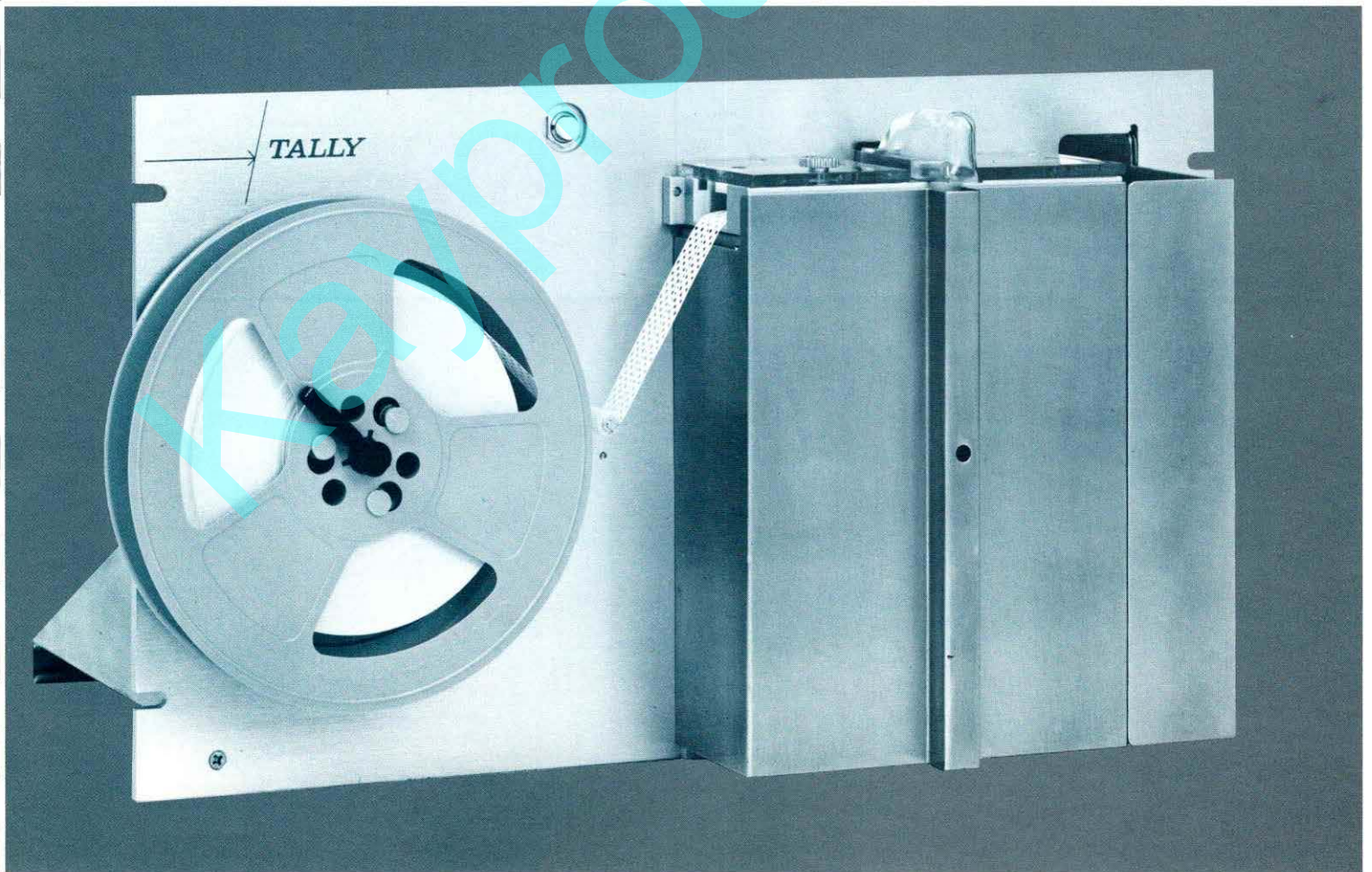


TALLY

MODEL **420** ASYNCHRONOUS TAPE PERFORATOR



DESCRIPTION

The Tally Model 420 is a self-contained high speed tape perforator which operates asynchronously up to 60 characters per second. The unit is panel mounted and designed for reel tape handling for maximum tape economy. It will accept paper, foil, or Mylar tape of varying widths up to eight channels. Customers can specify 6 or 10 inch metal or 7½ inch plastic take-up reels. The 8 inch supply reel holds 1000 feet of .004" paper tape.

Asynchronous drive is provided by the utilization of unique wire clutch drives for each punch. This enables the 420 to be slaved to other equipment rather than forcing a design compromise to slave the equipment to the perforator. A minimum interval of 16⅔ ms should be allowed between cycles for asynchronous operation.

Bidirectional tape transport allows tape to be reversed to correct or modify operation errors. Maintenance of the Model 420 is held to a minimum. The high speed mechanism of the perforator is enclosed in a baffled oil case which permits the use of an oil mist to lubricate and cool the moving parts.

OPERATION

Punching is controlled by the presence or absence of nine customer-supplied drive pulses (one for each bit level, plus one for sprocket and paper advance). Any combination of these pulses (but always including the sprocket and advance pulse) may be applied at any rate up to 60 pps. The applied pulse must be 48 v DC (or 24 v DC), 4.5 ± 0.5 milliseconds in duration. Normally a common drive pulse is applied and controlled by gating switches in associate equipment.

If individual pulses are used to drive the data channels (including sprocket and feed) at a maximum rate of 60 cps, they must occur simultaneously within ± 0.5 ms. However, if data is occurring at random and results in a greater deviation than ± 0.5 ms, the following timing logic must be used; the sprocket and feed instruction shall occur simultaneously with or after the last data instruction. The earliest data instruction for the following character shall not arrive earlier than 16⅔ ms after the sprocket and feed instruction.

Where spark suppression is used to protect the pulse source, it must cause the coil current magnitude to approach zero (less than 10% of steady state) within 2 ms after opening the contacts. The following table lists suitable circuit component values.

Resistance of coil	Drive pulse	R s	C s	Induc- tance
220 ohms	48 volts	10 ohms	0.5 mfd	200 mh
50 ohms	24 volts	5 ohms	0.7 mfd	60 mh

FEATURES

- 60 characters per second on paper, plastic, or foil tape.
- Perforates 5, 6, 7, or 8 levels interchangeably without modification.
- Asynchronous operation simplifies input and output logic.
- Oil mist lubrication extends life of mechanism.
- Integral reel tape handling.

SPECIFICATIONS

Operating Speed

Variable from 0 to 60 characters per second

Standard Code Channels

5, 6, 7, or 8

Code Hole Size

0.072" diameter on standard 0.1" centers

Feed Hole Size

0.047" diameter

Alignment

Code holes and feed holes have a common center line*

Standard Tape Widths

0.687, 0.875 and 1.000 inches

Supply

1000 feet, reel

Take-up

6" or 10" metal, or 7½" Lexan reels. NAB reeling available at extra cost.

Input Pulse Requirements

Sprocket and Paper Drive Clutches (in parallel)

48 v, 110 ohms, 4.5 ± 0.5 ms (24 v, 25 oms)

Punch Clutches

48 v, 220 ohms, 4.5 ± 0.5 ms (24 v, 50 ohms)

Drive Motor

1/20 hp, 110 v AC, 60 cps @ 1.7 amps

Termination

34 pin connector, mating connector supplied

Dimensions

420 PR 19" w x 10½" h x 11½" d.
Weight 28 lbs., shipping weight 48 lbs.

*Six level teletypesetter alignment available at extra cost

TALLY CORPORATION • 1310 MERCER STREET • SEATTLE, WASHINGTON 98109
PHONE 206/624-0760 • TWX 910-444-2039 • TELEX 032-286 • CABLE: TALLY SEATTLE WASH.
DARTEX DIVISION • 1222 East Pomona St. • Santa Ana, California 92707 • 714/542-1196
TALLY/AUTOMATIC PUNCHED TAPE, LTD. • 6a George St., Croydon, Surrey, Eng. • MUN 6838
TALLY EUROPE LTD. • Radnor House, 1272 London Rd., London S.W. 16, England • POL 9199
REGIONAL OFFICES
Tally Corporation, 45 N. Village Ave., Rockville Centre, N. Y. 11570 • 516/678-4220
Tally Corporation, 33 North Addison Road, Addison, Ill. 60101 • 312/279-9200
Tally Corporation, 1901 Ft. Myer Drive, Arlington, Va. 22209 • 703/525-8500