# TELETYPE

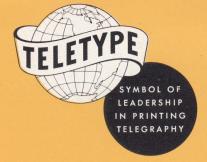


## PRINTER

WERNZ

Fifty years of leadership in printing telegraphy, packaged in one all-new instrument.





# All New

#### FEATHER WEIGHT CARRIAGE

Dependable carriage return at 100 words per minute—at any angle—with only one carriage return and one line feed signal.

#### TYPE BOX PRINTING

Type box instantly removable, without tools, for cleaning or changing type.

#### BUILT-IN STUNT BOX

Revolutionary . . . offers unlimited variety of signaling, switching, and control operations with minimum investment, low maintenance.

#### SELECTOR

Simple pulling magnet selector . . . high speed, low current.

## ALL METAL CLUTCHES

No idling load...require lubrication only once a year.

## SIGNAL GENERATOR

Single contact design... polar or neutral signals.

## DOUBLES AS TYPEWRITER

For the first time a printing telegraph machine can be equipped with back space and reverse line feed.

#### CONTROLS

All at front, all by keyboard button, for operator's convenience.

POWER KEYBOARD
Light and uniform key touch.



New

The Teletype 28 is a completely new instrument. It represents a giant stride forward in the printing telegraph art—it is *years* ahead.

Fast

Speed is built-in—with harmonic motions...with lightness and simplicity of parts. The Teletype 28 printer actually operates with greater ease at 100 words per minute than conventional machines at slow speeds. However, it will not lose efficiency at lower speed and can be adapted for use with present equipment by a simple gear change.

Quiet

The printer is small in size, light in weight, and extremely quiet in operation.

Stable

Operation is not affected by tilting or severe vibration. Also, the resilient sheet metal construction provides exceptional shock resistance. Thus it will operate reliably in mobile applications.

Versatile

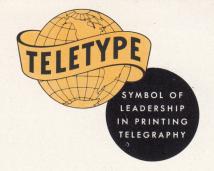
The Stunt Box expands the printing telegraph alphabet for nontyping tasks of every description...typeboxes are interchangeable...the machine can double as a typewriter where space is limited.

Attention Free

Speed for speed, this printer will cut customary maintenance to *one-fifth*. The metal clutches rarely need oiling, loads are lighter (no load when idling), there is less friction, less heat. New, more efficient motors were developed for the equipment. A new governor holds its speed setting for at least 3,000 hours. Thus operating costs are lowered, and printers can be installed in locations where frequent servicing is not practical.

The Teletype 28 Printer ushers in a new line of Teletype equipment—a line engineered to meet today's most complex communication problems, and with built-in facilities to solve new problems as they arise. It is an integrated line, with common mechanisms and parts wherever practicable. For the new elements of the companion units, the same fresh approach has been used as with the printer—design principles were employed with an accent on the future.

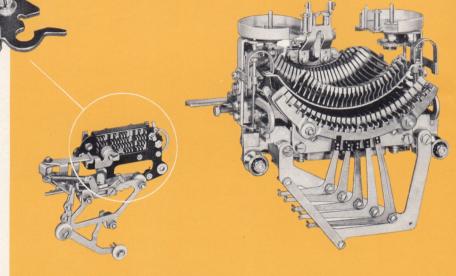
The new line embodies the cumulative know-how of the many years of continuous manufacture by the Teletype Corporation, backed by an extensive and unremitting research program conducted with modern industrial research techniques—with a full complement of creative personnel and adequate laboratory and technical facilities.



## FEATURES OF THE

# THE TYPEBOX Actual Size

How this new printing principle works: (a) the typebox is moved to bring the selected character to the printing position; (b) the print hammer drives the type pallet against the ribbon and paper. After each stroke the typebox is returned to its unoperated position below the printed line. Shift and unshift are governed by typebox position; the platen remains stationary.

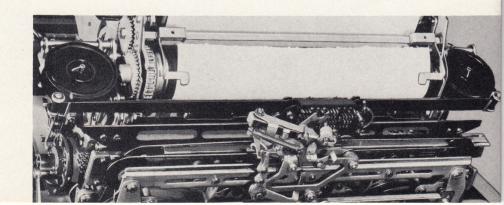


- SIZE OF CARRIAGE SHOWN IN RELATION TO CONVENTIONAL "BASKET" CARRIAGE.
  THE NEW ASSEMBLY WEIGHS ONLY 1/10TH AS MUCH.
- Featherweight carriage is built for speed. Carriage return is quick, easy, requires no extra signal at 100 words per minute.
- Carriage motion is not affected by nonlevel positions, assuring dependable operation on planes, ships, trucks, etc.
- The new carriage makes possible a smaller, lighter machine; also permits use of resilient stamped framing instead of castings, further reducing machine size.
- Type alignment is built in—eliminates on-the-job aligning.

- Typebox is quickly removable, without tools, for cleaning, etc.
- Typeboxes are interchangeable. Type arrangements can therefore be changed quickly. Gives operating flexibility...facilitates field conversions ...eliminates soldering of type pallets.
- Copy is more uniform because the same print hammer blow is applied to all characters. This is especially important in multiple copy work.
- Overscoring and underscoring are eliminated, since each character is mounted on a separate pallet in the typebox.

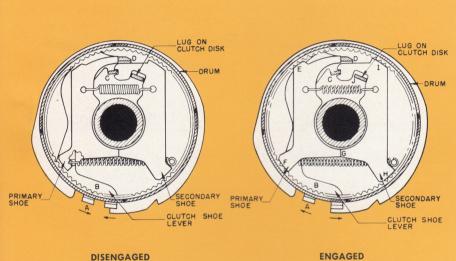
### STRAIGHT RIBBON TRAVEL

The ribbon spools are mounted at the sides of the machine rather than on the type carriage, providing a straight course for the ribbon travel and reducing the number of guides required. Simplifies ribbon changing, prolongs ribbon life.





## PRINTER



NEW CLUTCH DESIGN USES INTERNAL EXPANSION PRINCIPLE.

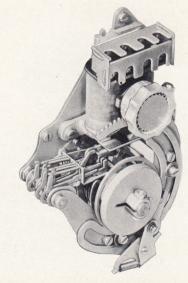
## **ALL-STEEL CLUTCHES**

Leverage is so arranged that by means of rigid force-multiplying levers a small spring produces pressure so high between steel drive shoes and an enclosing drum that the load is driven without slippage.

The long life clutch operates with exceptional stability and generates high torque capacity capable of handling both positive and negative loads. Its engagement is positive, uniform, and the short engaging time is accurately repeated cycle after cycle.

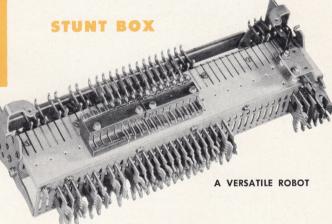
This advanced clutch design eliminates the wear and constant need for lubrication associated with conventional felt clutches (such problems are, of course, magnified in high speed operation). Since other elements in the machine have also been designed for attention-free operation, the lubrication interval for the entire printer is extended beyond anything hitherto known in printing telegraphy:

60 speed—3,000 hours operation or 1 year 75 speed—2,400 hours operation or 9 mos. 100 speed—1,500 hours operation or 6 mos. first



## HIGH SPEED SELECTOR

New high-speed pulling magnet selector... low current operation...few and simple adjustments. Range setting is quickly obtained by means of a self-locking, direct-reading knob. Driven by dependable, low-maintenance metal clutch.



The Stunt Box in effect provides a third shift, devoted wholly to nontyping operations. Extending across the full width of the typing unit, it has 42 code spaces. Ten are reserved for the common functions—line feed, shift, etc. The remainder of the Stunt Box can become a built-in sequential selector to initiate mechanical motions within the machine or remote operations by means of electrical switches.

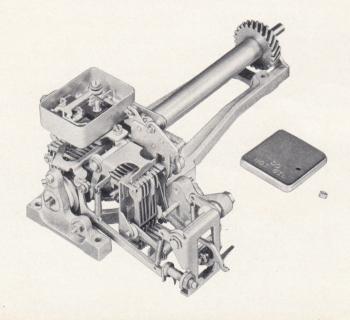
Thus a new vista is opened up for adding features without sacrificing key characters, for station selection without the expense of auxiliary equipment, for remote control operations of all kinds. For all practical purposes, the number of combinations available through sequential selection is limitless.

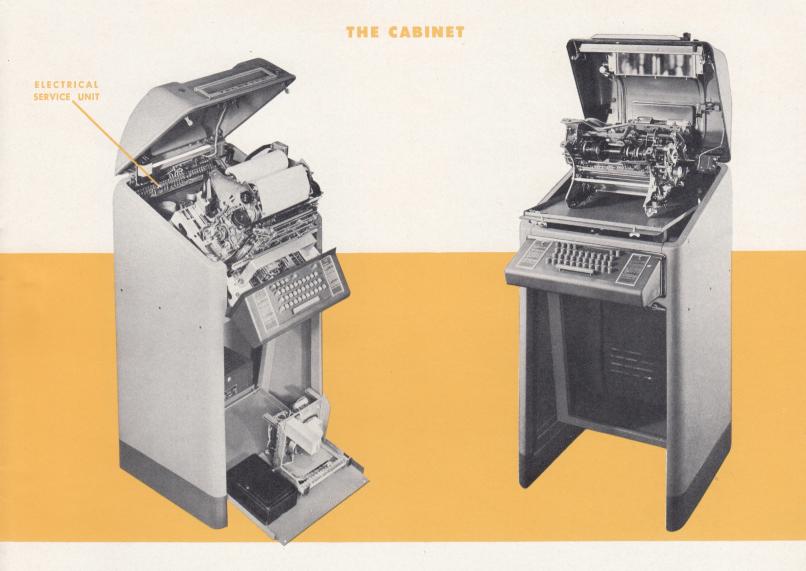


Motors have been specially designed for the Teletype 28, with emphasis on long life and attention-free operation. The synchronous motor has a rugged external relay in place of a starting switch, so the service man will have no need to open the motor. On the governed motor, the newly designed governor will hold its set speed for the life of the motor brushes (about 3,000 hours).

SIGNAL GENERATOR

A single contact assembly, mechanically operated by the distributor, replaces the conventional six-contact signal generator. The contact is mounted in a metal box for dust protection and shielding against radio interference. No adjustment is ever required, other than positioning the box itself. The motors have oversize ball bearings to obviate bearing trouble, and an air circulating system to take heat away rapidly. Both motors operate at 3600 r.p.m., use the same gears. Rubber mounts minimize noise.

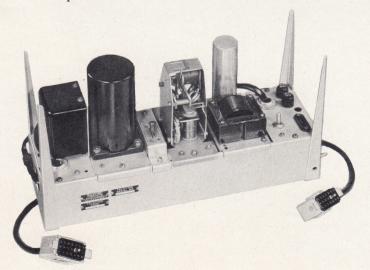




The smartly styled cabinet has been designed for operating convenience, noise suppression, and easy access for maintenance and for changing of ribbons and paper. A lamp within the cabinet illuminates the copy; the window above the copy has been set at an angle which minimizes glare. Since all mechanical controls have been brought to the front, cabinets may be placed in rows to conserve floor space.

The cabinet hood swings open and will remain fixed in any position desired. The entire page printer keyboard set is mounted in a cradle so the set can be pivoted forward for access on all sides.

The lower front panel may be used for mounting additional station equipment, as shown in the photograph at the left. Or, if preferred, it can become a servicing tray, as shown in the photograph at the right.



## **ELECTRICAL SERVICE UNIT**

Holds accessories such as line relay, rectifier, fuses, etc. Essentially it is a chassis, and the components are all packaged—for utmost flexibility in making up needed combinations. Interconnections between the various elements in the assembly have been made simple and adaptable, to permit installation of a standard machine under a variety of circuit termination requirements.





**Dimensions:** Height 40½", Width 20½", Depth 18½".

Approximate Weights: Net—typing unit and keyboard, 38 Lbs.; electrical service unit, 7 Lbs.; cabinet, 75 Lbs. Domestic packed—total weight, 182 Lbs.

**Finishes:** Available in gray-green wrinkle or other standard finishes.

Power Requirements: Synchronous motor—65 watts at 115 Volts A.C., 60 cycles; Series governed motor—95 watts at 115 Volts D.C., 25-60 cycle A.C.

**Optional Accessories:** A variety of optional features and accessoriés are available.



TELETYPE CORPORATION

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