Asynchronous Communication—ASCII—Conversational/Character Mode
Bottom-Line Data Entry With Scroll-up Operation

**Series 3300**—for basic teletypewriter replacement applications
- Upper-case characters displayed
- 110 to 2400 baud

**Series 3500**—for basic editing, high speed applications
- Upper-case characters displayed
- 110 to 9600 baud
- 1920 character memory
- Convenient keyboard located controls
- Space-Over-Data—for fill in the blanks
- Character-mode editing
  - cursor left (backspace)
  - cursor right (horizontal tab)
  - clear (formfeed)

**Series 3700**—for upper/lowercase, basic editing applications
- Upper- and lower-case characters displayed
- 110 to 9600 baud (any two standard)
- 1920 character memory
- Convenient keyboard located controls
- Space-Over-Data—for fill in the blanks
- Character-mode editing
  - cursor left (backspace)
  - cursor right (horizontal tab)
  - clear (formfeed)
  - Numeric keypad available

**Series 3900**—for APL-ASCII applications
- Full APL character set per ASCII standards
- APL typewriter-pairing keyboard
- Overstrike capability—for immediate verification of APL "overstrike" characters and underlining
- 110 to 9600 Baud (any two standard)
- Space-Over-Data—for fill in the blanks
- Character-mode editing
  - cursor left (backspace)
  - cursor right (horizontal tab)
  - clear (formfeed)
  - ASCII/APL switchable character set, for dual applications
SOME OF THE SPECIAL TELERAY BENEFITS

SIMPLICITY——Straight-forward interfacing to existing teletypewriter supported software and uncomplicated keyboard operation for fast operator training

RELIABILITY——One-logic board design using quality components with a minimum 3-day "burn-in" results in the most reliable terminals in the world

MAINTAINABILITY——True modular construction, easily accessible electronics and all plug-in chips means easy, simple, and fast repairs

USABILITY——Highly legible display and easy to use quality keyboard assures operator satisfaction with fewer entry errors and less fatigue

ADAPTABILITY——All format and interface variables easily modified as system requirements change—plus three standard interfaces (RS-232, current loop, TTL)

COMMON SPECIFICATIONS FOR ALL MODELS

Data Entry: Bottom line, typewriter entry method with scroll-up operation.
Character Form: 5 x 7 dot matrix (lower-case tails for 3700 and 3900)
Character Size:
   Normal—0.11" wide x 0.22" high with 80 characters per line.
   Wide—0.22" wide x 0.22" high with 40 characters per line.
Refresh Rate: 60 Hz
Screen Size: 9.5" wide x 7.5" high
Monitor: 12", P-4 phosphor
Cursor: Solid underline
Duplex: Half or Full—switchable
Modes: Local or Remote—switchable
Character Composition: 10 or 11 bit word—1 start bit, 7 data bits, 1 parity bit, and 1 or 2 stop bits.
Logic Board Variable: Parity (high, low, odd, even) Line Feed (automatic or manual), Carriage Return (automatic or manual), Stop Bits (1 or 2), Baud Range, and Formats.
Interfaces: RS-232-C, 20 MA current loop and serial TTL—all standard.

Terminal-Affected Codes:
   Bell—produces audible tone.
   Carriage Return—moves cursor to first column of bottom line
   Line Feed—advances entire display up one line.
   *Backspace—moves cursor one position to the left without altering data
   *Formfeed—erases the total display and moves cursor to first column of bottom line
   *Space-Over-Data—space code moves cursor one position to right without affecting data
   *Horizontal Tab—moves cursor one position to the right without altering data

Temperature Range: 5 to 45°C.

OPTIONS
   Composite Video . . . for slave monitors
   Auxiliary Interface . . . for printers, etc.
   Detachable Keyboard
   Receive-Only Configurations (no-Keyboard)
   Rack Mounting
   50 Hz Power
   *3500, 3700, and 3900 Series only

UNIQUE SPECIFICATIONS FOR EACH MODEL

<table>
<thead>
<tr>
<th>Character Set:</th>
<th>3300 Series</th>
<th>3500 Series</th>
<th>3700 and 3900 Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cursor left:</td>
<td>not available</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>Cursor right:</td>
<td>not available</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>Clear:</td>
<td>not available</td>
<td>option</td>
<td>option</td>
</tr>
<tr>
<td>Space-Over-Data:</td>
<td>110-2400</td>
<td>option</td>
<td>option</td>
</tr>
<tr>
<td>Baud Range:</td>
<td>option</td>
<td>option</td>
<td>option</td>
</tr>
<tr>
<td>Incremental Horizontal Tab:</td>
<td>not available</td>
<td>option</td>
<td>option</td>
</tr>
<tr>
<td>Numeric Keypad:</td>
<td>option</td>
<td>option</td>
<td>option</td>
</tr>
<tr>
<td>Display Formats:</td>
<td>standard</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>— 40 x 24</td>
<td>standard</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>— 80 x 24</td>
<td>standard</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>— 80 x 12</td>
<td>standard</td>
<td>standard</td>
<td>standard</td>
</tr>
<tr>
<td>15&quot; CRT:</td>
<td>RS-232</td>
<td>RS232, I-Loop, TTL Parallel</td>
<td>RS232, I-Loop, TTL Parallel</td>
</tr>
<tr>
<td>Printer Interface Option:</td>
<td>option</td>
<td>option</td>
<td>option</td>
</tr>
<tr>
<td>Wide Character Switch:</td>
<td>option</td>
<td>RS232, I-Loop</td>
<td>standard</td>
</tr>
<tr>
<td>Dimensions:</td>
<td>13.5&quot;H x 15.5&quot;W x 21&quot;D</td>
<td>14&quot;H x 18&quot;W x 23&quot;D</td>
<td>14&quot;H x 16&quot;W x 23&quot;D</td>
</tr>
<tr>
<td>Weight:</td>
<td>39 pounds</td>
<td>45 pounds</td>
<td>45 pounds</td>
</tr>
</tbody>
</table>

* APL for 3900 Series with overstrike capability.
Our Teleray 3700 rests on its laurels!

We've kept the TELERAY tradition with the 3700. MSI circuitry and top grade components cut down the things that can go wrong and give you another TELERAY Uptime terminal with the quick repair feature of having all logic, character generation, drives and interface on one plug-in board with every chip a plug-in.

As one TELERAY user puts it, "We can work around a down tube for a while, but our operators aren't low paid clerks. They're high paid programmers, scientists and skilled personnel. Their lost time really hurts." TELERAY is, in fact, rarely down, but is quickly and easily repaired — by our nation-wide service network.

**Standard features include:**
- UPPER/lower case, 128 character ASCII set — 95 displayable
- 1920 character, 12" CRT display (80 x 24)
- Dual data rates, to 9600 Baud
- Multiple interfaces — RS-232, Current Loop, TTL
- Wide character (40 x 24) format, switchable
- Character-mode, bottom line entry, scroll-up operation

- Bottom-line cursor control and screen clear
- Space-over-data, switchable — for fill-in-the-blanks (CAI)

**Optional features include:**
Printer Output, TTL parallel, Composite Video, Numeric Keypad, 15" display, 50 Hz, Incremental Horizontal tab, Receive Only, Detachable keyboard...

Call collect (612) 941-3300 and ask for TELERAY! There's an Uptime TELERAY Terminal for your CRT application.