TELETYPE equipment for 5-level data communications
Today's increasingly complex business and industrial world demands fast and accurate dissemination of information.

An extremely economical way to obtain instant, accurate printed data communications is through the use of Teletype® 5-level data terminals.

Teletype offers two lines of 5-level equipment: the heavy-duty Teletype 28 data terminal designed for continuous operation, and Teletype 32 data terminal for less demanding applications.

With either terminal you have full use of a 5-level code containing 32 combinations. A shift mechanism extends the number of combinations available to 62; of these, 26 are assigned to letters of the alphabet, with the remainder for numerals, punctuation and machine control functions.

This equipment operates at 10 characters per second (100 words per minute), or less where required. And can be equipped to send and receive messages simultaneously.

Both terminals deliver the flexibility and economy required to simplify data exchange problems. Provide permanent and accurate records instantly. As a message is transmitted it is printed in identical form on receiving terminals. Check it out. You'll find that on a price/performance basis—Teletype 5-level equipment is truly in a class by itself.
automatic send-receive sets

Teletype 28 and 32 Automatic Send-Receive (ASR) data terminals provide fast, accurate data transmission automatically using 5-level punched paper tape.

flexibility of tape Operators can punch messages off-line on tape for later errorless transmission. Messages can be collected from many sources at different times and combined into a single tape for economical on-line transmission at maximum speed. Basic data can be punched in tape, stored, used when needed, or even combined with variable data to save retyping.

keyboards Keyboards are designed for a light, uniform touch, and use a letters-figures shift combination for data preparation. Letters appearing on lower keytops are actuated by first depressing the LTRS key. To generate characters on the upper key portion, the FIGS key is first depressed. Control function keys make up the rest of the keyboard.

mode control selection On Model 28 equipment, a mode control selector provides three different modes of operation. 1. You can transmit messages while simultaneously punching a tape. 2. You can punch tape off-line, freeing the page printer to receive separate incoming messages. 3. Or you can punch a tape off-line while monitoring transmissions from the terminal's tape reader.

On Model 32 equipment, you can transmit data directly from keyboard, with or without punching tape. In local mode, messages can be prepared on tape, along with page copy to verify accuracy. Tape reader and punch can be used in local mode to duplicate tape. Data can be received in page copy form with or without perforating tape. Data can be sent on-line automatically using tape.

50 Hz motor Model 28 and 32 equipment have 115 volt, AC, 50 Hz synchronous motors and 50/60 Hz series governed motors as options.
keyboard send-receive and receive-only sets

All features on Teletype 28 and 32 keyboard send-receive (KSR) data terminals are the same as on the ASR terminals, except for the paper tape punch and reader capability.

These terminals can transmit and record messages by manual operation of the keyboards, using an 8½ in. friction-feed platen capable of handling single or multiply paper in roll diameters of 5 in. maximum.

Both 5-level data terminals are also available without keyboards for receive-only (RO) applications to record messages sent from other Teletype terminals. In addition, Teletype 28 KSR and RO terminals can be ordered in space-saving table- or wall-mounted models.

stunt and function box control
The Teletype 28 terminals have a stunt box and Teletype 32 terminals have a function box to control such non-printing functions as automatic carriage return, and activating remote apparatus (including paper tape punches and readers, business machine and meter devices).

Basically, the stunt box initiates internal mechanical functions and electrically controls internal and external functions.

model 32 international keyboard
This optional keyboard is compatible with most communications systems throughout the world. Incorporates CCITT (Consultative Committee on International Telephone and Telegraph) recommended features and requirements. 4-row keyboard uses letters-figures shift combination, but numbers are separated from character keys on top row of keys.

model 32 (3-row) keyboard
Uses letters-shift combination. LTRS key is depressed to transmit characters on lower part of keytop. FIGS key is depressed to transmit characters on upper portion of keytop. Machine control keys are separated (right-hand side) from character keys.

model 28 (3-row) keyboard
Operation of the model 28 keyboard is similar to the model 32 (3-row) keyboard. Control function keys however are positioned above the 3 rows of character keys.
optional features

automatic "answer-back"
Model 28 and 32 terminals are available with an answer-back mechanism for automatic unattended operation. Remote stations can be called in at any time and data transmitted without an operator being present.

TELETYPING 28 AN 32 DATA TERMINALS . . . can be equipped with low-paper alarm. The model 28 can be equipped with horizontal and vertical tabulators.

A sprocket feed platen is available with model 28 and model 32 equipment that enables typing of business forms on-line. Providing multiple copies both locally and at remote stations.

Model 28 wall mounted unit

more information

Teletype Corporation continually encourages the correspondence of companies and individuals interested in the science of data communications. For more information about:

LEASED SERVICES featuring Teletype 5-level data communications terminals, consult your local telephone or telegraph company.

PURCHASING or general information about this or any Teletype equipment, contact our Sales Organization at one of the locations listed on the back cover.

When ordering input-output terminals for your DATA PROCESSING SYSTEM, be sure to specify Teletype equipment—your vital communications link.
# Technical Information

## Model 28

### Speed

<table>
<thead>
<tr>
<th>Characters Per Second</th>
<th>6</th>
<th>6.6</th>
<th>7.5</th>
<th>10.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Words Per Minute</td>
<td>60</td>
<td>66</td>
<td>75</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unit Codes</th>
<th>Bauds</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.0</td>
<td>42.0</td>
</tr>
<tr>
<td>7.42</td>
<td>44.5</td>
</tr>
<tr>
<td>7.5</td>
<td>45.0</td>
</tr>
</tbody>
</table>

### Code

5-level with start-stop signals in 7.0, 7.42, and 7.5 unit transmission pattern

### Tape

5-level, chadless or fully perforated, oiled paper tape; 11/16 in. wide

### Printer

Standard form widths 3⅞ in. to 9⅝ in.; friction or sprocket feed

51 alphanumericics, plus special characters

Printed uppercase at 5, 6, 6, 10, or 12 per inch

Line feeds at 2, 3, 4, 6, or 8 lines per inch

Form positioning for standard form lengths 2 to 15 inches

Horizontal and vertical tabulation

### Keyboard

3-row, 32 key LETTERS-FIGURES shift

### Power Requirements

115 V AC @ 50 or 60 Hz or 115 V DC

### Maintenance Interval

Once every six months or after 1500 operating hours, whichever occurs first

### Temperature and Humidity

40° to 110° F.

95% humidity maximum

## Model 32

### Speed

<table>
<thead>
<tr>
<th>Characters Per Second</th>
<th>6</th>
<th>6.6</th>
<th>7.5</th>
<th>10.0</th>
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</thead>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Bauds</th>
</tr>
</thead>
<tbody>
<tr>
<td>45.0</td>
</tr>
<tr>
<td>49.5</td>
</tr>
<tr>
<td>56.3</td>
</tr>
<tr>
<td>75.0</td>
</tr>
</tbody>
</table>

### Code

5-level start-stop signals with 7.5 unit transmission pattern

### Tape

5-level fully perforated 11/16 in. wide

### Printer

Friction or sprocket feed platen for 8½ in. single or multiple-ply paper

10 characters per inch

Adjusted for 72 character line vertical spacing 6 lines per inch

Single or double row spacing

### Keyboard

3-row or 4-row 5-level

### Power Requirements

115 V AC @ 50 or 60 Hz, or 115 V DC, single phase synchronous motor

### Maintenance Interval

Once every six months or after 500 operating hours, whichever occurs first

### Temperature and Humidity

40° to 110° F.

95% humidity maximum

## Dimensions and Weight

<table>
<thead>
<tr>
<th>Unit</th>
<th>Height</th>
<th>Width</th>
<th>Depth</th>
<th>Approx. Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor Model RO</td>
<td>39 in.</td>
<td>20⅛ in.</td>
<td>18½ in.</td>
<td>115 lbs.</td>
</tr>
<tr>
<td>KSR</td>
<td>39 in.</td>
<td>20⅛ in.</td>
<td>24 in.</td>
<td>130 lbs.</td>
</tr>
<tr>
<td>ASR</td>
<td>39 in.</td>
<td>36 in.</td>
<td>24 in.</td>
<td>260 lbs.</td>
</tr>
<tr>
<td>Table Model RO</td>
<td>16 in.</td>
<td>20⅛ in.</td>
<td>21 in.</td>
<td>75 lbs.</td>
</tr>
<tr>
<td>KSR</td>
<td>16 in.</td>
<td>20⅛ in.</td>
<td>24 in.</td>
<td>90 lbs.</td>
</tr>
<tr>
<td>Wall Model RO</td>
<td>30 in.</td>
<td>16⅛ in.</td>
<td>11⅛ in.</td>
<td>105 lbs.</td>
</tr>
<tr>
<td>KSR</td>
<td>30 in.</td>
<td>16⅛ in.</td>
<td>14⅛ in.</td>
<td>110 lbs.</td>
</tr>
</tbody>
</table>