

# INSTALLATION INSTRUCTIONS

MODEL WKP-8

WINDOWS KEYPANEL

**RTS**<sup>TM</sup>

## GENERAL DESCRIPTION

The Windows Keypanel interfaces your IBM compatible PC to any Telex Digital Matrix Intercom System. The Windows Keypanel provides eight intercom talk/listen key pairs, plus call waiting, right on your computer monitor screen. Additional on-screen controls include a programming keypad, intercom volume control, and shortcut function keys for page, phone, point-to-point, IFB and party line assignment. Plus, there is an input level function key that lets you set listen levels for individual intercom channels (works with ADAM and ADAM CS intercoms only).

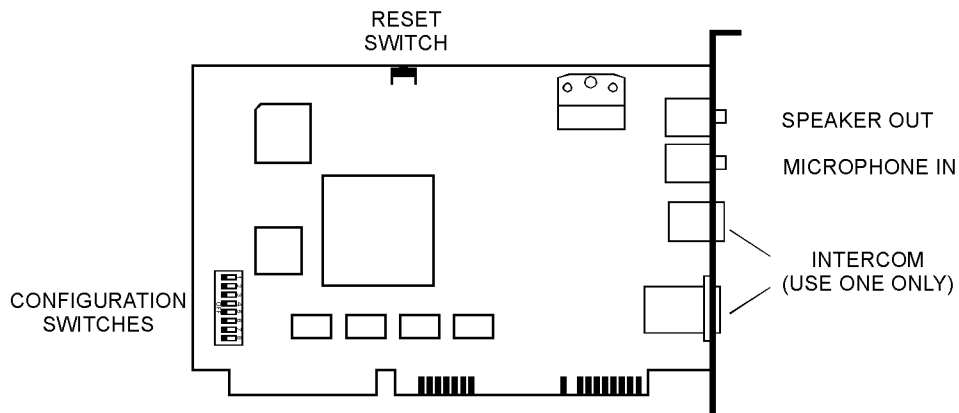
## PACKAGE CONTENTS

The Windows Keypanel Package Contains:

- 1 Windows Keypanel ISA Circuit Card
- 1 Speaker
- 1 Speaker Cord
- 1 Microphone
- 1 Software diskette
- 1 Installation Manual\*
- 1 Operation Manual\*

\* File with your intercom system documentation.

## INSTALLATION PROCEDURE



### Setting the I/O Address

Configuration switches 1-4 set the low and high I/O address for communication with the computer. The high address setting depends on the low address setting. For example, if the low address is set to 0000, the high address will be 0020. The available settings are shown in Table 1.

The default factory setting uses 0280 as the low address. However, since hardware configurations will vary from one computer to another, it is not possible to define a correct setting for every case. The recommended procedure is to install the Windows Keypanel Card using the default setting, and then check for normal operation. If the Windows Keypanel does not work correctly due to a conflict with another device, simply reset the DIP switches to another setting and check operation again.

**Table 1**  
**DIP Switch Settings for I/O Address Setting**

| DIP SWITCH POSITIONS |     |     |     | LOW ADDRESS | HIGH ADDRESS |
|----------------------|-----|-----|-----|-------------|--------------|
| SW1                  | SW2 | SW3 | SW4 |             |              |
| ON                   | ON  | ON  | ON  | 0000        | 0020         |
| ON                   | ON  | ON  | OFF | 0040        | 0060         |
| ON                   | ON  | OFF | ON  | 0080        | 00A0         |
| ON                   | ON  | OFF | OFF | 00C0        | 00E0         |
| ON                   | OFF | ON  | ON  | 0100        | 0120         |
| ON                   | OFF | ON  | OFF | 0140        | 0160         |
| ON                   | OFF | OFF | ON  | 0180        | 01A0         |
| ON                   | OFF | OFF | OFF | 01C0        | 01E0         |
| OFF                  | ON  | ON  | ON  | 0200        | 0220         |
| OFF                  | ON  | ON  | OFF | 0240        | 0260         |
| OFF                  | ON  | OFF | ON  | 0280        | 02A0         |
| OFF                  | ON  | OFF | OFF | 02C0        | 02E0         |
| OFF                  | OFF | ON  | ON  | 0300        | 0320         |
| OFF                  | OFF | ON  | OFF | 0340        | 0360         |
| OFF                  | OFF | OFF | ON  | 0380        | 03A0         |
| OFF                  | OFF | OFF | OFF | 03C0        | 03E0         |

### Logical Keypanel Address

Configuration switches 5-7 set the logical keypanel address for communication with the intercom system. Settings are summarized in Table 2. Note: DIP Switch 8 is not used.

#### Determining the Logical Keypanel Address for CS9XXX Intercoms

For intercom port numbers ending in 1 through 8, the address is the last digit of the port number. Port numbers ending in 0 or 9 cannot be used with the Windows Keypanel.

#### Determining the Logical Keypanel Address for ADAM and ADAM CS Intercoms

Determine the address using Table 3.

### Installing the Circuit Card

#### CAUTION!

Static electricity discharge can permanently damage your computer and the Windows Keypanel Card. Discharge any static electricity buildup on your body by touching an exposed metal part of the computer case before unplugging the computer.

1. Turn off the power to your computer and any other connected devices.
2. Unplug all power cords for the computer and any connected devices.

**Table 2**  
**DIP Switch Settings for Logical Keypanel Address Selection**

| DIP SWITCH POSITIONS |     |     | LOGICAL KEYPANEL ADDRESS |
|----------------------|-----|-----|--------------------------|
| SW5                  | SW6 | SW7 |                          |
| OFF                  | OFF | OFF | 1                        |
| ON                   | OFF | OFF | 2                        |
| OFF                  | ON  | OFF | 3                        |
| ON                   | ON  | OFF | 4                        |
| OFF                  | OFF | ON  | 5                        |
| ON                   | OFF | ON  | 6                        |
| OFF                  | ON  | ON  | 7                        |
| ON                   | ON  | ON  | 8                        |

3. Remove you computer's cover and locate an available 16-bit ISA expansion slot. Refer to your computer manual for details.
4. Inside the computer, remove the expansion slot cover for the selected slot. Retain the cover mounting screw. It will be used to secure the Windows Keypanel Card.
5. Insert the Windows Keypanel Card firmly into the selected slot until it is completely seated. Try to avoid contact with the card's edge connector and components during insertion.
6. Install the expansion slot cover screw to secure the Windows Keypanel Card.
7. Replace the cover and reconnect the power cords. Be aware, however, that you may have to remove the cover again to change the I/O address setting if the Windows Keypanel Card conflicts with another device in the computer.

## Connections

### Speaker

Plug the speaker cord into the SPKR OUT jack on the Windows Keypanel Card and into the speaker.

### Microphone

Plug the microphone into the MIC IN jack on the Windows Keypanel Card.

### Intercom

Use either FRAME connector (but not both) to connect the Windows Keypanel Card to a port of the intercom system. Make sure that the port you use is appropriate based on the logical keypanel address that you set on the Windows Keypanel Card. Use a standard intercom station cable.

## Installing the Software

Insert the Windows Keypanel Disk into the computer and run the setup program on the disk. Follow the on-screen instructions to install the software onto your computer.

## Checking the Installation

Double-click on the Windows Keypanel icon to start the program. The Windows Keypanel should appear on the screen, and asterisks should briefly display above the talk keys. After a few moments, the key assignments should appear in the displays. Or, if no key assignments have been programmed, the displays should show dashes.

If the Windows Keypanel is unable to communicate with the intercom system the displays will continue to show dashes. Check the intercom cable connection.

If there is a conflict with another device in the computer, the Windows Keypanel or the other device may operate erratically or not at all. Or, the computer may lock up. If this happens, shut off the computer, disconnect power, remove the computer cover and try another setting for the I/O address DIP switches on the Windows Keypanel Card. You may have to try several settings before locating one that works.

## Connector Pin Assignments

### Speaker

Type: 1/8-in. (3.5 mm) 2-conductor phone jack

Tip: Speaker “plus”

Ring: gnd

### Microphone

Type: 1/8-in. (3.5 mm) 2-conductor phone jack

Tip: Mic “plus”

Ring: gnd

### Intercom

#### RJ-11 Modular Style Connector

- |   |                                    |
|---|------------------------------------|
| 1 | Data “minus”                       |
| 2 | Audio from intercom system “plus”  |
| 3 | Audio to intercom system “plus”    |
| 4 | Audio to intercom system “minus”   |
| 5 | Audio from intercom system “minus” |
| 6 | Data “plus”                        |

#### DE9S 9-Pin Female D-sub

- |   |                                    |
|---|------------------------------------|
| 1 | Data “plus”                        |
| 2 | Data “minus”                       |
| 3 | Audio from intercom system, shield |
| 4 | Audio to intercom system “plus”    |
| 5 | Audio to intercom system “minus”   |
| 6 | Data shield                        |
| 7 | Audio from intercom system “minus” |
| 8 | Audio from intercom system “plus”  |
| 9 | Audio to intercom system, shield   |

**Table 3**  
**Correspondence between Logical Keypanel Numbers and Port Numbers**  
**for ADAM and ADAM CS Intercom Systems**

| Logical Keypanel Address | Port Numbers |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |
|--------------------------|--------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
|                          | 1            | 1   | 9   | 17  | 25  | 33  | 41  | 49  | 57  | 65  | 73  | 81  | 89  | 97  | 105 | 113 | 121 | 129 | 137 | 145 | 153 | 161 | 169 | 177 | 185  |
| 2                        | 2            | 10  | 18  | 26  | 34  | 42  | 50  | 58  | 66  | 74  | 82  | 90  | 98  | 106 | 114 | 122 | 130 | 138 | 146 | 154 | 162 | 170 | 178 | 186 | 194  |
| 3                        | 3            | 11  | 19  | 27  | 35  | 43  | 51  | 59  | 67  | 75  | 83  | 91  | 99  | 107 | 115 | 123 | 131 | 139 | 147 | 155 | 163 | 171 | 179 | 187 | 195  |
| 4                        | 4            | 12  | 20  | 28  | 36  | 44  | 52  | 60  | 68  | 76  | 84  | 92  | 100 | 108 | 116 | 124 | 132 | 140 | 148 | 156 | 164 | 172 | 180 | 188 | 196  |
| 5                        | 5            | 13  | 21  | 29  | 37  | 45  | 53  | 61  | 69  | 77  | 85  | 93  | 101 | 109 | 117 | 125 | 133 | 141 | 149 | 157 | 165 | 173 | 181 | 189 | 197  |
| 6                        | 6            | 14  | 22  | 30  | 38  | 46  | 54  | 62  | 70  | 78  | 86  | 94  | 102 | 110 | 118 | 126 | 134 | 142 | 150 | 158 | 166 | 174 | 182 | 190 | 198  |
| 7                        | 7            | 15  | 23  | 31  | 39  | 47  | 55  | 63  | 71  | 79  | 87  | 95  | 103 | 111 | 119 | 127 | 135 | 143 | 151 | 159 | 167 | 175 | 183 | 191 | 199  |
| 8                        | 8            | 16  | 24  | 32  | 40  | 48  | 56  | 64  | 72  | 80  | 88  | 96  | 104 | 112 | 120 | 128 | 136 | 144 | 152 | 160 | 168 | 176 | 184 | 192 | 200  |
| 1                        | 201          | 209 | 217 | 225 | 233 | 241 | 249 | 257 | 265 | 273 | 281 | 289 | 297 | 305 | 313 | 321 | 329 | 337 | 345 | 353 | 361 | 369 | 377 | 385 | 393  |
| 2                        | 202          | 210 | 218 | 226 | 234 | 242 | 250 | 258 | 266 | 274 | 282 | 290 | 298 | 306 | 314 | 322 | 330 | 338 | 346 | 354 | 362 | 370 | 378 | 386 | 394  |
| 3                        | 203          | 211 | 219 | 227 | 235 | 243 | 251 | 259 | 267 | 275 | 283 | 291 | 299 | 307 | 315 | 323 | 331 | 339 | 347 | 355 | 363 | 371 | 379 | 387 | 395  |
| 4                        | 204          | 212 | 220 | 228 | 236 | 244 | 252 | 260 | 268 | 276 | 284 | 292 | 300 | 308 | 316 | 324 | 332 | 340 | 348 | 356 | 364 | 372 | 380 | 388 | 396  |
| 5                        | 205          | 213 | 221 | 229 | 237 | 245 | 253 | 261 | 269 | 277 | 285 | 293 | 301 | 309 | 317 | 325 | 333 | 341 | 349 | 357 | 365 | 373 | 381 | 389 | 397  |
| 6                        | 206          | 214 | 222 | 230 | 238 | 246 | 254 | 262 | 270 | 278 | 286 | 294 | 302 | 310 | 318 | 326 | 334 | 342 | 350 | 358 | 366 | 374 | 382 | 390 | 398  |
| 7                        | 207          | 215 | 223 | 231 | 239 | 247 | 255 | 263 | 271 | 279 | 287 | 295 | 303 | 311 | 319 | 327 | 335 | 343 | 351 | 359 | 367 | 375 | 383 | 391 | 399  |
| 8                        | 208          | 216 | 224 | 232 | 240 | 248 | 256 | 264 | 272 | 280 | 288 | 296 | 304 | 312 | 320 | 328 | 336 | 344 | 352 | 360 | 368 | 376 | 384 | 392 | 400  |
| 1                        | 401          | 409 | 417 | 425 | 433 | 441 | 449 | 457 | 465 | 473 | 481 | 489 | 497 | 505 | 513 | 521 | 529 | 537 | 545 | 553 | 561 | 569 | 577 | 585 | 593  |
| 2                        | 402          | 410 | 418 | 426 | 434 | 442 | 450 | 458 | 466 | 474 | 482 | 490 | 498 | 506 | 514 | 522 | 530 | 538 | 546 | 554 | 562 | 570 | 578 | 586 | 594  |
| 3                        | 403          | 411 | 419 | 427 | 435 | 443 | 451 | 459 | 467 | 475 | 483 | 491 | 499 | 507 | 515 | 523 | 531 | 539 | 547 | 555 | 563 | 571 | 579 | 587 | 595  |
| 4                        | 404          | 412 | 420 | 428 | 436 | 444 | 452 | 460 | 468 | 476 | 484 | 492 | 500 | 508 | 516 | 524 | 532 | 540 | 548 | 556 | 564 | 572 | 580 | 588 | 596  |
| 5                        | 405          | 413 | 421 | 429 | 437 | 445 | 453 | 461 | 469 | 477 | 485 | 493 | 501 | 509 | 517 | 525 | 533 | 541 | 549 | 557 | 565 | 573 | 581 | 589 | 597  |
| 6                        | 406          | 414 | 422 | 430 | 438 | 446 | 454 | 462 | 470 | 478 | 486 | 494 | 502 | 510 | 518 | 526 | 534 | 542 | 550 | 558 | 566 | 574 | 582 | 590 | 598  |
| 7                        | 407          | 415 | 423 | 431 | 439 | 447 | 455 | 463 | 471 | 479 | 487 | 495 | 503 | 511 | 519 | 527 | 535 | 543 | 551 | 559 | 567 | 575 | 583 | 591 | 599  |
| 8                        | 408          | 416 | 424 | 432 | 440 | 448 | 456 | 464 | 472 | 480 | 488 | 496 | 504 | 512 | 520 | 528 | 536 | 544 | 552 | 560 | 568 | 576 | 584 | 592 | 600  |
| 1                        | 601          | 609 | 617 | 625 | 633 | 641 | 649 | 657 | 665 | 673 | 681 | 689 | 697 | 705 | 713 | 721 | 729 | 737 | 745 | 753 | 761 | 769 | 777 | 785 | 793  |
| 2                        | 602          | 610 | 618 | 626 | 634 | 642 | 650 | 658 | 666 | 674 | 682 | 690 | 698 | 706 | 714 | 722 | 730 | 738 | 746 | 754 | 762 | 770 | 778 | 786 | 794  |
| 3                        | 603          | 611 | 619 | 627 | 635 | 643 | 651 | 659 | 667 | 675 | 683 | 691 | 699 | 707 | 715 | 723 | 731 | 739 | 747 | 755 | 763 | 771 | 779 | 787 | 795  |
| 4                        | 604          | 612 | 620 | 628 | 636 | 644 | 652 | 660 | 668 | 676 | 684 | 692 | 700 | 708 | 716 | 724 | 732 | 740 | 748 | 756 | 764 | 772 | 780 | 788 | 796  |
| 5                        | 605          | 613 | 621 | 629 | 637 | 645 | 653 | 661 | 669 | 677 | 685 | 693 | 701 | 709 | 717 | 725 | 733 | 741 | 749 | 757 | 765 | 773 | 781 | 789 | 797  |
| 6                        | 606          | 614 | 622 | 630 | 638 | 646 | 654 | 662 | 670 | 678 | 686 | 694 | 702 | 710 | 718 | 726 | 734 | 742 | 750 | 758 | 766 | 774 | 782 | 790 | 798  |
| 7                        | 607          | 615 | 623 | 631 | 639 | 647 | 655 | 663 | 671 | 679 | 687 | 695 | 703 | 711 | 719 | 727 | 735 | 743 | 751 | 759 | 767 | 775 | 783 | 791 | 799  |
| 8                        | 608          | 616 | 624 | 632 | 640 | 648 | 656 | 664 | 672 | 680 | 688 | 696 | 704 | 712 | 720 | 728 | 736 | 744 | 752 | 760 | 768 | 776 | 784 | 792 | 800  |
| 1                        | 801          | 809 | 817 | 825 | 833 | 841 | 849 | 857 | 865 | 873 | 881 | 889 | 897 | 905 | 913 | 921 | 929 | 937 | 945 | 953 | 961 | 969 | 977 | 985 | 993  |
| 2                        | 802          | 810 | 818 | 826 | 834 | 842 | 850 | 858 | 866 | 874 | 882 | 890 | 898 | 906 | 914 | 922 | 930 | 938 | 946 | 954 | 962 | 970 | 978 | 986 | 994  |
| 3                        | 803          | 811 | 819 | 827 | 835 | 843 | 851 | 859 | 867 | 875 | 883 | 891 | 899 | 907 | 915 | 923 | 931 | 939 | 947 | 955 | 963 | 971 | 979 | 987 | 995  |
| 4                        | 804          | 812 | 820 | 828 | 836 | 844 | 852 | 860 | 868 | 876 | 884 | 892 | 900 | 908 | 916 | 924 | 932 | 940 | 948 | 956 | 964 | 972 | 980 | 988 | 996  |
| 5                        | 805          | 813 | 821 | 829 | 837 | 845 | 853 | 861 | 869 | 877 | 885 | 893 | 901 | 909 | 917 | 925 | 933 | 941 | 949 | 957 | 965 | 973 | 981 | 989 | 997  |
| 6                        | 806          | 814 | 822 | 830 | 838 | 846 | 854 | 862 | 870 | 878 | 886 | 894 | 902 | 910 | 918 | 926 | 934 | 942 | 950 | 958 | 966 | 974 | 982 | 990 | 998  |
| 7                        | 807          | 815 | 823 | 831 | 839 | 847 | 855 | 863 | 871 | 879 | 887 | 895 | 903 | 911 | 919 | 927 | 935 | 943 | 951 | 959 | 967 | 975 | 983 | 991 | 999  |
| 8                        | 808          | 816 | 824 | 832 | 840 | 848 | 856 | 864 | 872 | 880 | 888 | 896 | 904 | 912 | 920 | 928 | 936 | 944 | 952 | 960 | 968 | 976 | 984 | 992 | 1000 |