# The twin-cassette "Silent 700" ASR data terminals

from Texas Instruments



SILENT 700 electronic data terminals - CASSETTE 2 -PLAYBACK REWIND LOAD/FF READY 6 CHARACTER LOCAL THE ORPORATED MENTS SILENT 700 ASR

## A complete automatic send-receive

For your data terminal applications, present and future, the new *Silent 700\**: ASR terminals offer the high performance of magnetic tape cassette off-line storage and the speed, quietness and field proven performance of *Silent 700* keyboard data terminals, in a totally integrated, self-contained terminal unit.

#### **Fast**

Silent 700 ASR terminals print, transmit and receive data at 30 characters per second—up to three times faster than conventional terminals, and the automatic transmit and receive capability is expandable to 120 characters per second. Direct user benefits include maximum system utilization, lower line charges, less computer connect

time, less operator time at the terminal and a potential reduction in the number of terminals required to do the job.

#### **Totally Quiet**

Silent 700 ASR terminals combine silent electronic printing with smooth, quiet magnetic tape cassettes to offer users a powerful alternative to conventional ASR paper-tape teletypewriters.

#### Versatile

The new Silent 700 Models 732 and 733 include keyboard send-receive and automatic send-receive terminals, with USASCII or BAUDOT/CCITT codes and a choice of line interfaces. Ideally suited for application in:

- Point-to-point communications networks.
- Computer time-sharing systems.
- High volume data entry operations...for processing of orders, credit histories, and invoices.
- High-speed remote input/ output to a central computer.
- Computer peripheral systems for program input/output and off-line storage.

#### Reliable

Silent 700 terminals are designed and built to provide maximum "up-time" for users. Under normal usage, they will operate a year with only one or two remedial service calls. TI integrated circuit electronics, electronic printhead, and accurate digital-grade magnetic tape are the keys to this reliability. Maximum bit error rates are better than one in 10<sup>6</sup> (one in 10<sup>7</sup> typical).

#### Attractive

The new Models 732 and 733 terminals feature an attractive, modern design with a totally integrated, dual cassette system, in a self-contained unit suitable for use in offices, banks, hospitals, and even executive offices and boardrooms.

 $<sup>{\</sup>bf *Trademark\ of\ Texas\ Instruments\ Incorporated}$ 

### terminal capability



#### Standard Features

Silent 700 ASR terminals offer simultaneous transmit and receive capability, selectable record or playback on each cassette and simultaneous on-line transmission and off-line data preparation. Additional standard features include high speed tape duplication and a complete, off-line block and character data editing facility.

ANSI-compatible (Philips-type) cassettes are used...with 86 character block recording, phase encoded, 800 bits per inch...providing as a minimum 288,000 data characters storage per cassette (144,000 data characters per track).

Silent 700 terminals feature switch-selectable 10, 15 and 30 characters per second speed (50, 75 and 100 baud speed on Baudot models). Additionally, standard ASR and KSR terminals offer switch-selectable half- or full-duplex operation and odd, even or mark parity generation.

The compact KSR models are easily converted to ASR models by simply adding the upper cassette module and its controller.

### Modular Expandability

The simplified design in the ASR terminals permits a greater flexibility for expanding terminal capabilities and adding optional features which, depending on model, include:

- 1200 baud transmission speed ...120 characters per second.
- Automatic search control for fast search of cassette tape files and automatic tape duplication to facilitate editing.
- Automatic remote control of record-playback and cassette control functions.
- Answer-back memory.
- TTY-compatible or full USASCII upper/lower case keyboards.
- EIA RS-232-C or dc-current loop serial interfaces.
- Built-in 300 baud modems.
- 300 Baud Automatic Answer feature for unattended operation.

Silent 700 terminals are available in four new models, each with EIA RS-232C serial interface.



ASR Model 732 ASR with BAUDOT| CCITT code and Model 733 ASR with USASCII code...available with single or twin magnetic tape cassettes.



KSR Model 732 KSR with BAUDOT! CCITT code and Model 733 KSR with USASCII code...KSR models that can be easily upgraded to ASR models.

# SILENT 700 electronic data terminals

#### **New Terminal Accessories**

Accessory equipment available for Silent 700 terminals includes: a terminal stand for a stand-alone terminal station that complements and blends with modern office decor; an automatic paper spooler for take-up of printed output; and a fiberglass shipping container to reduce risk of damage when transporting terminals to and from different user locations.



Terminal stand . . . sturdy, attractive, functional.



Shipping container for KSR models... separate container used for cassette unit on ASR models.

#### **MODELS 732 AND 733 GENERAL SPECIFICATIONS**

#### 1. Printer

- A. Friction-feed platen
- B. Line length: 8 inches (80 characters/line, 10 characters/inch.)
- C. Line Spacing: Switchselectable 3 or 6 lines/inch.
- D. Complete visibility of printed data, including the line being printed and the character just printed.
- E. Enclosure contains space for printing paper: 8½ in. wide x 300 ft. long x 35% in. diameter roll.
- F. Character font: standard models print characters from 5 x 7, 35-dot matrix printhead, character size 0.105 in. x 0.080 in. On standard Model 733, lowercase received data is printed from 5 x 5 matrix, character size 0.0715 in. x 0.080 in.; with optional full USASCII keyboard, lower case alphabet is also generated.
- G. Carriage return/line feed (CR/ LF) automatic at column 81, no code is transmitted. Time for: (1) CR is 195 ms from any column, (2) LF (single space) is 33 ms, and (3) LF (double space) is 67 ms.

- 2. Printing Paper
- TI thermographic printing paper, No. 213714 (white).
- 3. Paper Out Indication
  - Last 10 ft. of TI thermographic printing paper roll is color coded.
- 4. Keyboard
  - "Two-key roll over" electronically prevents transmission when two keys are depressed simultaneously.
- 5. Cassettes (ASR units only)
  - A. Recording method: phaseencoding at 800 bpi, 86 data character blocks.
  - B. Bit error rate: 1 in 106. (maximum)
  - C. Storage medium: ANSIcompatible (Philips-type) cassettes containing 300 ft. digital grade magnetic tape.
  - D. Storage: 144,000 data characters per track or 288,000 data characters per cassette (minimum).
  - E. Off-line playback or record at 30 characters per second; tape duplication without printing at 250 characters per second. On-line playback or record for Model 732 at 6.67, 10, and 13.33 cps; for Model 733 at 10, 15 and 30 cps.
- 6. Physical
  - A. Power requirements: 115/230 volts RMS + 10% 15%, 50/60 Hz, 200 VA maximum.

- B. Ambient temperature:
  Operating, 10° to 35°C.
  Storage, -30° to 70°C, not
  including paper or magnetic tape
  cassettes.
  Paper, -30° to 40°C.
- Operating, 0 g Storage and handling, 10 g for 11 msec (in shipping container)

C. Shock:

- D. Vibration: 10 to 60 cps, 0.5 g
- E. Humidity, non-condensing: Operating, 10% to 90%. Storage, 10% to 95%.
- F. Terminal is self-contained.
  Dimensions for KSR units are
  21.2" wide x 19.5" deep x 7.2" high.
  Dimensions for ASR units are
  21.2" wide x 19.5" deep by 14.6"
  high.
- G. Weight (excluding options): KSR units, 38 lbs. maximum. ASR units, 55 lbs. maximum.

Sales and Service Offices of Texas Instruments are located throughout the United States as well as Canada and major countries overseas. Contact the Digital Systems Division, Texas Instruments Incorporated, P. O. Box 1444, Houston, Texas 77001. Or call (713) 494-5115, Ext. 2126, for the location of the office nearest you.

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