's TSD Rallying Software - Glenn Wallace - glenn@drizzle.com - <http://www.drizzle.com/~glenn/tsd/> software for Palm OS.

Mahonkin Heavy Industries - Nick Shectman - tsdpro@mahonkin.com - <http://www.mahonkin.com/tsdpro/> - Rallye computer software for PalmOS.

Monaco Systems - Paul McGaffey - mcgaffey@cdcla.com - (818)993-3270 - Monte Carlo count-down rallye clocks.

Rally America! - Clint Goss - rally@goss.com - <http://www.goss.com/rally.htm> - (203)454-1479 - 6 Fieldcrest Rd, Westport, CT 06880 - Rallye publications and software.

Small System Specialists (ALFA) - Mike Friedman - Alfa@Rally.cc - <http://www.rally.cc> - (609)426-0541 - PO Box 310, 52 Church St, Windsor, NJ 08561 - Rallye computers, odometers and clocks.

Snowmoose Software - Alan Perry - alanp@snowmoose.com - <http://www.snowmoose.com> - TSDWatch, TimeCalc, ArrivalTime, & Competitor software for Palm OS devices.

TapPoint - Dave Parker - info@tappoint.com - <http://tappoint.com> - TapPoint, LLC 20118 NE 176th St. Woodinville, WA 98072 - RallyTimer, RaceTimer, & LapTimer software for Palm OS devices.

Terratrip Ltd. - <http://www.terratrip.com> - (0)1 332 880468 - Ship Farm, Horsley Derby, DE21 5BR, England UK.

Timewise - Jack Christensen - chronos@northshore.net - <http://home.attbi.com/~timewise1/> - (847) 550-5052 - 32 Old Barn Rd, Hawthorn Woods IL 60047 - Rallye computers, odometers and clocks. Also repairs Zeron, Chronar, Curta, etc.

3. MISCELLANEOUS

On The Dash - <http://www.onthedash.com> - Jeff Stein jeff4820@bellsouth.net (Heuer vintage rally timepieces info)

The Curta Calculator page & registry - <http://www.vcalc.net/cu.htm> - (Curta information)

Rallye equipment manuals online - <http://www.ebtcc.com/racenews/manuals/> - (Rallye computer manuals)

Rally-L - <http://cowboywww.squawk.com/majordomo/rally-l.html> - (E-mail remailer list for general rallye discussion)

SCCA TSD - <http://egroups.com/group/SCCARoadRally> - (E-mail remailer list for TSD discussion)

Sporty's Pilot Shop - <http://www.sportys.com> - (800)LIFTOFF - (Pilot supplies useful on rallyes, GPS, calculators, lighting, cases, etc.)

US Rally - <http://www.usrally.com> - (Rallye event, team, and club database)

TRC (The Rallye Club of Silicon Valley) web site - <http://www.therallyclub.org/> - (Northern California rallye information)

Vintagerally.com - <http://www.vintagerally.com> (Tim Winker's site dedicated to vintage events & equipment)

If you have any updates to this list, please contact Bill Jonesi - jonesi@pcmagic.net or (408)247-7115