

THE HENRY FAMILY



BROADCAST SOLUTIONS

HENRY ENGINEERING

"WE BUILD SOLUTIONS"

THE MATCHBOX



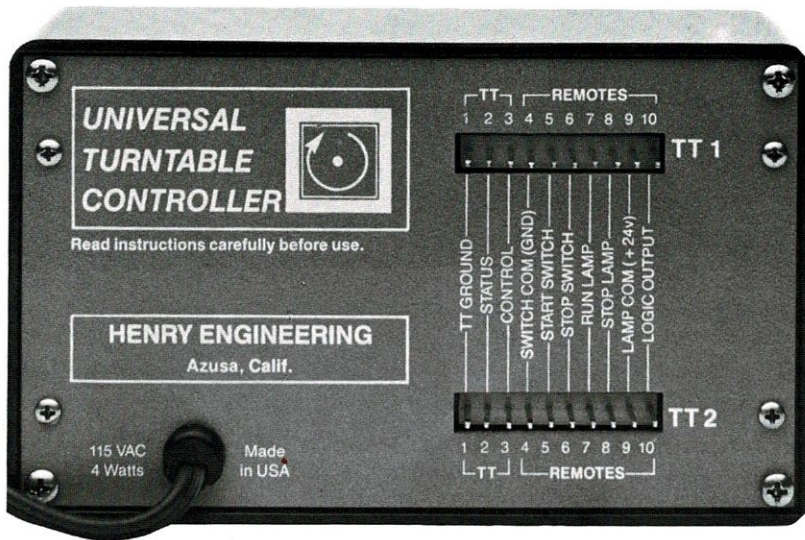
THE MATCHBOX is the industry's most used level and impedance converter. It's the ideal way to interconnect "HiFi" or semi-pro equipment with professional studio gear. The Matchbox is bi-directional, with *four* independent amplifiers providing full stereo *input* and *output* interface. All circuitry is active and direct-coupled for absolute sonic transparency. There are *no* transformers or capacitors in the signal path, making The Matchbox the *best* interface unit for use with CD players, PCM converters, and other digital sources. The gain is adjustable to accommodate either +4 or +8 system level. The Matchbox will drive a 600 ohm to +26dBm with .008% distortion. Noise level is -85dBm. An extra AC socket is provided for convenience.

SUPERELAY is a multi-purpose control interface for use in any studio installation requiring multiple circuit control. Superelay is ideal for controlling the various equipment functions that need to be switched when, for example, a Control Room Mic is turned *ON*, e.g., EBS receiver mute, intercom speaker defeat, telephone bell disconnect, skimmer recorder start, "ON THE AIR" warning lights on/flash, etc. Superelay can be controlled by any switch, relay (either momentary or maintained), or CMOS/TTL logic circuit. Superelay provides *six* double-throw relay outputs for low-voltage and audio switching. The AC output is switched with a *solid-state synchronous relay* for direct powering of "ON THE AIR" warning lights (300 W max.); an internal flasher circuit will flash the lights if desired. Superelay can also be connected to a dial-up telephone line for equipment control during ring detection. The built-in power supply provides 24VDC for utility use.

SUPERELAY



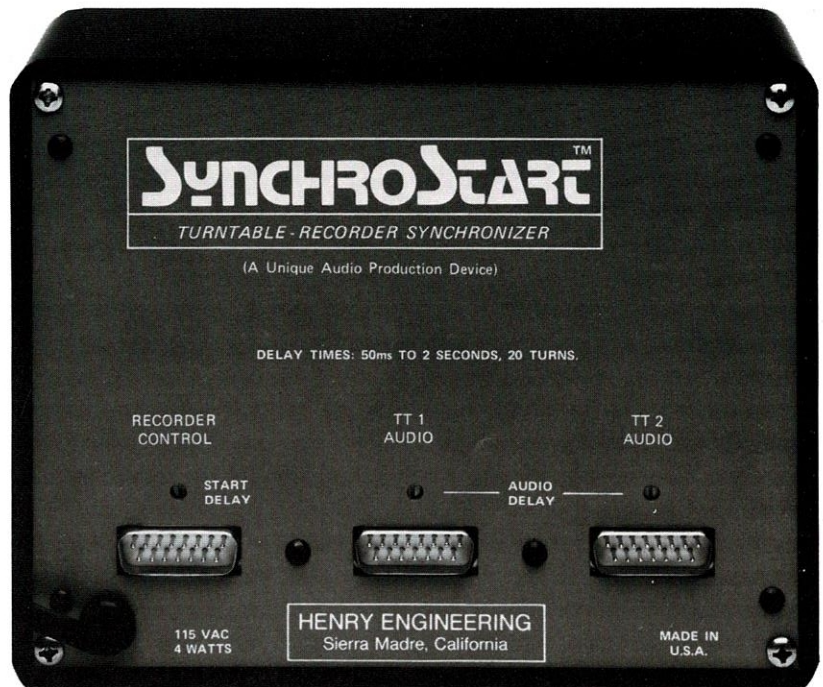
UNIVERSAL TURNTABLE CONTROLLER



The **UNIVERSAL TURNTABLE CONTROLLER** is a control interface unit that adds full remote control to Technics SP10, SP15, SP25, and SL1200MKII turntables. It converts the turntable's 'single button' control logic so that *separate* START and STOP switches can be used to operate the turntable. Contact-bounce and false operation are eliminated. The UTC also provides outputs to drive 24VDC tally lamps for use with illuminated push buttons, to show the RUN or STOP mode with absolute reliability. The turntable's start-stop switch can still be used for cueing records; the Universal Turntable Controller will *always* stay in sync with the turntable. The UTC connects to the turntable with just three wires. It may be interfaced to most console 'remote control' facilities, (CMOS or TTL) or external switches or relays. One UTC will control two turntables. Companion unit: SYNCHROSTART. See below.

SYNCHROSTART is a turntable-cart recorder synchronizing unit that is a companion unit to the Universal Turntable Controller. Synchrostart provides *audio muting* during turntable start-up, to precisely mute disc audio until stable playing speed has been reached. Cue-burn and 'wow-in' are thereby eliminated, and records that were previously unuseable can once again be used. Audio is "ramped" on and off electronically to sound like a very rapid fade. A disc can be cued *within* modulation to a specific beat or musical phrase. When the disc is started, no audio is heard until that point is *precisely* beneath the stylus; audio then turns on *smoothly*. The muting interval is adjustable to accommodate the turntable being used. Synchrostart also provides a CART RECORDER START function to start a cart recorder just prior to audio turn-on. The start delay is independently adjustable to compensate for the start-up time of the recorder. Synchrostart makes dubbing discs to cartridge a 'one-button' operation, and produces carts that are tightly cued and *consistent with no guesswork*. One Synchrostart will control audio for two turntables and one cart recorder. The Universal Turntable Controller is suggested for turntable control and interface, above.

SYNCHROSTART



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

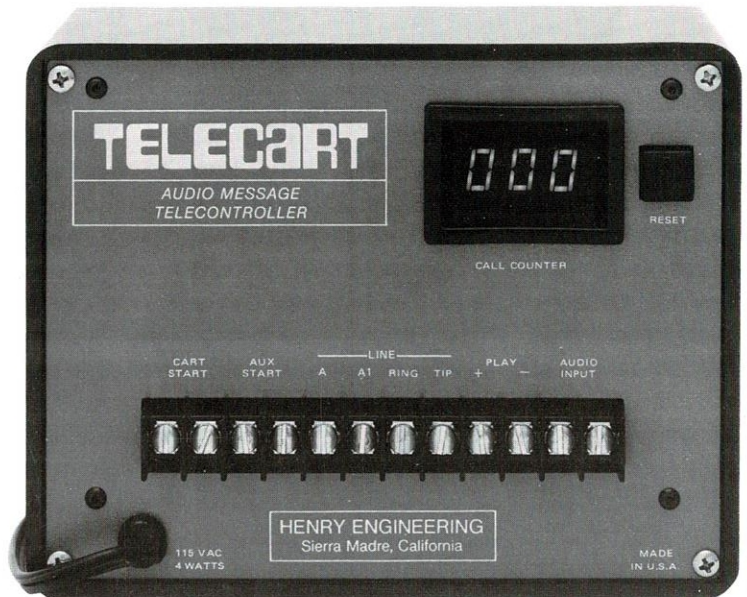
MIXMINUS PLUS



MIXMINUS PLUS is a differential summing amplifier designed to add a "Mix Minus" output to a broadcast console. This output is typically used to feed the *Send* input of a telephone hybrid device. MixMinus Plus has two inputs and one output. One input is fed with the Program output of the console (+4 or +8dBm nominal). The second input is fed with the hybrid Receive audio, tapped just after the "phone" channel fader on the console (-28 to -10dBm nominal). MixMinus Plus *subtracts* the hybrid Receive signal from the Program output, to generate a Program mix *minus* the Receive (caller) audio. The NULL adjustment will provide 40dB caller audio rejection (30Hz-3kHz). Mix Minus Plus is easily connected to most consoles and needs no adjustment once installed. The inputs and outputs can be balanced or unbalanced. The overall gain is unity; the output will drive a 600 ohm load to +26dBm.

TELECARD is an automatic answering unit that permits a standard NAB-type cartridge machine to answer a phone line and play a recorded message to the caller. Telecart will work with virtually *any* cart machine. All machine control circuits are relay and opto-isolated. No secondary tones are required. The unit is fully automatic for unattended operation. Its "failsafe" design prevents the line from being answered unless the message cart is cued and ready to play. A DIGITAL CALL COUNTER registers the number of calls received to 999. If a caller hangs up before the message has finished, Telecart will hold the line "busy" until the cart has recued. An internal *audio transformer* isolates the cart machine from the phone line. The unit can be used with phone systems requiring A-Lead control. Telecart is AC powered; it does not draw power from the phone line or the cart machine.

TELECARD



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