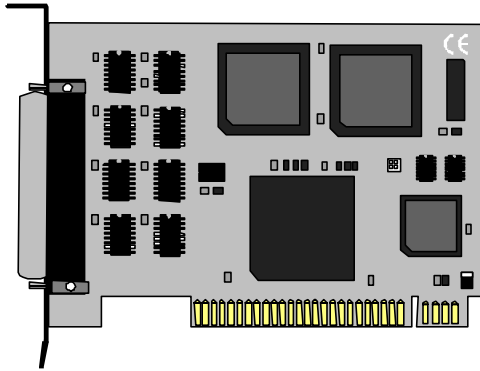


COMM+4TM
USER'S MANUAL
Part Number 3064, 3065, 3066



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SECTION 1.

Installation

The COMM+4 can be installed in any of the PC expansion slots except J8 on the XT, and the IBM Portable. First you must set the board base address and IRQ jumper. Remove the PC case, remove the blank metal slot cover, and insert the board. The COMM+4 model you have will determine how the cables are connected. Replace the screw, replace the case, and installation is complete.

Ribbon Cables - These cables are routed through the slot opening and connected to the board before the board is seated in the bus connector. The cables should be connected so that the stripe is down, or toward the bottom, with the cables facing toward the rear of the PC. Hang the attached cable bracket on the rear deck before tightening the case screws.

DB-9 Cables - Install the board in a slot, and then install the extra two cable bracket in the slot toward the power supply from the board.

Spider Cable - Install the board in a slot, close the cover, and then install the DB-37 connector (Spider Cable) to the board.

SECTION 2.

Address Selection

The COMM+4 board occupies 32 consecutive I/O locations. The dip-switch is used to set the base address for these locations. Be careful when selecting the base address as some selections conflict with existing PC ports. The following table shows several examples that usually do not cause a conflict.

Address	Switch Settings				
	1	2	3	4	5
280-29F	Off	On	Off	On	On
2A0-2BF	Off	On	Off	On	Off
380-39F	Off	Off	Off	On	On
3A0-3BF	Off	Off	Off	On	Off
1A0-1BF	On	Off	Off	On	Off
2E0-2FF	Off	On	Off	Off	Off

Figure 1
Address Selection Table

NOTE That 3A0-3BF cannot be used if the monochrome adapter is installed, as port contention will result. The 2E0-2FF setting in conjunction with the IRQ 3 interrupt selection will let the PC recognize COM2:(2F8 Hex) and COM4:(2E8 Hex).

The following illustration shows the correlation between the DIP-switch setting and the address bits used to determine the base address. In the example below, the address 2E0 Hex is selected as a base. Address 2E0 in binary is XX 10 111X XXXX where X = a non-selectable address bit.



Figure 2
DIP-Switch S1

Note that setting the switch "On" or "Closed" corresponds to a "0" in the address, while leaving it "Off" or "Open" corresponds to a "1".

Operating System Installation

For Windows Users

Start by choosing **Install Software at the beginning of the CD. Choose Asynchronous COM: Port Software, SeaCOM.**

Other Operating Systems

Refer to the appropriate section of the Serial Utilities Software.

The following table shows which port is connected to which connector and the corresponding address.

PORT #	CONNECTOR LOCATION	ADDRESS	EXAMPLE (BASE=280H)
1	J1	BASE+0	280-287 HEX
2	J2	BASE+8	288-28F HEX
3	J3	BASE+16	290-297 HEX
4	J4	BASE+24	298-29F HEX

Figure 3
Address to Connector correlation

SECTION 3.

Interrupt Selection

The COMM+4 has an interrupt selection jumper which should be set prior to use. The software you are using with the board will determine which interrupt, if any, is to be used. The DOS interface software does not use interrupts, while interrupt buffer programs do. DOS and BASIC do not require the interrupt to be set, while most multi-user operating systems will. Consult the particular manual for the software that you are using to determine the proper setting. The four interrupts are OR'ED together to form a single interrupt request (IRQ). This signal is converted to "Open Collector Active High Pull-Up" allowing multiple COMM+4's to share the same IRQ line. The IRQ can be set at jumper E1 for IRQ 2, 3, 4, or 5. In the following example the IRQ is set as IRQ 3.

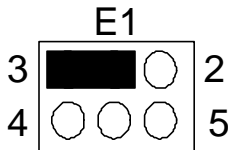


Figure 4
Header E1, IRQ Selection

SECTION 4.

Technical Description

THE COMM+4 provides four RS-232 serial ports utilizing the 16550 UART. This chip features programmable baud rate, data format, interrupt control and a 16 Byte input and output FIFO.

The COMM+4 is configured as four consecutively addressed UARTS with full RS-232 signal drivers and receivers. The connector pinout is identical to the standard PC async adapter pinout (see below).

Signal	Name	DB-25	DB-9	Mode
TD	Transmit Data	2	3	Output
RD	Receive Data	3	2	Input
RTS	Request To Send	4	7	Output
CTS	Clear To Send	5	8	Input
DSR	Data Set Ready	6	6	Input
GND	Ground	7	5	
CD	Carrier Detect	8	1	Input
DTR	Data Terminal Ready	20	4	Output
RI	Ring Indicator	22	9	Input

Figure 5

SECTION 5.

Specifications

Environmental Specifications

Specification	Operating	Storage
Temperature Range	0 - 50 Degrees C (32 - 122 Degrees F)	-20 -70 Degrees C (- 4 - 158 Degrees F)
Humidity Range	0 - 90% R.H. Non Condensing.	0 - 90% Non Condensing

Power Consumption

SUPPLY LINE	+12 VDc	-12 VDc	+5 VDc
RATING(mA)	50 mA	50 mA	550 mA

Mean Time Between Failures (MTBF)

Greater Than 150,000 Hrs. (Calculated)

SECTION 6.

Warranty

Sealevel Systems, Inc. provides a lifetime warranty for this product. Should this product fail to be in good working order at any time during this period, Sealevel Systems will, at its option, replace or repair it at no additional charge except as set forth in the following terms. This warranty does not apply to products damaged by misuse, modifications, accident or disaster.

Sealevel Systems assumes no liability for any damages, lost profits, lost savings or any other incidental or consequential damage resulting from the use, misuse of, or inability to use this product. Sealevel Systems will not be liable for any claim made by any other related party.

Return authorization must be obtained from Sealevel Systems before returned merchandise will be accepted. Authorization can be obtained by calling Sealevel Systems and requesting a Return Merchandise Authorization (RMA) Number.

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Please Refer To The Included Software For Any Post Production Manual Updates And Application Specific Information.

Technical Support is available from 8 a.m. to 5 p.m. Eastern time.
Monday - Friday

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