

APPLICATION NOTE  
REMOTE COMMUNICATIONS & INTERFACE DEVICES  
APRIL 1983

The programs mentioned in the following text are known to be available for use on the SAGE II and SAGE IV computer systems. Further details can be obtained from the Vendors producing the product. SAGE does not currently distribute these products but will welcome comments as to their effectiveness and general pricing.

The attached list(s) are by no means complete. SAGE welcomes additions, hopefully with specifics on how the program (or device) was used. Please send WRITTEN information to the APPLICATIONS department.

SUBJECT AREA: Remote Communications.

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Remote Communications refers to communications with another computer or device over a phone line, private line, or other transmission media. It is typically accomplished with the SAGE computer by connecting the appropriate device to one of the serial ports.

The type of device connected depends mainly on the system on the other end of the wire and the type of protocols involved. MODEMS are devices which interface the computer to the telephone signals required for phone line transmission. PROTOCOL CONVERTERS are devices which convert one type of computer transmission to another type of computer signal. These converters are generally needed when talking to some main frame systems such as IBM where the SAGE RS232 signals must be converted to IBM BSC. Many different types of devices are available. The one best suited for the user application can be determined only if the requirements of both computers is known. The interface equipment vendors are often the best source for determining what equipment is needed.

Once the hardware specifics have been determined, software must be chosen (or written) to run it. Again, the software vendors can best describe their product in terms of the end user's application.

REMOTE COMMUNICATIONS PROGRAMS:

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The USUS (p-System Users group) distributes source of various terminal emulation programs which are being used to talk to electronic mail services such as Telemail and CompuServe. These PASCAL programs must be compiled and linked to run. They are shipped "AS IS" with no warantee or support provided. If the user is not familiar with the details of remote communications, setting this up may be time consuming. To acquire these programs, (and others) join USUS by sending \$20 to address given. (Information may be slow returning to you.) Once you have sent in your dues, order Vol. 15 from the SAGE distributor.

USUS \$20  
P.O. BOX 1148  
LaJolla, Ca 92038

Chuck Butler (507) 388-7019 USUS distributor for SAGE  
1708 Fair St.  
Mankato, MN. 56001

Specify 40 or 80 track diskettes. \$8 per 3 vol on a SAGE diskette.

Commercial communications packages are:

MicroStrategies Inc. COMLINK \$ 75  
359 Village St.  
Millis, MA 02054

TICOM (213) 827-7118 REMCOM \$ 95  
13470 WASHINGTON BLVD., SUITE 207  
MARINA DEL REY, CA 90291

LOGOS (201) 782-1533 FORCOMM \$125  
RD5 BOX 114B  
FLEMINGTON, NJ 08833

JBS (916) 756-6582 AIP \$200  
200 B ST. #6  
DAVIS, CA 95616

Andrew Holupka (412) 337-6080 Communications  
Automation Products Int. Consulting Specialist  
Fifth Ave. and Ninth St.  
New Kensington, PA 15068

INTERCONNECTION DEVICES:  
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MULTIPLEXERS AND PORT CONTENDERS:

ComLink Inc. (916) 786-3445  
2238 McLaren Drive  
Roseville, Ca 95678

BLACK BOX (412) 746-2910  
P.O. BOX 12800  
PITTSBURGH, PA 15241

VIA WEST, INC (602) 623-5716  
534 N.STONE AVE.  
TUCSON, AZ 85705

ATTACH TO SNA/SDLC PORT:

PROTOCOL COMPUTERS, INC. (800) 423-5904  
6150 Cnaoga Ave. Suite 100  
Woodland Hills, CA 91367

ATTACH TO A IBM-BSC PORT:

BMC INTERNATIONAL (213)-320-9880  
20610 MANHATTAN PLACE SUITE 112  
TORRANCE, CA 90501

ALMOST ANYTHING TO ANYTHING ELSE  
(RS232 RS422 V.35 , RS422 , BURROUGHS TDI, RS449, EIA/LOOP , IEEE488)

BLACK BOX (412)746-2910  
P.O. BOX 12800  
PITTSBURGH, PA 15241

VIA WEST, INC (602) 623-5716  
534 N.STONE AVE.  
TUCSON, AZ 85705

RS232 TO FULL DUPLEX 4-WIRE LINES (For short haul modems):

BO-SHERREL CO. (415) 792-0354  
6101 JARVIS AVENUE.  
NEWARK, CA 94560

RS232 TO DIFFERENTIAL (up to 1500 feet)

RACON INC  
12628 INTERURBAN AVE.SO  
SEATTLE,WA 98168

(800)426-5245

IEEE488 to other (RS422, RS232)

NATIONAL INSTRUMENTS  
12109 TECHNOLOGY BLVD.  
AUSTIN, TEXAS 78759

(512) 250 9119

CABLES:

Support Systems, International  
150 SOUTH SECOND ST.  
RICHMOND, CA 94804

(415) 234-9090