The 3M *Whisper* Writer 1000™ Series

3M

Helping the business world communicate

Increase your communication flexibility while decreasing costs with 3M *Whisper* Writer

The introduction of the 3M Whisper Writer system signals a revolution in business communications. Whether relaying monthly sales reports, sending a message to a supplier, communicating with your sales organization, entering daily orders, or checking the latest stock quotation, this versatile teleprinter system meets your business communication needs… now, when you need it.

Quiet and compact, the Whisper Writer goes wherever you need it…on your desk or on the road. The unit installs anywhere there is a standard telephone hook-up. It can even share a line with a regular phone. For travel,

the Whisper Writer comes packaged in an attractive executive briefcase. An acoustic adapter provides communication capability any place there is power and a telephone.

For easy access to a database or a remote computer, the Whisper Writer can be programmed to store and automatically dial up to four phone numbers and log-on sequences, and frequently called computer systems.

Choose an optional automatic line selector if you want to interface with a dedicated Western Union line as well as the standard phone line. With this

option you can receive both 300 Baud communications over the public network and 110 Baud communications via the TWX network. (Available in U.S. only.)

Use the Whisper Writer teleprinter alone as a receive-only terminal or add the 3M Intelligent Keyboard for full communications capability. Available in a variety of productivity-oriented models, the Whisper Writer system offers flexibility, performance and low cost in a unique communications system.

Build a *Whisper* Writer System to suit your precise needs

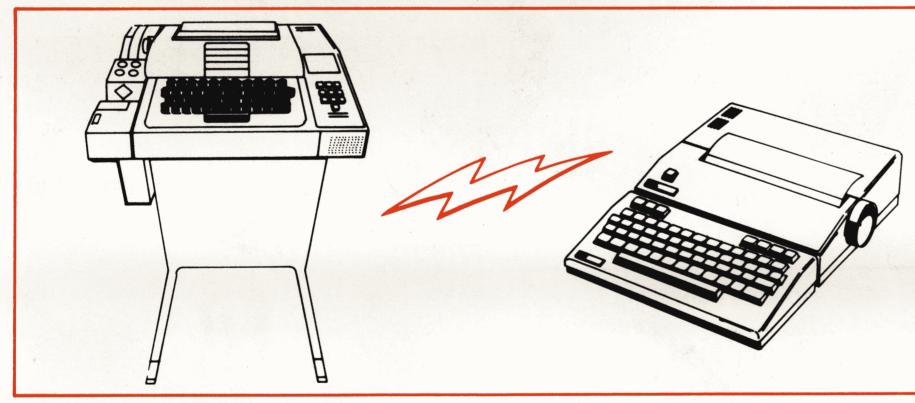## The 3M *Whisper* Writer System is used in a variety of business applications.

Electronic messaging
Whisper Writer systems communicate with each other and with other compatible terminals. Whisper Writers are excellent choices for applications like electronic mail systems.

Remote computing/database accessing/timesharing
Whisper Writers can communicate with computer systems to perform financial planning, scheduling, modeling and various other applications. Whisper Writers communicating with public and private databases can provide you with the information you need for timely, effective decision making.

TWX, Telex I, IRC Telex compatibility
Depending on teleprinter and keyboard models, Whisper Writer systems can single-line interface with the dedicated TWX (1980/1945), Telex I (1483/1446) and IRC Telex (1483/1446 with options) networks that interconnect terminals worldwide. The automatic line selector option allows a Whisper Writer (Models 1980/1945) to interface with both the dedicated TWX network and the Public Switched Telephone Network (PSTN).

Output printer for CRT
The Model 1482 can be used as low cost printers for any CRT system equipped with an RS-232C interface. They can be used as primary printers for specific tasks or as back-up printers.

Check these other *Whisper* Writer advantages:

■ The Whisper Writer is inexpensive enough to install in multiple locations...wherever you need communication capabilities.

■ Quiet, reliable thermal printing makes the teleprinter a welcome addition to any work setting.

■ The teleprinter is operated by the push of a button. Send and receive messages quickly and easily.

■ The teleprinter offers several sizes of output column lengths to match your application requirements.

■ Whisper Writer systems also offer auto dial and auto log-on capabilities. This means you can store phone numbers and log-on sequences in the directory which facilitates single keystroke access to up to four computer systems or terminals. You can also dial a number in the keyboard, if a telephone is not connected.

■ The keyboard is designed with the operator in mind. It is standard size typewriter style, features auto-repeat on all keys but ESC, has easy to use function keys, and generates all 128 ASCII codes.

■ The Intelligent Keyboard allows you to either send messages as you type them, or create and edit messages off-line for later transmission. For lengthy messages, off-line editing can save you communications costs. For important messages, off-line editing can assure you of error-free copy.

■ Whisper Writer keyboards have up to 8000 characters of memory featuring two independent buffers. Both memories can be edited and cleared without clearing the other.

■ The Model 1945 Intelligent Keyboard also has data flow control capabilities. If you send a message faster than a remote computer or terminal can accept it, that information will be stored in keyboard memory until the remote device requests transmission to resume.

■ When communicating over phone lines, you can choose to use the auto-answer feature. Auto-answer permits communications to be received unattended during low network usage periods when communications charges are lower. The answerback with which your teleprinter responds is fully programmable, and protected from power outages for at least five years.

■ Whisper Writer systems (with Model 1945 Intelligent Keyboard) also feature polling. You can enter a message into your keyboard memory for later polling by a remote computer. For instance, daily financial or inventory data can be sent after business hours when costs are lower. Also, messages can be stored to be sent to different time zones during their normal business days.

If any of these Whisper Writer advantages could help you meet your business communications needs, consider building a 3M system to fit your unique applications.

Teleprinters

Model 1980 is an 80/136-column display teleprinter with a Bell 103 compatible internal modem. It connects to public telephone lines (PSTN) in North America as well as to the TWX network. It can be used in messaging, remote computing and TWX compatible applications. Its memory can store and automatically pulse dial up to four phone numbers and log-on sequences required to communicate with remote computers on terminals.

Model 1981 is an 80/136-column display printer with a CCITT V.21 modem that connects to the Public Switched Telephone Network outside of North America. It can be used for messaging and remote computing.

Model 1482 is an 80-column printer with an RS-232C interface. It is primarily intended for use as a CRT printer but can be used for other purposes with an external modem.

Keyboard

Model 1945 Intelligent Keyboard can be connected to teleprinter models 1980 and 1981.
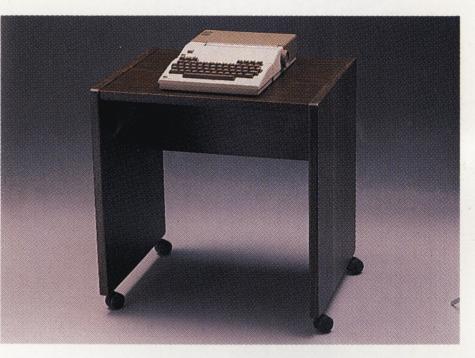
Package 83

Package 83 is designed to communicate with destinations on either Telex I or International Telex networks using F1/F2 analog lines. The optional, field-installable IRC Telex kit allows connection to IRC Telex lines. It consists of a Model 1483 teleprinter and a Model 1446 Intelligent Keyboard.

Accessories

Model 1490 acoustic coupler connects Model 1980 teleprinter to public phone lines through a telephone handset. It is recommended for applications where direct connection to phone lines is either not practical or not desirable.

Model 1441 automatic line selector allows the Model 1980 to be used for sending messages through the Public Switch Telephone Network, domestic Telex (or TWX), and International Telex. It selects the appropriate transmission speeds required by the different networks.

3M Whisper Writer Portable Package consists of Model 1490 acoustic adapter and an attractive briefcase for carrying a Model 1945 Intelligent Keyboard and a Model 1980 or 1482 teleprinter. It weighs less than 18 lbs. and is so portable it qualifies as carry-on luggage on airlines.
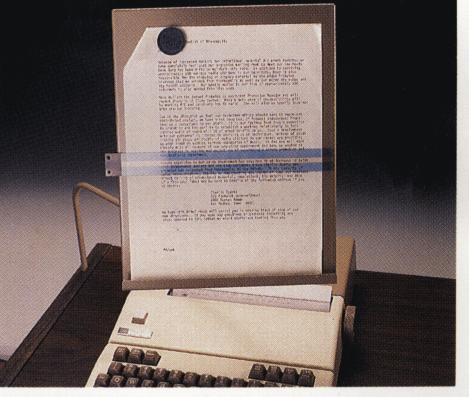

3M Whisper Writer Stand is as attractive as it is functional. With its oak formica finish and contemporary styling, it's a handsome addition to any office. Designed to accommodate your teleprinter, keyboard and phone, this compact stand turns your immediate office area into a more efficient, organized communications center.

3M Whisper Writer Copyholder is designed to be used with the 3M Whisper Writer Stand to keep source material at eye level for operator ease. The lightweight yet durable holder consists of a copyboard attached to a thin, balanced rod which inserts into a hole pre-drilled in the stand. And because the stand has two such holes, one on both the left and right side, the Copyholder can be positioned, and easily re-positioned, according to operator preference.

3M *Whisper* Writer Specifications

Teleprinter Models 1980, 1981, 1482 and 1483

Print Mode
Non-impact, thermal, last character visible

Print Rate
35 CPS (maximum) bi-directional

Character Set
Models 1980, 1981, 1482. 128 printing ASCII characters Model 1983. C.C.I.T.T. Telegraphic Alphabet No. 2

Line Length
186 mm (7.35 in.); for Models 1980, 1981, 1482
160 mm (6.32 in.); for Model 1483

Line Spacing
6 lines/inch

Paper
8.6 in. (216 mm) wide for 1980, 1981, 1482, 1483
80 or 300 ft. (24.4m or 91.4m) lengths for all models

Data Rates
110 (100 or 66 wpm) and 300 Baud; all models except 1483
50 Baud (66 wpm); 1483 only

Answerback
Models 1980, 1981, 1482
User programmable up to 46 characters in length. Any combination of 127 ASCII characters (CTRL E excluded).

Model 1483
Installer-programmable up to 20 characters in length including header and trailer. Installer-programmable IRC option; up to 24 characters in length including header and trailer. Default answerback is "WW 1483 TELEX."

Flow Control
Transmit DC1/DC3
Models 1980, 1981
Printer sends a DC3 (X-OFF) when receive buffer approaches its capacity; goes to a fast print mode if it continues to fill, and sends a DC1 (X-ON) when receive buffer is ready to accept more data.

Model 1482
Sends a DC3 (X-OFF) when the receive buffer approaches its capacity; goes to a fast print mode and DTR signal is turned off if it continues to fill. Printer sends a DC1 (X-ON) and DTR signal is turned on when the receive buffer is ready for more data.

Auto Dial, Auto Log-on
Model 1980 and 1981 only
Model 1980 teleprinter stores and automatically pulse dials up to four phone numbers, including auto log-on capability. Model 1981 teleprinter has automatic log-on capability only.

Dimensions
Width 12.2 in. (311 mm) for 1980, 1981, 1482
Depth 10.6 in. (269 mm)
Height 3.1 in. (79 mm)
Weight 8.75 lbs. (3.9 kg)

Power
Input Voltage: 115 V RMS±10%; 47-63 Hz
Power Consumption: 60 watts maximum

Internal Modem
Model 1980
Bell 103/113 Series; direct connect RJ11; optional acoustic adapter; Auto-answer, answer and originate

Model 1981
C.C.I.T.T. V.21/V.25 protocol; direct connect via 9-pin D connector, optional acoustic adapter.

Model 1483
Bell 108 originate only; conforms with Western Union F1/F2 Analog Lines; conforms with IRC recommendations if optional IRC kit is installed.

Models 1945 and 1446 Intelligent Keyboard

Arrangement
60 key typewriter style

Auto-repeat
All typing and editing keys except ESC

Function Keys
Model 1945
Caps Lock, Local Copy, Run Message, Who Are You, Here Is, PGM/Break

Model 1446
Who Are You, Here Is, Run Message, Stop, Call, Clear Call

Edit Functions
Model 1945
Delete Character, Delete to EOL, Clear Memory, Forward or Back a Character, Forward or Back 5 Lines, Insert, Top of Memory, End of Memory

Model 1446
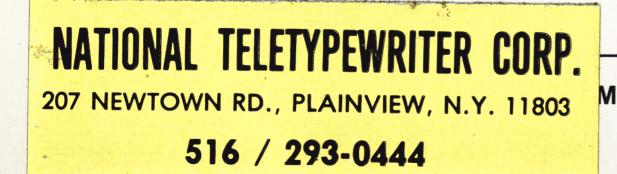Clear, Home, Scroll, Verify, Forward, Backspace, Character Delete and Character Insert

Memory
Model 1945
Up to 8000 characters user divided into two buffers, one called memory and the other called CTRL memory

Model 1446
4090 characters, automatically insert FIGS/LTRS case shifts as required during transmission

Keyboard Response
32 characters type-ahead buffer

Polling
When polling is enabled, the Whisper Writer answers the telephone and transmits the contents of memory when a DC1 is received.

Status Report
When you press SHIFT and WHO ARE YOU simultaneously, a status report on Baud rate, return key transmits X-ON, X-OFF and auto-answer is generated. For Models 1980 and 1981, it will also include log-on directory contents.

Dimensions
Width 11.5 in. (292 mm)
Depth 6 in. (152 mm)
Height 2.6 in. (66 mm)
Weight 2.6 lb. (1.2 kg)

Power
Provided by connected Whisper Writer Teleprinter

Model 1441 Automatic Line Selector
Connects a standard telephone line and TWX line to the Whisper Writer. Provides automatic answer and speed select.

Model 1490 Acoustic Adapter
Connects Models 1980 and 1460 Teleprinters to public phone lines through a telephone handset. Also Models 1981 and 1461 when handset is compatible.

Portable Package Carrying Case
Width 19 in. (482 mm)
Depth 15 in. (381 mm)
Height 5 in. (127 mm)
Weight Less than 20 lbs. (9 kg)

"Litho in USA with 3M offset plates, film and proofing systems."

3M