# ADAM™
# Advanced Digital Audio Matrix

## USER MANUAL

## CSedit

## Intercom Configuration Software for ADAM and ADAM CS Intercom Systems

RTS™

9350-7077-300 Rev C, 8/00

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## Introduction

This manual describes the CSedit Intercom Configuration Software for the ADAM™ and ADAM™ CS Intercom Systems. The manual is divided into three sections. Section 1, “Getting Started”, briefly describes basic CSedit operation. Section 2, “Editing Procedures”, provides step-by-step procedures for the most commonly used features of CSedit. Section 3, “Reference”, provides additional information about CSedit features.

## If You Are in a Hurry!

If you wish to run CSedit immediately, simply insert the CSedit disk in your computer, type **csedit**, and press the ENTER key. If you encounter problems while using the CSedit menus, press the F1 key on your computer keyboard to access the CSedit on-line help.

## Version Number

The CSedit version number should be imprinted on the software diskette. CSedit and master controller version numbers are also available while running CSedit (see “Status, Diagnostics”, page 3-14.)

## Computer Requirements

An IBM® or compatible personal computer with at least 2M of extended memory (4M recommended). CSedit cannot be run under any other operating system other than DOS.

A Microsoft® serial mouse (optional). Two serial ports are required for use with a mouse, with COM1 as the default port for the intercom system connection.

## Use of Special Type Styles in this Manual

Certain type styles which appear in the text of this manual (not in titles) have special meanings as follows:

**Bold in Text** : Anything you must type

*Italics in Text* : References to other manuals

ALL CAPS IN TEXT: Directory names, filenames and names of keys on a computer keyboard

Initial Caps In Text: References to CSedit menus, menu items, tables and lists

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# Section 1: Getting Started

## Installing CSedit

The minimum requirement to run CSedit is a 386 computer with at least 2M of extended memory (4M preferable). Also, CSedit should not be installed to run under any other operating system other than DOS.

To install CSedit: insert the CSedit disk, then change to the drive where the disk is inserted. Type **install** and press the ENTER key.

Store the original disk in a safe place.

## Starting CSedit

Change to the drive and directory where the CSedit files are located. Type **csedit**, then press the ENTER key.

## CSedit Start-up Routine

When CSedit is started, it will present the CSedit menu screen (Figure 1-1). Next, it will check for a connection to the intercom system. If it finds a connection, it will upload the current system configuration from the intercom system. While CSedit is uploading the configuration, it will report the percentage completed at the bottom of the menu screen.

**Note** The default port for communication between the computer and intercom system is COM1 and 9600 baud. If the intercom system configuration does not upload, you may have to change these settings. See "Options Menu", page 3-5.

**Note** If you are using a laptop computer or other computer with a monochrome display, you will have to change the CSedit color mode for proper screen display. See "Options Menu", page 3-5.

## CSedit Menu Screen

The CSedit menu screen displays the menu bar across the top of the screen. The menu bar lists all of the available CSedit menus from which you will make selections. The filename of the currently opened system configuration file displays in the lower-left corner of the screen. The mode (either on-line or off-line) displays in the lower-right corner of the screen.

**Note** If the computer is on-line with the intercom system when CSedit is started, the on-line configuration file will automatically be opened for editing in CSedit. If the computer is off-line, no file will be opened, and the filename will be “New”.

```
 Help  File  Keys  System  Status  Sort  Screen        Options  Intercom

File: New                                          Mode: Off-Line
```

***Figure 1-1. The CSedit Menu Screen***

## Menu Selection Using the Computer Keyboard

1. Use the LEFT and RIGHT cursor keys on the computer keyboard (← →) to move the cursor from one menu to another on the menu bar. The currently selected menu will be highlighted.

2. Press the ENTER key or DOWN cursor key (↓) to open the selected menu. Figure 1-2 shows the opened File menu.

3. Use the UP/DOWN cursor keys to highlight a menu item, then press the ENTER key to select it.

4. Press the ESCAPE key to cancel a selection. Press ESCAPE again to close a menu and return to the menu bar.

The function keys also drop down menus:

| | |
|---|---|
| F1 | Help |
| F2 | Files |
| F3 | Keys |
| F4 | System |
| F5 | Status |
| F6 | Sort |
| F7* | Screen |
| F8 | Not used |
| F9 | Options |
| F10 | Intercom |

* This menu is accessible only during certain editing procedures.

## Menu Selection Using a Mouse

You must install the mouse and its software prior to running CSedit. Follow the instructions that came with your mouse. If there is a choice, install your mouse as a Microsoft® compatible mouse.

**Note** If your mouse does not work, the CSedit com port settings may be incorrect. See "Options, Communications", page 3-6.

To use a mouse with CSedit:

1. From the CSedit menu bar, point and click the left mouse button on a menu to open it.

2. Point and click the left mouse button on a menu item to select that item.

3. To cancel a selection, click on any selectable item with the right mouse button. To close a menu and return to the menu bar, click on any menu item with the right mouse button.

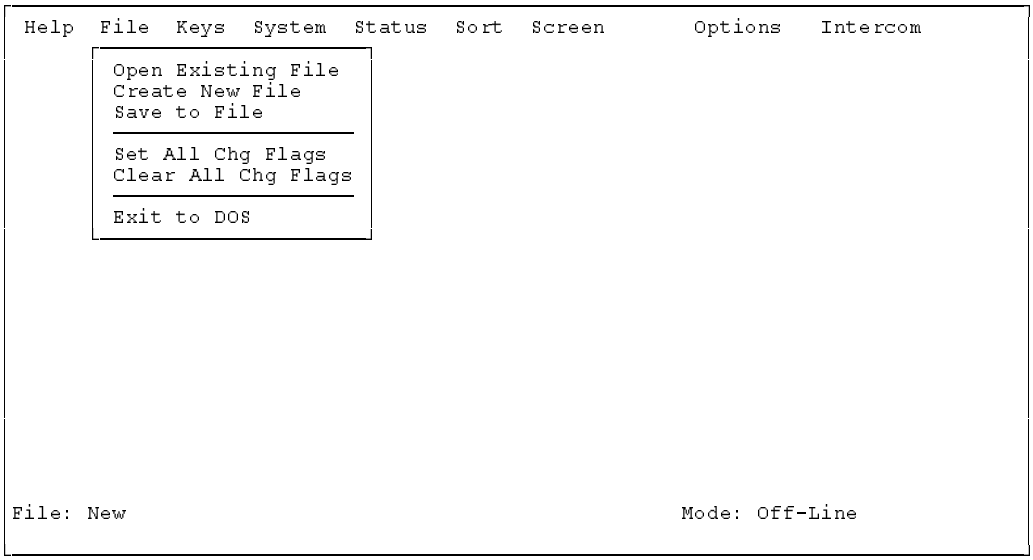


***Figure 1-2. The CSedit File Menu***

## CSedit Editing Screens

Figure 1-3 shows a typical editing screen that opens after a menu item is selected. This particular editing screen will open when you select “ISOs” from the “System” menu. The ISOs editing screen contains two windows. The window at the left is an edit table to configure camera ISOs. This table has several columns in which you enter information to configure ISOs. The window at the right side of the screen is a pick list. A pick list is simply a list from which you can pick items to insert into edit tables as you configure the intercom system. Some pick lists may open up into sub lists when you pick items.

### Movement in Editing Screens Using the Computer Keyboard

**ESCAPE Key:** Exits a sub list or menu item and returns you to the previous screen.

**TAB Key:** Moves the cursor from one window to another. The border around the currently selected window will be highlighted.

**SHIFT+TAB Keys:** Moves the cursor back into the previous window.

**CURSOR Keys (↑↓→←):** Move the cursor within the current window. Some tables and pick lists may also have scroll buttons (▲▼) like the ones shown in Figure 1-3; use the UP/DOWN cursor keys (↑↓) to scroll the screen and view additional items.

**ENTER Key:** Enters information that you have typed into a column, and moves the cursor to the next column or down to the next line. Enters the currently selected item in a pick list into the currently selected position in an edit table in another window.

**Plus “+” Key on Numeric Keypad:** Inserts the currently selected item in a pick list into the currently selected position in an edit table, and then advances the cursor to the next row of the table. (Useful for speed formatting, see "Speed Formatting", page 3-8.)

### Movement in Editing Screens Using a Mouse

Click on any item in an edit table to select the edit table. Move the cursor over a pick list to select the pick list. The border around the currently selected window will be highlighted. Clicking on an item in a pick list will insert that item into the currently selected position in an edit table.

## Using Help

**F1 Key:** Calls context-sensitive help from within CSedit. Context sensitive means the help screens will provide information about the currently selected menu or menu item.

**Key Words in Help Screens:** Certain words may be highlighted in a help screen. Select these words with the UP/DOWN/LEFT/RIGHT cursor keys, then press the ENTER key to get additional help. Or, if you are using a mouse, click on the key word for additional help.

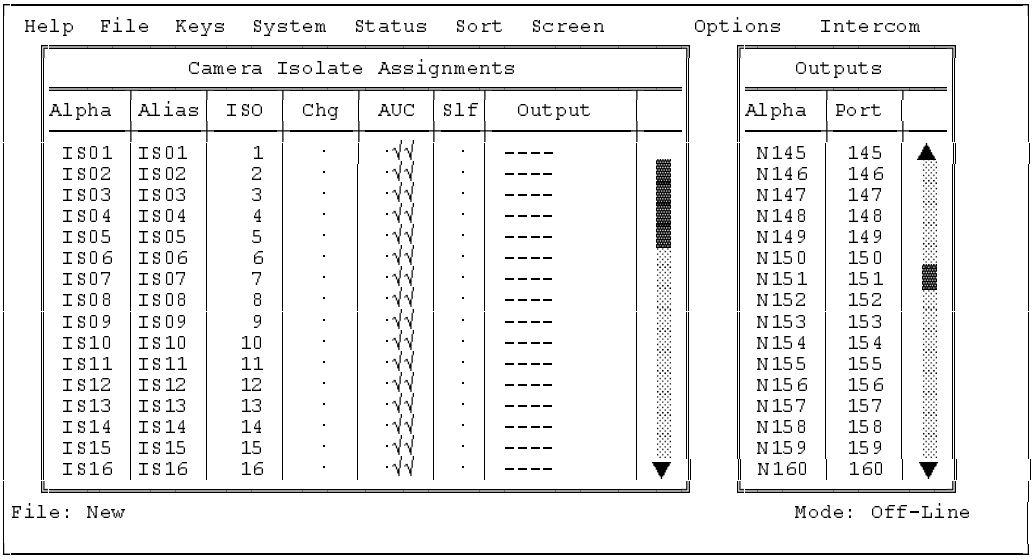


***Figure 1-3. A Typical Editing Screen Showing an Edit Table at Left and a Pick List at Right***

**Scrolling in Help Screens:** Some help topics may take more than one screen. In such cases, use the DOWN/UP cursor keys to scroll down or up. If you scroll beyond the end of the help topic, the cursor will automatically return to the beginning of the topic.

**BACK SPACE Key in a Help Screen:** Returns you to the previous help screen.

**ESCAPE Key in Help:** Returns you to CSedit.

## Creating / Editing Configuration Files

If the computer is on-line with the intercom system when CSedit is started, the on-line configuration file is automatically opened for editing. To create a new file or edit an existing configuration other than the on-line configuration, select one of two options from the File menu:

- Open Existing File: This opens a configuration file that is already on disk. If you have done any editing before selecting this option, you will be prompted to save your work or send it to the intercom before a new file is opened. You will also be asked "What Would You Like To Do With Change Flags". See the Change Flag description, at right.

- Create New File: This clears all settings and creates a blank intercom configuration. If you have done any editing before selecting this option, you will be prompted to save your work or send it to the intercom before all settings are cleared. You will also be asked "What Would You Like To Do With Change Flags". See the Change Flag description, at right.

If, after creating a new file or editing a file on disk, you wish to make changes to the on-line intercom configuration file, select "Open On-Line" from the Intercom menu.

## Editing a Configuration

Once you have selected one of the above file options, you may edit the opened file using the editing procedures described in Section 2 of this manual.

## Saving Changes

When you are finished creating a new configuration or editing an existing configuration, save your changes using the "Save to File" option on the File menu.

## Activating a New File or Sending Changes

To send your changes to the intercom system, use one of two options on the Intercom menu:

- Activate Chgs: Active only when you have modified the on-line file. This option sends all the changes which have been made since the last time the file was saved or sent to the intercom system.

- Send File: Active only when CSedit is in communication with the intercom, but editing a file other than the on-line file. This option sends only those items that have change flags set. To send the entire contents of a file, first select "Set All Chg Flags" from the File menu. See the Change Flag description, below, for further information about the use of change flags.

## Quitting CSedit

To quit CSedit when you are finished editing, select Exit to DOS from the File menu and then press the ENTER key. If you have not saved your changes, CSedit will ask you if you want to do this.

## Change Flags

### General Description

Each item that can be changed in CSedit has an associated change flag. These change flags display as check marks √ next to the items that you change. The change flags control which items are downloaded to the intercom system when a file is sent. Only those items that have change flags turned on (set) will be sent.

### Change Flag Prompt when Opening or Saving a File

Whenever you open a file or create a new file, you will first see the prompt "What would you like to do with Change Flags?"

Selecting "Set All Chg Flags" will turn on all change flags in the file that you are currently editing. If you send the file to the intercom system after selecting this option, the current intercom system configuration will be completely overwritten by the new configuration.

Selecting "Leave Chg Flags" will leave all change flags on that are currently on and will leave all change flags off

that are currently off. Only those items that have change flags set would be sent to the intercom system during a download, resulting in only a partial modification of the current intercom system configuration.

Selecting “Clear All Chg Flags will turn off all change flags in the file that you are currently editing. If you then tried to send the file to the intercom system, it would have no effect.

## Uses of the Change Flags

Change flags can be used in three ways to create various configuration changes:

1. If you are on-line with the intercom system and editing the on-line configuration, change flags will automatically be set for any items that you change. Selecting “Activate Chgs” from the Intercom menu will download all items with change flags set.

2. If you want to completely over-write the current intercom system configuration with a new configuration, open the new configuration file, then select “Set All Chg Flags”. This will assure that all items in the file are sent. Now send the file using the “Send File” command on the Intercom menu.

3. The “Send File” command on the Intercom menu can also be used to make periodic updates to the intercom system using files that you prepared previously. Only the items that you wish to change will be sent, which means that updating can proceed much more quickly than if you send an entire configuration file. Here is how periodic updating works:

   a) Set up a basic, or starting, intercom system configuration. You can base this file on a previously existing configuration file by selecting “Open Existing File” from the File menu. Or, you can make a completely new file by selecting “Create New File” from the File menu. Whichever method you use, just make sure that you select “Set All Chg Flags” when prompted.

   b) Go ahead and configure the intercom system as you want it to operate at the start. When your starting configuration is completed, save it to file. Again, select “Set All Chg Flags” when prompted (in case you inadvertently turned off any change flags while editing).

   c) Send your configuration to the intercom system using the “Send File” command in the Intercom menu. Since all the change flags are set, the entire configuration file will be sent, and the current intercom system configuration will be entirely overwritten. Your basic configuration is now in place.

   d) Prepare your first update file: Using the “Save to File” command on the File menu, save your basic configuration to a new file with a new name. Select “Clear All Chg Flags” when prompted.

   e) Go ahead and make any changes that you want to put into effect during updating. As you make your changes, the change flags for those items will automatically be set.

   f) Again, save your update file to disk, but select “Leave Chg Flags” when prompted.

   g) Prepare any additional update files that you need by saving the PREVIOUS UPDATE FILE with a new name. As before, select “Clear All Chg Flags” before you start editing the new file, and select “Leave All Chg Flags” when you save or re-open the file.

   h) To send your first update, open the desired update file. Always select “Leave Chg Flags” when opening your update files. Then select “Send File” from the Intercom menu. Only those items that have change flags set will be sent.

   i) Continue to make periodic updates as needed by sending new update files. To return to your basic configuration at any time, simply send your basic configuration file to the intercom system. Just remember when opening your basic configuration or any update files, always select “Leave Chg Flags”.

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# Section 2: Editing Procedures

## Introduction

The following editing procedures are arranged in the general order that you would typically use them when creating a new intercom system configuration.

### General Procedure to Configure the Intercom System

1. Assign names for individual ports (channels) of the intercom system. (Page 2-1.)

2. Configure and name any party lines, IFBs etc. that will be needed. (Pages 2-3 through 2-14.)

3. Assign keys on keypanels to talk and/or listen to ports, party lines etc. (Pages 2-15 through 2-21.)

### Additional Requirements for Trunked Intercoms

If the intercom system is interconnected (trunked) to other intercom systems, three additional steps are also required:

1. Reserve one or more intercom ports for use as communication channels between the intercom systems. See "Restricting a Port for Use As a Trunking Port", page 2-21 .

2. Remove restrictions from any ports, party lines, etc. in one intercom system that you want to make available for key assignment in other intercom systems. (By default, all devices in one intercom system are restricted from being assigned in other intercom systems.) Applying and removing restrictions is discussed in the separate setup procedures for ports, party lines, etc. on the following pages.

3. Run the companion program, CStrunk, to configure the trunking ports for communication between intercom systems. Once the trunk lines are up and running, keypanel keys may be assigned in each trunked intercom system to access ports, party lines etc. in other intercom systems.

# Assigning Names (Alphas & Aliases)

## General Description

CSedit lets you assign 4-character, alpha-numeric names to individual ports for point-to-point communication. It also lets you assign names to other types of communication such as party lines, IFB's and so forth. These names will appear in keypanel alpha-numeric displays when the ports, party lines etc. are assigned to keys. (Even if your system does not use alpha-numeric keypanels, naming users will make it easier to change the intercom system configuration in the future.)

Two names are assigned for each port, party line, etc. The first name is the "Alpha" name. This name is used within the local intercom system, that is, the intercom system where the port, party line etc. is located. The second name is the "Alias" name. If the local intercom system is interconnected (trunked) with other intercom systems, the Alias name will appear in keypanel displays in the other intercom systems. By default, when you create an Alpha name, the Alias name is automatically made the same. However, if that name is already used in the other intercom system, the Alias name can be changed to prevent mix-ups.

**Important!**

Every name assigned in CSedit should be unique. Unless you are an advanced user of CSedit, avoid using a name for one type of communication (port, party line, etc.) that has already been assigned to some other type of communication, as this could cause unpredictable results.

## Naming Individual Audio Ports

1. From the menu bar, select the System menu, then select "Port Alphas". The Port Alpha Assignments screen should appear (Figure 2-1).

2. Each intercom audio port has a Port number (1, 2, 3 etc.). Port numbers cannot be changed, since they are the physical points where intercom stations are connected to the intercom system. Alongside each Port number are columns for entering Alpha and Alias names. You may enter names using any combination of up to four characters. To change an Alpha or Alias, select it (using the cursor keys or by moving the mouse cursor over it) and then type in a new name. Press the ENTER key to record the new name and move to the next column (or simply move the mouse cursor).

   When you make a change to an Alpha or Alias and move to a new position, you will notice that a check mark √ is inserted in the "Chg" column next to the Port number. This check mark is a change flag. (See the change flag description on page 1-4 for further details.)

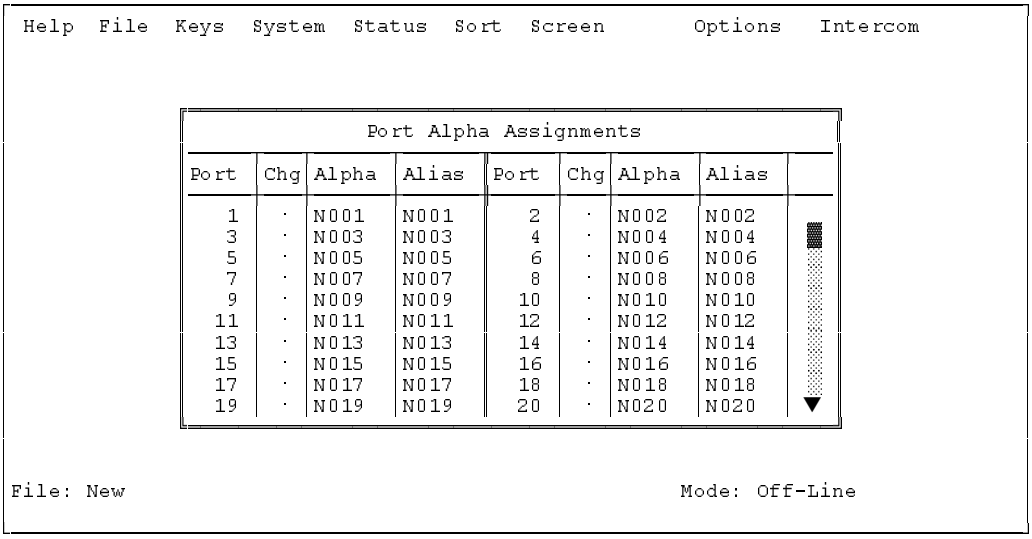
**Note** When assigning Alphas for personnel located in the same area, we suggest using the same first character in each Alpha. For example, if you have 2 control rooms, you might use 1-TD, 1DIR, 1-AO, 2-TD, 2DIR, 2-AO etc. This will cause the names of personnel in the same area to be grouped together in pick lists for easier key assignment. It may also make it easier for keypanel operators to identify related personnel on their keypanels.

3. Press the ESCAPE key (or click the right mouse button on any selectable item) to return to the CSedit menu screen when finished naming ports.

4. Remember to save your changes and send them to the intercom system when finished. (See "Activating a New File or Sending Changes", page 1-4.)

## Naming Other Types of Communication (Party Lines, ISO's etc.)

Other types of communication are named as they are configured. See "Creating a Party Line", "Creating an IFB" etc., on the following pages.




| Port | Chg | Alpha | Alias | Port | Chg | Alpha | Alias |
|---|---|---|---|---|---|---|---|
| 1 | · | N001 | N001 | 2 | · | N002 | N002 |
| 3 | · | N003 | N003 | 4 | · | N004 | N004 |
| 5 | · | N005 | N005 | 6 | · | N006 | N006 |
| 7 | · | N007 | N007 | 8 | · | N008 | N008 |
| 9 | · | N009 | N009 | 10 | · | N010 | N010 |
| 11 | · | N011 | N011 | 12 | · | N012 | N012 |
| 13 | · | N013 | N013 | 14 | · | N014 | N014 |
| 15 | · | N015 | N015 | 16 | · | N016 | N016 |
| 17 | · | N017 | N017 | 18 | · | N018 | N018 |
| 19 | · | N019 | N019 | 20 | · | N020 | N020 |

***Figure 2-1. The Port Alpha Assignments Screen***

## Creating a Party Line

A party line is a group of intercom stations that can always talk and/or listen to each other.

**Note** Usually, keypanels should not be assigned as permanent members of a party line (although this can be done if desired). Instead, keypanel keys are usually programmed to talk and listen to party lines as needed. See "Keypanel Setup", starting on page 2-15, for information on how to assign keys.

To set up a party line:

1. From the menu bar, select the System menu, then select “Party Lines”. The party line pick list should appear (Figure 2-2). The default Alpha names for party lines are PL01, PL02 etc. As you configure party lines you can change the Alphas to more meaningful names for your intercom system.

2. To select a party line for configuring, highlight it with the cursor, then press the ENTER key (or click on a party line with a mouse). The editing screen for the selected party line should appear (Figure 2-3).

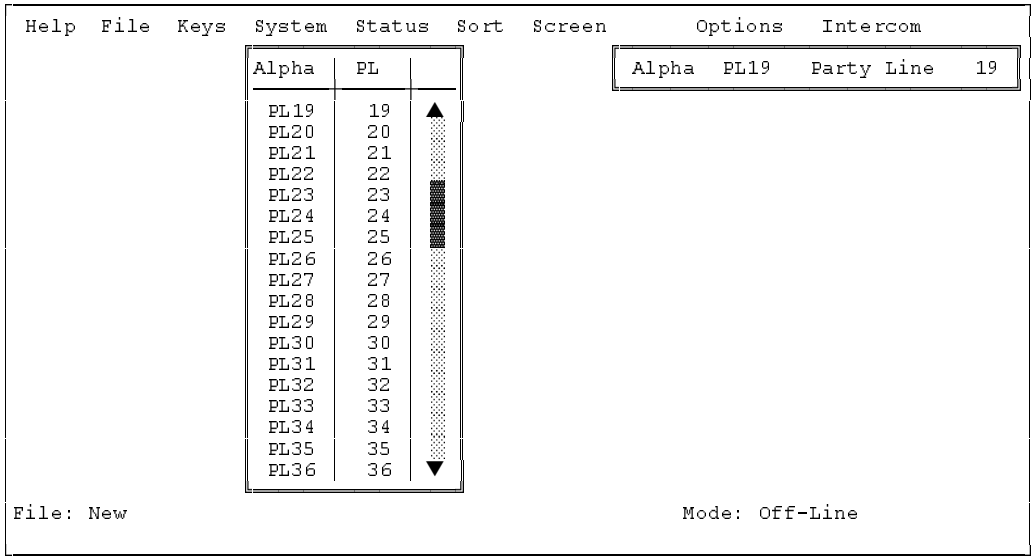



***Figure 2-2. The Party Line Pick List***

Figure 2-3 shows the editing screen for party line, PL19. The Party Line Assignments table at the bottom of the screen is used to assign intercom ports to the party line. The window in the upper-right corner of the screen pops open when selected to name the party line and restrict access for key assignment.

3. To assign an intercom port to the party line, move to the “T” column next to the port. Then, use the SPACE BAR, or click with a mouse, to select “P”, “T”, “L” or “-”:

   - Selecting “P” will let the port talk and listen on the party line
   - Selecting “T” will let the port talk only
   - Selecting “L” will let the port listen only
   - Selecting “-” will disconnect the port from the party line

4. To name the party line or restrict party line usage, TAB to the upper-right window and press the ENTER key (or click on any selectable item in the upper-right window with the left button of a mouse). The name/restriction editor screen should appear (Figure 2-4).

5. In the sample screen shown in Figure 2-4, the default Alpha is “PL19". This may be changed to any meaningful four-character name. When you type in a new Alpha and move the cursor to a different position, you will notice that the Alias is automatically changed to the same name as the Alpha. If your intercom system is interconnected (trunked) with other intercom systems, the Alias name will appear in pick lists, keypanel displays and so forth in the other intercom systems. If desired, you may enter a different Alias name that will be more meaningful to personnel in the other intercom systems.

**Note** When you make any change to a party line and move to a new position, you will notice that a check mark √ is inserted next to “Data Changed” in the name/restriction editor window. This check mark is a change flag. (See the change flag description on page 1-4 for further details.)

Help File Keys System Status Sort Screen Options Intercom

Alpha PL19 Party Line 19

Party Line Assignments

| Alph | Port | T | Alph | Port | T | Alph | Port | T | Alph | Port | T | Alph | Port | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N001 | 1 | T | N002 | 2 | - | N003 | 3 | - | N004 | 4 | - | N005 | 5 | - |
| N006 | 6 | P | N007 | 7 | - | N008 | 8 | - | N009 | 9 | - | N010 | 10 | - |
| N011 | 11 | L | N012 | 12 | - | N013 | 13 | - | N014 | 14 | - | N015 | 15 | - |
| N016 | 16 | - | N017 | 17 | - | N018 | 18 | - | N019 | 19 | - | N020 | 20 | - |
| N021 | 21 | - | N022 | 22 | - | N023 | 23 | - | N024 | 24 | - | N025 | 25 | - |
| N026 | 26 | - | N027 | 27 | - | N028 | 28 | - | N029 | 29 | - | N030 | 30 | - |
| N031 | 31 | - | N032 | 32 | - | N033 | 33 | - | N034 | 34 | - | N035 | 35 | - |
| N036 | 36 | - | N037 | 37 | - | N038 | 38 | - | N039 | 39 | - | N040 | 40 | - |
| N041 | 41 | - | N042 | 42 | - | N043 | 43 | - | N044 | 44 | - | N045 | 45 | - |
| N046 | 46 | - | N047 | 47 | - | N048 | 48 | - | N049 | 49 | - | N050 | 50 | - |

File: New Mode: Off-Line

***Figure 2-3. The Editing Screen for a Party Line***

6. To apply or remove restrictions, use the cursor keys or the mouse to select the desired restriction, then use the SPACE BAR or click with the mouse to place a check mark √ next to the restriction:

   - PL Access Restricted: A check mark here prevents keypanel operators in the local intercom system from assigning this party line to keys from their keypanels.

   - PL Univ Scroll Restricted: If your intercom system is trunked with other intercom systems, a check mark here prevents keypanel operators in other intercom systems from assigning this party line to keys from their keypanels.

   - PL CSedit Scroll Restricted: If your intercom system is trunked, a check mark here prevents CSedit users in other intercom systems from assigning this party line in their intercom systems.

7. Press ESCAPE (or click on any selectable item with the right mouse button) to return to the party line pick list when finished configuring a party line. Press the ESCAPE key again to return to the CSedit menu screen when finished configuring party lines.

8. Remember to save your changes and send them to the intercom system when finished. (See "Activating a New File or Sending Changes", page 1-4.)

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom
                                          Alpha  PL19   Party Line   19
                                          Alias  PL19                 .
                                          PL Access Restricted        .
                                          PL Univ Scroll Restricted   √
                                          PL CSedit Scroll Restricted √
                                          Data Changed                √
File: New                                          Mode: Off-Line
```

***Figure 2-4. The Party Line Name/Restriction Editor***

## Creating an IFB ( Interrupt Foldback Bus)

An IFB is a special use of an output port. The person connected to the output port usually hears a program source connected to some input port of the intercom system. This program source is then interrupted when a keypanel operator presses a key to talk to the person. The following procedure lets you define which output port you want to use for IFB output, and which port will be used for program input. You can also assign a meaningful name for the IFB. Once you have configured an IFB, you can assign it to any keypanel key as described starting on page 2-15.

To set up an IFB:

1. From the menu bar, select the System menu, then select "IFB Buses". The IFB editing screen should appear (Figure 2-5). Interrupt Foldback Bus Assignments are shown in the table at the left of the screen. An Inputs/Outputs pick list is shown at the right. The default Alpha names for IFBs are IF01, IF02 etc. As you configure IFBs you will also change the Alphas to more meaningful names for your intercom system. The number of available IFBs will vary depending on the size of your intercom system.

2. Name the IFB: Use the UP/DOWN cursor keys to select an IFB Alpha (or click on the desired Alpha with a mouse). Then, enter a four-digit name for the IFB. (The IFB Alpha may be the same as the output port Alpha of the person that will be interrupted during IFB operation. Just remember that assigning the port to a talk key will have a different effect than assigning the IFB to a talk key.) When you move the cursor to a different position, you will notice that the Alias changes to the same name as the Alpha*. If your intercom system is interconnected (trunked) with another intercom system you may enter a different Alias name that will be meaningful to personnel in the other intercom system.

**Note** When you make any change to an IFB and move to a new position, you will notice that a check mark √ is inserted in the "Chg" column. This check mark is a change flag. (See the change flag description on page 1-4 for further details.)

3. Specify the output port of the person to be interrupted during IFB: Move to the "IFB Out" column. Type the Alpha of the output port, or select it from the pick list at the right side of the screen. In the example in Figure 2-5, port N033 has been entered as the IFB output for IF01.

**Note** To use the pick list to insert ports into the Interrupt Foldback Bus Assignments table: Position the cursor in the table at the point where you want to make the insertion. Then, press the TAB key to move the cursor into the Inputs/Outputs pick list (or move the mouse cursor over the pick list). Select a port from the pick list and press ENTER (or click on a port with the left mouse button). The selected port should appear in the Interrupt Foldback Bus Assignments table.

* Except when an Alias has already been entered that is different from the Alpha. In this case, the Alias will not change whenever the Alpha is changed.

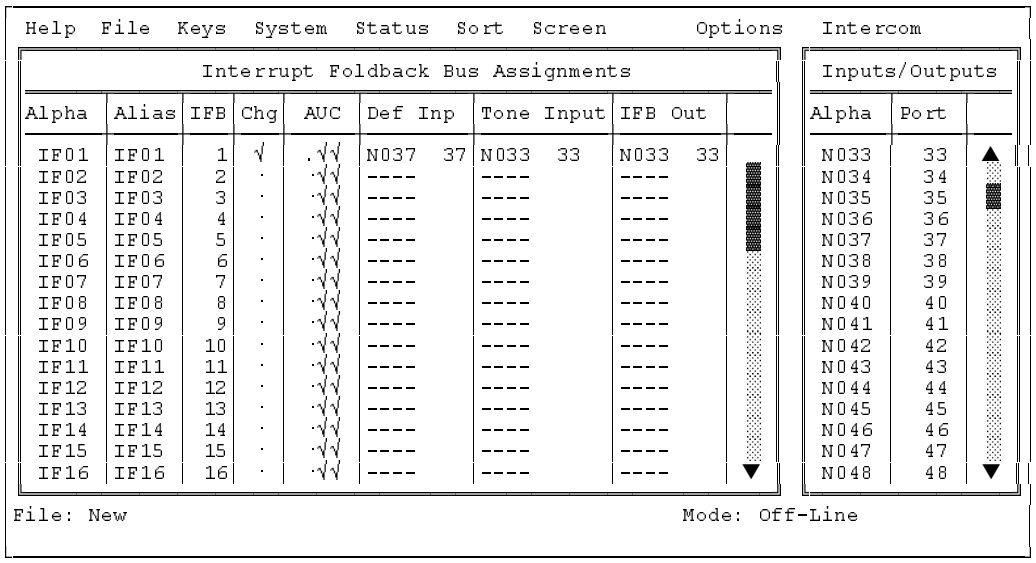



***Figure 2-5. The IFB Edit Screen***

4. Specify a default intercom port for program input:

**Note** If your intercom system has a Program Assign Panel (PAP), you will be able to select a different program input source from that panel at a later time if you wish, but you must still specify a default input port.

To specify the input port, position the cursor on the left side of the "Def Inp" column and type the Alpha of the desired input port. (Or, use the pick list at the right side of the screen.) In the example in Figure 2-5, input port N037 has been selected for use with IFB IF01.

5. The "Tone Input" column may be used in intercom systems that have an optional TIM-940 or equivalent Tone Activated Switcher for remote IFB override. (See page 3-7 for a description of this device.) The "Tone Input" column designates the intercom input port for the 2400 Hz tone that activates the TIM-940 during IFB override.

   To specify the intercom port for tone input, position the cursor on the left side of the "Tone Input" column and type the Alpha of the desired input port. (Or, use the pick list at the right side of the screen.) In the example in Figure 2-5, input port N033 has been selected as the tone input for use with IFB IF01.

6. To apply restrictions, move to the “AUC” column. Use the SPACE BAR or click with a mouse to place or remove check marks:

   A Access Restricted: A check mark under “A” prevents keypanel operators in your intercom system from assigning this IFB to keys from their keypanels.

   U Univ Scroll Restricted: If your intercom system is trunked with other intercom systems, a check mark under “U” prevents keypanel operators in the other intercom systems from assigning this IFB to keys from their keypanels. Normally you will want to restrict outside keypanel access, so a check mark is automatically placed in this column for you.

   C CSedit Scroll Restricted: A check mark under “C” prevents CSedit users in other intercom systems from assigning this IFB in their intercom systems. Normally you will want to restrict outside CSedit access, so a check mark is also automatically placed in this column for you.

7. Press the ESCAPE key (or click the right mouse button on any selectable item) to exit the IFB edit screen after setting up an IFB.

8. Assign the IFB to a keypanel talk key. See "Keypanel Setup", starting on page 2-15.

9. Remember to save your changes and send them to the intercom system when finished. (See "Activating a New File or Sending Changes", page 1-4.)

10. Check IFB operation. The program source should be audible at the intercom port specified as the IFB output. When the IFB talk key is pressed, the program source should be interrupted and the keypanel operator should be able to talk to the IFB output.

## Creating a Special List

A special list is a group of ports that a keypanel operator can talk and/or listen to by pressing a single key. Special lists are useful for paging, all-call, group call, all-listen or group listen.

The following procedure lets you create a special list by assigning ports to the list. You can also assign a meaningful name for the special list. Once you have configured a special list, you can assign it to any keypanel key as described starting on page 2-15.

To set up a special list:

1. From the System menu, select “Special Lists” to open the special list pick list (Figure 2-6). The default Alpha names for special lists are SL01, SL02 etc. As you configure special lists you will also change the Alphas to more meaningful names for your intercom system.

2. To select a special list, highlight it using the cursor keys, then press the ENTER key (or click on a special list with a mouse). A special list edit screen should appear (Figure 2-7).

3. Figure 2-7 shows a typical special list edit screen for special list SL19. To assign ports to the special list, use the Special List Port Assignments table at the bottom of the screen. Position the cursor in the “S” column next to a port that you want to add to the special list. Then, use the SPACE BAR (or click with a mouse) to insert a check mark √ in the column. In the example in Figure 2-7, ports 1, 6, 16 and 36 have been assigned to the special list.

4. Relays* may be assigned to a special list for activation along with the special list. To assign a relay to a special list, TAB to the Special List Relay Assignments window and press ENTER. (Or click on the window with a mouse.) The special list relay assignment screen should appear (Figure 2-8). Type in the Alpha names of up to four relays in the relay assignment table at the left side of the screen. Or, use the Relays pick list at the right side of the screen to enter Alpha names into the table. In the example in Figure 2-8, the relays with default names RY02 and RY04 have been assigned to the special list.

* The generic term “relay” refers to the digital outputs of an ADAM-CS Frame (available at J903) or the relay outputs of an optional UIO-256 or FR9528 Frame.

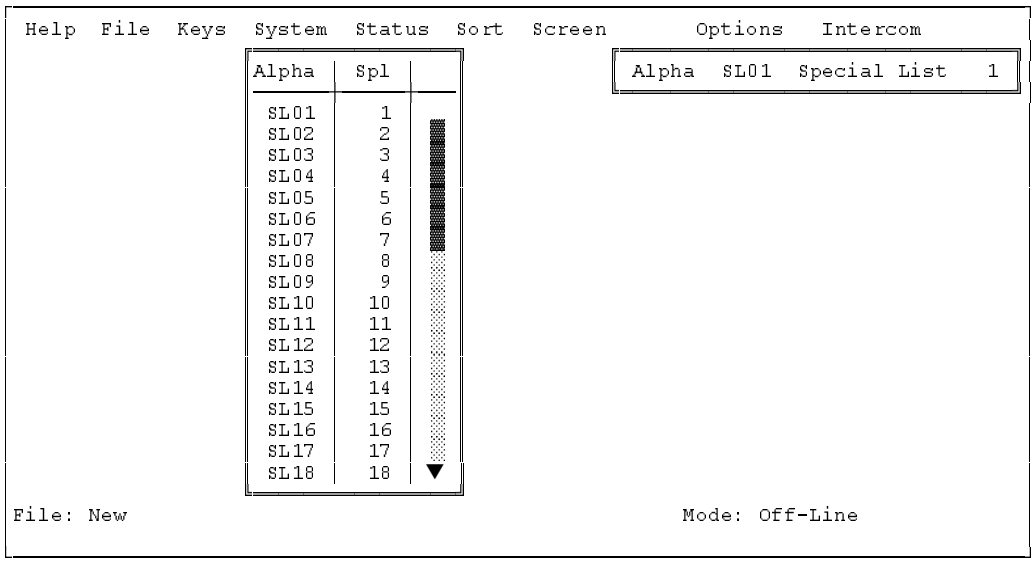



***Figure 2-6. The Special List Pick List***

**Note** To use the Relays pick list to insert relays into the Special List Relay Assignments table: Position the cursor in the Special List Relay Assignments table at the point where you want to make the insertion. Then press the TAB key to move the cursor into the Relays pick list (or if you have a mouse, just move the mouse cursor over the pick list). Select a relay Alpha from the pick list and press ENTER (or click with a mouse). The selected relay should appear in the Special List Relay Assignments table.

5. Close the Special List Relay Assignments window when finished assigning relays: either press the ESCAPE key, or click with the right mouse button on any selectable item in the window.

**Note:** If desired, you can replace the default relay Alpha names with ones that are more meaningful in your intercom system. See "Using Relays", page 2-11, to rename relays.

6. To name the special list, TAB to the “Alpha” window in the upper-right corner of the screen and press ENTER. (Or click on any selectable item in the window with a mouse.) The name/restriction editor screen

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

                                          Alpha  SL19  Special List  19
            Special List
               Relay
            Assignments

                          Special List Port Assignments
Alph | Port | S | Alph | Port | S | Alph | Port | S | Alph | Port | S | Alph | Port | S |
N001 |   1 | √ | N002 |   2 | · | N003 |   3 | · | N004 |   4 | · | N005 |   5 | · |
N006 |   6 | √ | N007 |   7 | · | N008 |   8 | · | N009 |   9 | · | N010 |  10 | · |
N011 |  11 | · | N012 |  12 | · | N013 |  13 | · | N014 |  14 | · | N015 |  15 | · |
N016 |  16 | √ | N017 |  17 | · | N018 |  18 | · | N019 |  19 | · | N020 |  20 | · |
N021 |  21 | · | N022 |  22 | · | N023 |  23 | · | N024 |  24 | · | N025 |  25 | · |
N026 |  26 | · | N027 |  27 | · | N028 |  28 | · | N029 |  29 | · | N030 |  30 | · |
N031 |  31 | · | N032 |  32 | · | N033 |  33 | · | N034 |  34 | · | N035 |  35 | · |
N036 |  36 | √ | N037 |  37 | · | N038 |  38 | · | N039 |  39 | · | N040 |  40 | · |
N041 |  41 | · | N042 |  42 | · | N043 |  43 | · | N044 |  44 | · | N045 |  45 | · |
N046 |  46 | · | N047 |  47 | · | N048 |  48 | · | N049 |  49 | · | N050 |  50 | · |

File: New                                          Mode: Off-Line
```

***Figure 2-7. A Typical Special List Edit Screen***

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

                                          Alpha  SL19  Special List  19
            Special List
               Relay
            Assignments
            ----------
            RY02    2
            RY04    4
            ----
            ----

                                              Relays
                                            for LOCL
                                          Alpha | Relay |
                                          RY01  |   1   |
                                          RY02  |   2   |
                                          RY03  |   3   |
                                          RY04  |   4   |
                                          RY05  |   5   |
                                          RY06  |   6   |
                                          RY07  |   7   |
                                          RY08  |   8   |
                                          RY09  |   9   |
                                          RY10  |  10   |
                                          RY11  |  11   |
                                          RY12  |  12   |

File: New                                          Mode: Off-Line
```

***Figure 2-8. The Relay Assignment Screen for a Special List***

should appear (Figure 2-9). Type in an alpha name (up to four digits). If desired, type in a different alias name.

7. To apply or remove restrictions, use the cursor keys or the mouse to select the desired restriction, then use the SPACE BAR or click with the mouse to place a check mark √ next to the restriction:

   - Spl Access Restricted: A check mark here prevents keypanel operators in your intercom system from assigning this special list to keys from their keypanels.

   - Spl Univ Scroll Restricted: If your intercom system is trunked with other intercom systems, a check mark here prevents keypanel operators in the other intercom systems from assigning this special list to keys from their keypanels.

   - Spl CSedit Scroll Restricted: A check mark here prevents CSedit users in other intercom systems from assigning this special list in their intercom systems.

**Note** As you make changes in this screen, or in any of the other screens for this special list, you will notice that a check mark √ is inserted next to “Data Changed” in the name/restriction editor. This check mark is a change flag. (See the change flag description on page 1-4 for further details.)

8. Press the ESCAPE key (or click on any item with the right mouse button) to return to the special list pick list when finished configuring a special list. Press the ESCAPE key again to return to the CSedit menu screen.

9. After you have configured one or more special lists, proceed to "Keypanel Setup", starting on page 2-15, to assign the special list to a keypanel key.

10. Remember to save your changes and send them to the intercom system when finished. (See "Activating a New File or Sending Changes", page 1-4.)

11. Check special list operation. When the special list key is pressed, it should be possible to talk and/or listen to all members of the special list. Also, any relays assigned to the special list should activate.

```
Help  File  Keys  System  Status  Sort  Screen       Options   Intercom
                                        Alpha  SL19   Special List  19
                                        Alias  SL19
                                        Spl Access Restricted        ·
                                        Spl Univ Scroll Restricted   ·
                                        Spl CSedit Scroll Restricted ·
                                        Data Changed                 √
File: New                                          Mode: Off-Line
```

***Figure 2-9. The Name/Restriction Editor for a Special List***

## Using Relays

**Note:** The generic term “relay” refers to the digital outputs of an ADAM-CS Frame (available at J903) or the relay outputs of an optional UIO-256 or FR9528 Frame. One method of using relays was already discussed under "Creating a Special List", page 2-8. There are also two other methods for using relays:

**Method 1:** The first method provides all-or-one relay activation: a relay can be set to activate whenever anyone talks to a specified output port, or when a specified user talks to that port. You could use this method, for example, when a radio transmitter is connected to an intercom audio output and you want a relay to automatically key the transmitter for all users or just one specific user. Use of method 1 is described at right.

**Method 2:** In the second method, you assign individual talk keys on selected keypanels to activate relays. Since talk keys can be programmed to activate two types of communication simultaneously, method 2 can also be used like method 1: for example, to talk to a transmitter and key transmitter output. The difference is that, using method 2, you define selected keys that can talk to a particular output and activate a relay. To use method 2, assign relay names and impose restrictions as described in steps 1-3 which follow. Then, refer to "Keypanel Setup", starting on page 2-15, to assign the relays to keys on selected keypanels.

To configure a relay:

1. From the menu bar, select the System menu, then select “Relays”. The Relay Edit Screen should appear (Figure 2-10). Relays are configured in the Relay Assignments table at the left of the screen. A pick list of Inputs/Outputs that may be inserted into the table is shown at the right. The number of available relays may vary depending on the size and configuration of your intercom system.

2. Default relay Alpha and Alias names are RY01, RY02 etc. To change a relay’s Alpha name, position the cursor in the Alpha column and type in the desired name (up to 4-characters). When you change a relay’s Alpha name and move to a new location in the table, you will notice that the relay’s Alias name is also changed*. If your intercom system is trunked to other intercom systems, you can change this Alias name to a different name that will be more meaningful to users in the external intercom systems.

**Note** When you make any change to a relay definition and move to a new position, you will notice that a check mark √ is inserted in the “Chg” column. This check mark is a change flag. (See the change flag description on page 1-4 for further details.)

* Except when an Alias has already been entered that is different from the Alpha. In this case, the Alias will not change whenever the Alpha is changed.

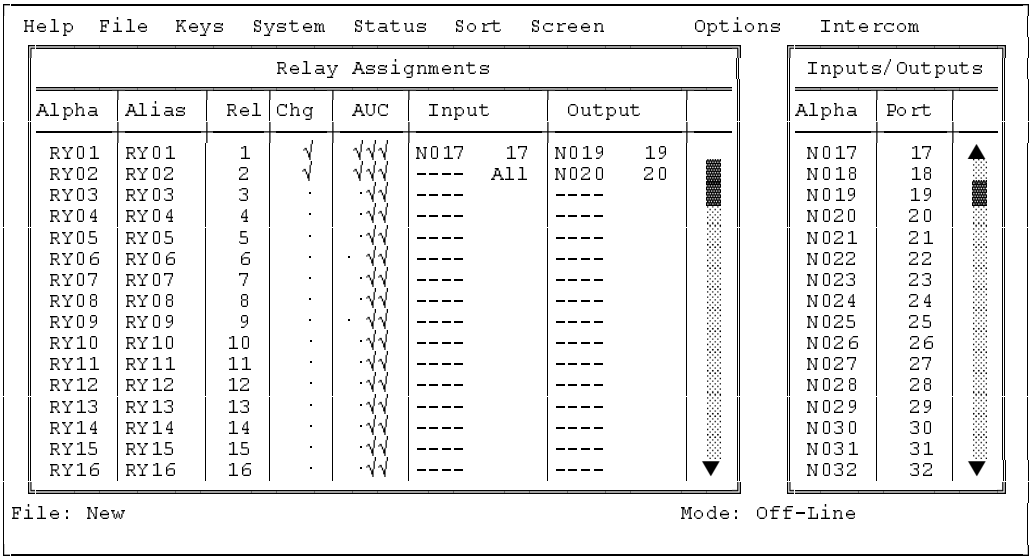



***Figure 2-10. The Relay Edit Screen***

3. To apply restrictions to a relay, position the cursor in the “AUC” column under A, U or C. Then, use the SPACE BAR or click with a mouse to place or remove check marks as follows:

   A Access Restricted: A check mark under “A” prevents keypanel operators in your intercom system from assigning this relay to keys from their keypanels.

   U Univ Scroll Restricted: If your intercom system is trunked with other intercom systems, a check mark under “U” will prevent keypanel operators in the other intercom systems from assigning this relay to keys from their keypanels. Normally you will want to restrict outside keypanel access, so a check mark is automatically placed in this column for you.

   C CSedit Scroll Restricted: A check mark under “C” prevents CSedit users in other intercom systems from assigning this relay in their intercom systems. Normally you will want to restrict outside CSedit access, so a check mark is automatically placed in this column for you.

**Note** The following steps are required only if you want a relay to activate whenever a particular audio output port is called. If, on the other hand, you wish to assign a relay for activation by a specific keypanel key, skip the following steps and proceed to "Keypanel Setup", starting on page 2-15.

4. Associate a relay with an audio output port (for example, the output port to which a transmitter is connected). Position the cursor in the “Output” column of the Relay Assignments table and enter the name of the output port (or use the pick list at the right side of the screen.) In the example in Figure 2-10, relay RY01 has been associated with output port N019.

5. Select a single user or all users for relay activation:

   **Single User:** Position the cursor in the left side of the “Input” column and type the Alpha name of the user (or select a name from the pick list at the right side of the screen). In the example in Figure 2-10, only the user at port N017 will activate relay RY01 when talking to port N019.

   **All Users:** Position the cursor in the right side of the “Input” column and press the SPACE BAR (or click with a mouse) to enter the word “All” in the column. In the example in Figure 2-10, all users will activate relay RY02 when talking to output port N020.

6. Press the ESCAPE key (or click on any selectable item with the right mouse button) to exit the relay edit screen after relays have been set up.

7. Remember to save your changes and send them to the intercom system when finished. (See "Activating a New File or Sending Changes", page 1-4.)

## Creating a Camera ISO Channel

An ISO channel is a special type of communication where a keypanel user can press a single key to completely isolate, or cut off, all communications to a particular intercom station and establish a private conversation with that intercom station. The name “Camera ISO” refers to a broadcasting application where, for example, a director needs to talk to one specific camera on a camera party line without interruptions from other personnel on the party line. Other personnel on the party line can carry on conversation as usual, but the isolated camera will not hear the party line while the ISO is active. Releasing the ISO key re-establishes normal communications. The following procedure lets you tell CSedit which port you want to isolate. You can also assign a meaningful name for the ISO and restrict access to it. Once you have configured an ISO, you can let any keypanel user talk to it by simply assigning the ISO to a key on their keypanel.

To set up an ISO:

1. From the menu bar, select the System menu, then select “ISOs”. The ISO edit screen should appear (Figure 2-11). ISO’s are set up in the Camera Isolate Assignments table at the left side of the screen. An Outputs pick list appears at the right side of the screen.

2. Default ISO Alpha and Alias names are IS01, IS02 etc. To change an ISO’s Alpha name, position the cursor in the Alpha column and type in a 4-character name that will be meaningful to users in your intercom system. When you change an ISO’s Alpha name and move to a new location in the table, you will notice that the Alias name is also changed. If your intercom system is trunked to other intercom systems, you can change this Alias name to a different name that will be more meaningful to users in the external intercom systems.

**Note** When you make any change to an ISO definition and move to a new position, you will notice that a check mark √ is inserted in the “Chg” column. This check mark is a change flag. (See the change flag description on page 1-4 for further details.)

3. To apply restrictions to an ISO, position the cursor in the “AUC” column under A, U or C. Then, use the SPACE BAR or click with a mouse to place or remove check marks as follows:

   A Access Restricted: A check mark under “A” prevents keypanel operators in your intercom system from assigning this ISO to keys from their keypanels.

   U Univ Scroll Restricted: If your intercom system is trunked with other intercom systems, a check mark under “U” will prevent keypanel operators in the other intercom systems from assigning this ISO to keys from their keypanels. Normally you will want to restrict outside keypanel access, so a check mark is automatically placed in this column for you.

   C CSedit Scroll Restricted: A check mark under “C” prevents CSedit users in other intercom systems from assigning this ISO in their intercom systems. Normally you will want to restrict outside CSedit access, so a check mark is automatically placed in this column for you.

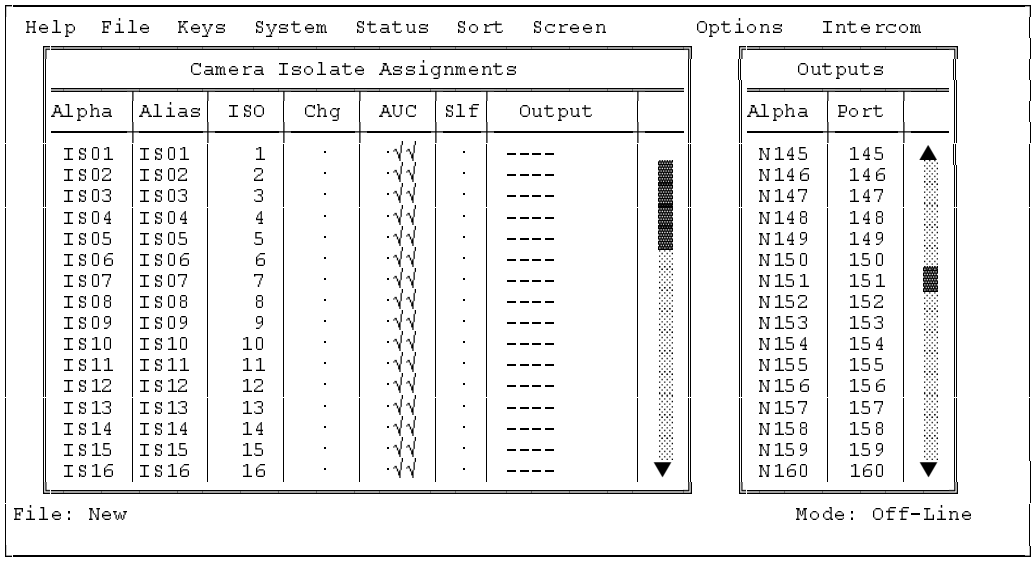



***Figure 2-11. The ISO Edit Screen***

4. The “self” column (Slf) is used to also isolate the keypanel operator during ISO activation. This insures that the keypanel operator is not disturbed during a critical ISO operation. Use the SPACE BAR or click with a mouse to place or remove a check mark in this column.

5. To designate the port that will be isolated during ISO activation, move the cursor to the Output column and enter the Alpha name of the desired port (or select the desired Alpha from the pick list at the right side of the screen).

6. When you are done setting up an ISO, press the ESCAPE key to return to the menu bar. (Or, click on any selectable item with the right button on a mouse.)

7. Assign the ISO to a key on a keypanel as described under "Keypanel Setup", starting on page 2-15.

8. Remember to save your changes and send them to the intercom system when finished. (See "Activating a New File or Sending Changes", page 1-4.)

## Keypanel Setup and Trunking Port Allocation

Once you have assigned alphas and configured any party lines, IFB's, ISO's etc. that will be needed, you can assign the keys on keypanels to meet each user's communication needs. As you set up keypanels, you can impose restrictions on each keypanel to prevent the keypanel operator from changing key assignments from their keypanels. You can also impose scroll restrictions to prevent keypanel access from external intercom systems. Finally, for each keypanel, you can assign priority levels for access to IFB's and for access to limited trunking lines. To use a port as a trunking port, you simply turn on all restriction flags and leave all keys unassigned. (The restriction flags are discussed in detail on page 2-20.)

### Important

The following paragraphs walk you through the process of configuring a keypanel. However, it is recommended that you read through the next few pages before you start. Pay particular attention to the sections describing the Auto-Follow feature (page 2-18) and the Copy and Paste Screen feature (page 2-19). By using these two features, you may be able to save considerable time with listen key assignments.

## Keypanel Setup: Selecting a Keypanel For Editing

From the menu bar, select the Keys menu, then select "Ports". The ports pick list should appear (Figure 2-12. If you assigned names for ports (as described on page 2-1) these names will appear in the Alpha column of the pick list in place of the default Alpha names N001, N002 etc. shown below.

To select a port for editing, select its Alpha name and press the ENTER key (or click on a port with a mouse). If your intercom is not trunked, the keypanel edit screen for the local intercom (Matrix LOCL) will display (Figure 2-13). If your intercom system is trunked to other intercom systems, the keypanel edit screen will look like Figure 2-14.

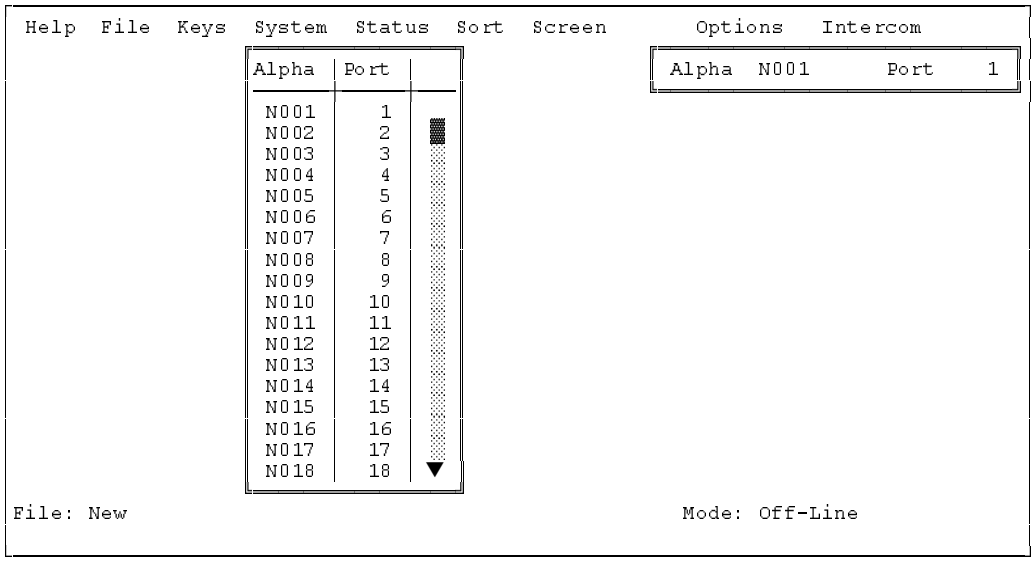



*Figure 2-12. The Ports Pick List for Keypanel Setup*

**Note** **For trunked intercom systems only.** You must select an intercom system and retrieve the pick lists from that intercom system before assigning keys. To do this, TAB to the window titled “Select Key Assign Matrix” (Figure 2-14). Use the cursor keys to select the desired intercom system, then press ENTER. (If you are using a mouse, simply click on the desired intercom system name.) Once the pick lists have been retrieved, the edit screen will look just like the local matrix screen (Figure 2-13). Note that the name of the selected intercom system will appear in the lower-right corner of the screen.

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

Setup  1                                Use  Main   Alpha  N001      Port    1

Talk    T1    T2    Res  Listen  L     Res

  1    ----  ----   .     1    ----    .
  2    ----  ----   .     2    ----    .
  3    ----  ----   .     3    ----    .
  4    ----  ----   .     4    ----    .
  5    ----  ----   .     5    ----    .
  6    ----  ----   .     6    ----    .
  7    ----  ----   .     7    ----    .
  8    ----  ----   .     8    ----    .
  9    ----  ----   .     9    ----    .
 10    ----  ----   .    10    ----    .
 11    ----  ----   .    11    ----    .
 12    ----  ----   .    12    ----    .
 13    ----  ----   .    13    ----    .
 14    ----  ----   .    14    ----    .
 15    ----  ----   .    15    ----    .
 16    ----  ----   .    16    ----    .

                                          Select Key Assign Type
                                              for Matrix LOCL

                                          Ports
                                          Party Lines
                                          IFBs
                                          Special Lists
                                          Relays
                                          ISOs
                                          Special Functions

                                                Data Changed

File: New                                       Mode: Off-Line
```

*Figure 2-13. A Keypanel Edit Screen for the Local Intercom System*

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

Setup  1                                Use  Main   Alpha  N001      Port    1

Talk    T1    T2    Res  Listen  L     Res

  1    ----  ----   .     1    ----    .
  2    ----  ----   .     2    ----    .
  3    ----  ----   .     3    ----    .
  4    ----  ----   .     4    ----    .
  5    ----  ----   .     5    ----    .
  6    ----  ----   .     6    ----    .
  7    ----  ----   .     7    ----    .
  8    ----  ----   .     8    ----    .
  9    ----  ----   .     9    ----    .
 10    ----  ----   .    10    ----    .
 11    ----  ----   .    11    ----    .
 12    ----  ----   .    12    ----    .
 13    ----  ----   .    13    ----    .
 14    ----  ----   .    14    ----    .
 15    ----  ----   .    15    ----    .
 16    ----  ----   .    16    ----    .

                                          Select Key Assign Matrix

                                          LOCL
                                          NEWS
                                          8H
                                          8G
                                          6A
                                          WNBC
                                          WASH
                                          CNBC

                                                Data Changed

File: New                                       Mode: Off-Line
                                                Assign: LOCL ----
```

*Figure 2-14. A Keypanel Edit Screen for a Trunked Intercom System*

## Keypanel Setup: The Setup Table

The setup table is located at the left side of the keypanel edit screen. When the setup table is highlighted, you can use the PAGE UP/DOWN keys to select setup pages 1 through 4. Each setup page assigns up to 16 talk and listen key pairs. The currently selected setup page number displays at the upper-left corner of the setup table ("Setup 1", "Setup 2" etc.).

Each setup page can be assigned and used by either the main keypanel or any connected expansion panel. Setup page usage displays at the upper-right corner of the setup table. In Figure 2-15, for example, setup page 1 is being used by the main keypanel ("Use Main"). If this setup page was assigned to an expansion panel, "Use Exp1", "Use: Exp2" etc. would display. (Setup page assignment is discussed on page 2-21.) The following procedures will first describe how to assign individual keys in the setup pages. Then assigning the setup pages to panels will be described.

## Keypanel Setup: Key Assignments and Key Restrictions

### Talk Key Assignments

Talk keys are numbered from 1 to 16 along the left side of the setup table. For each key, there is a "T1" and "T2" assignment. The "T1" column is where you make the normal key assignment (also called a level 1 talk key assignment). The assignment that you make in this column will appear in the alpha-numeric display on the keypanel, and this is the person, port, party line etc. that you will normally talk to when the key is pressed. The "T2" column can be used to define a secondary key assignment (called a level 2 talk key assignment) to activate along with the level 1 assignment. A talk key that activates two devices is called a "stacked talk key". For example, you could assign talk level 1 to talk to a two-way radio, and then assign talk level 2 to activate a relay to key the radio during transmit. In the example in Figure 2-15, port N001 is the level 1 assignment and relay RY01 is the level 2 assignment for talk key 1.

To prevent the keypanel user from changing a talk key assignment from the keypanel, position the cursor in the “Res” (restrict) column next to the "T2" column and press the SPACE BAR to place a check mark √ in the column.

### Listen Key Assignments

Listen keys are assigned and restricted just like talk keys. In the example in Figure 2-15, listen key 1 has been assigned to listen to port N001. Also, the key has been restricted to prevent the keypanel operator from reassigning it. (Note: You can save much setup time by using special functions for most listen key assignments. See the description of special functions, page 2-18.)

### Important Notes About Key Assignments

**Main panel vs expansion panel usage for all types of panels:** If a setup page is used by the main keypanel, do not assign key 16, as this is the Incoming Messages key (also called "call waiting"). If a setup page is used by an expansion panel, key 16 may be assigned.

**KP-90 and EKP-90 series keypanels and expansion panels with 16 keys**: the left-most key on the panel corresponds to key 1 in the setup table.

```
Help  File  Keys  System  Status  Sort  Screen      Options  Intercom

Setup  1                                  Use  Main      Alpha  N001      Port    1

Talk   T1    T2    Res  Listen  L     Res
 1     N001  RY01  √     1      N001  √
 2     ----  ----  ·     2      ----  ·
 3     ----  ----  ·     3      ----  ·
 4     ----  ----  ·     4      ----  ·
 5     ----  ----  ·     5      ----  ·
 6     ----  ----  ·     6      ----  ·
 7     ----  ----  ·     7      ----  ·
 8     ----  ----  ·     8      ----  ·
 9     ----  ----  ·     9      ----  ·
10     ----  ----  ·    10      ----  ·
11     ----  ----  ·    11      ----  ·
12     ----  ----  ·    12      ----  ·
13     ----  ----  ·    13      ----  ·
14     ----  ----  ·    14      ----  ·
15     ----  ----  ·    15      ----  ·
16     ----  ----  ·    16      ----  ·

                                          Select Key Assign Type
                                              for Matrix LOCL

                                          Ports
                                          Party Lines
                                          IFBs
                                          Special Lists
                                          Relays
                                          ISOs
                                          Special Functions

                                                Data Changed

File: New                                       Mode: Off-Line
```

***Figure 2-15. A Typical Key Assignment (Talk/Listen Key 1)***

**KP-90 and EKP-90 series keypanels and expansion panels with 8 keys:** The leftmost key on any of these panels corresponds to key 9 in the setup page, so start programming at key 9 and do not program keys 1-8.

**KP-12 keypanel; EKP-12, EKP-16 and EKP-20 expansion panels:** Please refer to the special notes, "Understanding How MODS Work", on page 2-22 for further information.

## Keypanel Setup: Using the Pick Lists

The pick lists in the “Select Key Assign Type” window in (Figure 2-15) can be used to assign any of the available types of communication (ports, party lines, etc.) to keys. To choose a pick list, TAB to the Select Key Assign Type window. Then, use the UP/DOWN CURSOR keys to highlight the desired communication type, and press ENTER. (Or simply click on the desired communication type with a mouse.) For example, if you select “Ports”, the Ports pick list appears. Figure 2-16 shows the ports pick list for the local intercom system. You can use the ports pick list to assign keys for point-to-point communication as follows:

**Without a mouse:** Use the CURSOR keys to select the key in the Setup table that you want to assign. Next, TAB to the ports pick list, and use the CURSOR keys to select the port that you want to assign to the key. Press ENTER. The selected port should appear in the Setup table. When you are finished using the ports pick list, select it and press ESCAPE.

**With a mouse:** Click on the key in the Setup table that you want to assign, then click on the scroll bar in the ports pick list to scroll and locate the port that you want to assign. Click on the desired port, and it should appear in the Setup table. When you are finished using the ports pick list, close it by clicking on any selectable item in the list with the right mouse button.

### Identifying which Intercom System a Key is Assigned To (Trunked Intercom Systems)

You can identify which intercom system each key is assigned to by positioning the cursor over the key assignment and then viewing the “Assign” information at the lower-right corner of the screen. The intercom system name will be listed first, followed by the Alias name of the port, party line etc. that is assigned.

## Keypanel Setup: Special Functions

Special Functions are available from the Special Functions pick list (Figure 2-17).

### The All Call Special Function (AC)

All Call can only be assigned to talk level 1 keys. Activating an All Call key will also activate all talk keys to the left of the AC key on the keypanel (up to another All Call key).

### Auto-Follow Special Function (AF)

Auto-Follow is assignable to listen keys only. Auto-Follow causes the listen key assignment to always be the same as the level 1 talk key assignment. Auto-Follow is the most often-used listen key assignment, because it saves the operator from having to change the listen key

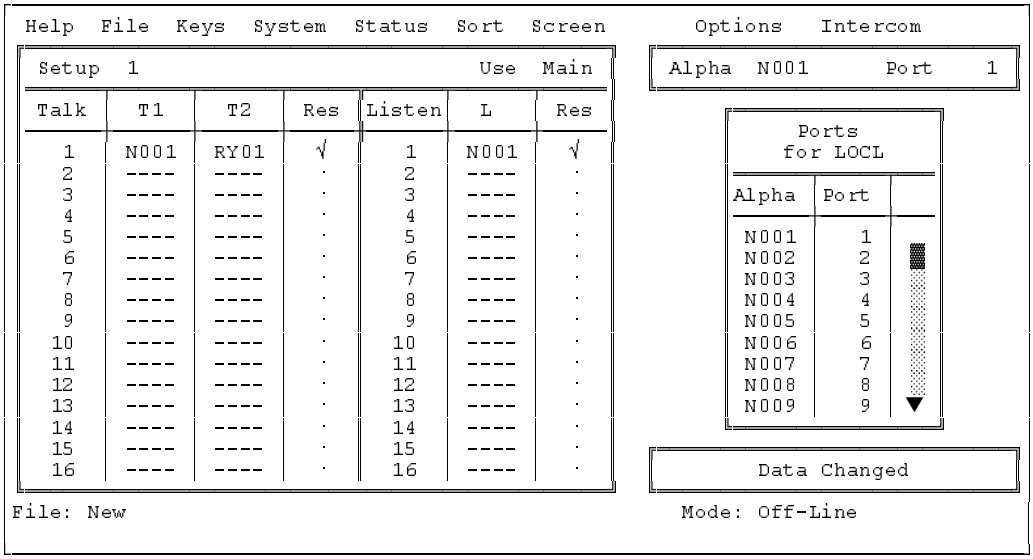



*Figure 2-16. A Keypanel Edit Screen with the “Ports” Pick List Opened*

whenever the talk key is changed (either in CSedit or from the keypanel).

**Note** You don't need to manually enter the AF assignment for every listen key. You can use the "Copy Screen" and "Paste Screen" features of CSedit. See "Using Copy Screen and Paste Screen", at right.

### The Auto Listen Special Function (AL)

This assignment works the same as AF, but the listen key is automatically engaged when the talk key is pressed. This is often a good assignment for use with party lines or individual belt packs and other devices that do not have data connections to the intercom system, because these devices cannot activate the listen path back to the caller. You should also use this assignment with the push-button style KP-12 Keypanel when a talk key is assigned to talk to a TIF-951 Telephone Interface. Otherwise, the keypanel operator will not be able to hear the dial tones and incoming audio from the telephone line.

### The Auto Mute Special Function (AM)

This assignment is the opposite of AL. It allows the keypanel operator to hear the level 1 talk key assignment only when the talk key is NOT pressed. Auto Mute is useful for talking to devices which echo back the talkers voice, as it prevents feedback.

### The Auto Reciprocal Special Function (AR)

This assignment forces the keypanel to continuously listen to whatever is assigned to the level 1 talk key assignment. It is commonly used on keypanels which are not equipped with listen keys to allow listening to devices which do not have talk-back capability, such as party lines, belt packs etc. It is also useful to force listening when it is desirable to have an operator continuously hear a party line or other source.

## Keypanel Setup: Using Copy Screen and Paste Screen

Copy Screen and Paste Screen let you copy one keypanel setup to another location. Copy Screen and Paste Screen are convenient, for example, if you want to quickly program all listen keys with the Auto-Follow function assignment prior to configuring your keypanel talk keys. You can do this by programming all the listen keys on one keypanel for Auto-Follow, and then copying that keypanel to all other keypanels as follows:

1. Begin your first keypanel setup by programming the Auto-Follow function to all four pages of listen keys on the keypanel.

2. Before programming anything else, press the F7 key to access the Screen menu (or click on the Screen menu with a mouse). The Screen menu will open within the keypanel setup screen (Figure 2-18).

3. Select "Copy Screen" from the Screen menu. CSedit will copy the entire keypanel setup (which should consist only of the auto-follow key assignments). This copy will be retained for the duration of the edit session or until you select "Copy Screen" again.

4. Finish your first keypanel setup. When you start on your next keypanel setup, press F7 again, but this time select "Paste Screen". The Auto-Follow special

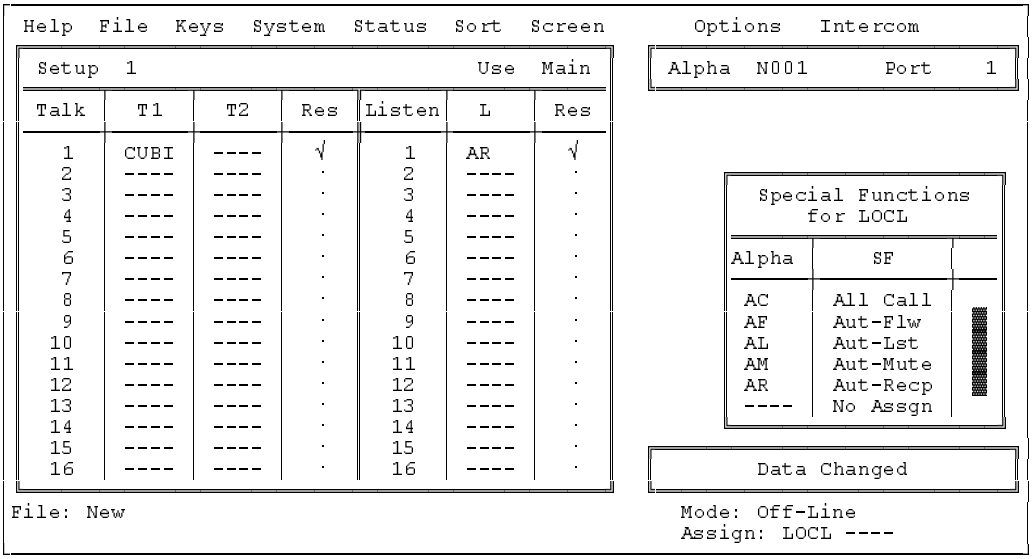



*Figure 2-17. The Keypanel Special Functions Pick List*

function will be copied to all four pages of the current keypanel setup. Continue using “Paste Screen” whenever you start a new keypanel setup.

**Note** Copy Screen and Paste Screen can also be used to relocate a keypanel configuration to a new port. However, a few other steps are also required if you ever need to do this. For further information, see "Using Search", page 3-2.

## Keypanel Setup: Port Information

Port information, such as restrictions, trunking priorities etc. can be accessed by opening the port information window at the upper-right side of the keypanel edit screen (Figure 2-19).

### Port Restrictions

Use the cursor keys or the mouse to select the desired restriction, then use the SPACE BAR or click with the mouse to insert or remove a check mark:

Port Access Restricted: A check mark here prevents keypanel operators in the local intercom from assigning this keypanel to keys from their keypanels.

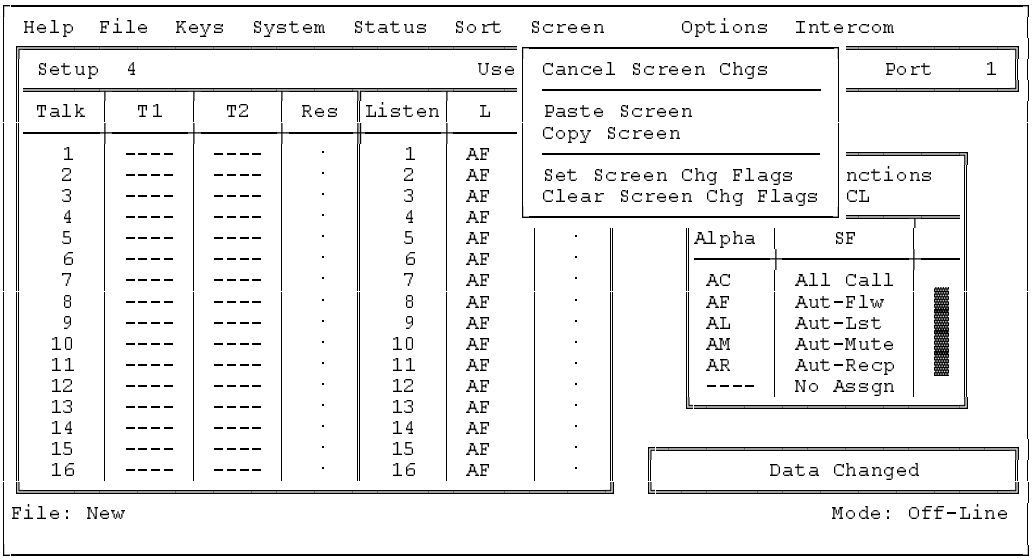



*Figure 2-18. Copying a Key Assignment Screen*

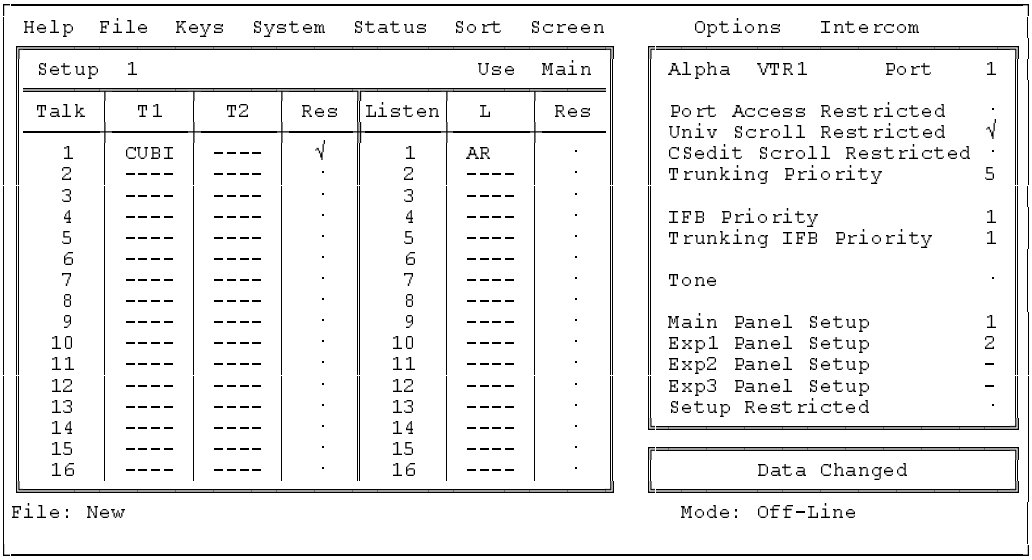



*Figure 2-19. The Keypanel Port Info Edit Screen*

Univ Scroll Restricted: If your intercom system is trunked with other intercom systems, a check mark here prevents keypanel operators in other intercom systems from assigning this keypanel to keys from their keypanels.

CSedit Scroll Restricted: A check mark here prevents CSedit users in other intercom systems from assigning this keypanel in their intercom systems.

### Restricting a Port for use as a Trunking Port

To use a port as a trunking port, all that is required is to turn on all three port restriction flags as described above.

### IFB and Trunking Priorities

You can assign a trunking priority level to a keypanel based on the keypanel operator's relative need for access to limited trunk lines. The Trunking Priority can be any number from 1-9. Level 9 overrides all other levels, and gets first access to trunk lines; level 8 overrides level 7 and lower etc.

You can assign an IFB priority to a keypanel based on the keypanel operator's relative need to have IFB access. When two or more keypanels have keys assigned to the same IFB, this determines who gets to access the IFB in cases where two or more keypanels are trying to access it at the same time. Level 3 overrides all keypanels with a level 2 or 1 priority. Level 2 overrides all keypanels with a level 1 priority. If any keypanel operators with a lower priority attempt to talk to the IFB while a higher priority operator is talking, they will not be able to do so. If two keypanels with the same priority level access an IFB at the same time, however, both will be heard. The IFB priority can be set separately for the local intercom and for external intercoms.

### Tone Oscillator

Selecting “Tone” and pressing the SPACE BAR (or clicking on "Tone" with a mouse) will turn the tone generator in the keypanel on or off. (In order for this change to take effect, you must send the change to the intercom system using the Activate Chgs command in the Intercom menu.) You can use this, for example, to check the talk path from a remotely located keypanel back to the ADAM frame and to a test keypanel: activate the tone generator, then force the crosspoint (page 3-16) from the remote keypanel to the test keypanel. You should be able to hear the tone at the test keypanel. If you turn the tone oscillator on in CSedit, you will not be able to deactivate it from the keypanel, so remember to turn it off when finished testing by pressing the SPACE BAR again or clicking with a mouse. Again, you must send the change to the intercom system in order to deactivate the tone oscillator.

### Setup Page Assignment

Type the page number (1 to 4) that you want to assign. In the example in Figure 2-19, the main keypanel has been assigned to use setup page 1 and the first expansion panel has been assigned to use setup page 2.

**Note** CSedit will not allow you to assign the same setup page to two panels. If you wish to use a page number that is already assigned to another panel, select the panel which is currently using that number, and press the SPACE BAR to clear the number. Then, make your new assignment.

**Note** EKP-20 Expansion Panels. When you assign an EKP-20 to a setup page, it will occupy key assignments on that page and the next setup page. For example, it you assign an EKP-20 to setup page 2, it will occupy keys 1-16 of setup page 2 and keys 1-4 of setup page 3. If you then assign a second EKP-20 to setup page 3, it will occupy the remaining keys on setup page 3 and then the first 8 keys of setup page 4. You can then assign a third EKP-20 to setup page 4, but only the first 12 keys will operate.

To prevent the keypanel user from reassigning setup pages from the keypanel, use the SPACE BAR (or click with a mouse) to place a check mark next to “Setup Restricted”.

## Keypanel Setup: Data Changed Window

Any time you make a change to any item in the keypanel edit screen, a check mark √ will be set for that item in the “Data Changed” window. This check mark is a change flag. (See the change flag description on page 1-4 for further details.)

## Understanding How MODS Work

The KP-12 keypanel and the EKP-12, EKP-16 and EKP-20 expansion panels use a system of "key groups". Key groups are simply groups of 4 consecutive keys (and their associated displays) starting with the first key at the left on the front of the panel. Thus, keys 1-4 form a key group, as do keys 5-8 and so forth. Each key group is assigned a module number (called a "MOD" number). The factory default MOD number assignments are shown in Table 2-1. Any MOD number can be assigned to any group of four keys. (However, MOD4 should always be assigned to the SELECT control on the KP-12.) Notice that all expansion panels are shipped with default MOD assignments starting at MOD5. If two or three expansion panels are used along with the KP-12, the module numbers must be reassigned on the second and third expansion panels.

Although MOD numbers can be reassigned, there is an exact relationship between CSedit setup page usage and specific MOD numbers. This relationship is shown in Table 2-2.

With the KP-90 series keypanels, the terminology "Main", "Exp1" etc. represents actual hardware panels. This is not the case for the KP-12, EKP-12, EKP-16, and EKP-20. This is because the MOD numbers can be assigned to any group of 4 keys on any panel. There are two things to keep in mind though:

1. The KP-12 must always be assigned as "Use Main" in CSedit, and MOD 4 should always be kept as keys 13-16 of the main keypanel.

2. The remaining setup pages must be assigned as "Exp1", "Exp2" etc. in order to use the keys that are contained on those pages.

   Example 1: If an EKP-20 is connected along with a KP-12, and the default MOD settings are used, you must assign both Exp1 AND Exp2 to setup pages in CSedit. This is because MOD's 5-8 of the EKP-20 correspond to keys 17-32 of Exp1, while MOD9 of the EKP-20 corresponds to keys 33-36 of Exp2.

   Example 2: If two EKP-20's are connected along with a KP-12, you must reassign all of the key groups on one of the EKP-20's to MOD numbers 10-13. (For instructions about how to reassign MOD's, see "SERVICE Menu, MOD ASGN" in the KP-12 User Manual".) By reassigning the MOD numbers, you will cause the keys to be reassigned as keys 37-52). After you have reassigned the MOD's, you must assign Exp1, Exp2 AND Exp3 to setup pages in CSedit.

***Table 2-1. Default Module Number Assignments for the KP-12, EKP-12, EKP-16 and EKP-20***

| **KP-12 Default MOD Assignments** | |
|---|---|
| MOD1 | Keys 1-4 |
| MOD2 | Keys 5-8 |
| MOD3 | Keys 9-12 |
| MOD4 | Keys 13-16 (This MOD should always be assigned to the SELECT control on the KP-12. Keys 13-15 are not used. Key 16 corresponds to the SELECT control and is always used for call waiting.) |
| **EKP-12 Default MOD Assignments** | |
| MOD5 | Keys 17-20 |
| MOD6 | Keys 21-24 |
| MOD7 | Keys 25-28 |
| **EKP-16 Default MOD Assignments** | |
| MOD5 | Keys 17-20 |
| MOD6 | Keys 21-24 |
| MOD7 | Keys 25-28 |
| MOD8 | Keys 29-32 |
| **EKP-20 Default MOD Assignments** | |
| MOD5 | Keys 17-20 |
| MOD6 | Keys 21-24 |
| MOD7 | Keys 25-28 |
| MOD8 | Keys 29-32 |
| MOD9 | Keys 33-36 |

***Table 2-2. The relationship between CSedit setup pages and the MOD's***

| **CSedit Use: Main** | |
|---|---|
| Keys 1-4 | MOD1 |
| Keys 5-8 | MOD2 |
| Keys 9-12 | MOD3 |
| Keys 13-16 | MOD4 |
| **CSedit Use: Exp1** | |
| Keys 17-20 | MOD5 |
| Keys 21-24 | MOD6 |
| Keys 25-28 | MOD7 |
| Keys 29-32 | MOD8 |
| **CSedit Use: Exp2** | |
| Keys 33-36 | MOD9 |
| Keys 37-40 | MOD10 |
| Keys 41-44 | MOD11 |
| Keys 45-48 | MOD12 |
| **CSedit Use: Exp3** | |
| Keys 49-52 | MOD13 |
| Keys 53-56 | MOD14 |
| Keys 57-60 | MOD15 |
| Keys 61-64 | MOD16 |

# Section 3: Reference

## Introduction

This section contains information about additional CSedit features which may be of interest to some users.

## Changing Screen Colors

There are several reasons why you may wish to change the default screen colors for CSedit:

- You may have a laptop computer which maps colors to shades of grey, and the screen is unreadable when running CSedit.
- You may have more than one intercom system, and you wish to distinguish which one you are working with by the screen colors.
- You may prefer different color choices.

Here is how to change the screen colors:

1. Using a DOS text editor, open the CSEDIT.SET file (located in the CSedit directory).

**Note** If there is no CSEDIT.SET file, you can create one by running CSedit and temporarily changing the com port or baud rate setting as described under "Options, Communications" on page 3-6. When you exit the Options menu, CSedit will create the CSEDIT.SET file in the CSedit directory. Restore the original setting, then exit CSedit and open the new file in your text editor.

2. The CSEDIT.SET file contains 28 lines. The default values for each line are shown in Table 3-1. Lines 1-3 each contain one number, and the available options are listed in the “Settings” column of the table. Lines 4-28 each contain three numbers (in hex code) separated by single spaces. The first two numbers (foreground and background color) are used when line 3 is set to "0" (Automatic). The last number is used when line 3 is set to "1" (Force Mono). The colors that correspond to each numeric value are listed in Table 3-2. Change the values in each line of the CSEDIT.SET file to create the color scheme that you want.

3. After you have created the desired color scheme, save the CSEDIT.SET file as a plain ASCII file.

4. Run CSedit and check the color scheme.

***Table 3-1. CSEDIT.SET File Line Usage***

| Line | Use | Settings | Default Value |
|---|---|---|---|
| 1 | Baud rate | 0=9600, 1=38.4k, 2=19.2k | 0 |
| 2 | Communications port | 0=COM1, 1=COM2 | 0 |
| 3 | Color/mono select | 0=Automatic, 1=Force Mono | 0 |
| Lines 4 - 7 set the colors in the menus: | | | |
| 4 | Unselected menu items | See Table 3-2 | 1 3 70 |
| 5 | Selected menu item | | 7 1 0f |
| 6 | Menu Bar | | e 3 70 |
| 7 | Unselectable menu item | | 9 3 70 |
| Lines 8 and 9 set the colors in the error messages: | | | |
| 8 | Error message | See Table 3-2 | f 4 07 |
| 9 | Error message border | | f c f7 |
| Lines 10 - 20 set the colors in the editing windows: | | | |
| 10 | Regular field, edit window | See Table 3-2 | f 1 0f |
| 11 | Selectable field, edit window | | f 3 70 |
| 12 | Background (non field), edit window | | 7 1 07 |
| 13 | Border, current window | | f 1 0f |
| 14 | Border, non-current window | | 2 1 07 |
| 15 | Selectable field, non-current window | | f 3 70 |
| 16 | Restricted field | | c 1 07 |
| 17 | Selected restricted | | 4 3 07 |
| 18 | Non-editable field | | a 1 07 |
| 19 | Invalid field | | e 1 07 |
| 20 | Selectable invalid field | | e 3 07 |
| Lines 21 - 24 set the colors for the overall screen: | | | |
| 21 | File/on-line status line | See Table 3-2 | 1 3 70 |
| 22 | Bottom status line | | 7 1 07 |
| 23 | Background | | 1 1 07 |
| 24 | Background selected field | | 1 1 07 |
| Lines 25 - 28 set the colors in the help screens: | | | |
| 25 | Help background | See Table 3-2 | 7 1 07 |
| 26 | Help key words | | e 1 0f |
| 27 | Help selected key word | | e 3 70 |
| 28 | Help border | | 7 1 07 |
| * The Screen menu, for example, when no edit screen is open. | | | |

### *Table 3-2. Color Chart*

| Foreground Color (First Number) | Background Color (Second Number) | Monochrome Setting (Third Number) |
|---|---|---|
| 0=black | 0=black | 07=normal |
| 1=blue | 1=blue | 70=reverse |
| 2=green | 2=green | 0f=bold |
| 3=cyan | 3=cyan | f7=blinking |
| 4=red | 4=red | 01=underline |
| 5=magenta | 5=magenta | 09=bold underline |
| 6=brown | 6=brown | f1=blink underline |
| 7=white | 7=white | f0=blink reverse |
| 8=dark grey | 8=black, blinking | |
| 9=light blue | 9=blue, blinking | |
| a=light green | a=green, blinking | |
| b=light cyan | b=cyan, blinking | |
| c=light red | c=red, blinking | |
| d=light magenta | d=magenta, blinking | |
| e=light yellow | e=brown, blinking | |
| f=bright white | f=white, blinking | |
| Example: 5 1 70 = magenta foreground and blue background for color (Automatic) operation; reverse video for monochrome (Force Mono) operation. | | |

## CSedit Files

The following files are uncompressed and placed on your hard drive when you run install:

| | |
|---|---|
| $$STALL.EXE<br>INSTALL.BAT | Used to install CSedit on your hard drive |
| CONVERT.EXE<br>CONVERT.TXT<br>CONVPROT.EX_<br>CONVREAL.EXE<br>UNCO NV.EX_ | Used to convert configuration files from a previous version of CSedit to the current version. To use the convert program, type **convert** at the DOS prompt, then press the ENTER key. The convert program converts all previous versions of intercom configuration files to version 7 configuration files. |
| README.TXT | Start-up notes for CSedit. |
| CSEDIT.EXE | The CSedit program. |
| CSEDIT.HLP | The CSedit help file. (Must be located in the same directory as CSEDIT.EXE.) |

In addition, any time you change any settings on the Options menu, CSedit creates a file called CSEDIT.SET in the directory where CSEDIT.EXE is located.

## Copying and Pasting Edit Screens

Any information that you have configured in one edit screen may be copied and pasted to another edit screen of the same type. To copy and paste a screen, proceed as follows:

1. Open the edit screen for the keypanel, party line etc. that you want to copy.

2. Press the F7 key to open the Screen menu. (Or click on the Screen menu with a mouse.)

3. Select “Copy Screen” and press the ENTER key. (Or click on “Copy Screen” with a mouse.) This will copy the entire current edit screen configuration including all settings in all windows.

4. Close the current edit screen and open the edit screen that you want to paste to.

5. Press the F7 key, select “Paste Screen” and press the ENTER key. (Or click on the Screen menu and select “Paste Screen” with a mouse.) The entire configuration that you copied should now appear in the new edit screen. You may continue pasting the same configuration to other edit screens of the same type as long as you do not copy another edit screen.

## Using Search (Keys Menu)

Search is used to locate all keypanels that have keys assigned to a specific port (or party line, IFB etc). Search is useful when you wish to move a user (keypanel, belt pack etc) to a new location, because you will have to find and reassign all the keys that communicate with that user. See "Moving a User to a New Port", below.

## Moving a User to a New Port

Any time you relocate an intercom user, whether a keypanel, belt pack etc. to another location, you must reassign all keys throughout the intercom system that are assigned to talk or listen to that user. This may seem like a large task, but the search feature makes it very easy.

**Note** Whenever you relocate a user, we recommend that you save a backup copy of your configuration file before proceeding. Moving users and reassigning their keys can sometimes have unforeseen results, and you may want to recall the old file.

Example: Suppose that you want to move a user called 1DIR (director 1) from a keypanel connected at port

number 1 to a keypanel connected at port number 20. For the example, assume that keypanels with the following alpha names have keys assigned to talk to director 1: 1AUD, 1TD, 1VID, 1VTR. In order to properly update the intercom system, use the following procedure:

1. Update all keypanels with keys assigned to 1DIR to reflect the director's new location as follows:

   a. From the Keys menu, select "Search" and press ENTER. If your system is trunked, a matrix pick list screen will first appear (Figure 3-1). When you select a matrix to search, a pick list similar to Figure 3-2 will appear.

   If your intercom system is not trunked, the search pick list screen for the local matrix will immediately appear (Figure 3-2).

   b. TAB to the Target Assignment window at the upper-right of the pick list screen (or move the mouse cursor over the window) and type in the name "1DIR". Press the ENTER key, or click on 1DIR with a mouse, to start the search. (Alternatively, you could select 1DIR from the "Ports" pick list at the lower-right of the screen.) The search will result in a pick list of all keypanels with keys assigned to 1DIR (Figure 3-3).

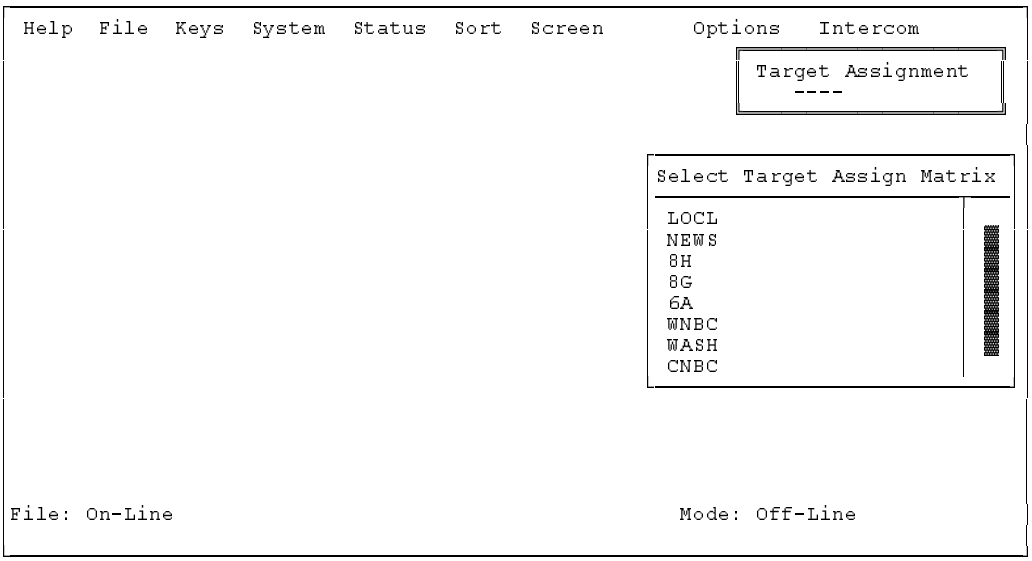



***Figure 3-1. Trunking Intercom Matrix Pick List***

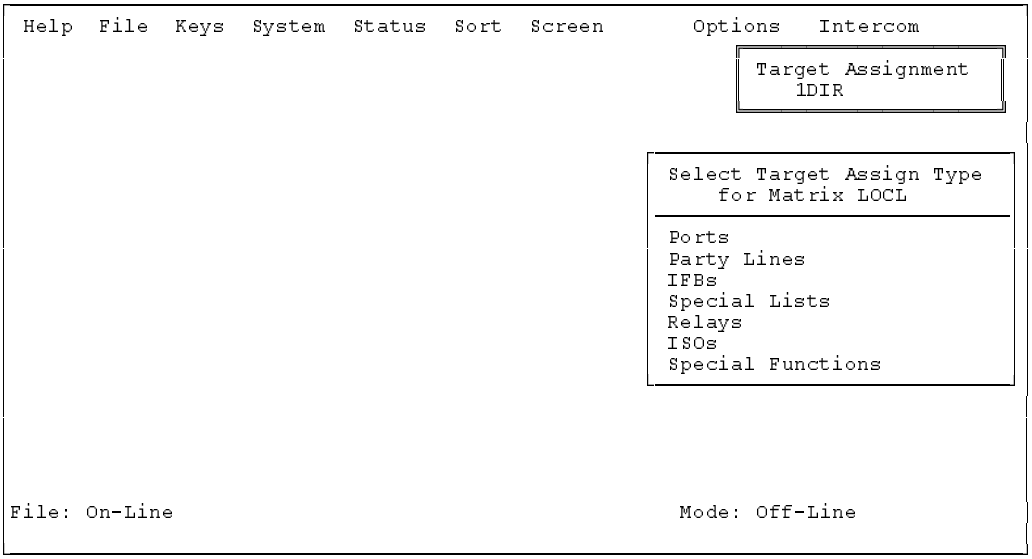



***Figure 3-2. Typical Matrix Pick List (Local Matrix Shown)***

c. Use the cursor keys to select the first port in the search pick list (1AUD), and press the ENTER key. Or, click on 1AUD with a mouse. The keypanel edit screen for that port should appear, and the key assigned to 1DIR should be highlighted (Figure 3-4).

d. Type in the alpha name that is currently being used for port number 20. (Hint: If you do not know the name that is assigned to a port, TAB to the "Select Key Assign Type" window, select "Ports" and press ENTER. Then scroll to the desired port number. Press ENTER to insert that port's name into the setup table in place of "1DIR".)

e. Press the ESCAPE key (or click on any selectable item with the right mouse button) to return to the search pick list (Figure 3-3).

f. Select each port in succession and repeat steps c, d and e.

g. When all ports in the search pick list have been changed, press the ESCAPE key as needed to return to the menu bar.

```
 Help  File  Keys  System  Status  Sort  Screen      Options   Intercom
                                                  Alpha  1AUD      Port  4

                 Alpha | Port |
                 ------------
                  1AUD |   4  |
                  1TD  |   2  |
                  1VID |   3  |
                  1VTR |   5  |

File: On-Line                                      Mode: Off-Line
```

***Figure 3-3. The Search Pick List***

```
 Help  File  Keys  System  Status  Sort  Screen      Options   Intercom
 Setup  1                                Use  Main   Alpha  N001      Port    1

 Talk   T1    T2    Res  Listen  L     Res
   1    ----  ----  .     1     ----  .      Select Key Assign Type
   2    ----  ----  .     2     ----  .          for Matrix LOCL
   3    ----  ----  .     3     ----  .
   4    ----  ----  .     4     ----  .      Ports
   5    ----  ----  .     5     ----  .      Party Lines
   6    ----  ----  .     6     ----  .      IFBs
   7    1DIR  ----  .     7     ----  .      Special Lists
   8    ----  ----  .     8     ----  .      Relays
   9    ----  ----  .     9     ----  .      ISOs
  10    ----  ----  .    10     ----  .      Special Functions
  11    ----  ----  .    11     ----  .
  12    ----  ----  .    12     ----  .
  13    ----  ----  .    13     ----  .
  14    ----  ----  .    14     ----  .
  15    ----  ----  .    15     ----  .          Data Changed
  16    ----  ----  .    16     ----  .
File: New                                          Mode: Off-Line
```

***Figure 3-4. A Keypanel Edit Screen Opened from the Search Pick List***

2. Copy the director's keypanel configuration from the old location to the new location. (See "Copying and Pasting Edit Screens", page 3-2, then return here.)

**Note:** In an actual situation, if there was already a keypanel setup in use at the new location, you could use Copy Screen and Paste Screen to save that setup to some other unused location first.

3. Update the keypanel alpha names:

   a. Open the System menu and select "Port Alphas".

   b. Change the alpha name of the director's old location from "1DIR" to "N001", then change the alpha name of the director's new location to "1DIR".

4. Press ESCAPE as needed to return to the menu bar.

5. Save your changes, then send the changes to the intercom system. (Use "Activate Chgs" on the Intercom menu.) If all steps have been completed correctly, it should now be possible to communicate with the director at the new location.

## Options Menu (F9 Key)

The Options menu (Figure 3-5) is used to change settings for screen colors, baud rate, and COM port usage. For information about the color settings, see "Options, Color", below. For information about COM port and baud rate settings, see "Options, Communications", page 3-6

### Options, Color

When you select "Color" from the Options menu, the "Color and Mono Setup" screen will appear (Figure 3-6). Press the SPACE BAR to select "Automatic" for color operation or "Force Mono" for monochrome operation. "Automatic" detects the presence of a color adapter (CGA, EGA, VGA) and sets up screen colors for color operation. "Force Mono" overrides automatic color setup and forces monochrome (black and white) operation. Force mono is the correct choice, for example, with many laptop computers that have a monochrome LCD display.

**Note** Any time you make any change in the Color and Mono Setup screen and then exit the screen, a file called CSEDIT.SET is created in the CSedit directory. You can customize the screen colors by modifying the CSEDIT.SET file. See "Changing Screen Colors", page 3-1

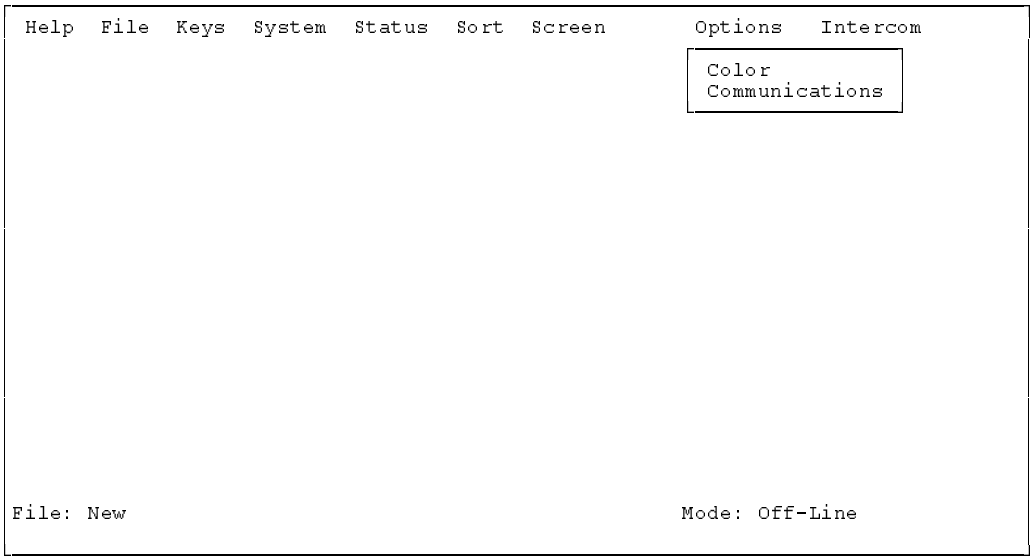



***Figure 3-5. The CSedit Option Menu***

IMPORTANT: IF YOU HAVE A CGA MONITOR, OR A LAPTOP COMPUTER THAT EMULATES CGA.

Do not select “Force Mono” unless you know that your computer also supports monochrome operation. Most CGA machines abort when forced to monochrome. If you select “Force Mono” and the computer aborts, proceed as follows:

1. Reboot the computer, but do not run CSedit.

2. Erase the CSEDIT.SET file from the CSedit directory.

3. Run CSedit. The “Automatic” option will be selected as the default color selection.

NOTE TO LAPTOP COMPUTER USERS

Many LCD laptop computers map color selections to grey-scale values. There are no standards for this mapping, so on some machines, the standard CSedit color scheme will not be readable. If this is the case, you may have to make changes in the CSEDIT.SET file. See "Changing Screen Colors", page 3-1.

## Options, Communications

When you select “Communications” from the Options menu, the Communications Setup screen will appear (Figure 3-7). This menu item is used to set the COM port and baud rate for communication between the computer and the intercom system. If the setting is not correct, CSedit will not be able to get on-line with the intercom system and the mouse may not work. Check and/or change the COM port and baud rate settings as follows:

### COM Port

1. Select the Com Port setting, then press the SPACE BAR to select either "COM1" or "COM2".

2. Press the ESCAPE key to return to the menu screen. After a few moments, the message “Uploading data from intercom” should appear in the lower-left corner of the screen, and “On-line” should appear in the lower-right corner. If not, the cable from the PC to the intercom system may be incorrectly wired. See Appendix A for information about cable wiring.

**Note** If you are using a mouse, you must exit CSedit and restart the program to re-initialize the mouse. To exit, use the LEFT/RIGHT arrow keys to select the File menu on the menu bar (or press F2). Then, use the DOWN arrow key to open the menu. Select “Exit to DOS”, and press the ENTER key. When you restart CSedit, the mouse should be operational.

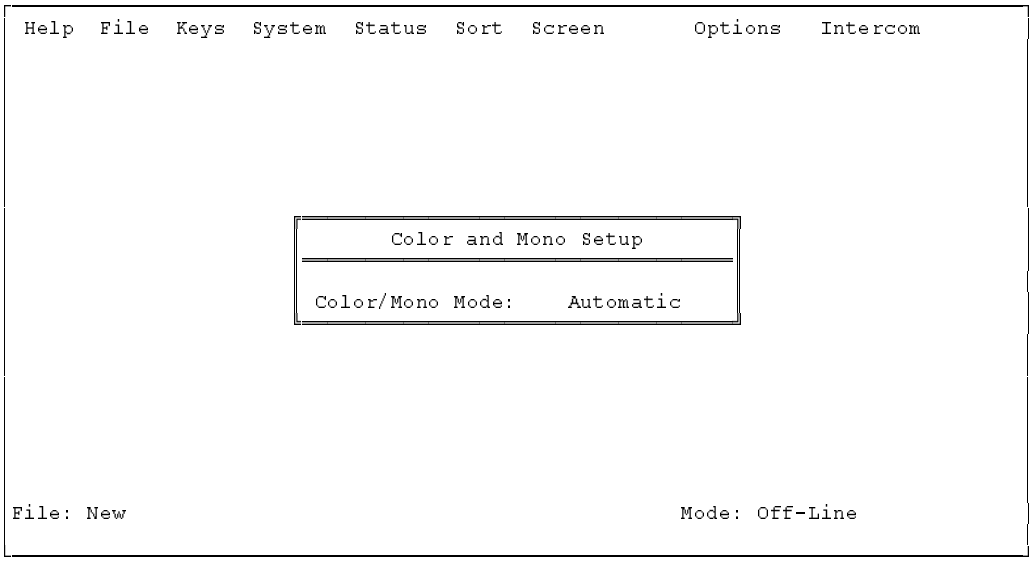



***Figure 3-6. The Color and Mono Setup Screen***

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

                    Communications Setup

                    Baud Rate:    9600
                    Comm Port:    COM1

File: New                                        Mode: Off-Line
```

***Figure 3-7. The Communications Setup Screen***

### Baud Rate

Two baud rates are available: 9600 baud and 38.4K baud. The default baud rate is 9600 baud. Whichever baud rate is used, make sure that DIP switch 1 is set correctly on both the main and backup controller cards in the ADAM or ADAM CS frame.

Operation at 9600 baud allows the use of a longer cable, but results in slower communication between the computer and the intercom system. The parameters for operation at 9600 baud are: no parity, 1 stop bit, 8 data bits, 1 start bit, 9600 baud.

38.4K baud results in fastest operation, but requires a short cable from the computer to the intercom, less than 25 ft (8 m).

## Remote IFB

Remote IFB uses a TIM-940 Tone Activated Switcher and a 2400 Hz tone source as illustrated in Figure 3-8. The 2400 Hz tone source is connected to an audio input port of the matrix. The tone input port and IFB output port are then defined in the IFB edit screen of CSedit (page 2-6). The IFB is then assigned to a keypanel key.

During normal operation, the audio path from the remote audio source to the remote listener passes through the TIM-940 uninterrupted. When the operator at the central control keypanel presses the IFB key, the controller's audio signal, plus the 2400 Hz signal is routed, via the IFB output, to the TIM-940. The TIM-940 removes the 2400 Hz tone from the audio signal and uses this tone to activate the switcher. The switcher cuts off the remote audio signal, and routes the controller's audio signal to the remote listener.

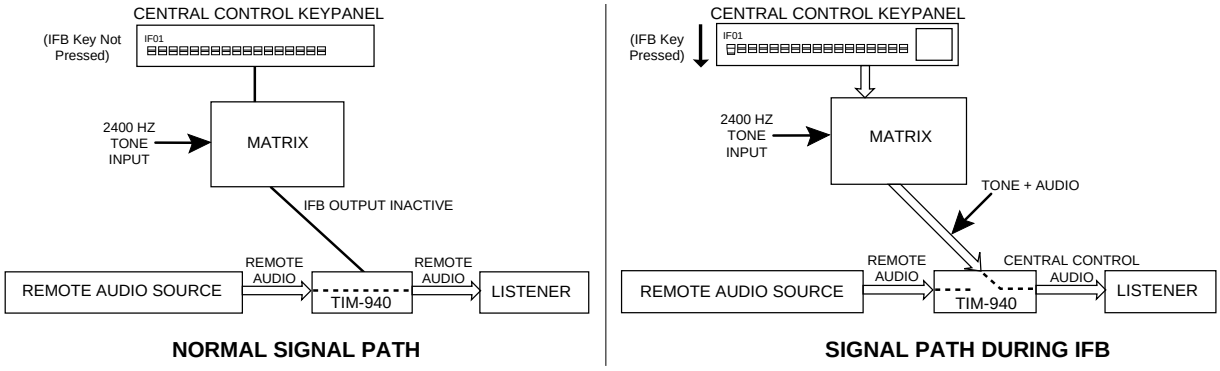



***Figure 3-8. Remote IFB Operation***

## Screen Menu (F7 Key)

The Screen menu is generally selectable only when an edit screen is currently open (for example a keypanel edit screen or a party line edit screen).

### Screen, Cancel Screen Chg

If editing a file other than the on-line file, selecting “Cancel Screen Chgs” will cause all settings in the currently opened edit screen to be restored to the settings when the screen was entered.

If editing the on-line file, selecting “Cancel Screen Chgs” will cause all changes to the current screen to be cleared, and the current intercom setup for the screen will be uploaded from the intercom system.

If editing a force & inhibit table in the System menu, selecting “Cancel Screen Chgs” will cause CSedit to access the intercom system and get updated information about what crosspoints are currently closed. Closed crosspoints will be displayed using check marks √.

If viewing communication error counters in the Status menu, selecting “Cancel Screen Chgs” will cause the communication error counters to be cleared.

### Screen, Paste Screen

Paste Screen is selectable only after an edit screen has been copied using Copy Screen. Selecting “Paste Screen” will cause the copied configuration to be pasted to the current edit screen. All settings for all items in the copied screen will be pasted.

### Screen, Copy Screen

Copy Screen will copy the entire configuration for the current edit screen, including the settings for all items in all windows not currently opened.

Related Topics: "Copying and Pasting Edit Screens", and "Moving a User to a New Port", page 3-2.

## Speed Formatting

Speed formatting is useful when you want to make several identical key assignments in a column, or when you wish to quickly erase all the key assignments in a column. For example, in many intercom systems, the listen keys are usually programmed to auto-follow the corresponding talk key. When the talk key is programmed, the listen key will automatically receive the same assignment. The following example shows how you can rapidly setup all the listen keys on a keypanel for auto-follow operation.

1. From the Keys menu, select “Ports” and press ENTER. The keypanel pick list should appear.

2. Select a keypanel from the keypanel pick list and press ENTER. The keypanel setup screen for that keypanel should appear.

3. Move the cursor to highlight the “L” column for listen key 1.

4. Select “Auto-Follow” from the “Special Functions” pick list at the right side of the screen.

5. Press the “+” key on the computer’s numeric keypad. “AF” should appear in the “L” column of the key assignment table, and the next line in the table should be highlighted. Press the UP cursor key to re-select “AF” and again press the “+” key. If you repeatedly press the UP cursor key followed by the “+” key, the “AF” assignment should be inserted in every line of the key assignment table.

6. To rapidly erase multiple key assignments:

    a. Position the cursor in the key assignment table over the top-most key in a column that you wish to erase.

    b. Select the “No Assgn” special function from the Special Functions pick list.

    c. Hold down the “+” key on the numeric keypad. Key assignments will continue to be erased until you release the “+” key.

## Status Menu (F5 Key)

To access all items in this menu, the computer must be connected to the intercom system, and the on-line file must be opened in CSedit.

### Status, Port

When you select "Port" from the Status menu, the Panel Configuration table appears (Figure 3-9). Port numbers (listed under "Panels") and alphas are listed in the left-most columns. The status of each port is indicated in the right column as follows:

**Bad Off:** Indicates that there has never been any data communication with this port during the current edit session. This could be because the device is not a keypanel, or is a keypanel that is not turned on.

**Bad Cut:** Indicates that there was a data device at the port at some time during the current edit session, but it is not now transmitting data.

**Ok TIF** Indicates that the data device is a telephone interface.

**Ok ?** Indicates that the device is a keypanel with an unknown or earlier version of software.

**Ok 1-7 Kp** Indicates that the device is a normally functioning keypanel. The number 1-7 indicates the keypanel DIP switch settings for switches SW1-1 through SW1-3 on the keypanel rear panel as summarized in the table below. Refer to the keypanel's installation instructions for information on DIP switch settings.

| Number Displayed | Switch Settings | | |
|---|---|---|---|
| | SW1-1 | SW1-2 | SW1-3 |
| 0 | Open | Open | Open |
| 1 | Open | Closed | Open |
| 2 | Closed | Closed | Open |
| 3 | Same as number 2 | | |
| 4 | Open | Open | Closed |
| 5 | Open | Closed | Closed |
| 6 | Closed | Closed | Closed |
| 7 | Same as number 6 | | |

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

                    Panel Configuration
                 Panel | Alpha |  Config
                   1   | N001  | Bad  Off
                   2   | N002  | Bad  Off
                   3   | N003  | Bad  Off
                   4   | N004  | Bad  Off
                   5   | N005  | Bad  Off
                   6   | N006  | Bad  Off
                   7   | N007  | Bad  Off
                   8   | N008  | Bad  Off
                   9   | N009  | Bad  Off
                  10   | N010  | Bad  Off
                  11   | N011  | Bad  Off
                  12   | N012  | Bad  Off
                  13   | N013  | Bad  Off
                  14   | N014  | Bad  Off
                  15   | N015  | Bad  Off

File: On-Line                                  Mode: Off-Line
```

*Figure 3-9. The Panel Configuration Table*

## Status, Standby Controller

This menu item provides information about the current status of the backup, or standby, master controller card in the ADAM or ADAM CS frame. When you select this item, the Standby Master Controller Configuration table appears (Figure 3-10).

The information displayed in the “Config” column indicates status as follows:

**Bad Off:** Indicates that there has never been any data communication with a standby master controller during the current edit session. This could be because the device is not connected or has not been turned on.

**Ok Cur** Indicates that the standby master controller is connected and operating, and that it has been updated with the current intercom system configuration.

**Ok Old** Indicates that the standby master controller is connected and operating, but that it has not been updated with the current intercom system configuration.

**Note:** If several ADAM frames are interconnected using Bus Expansion cards, the status is only reported for the standby master controller in frame number one.

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

                    Stby MC Configuration
                    Stby MC   Config
                          1   Bad  Off

File: On-Line                                       Mode: Off-Line
```

***Figure 3-10. The Standby Master Controller Configuration Table***

## Status, Trunk Master

When you select "Trunk Master" from the Status menu, the Trunking Master Controller configuration table appears (Figure 3-11).

The information displayed in the “Config” column indicates status as follows:

**Bad Off:** Indicates that there has never been any data communication with a trunk master during the current edit session. This could be because the device is not connected or has not been turned on.

**Ok Cur** Indicates that the trunk master is connected and operating, and that it has been updated with the current intercom system configuration.

**Ok Old** Indicates that the trunk master is connected and operating, but that it has not been updated with the current intercom system configuration.

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

                 Trunk Master Configuration
                 Trunk Master |  Config  |
                            1 | Bad  Off |

File: On-Line                                    Mode: Off-Line
```

***Figure 3-11. The Trunking Master Controller Configuration Table***

## Status, PAP

When you select "PAP" from the Status menu, the Program Assign Panel configuration table appears (Figure 3-12).

The information displayed in the “Config” column indicates status as follows:

**Bad PAP:** Indicates that there has never been any data communication with a Program Assign Panel during the current edit session. This could be because the device is not connected or has not been turned on.

**Ok PAP** Indicates that the Program Assign Panel is connected and operating.

```
Help  File  Keys  System  Status  Sort  Screen       Options   Intercom

                    PAP  Configuration
                 PAP      Config
                   1   Bad  PAP
                   2   Bad  PAP
                   3   Bad  PAP
                   4   Bad  PAP

File: On-Line                                        Mode: Off-Line
```

***Figure 3-12. The Program Assign Panel Configuration Table***

## Status, UIO-256

When you select "UIO-256" from the Status menu, the UIO-256 configuration table appears (Figure 3-13).

The information displayed in the “Config” column indicates status as follows:

**Bad Off:** Indicates that there has never been any data communication with a UIO-256 during the current edit session. This could be because the device is not connected or has not been turned on.

**Ok Cur** Indicates that the UIO-256 is connected and operating, and that it has been updated with the current intercom system configuration.

**Ok Old** Indicates that theUIO-256 is connected and operating, but that it has not been updated with the current intercom system configuration.

**Note** If several UIO-256's are connected in a "ring" configuration, the status screen will only verify the operation of the UIO-256 directly connected to the intercom system.

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

                    UIO-256 Configuration
                    UIO-256 |   Config  |
                          1 | Bad  Off |
                          2 | Bad  Off |
                          3 | Bad  Off |
                          4 | Bad  Off |
                          5 | Bad  Off |
                          6 | Bad  Off |
                          7 | Bad  Off |
                          8 | Bad  Off |
                          9 | Bad  Off |
                         10 | Bad  Off |
                         11 | Bad  Off |
                         12 | Bad  Off |
                         13 | Bad  Off |
                         14 | Bad  Off |
                         15 | Bad  Off |

File: On-Line                                   Mode: Off-Line
```

***Figure 3-13. The UIO-256 Configuration Table***

## Status, Diagnostics

When you select Diagnostics from the Status menu, a pick list of available diagnostics appears (Figure 3-14).

### Diagnostics, CSedit Version

This selection indicates the version number of CSedit.

### Diagnostics, MC Version

This selection indicates the version number of the ROM contained in the master controller.

### Diagnostics, Comm Error Screens

When you select any of the comm error items, a screen similar to Figure 3-15 will appear. This particular screen shows data communication errors between ports and the master controller (MC). Port numbers are listed on the left side of the table, followed by their names in the next column. The “Msgs From KP” column indicates transmission errors from keypanels to the master controller. The “Msgs to KP” column indicates transmission errors from the master controller to keypanels. Errors are documented in two ways: the “Err” columns indicate total accumulated errors. The “BER” column indicates the bit error rate during the last ten minutes of operation. The counters are reset to zero on reset or power-up of the controller. The counters may be updated by pressing the ENTER key. In general, error rates of no more than one error per hour are normal. Error rates between one per hour and one per minute are higher than normal but may not cause significant problems. Error rates greater than 1 per minute usually require immediate attention.

Systems installed in facilities with good grounding, using high quality telephone type twisted pair wiring will normally operate with error rates between 0 and 20 per 24 hours. With shielded wire, the rates are generally higher, because of the additional cable capacitance (5-30 per 24 hours). Symptoms of higher error rates begin to appear when the rate exceeds 1 per minute. Symptoms include cross points which remain closed for no apparent reason, IFB’s with muted program when no keys are closed, slow response, and general inconsistent or “flaky” operation. General causes of high error rates include:

- Cables too long
- Poor facility grounding practices
- Crosstalk, especially when using non-twisted wiring, with long parallel runs of data cables in close proximity to each other containing differing data streams.
- Noise induction: Keypanel cabling running parallel to lighting cables etc.
- A bad keypanel: One keypanel of a group of 10 has a failed RS485 driver or processor.
- One side of a data line shorted to ground or audio

```
Help  File  Keys  System  Status  Sort  Screen      Options   Intercom

                    Select Diagnostic Type
                 CSedit Version
                 MC Version

                 KP <=> MC Comm Errors
                 PAP<=> MC Comm Errors
                 MC <=> UIO-256 Comm Errors
                 MC <=> Standby MC Comm Errors
                 MC <=> Trunk Master Comm Errors
                 MC <=> CSedit Comm Errors

File: On-Line                                   Mode: Off-Line
```

***Figure 3-14. The Diagnostics Pick List***

```
Help  File  Keys  System  Status  Sort  Screen       Options   Intercom

                    KP <=> MC Comm Errors
 KP   Description   Msgs From KP   Msgs To KP
                    Err      BER   Err      BER
  1   ZXCV           0        0     0        0
  2   BGTF           0        0     0        0
  3   CUBI           0        0     0        0
  4   BGTF           0        0     0        0
  5   NJUK           0        0     0        0
  6   OKMJ           0        0     0        0
  7   WSDE           0        0     0        0
  8   TFRT           0        0     0        0
  9   BHGT           0        0     0        0
 10   UHJN           0        0     0        0
 11   OKLP           0        0     0        0
 12   CDES           0        0     0        0
 13   AWAW           0        0     0        0
 14   VCFG           0        0     0        0

File: On-Line                                   Mode: Off-Line
```

***Figure 3-15. A Typical Communications Error Screen***

## System, Digital Inputs

The digital inputs screen lets you assign the inputs of an optional UIO-256 frame to simulate keypanel keys. The digital inputs screen can also be used to assign the eight digital inputs available at the J903 connector on the back of an ADAM CS frame.

When you select Digital Inputs from the System menu, the Digital Input Edit Screen should appear (Figure 3-16). In the example, digital input #1 has been assigned to simulate talk key #1 for intercom port N001.

```
Help  File  Keys  System  Status  Sort  Screen       Options   Intercom

              Digital Input Assignments                  Outputs
Inp  Chg  Key Panel   Key   T/L                   Alpha   Port
 1   √    N001   1    1     ·T                    N001    1
 2   ·    ----   ·    ·     ·                     N002    2
 3   ·    ----   ·    ·     ·                     N003    3
 4   ·    ----   ·    ·     ·                     N004    4
 5   ·    ----   ·    ·     ·                     N005    5
 6   ·    ----   ·    ·     ·                     N006    6
 7   ·    ----   ·    ·     ·                     N007    7
 8   ·    ----   ·    ·     ·                     N008    8
 9   ·    ----   ·    ·     ·                     N009    9
10   ·    ----   ·    ·     ·                     N010   10
11   ·    ----   ·    ·     ·                     N011   11
12   ·    ----   ·    ·     ·                     N012   12
13   ·    ----   ·    ·     ·                     N013   13
14   ·    ----   ·    ·     ·                     N014   14
15   ·    ----   ·    ·     ·                     N015   15
16   ·    ----   ·    ·     ·                     N016   16

File: New                                       Mode: Off-Line
```

***Figure 3-16. The Digital Input Edit Screen***

# System, Force & Inhibit

## General Usage

You can force a crosspoint to create a continuously activated talk and/or listen path between a selected port and any other port. You can also inhibit crosspoints to block communications between selected ports. Finally, you can view all the connections from a selected port to all other ports.

Force is commonly used to establish communication paths through the matrix when the inputs and outputs involved are not keypanels. It can also be used with keypanels to force communication paths to be on continuously. Inhibit is used to restrict communication between keypanels. It is commonly used to prevent feedback between adjacent keypanels when they are using the same party line. Inhibiting the two crosspoints between adjacent keypanels will effectively “mix minus” the two keypanels without affecting communication with other ports on the party line.

When you select "Force & Inhibit" from the System menu, a pick list of ports will appear (Figure 3-17). Select a port from the pick list to view the force & inhibit screen for that port.

Figure 3-18 shows the force inhibit screen for port N001. The name of the selected port is shown in the window at the upper right. The names of all connecting ports and their port numbers are displayed in the “Alph” and “Port” columns of the “Connecting Ports” table. The “→M→” column is actually two columns. The “→M” column indicates “from the port at the left to me”, where “me” in this case is port N001. The “M→” column indicates “from me to the port at the left”. The “→M→” columns provide the following indications:

F: Indicates that a crosspoint is “forced” closed

I: Indicates that a crosspoint is “inhibited”, or prevented from closing

√: Indicates that a crosspoint is currently closed (a keypanel key is activated)

A blank space indicates that a crosspoint is neither forced nor inhibited nor currently closed.

**To change the setting of a crosspoint:** Use the cursor keys to select the desired crosspoint, then use the space bar to change the setting. (Or, simply click on a crosspoint with a mouse.) Once you have made any desired changes, press the ESCAPE key to return to the menu bar. Then, select "Activate Chgs" from the Intercom menu to send the changes to the intercom system.

**Note:** If keypanel keys are turned on and off while the force & inhibit screen is displayed, the screen may not show it. To update the screen and see which crosspoints are currently closed, press the ENTER key. Each time you press the ENTER key, CSedit will upload the current crosspoint status from the intercom system. If you modify any crosspoint settings, you should first send your changes to the intercom before performing a screen update. Otherwise, your changes may be erased.

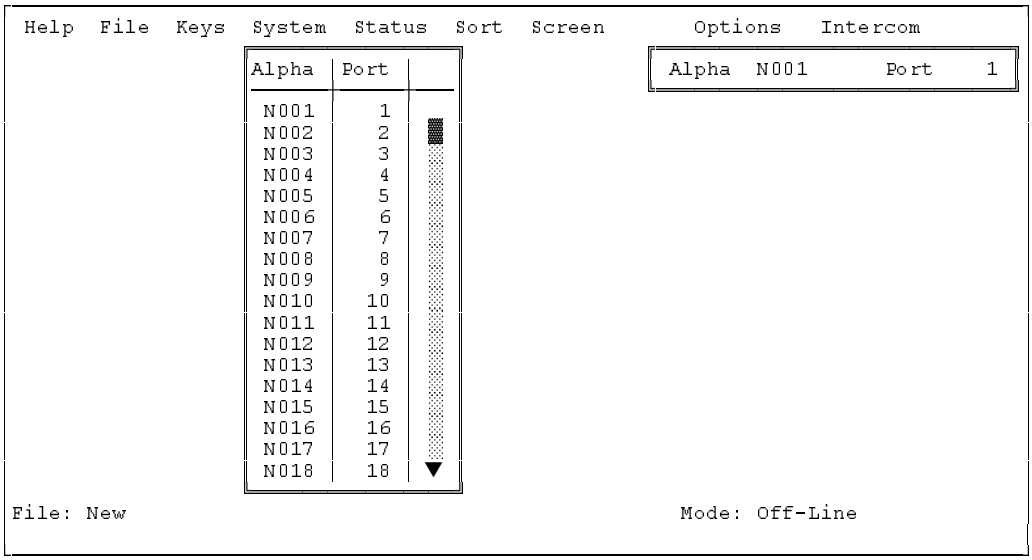



***Figure 3-17. The Pick List for Force and Inhibit***

```
Help  File  Keys  System  Status  Sort  Screen        Options   Intercom
                                                  Alpha  N001     Port     1
                                                  Data Changed             √

                          Connecting Ports
Alph | Port | →M→ | Alph | Port | →M→ | Alph | Port | →M→ | Alph | Port | →M→ | Alph | Port | →M→
N001 |   1 |     | N002 |   2 |     | N003 |   3 |     | N004 |   4 |     | N005 |   5 |
N006 |   6 |  √  | N007 |   7 |     | N008 |   8 |  √  | N009 |   9 |     | N010 |  10 |
N011 |  11 |     | N012 |  12 |     | N013 |  13 |     | N014 |  14 |     | N015 |  15 |
N016 |  16 |     | N017 |  17 |     | N018 |  18 |     | N019 |  19 |     | N020 |  20 |
N021 |  21 |  √ √ | N022 |  22 |   I | N023 |  23 |     | N024 |  24 |   F | N025 |  25 |
N026 |  26 |     | N027 |  27 |     | N028 |  28 |   F | N029 |  29 |     | N030 |  30 |
N031 |  31 |   F | N032 |  32 |     | N033 |  33 |     | N034 |  34 |     | N035 |  35 |
N036 |  36 |     | N037 |  37 |     | N038 |  38 |   √ | N039 |  39 |     | N040 |  40 |
N041 |  41 |   F | N042 |  42 |     | N043 |  43 |     | N044 |  44 |     | N045 |  45 |  √
N046 |  46 |     | N047 |  47 |     | N048 |  48 |   F | N049 |  49 |   F | N050 |  50 |

File: On-Line                                        Mode: Off-Line
```

***Figure 3-18. Typical Force & Inhibit Screen (Port Alpha N001 Shown)***

## Typical Application of Forced Crosspoint

Example: Suppose you want to create an output with the director and producer permanently on it, and distribute this output to the studio floor. To do this, proceed as follows:

1. Connect a matrix output to the studio distribution amplifier.

2. From the System menu select "Key Panel Alphas", and name the output to the amplifier “HOT” (for “hot mic”).

3. From the System menu, select "Force & Inhibit".

4. Select the director’s panel from the force and inhibit pick list. Then, insert an "F" in the “M→” column next to the port named "HOT", as shown in Figure 3-19.

5. Press the ESCAPE key to return to the force and inhibit pick list. Then, select the producer’s panel. Insert an "F" in the “M→” column next to the port named "HOT", as shown in Figure 3-20.

6. Press the ESCAPE key as required to return to the menu bar.

7. Send the changes to the intercom system. The director and producer will now both have hot mics to the output HOT, which you have distributed to the studio floor.

```
Help  File  Keys  System  Status  Sort  Screen        Options   Intercom
                                                  Alpha  DIR      Port     1
                                                  Data Changed             √

                          Connecting Ports
Alph | Port | →M→ | Alph | Port | →M→ | Alph | Port | →M→ | Alph | Port | →M→ | Alph | Port | →M→
DIR  |   1 |     | PROD |   2 |     | HOT  |   3 |   F | N004 |   4 |     | N005 |   5 |
N006 |   6 |     | N007 |   7 |     | N008 |   8 |     | N009 |   9 |     | N010 |  10 |
N011 |  11 |     | N012 |  12 |     | N013 |  13 |     | N014 |  14 |     | N015 |  15 |
N016 |  16 |     | N017 |  17 |     | N018 |  18 |     | N019 |  19 |     | N020 |  20 |
N021 |  21 |     | N022 |  22 |     | N023 |  23 |     | N024 |  24 |     | N025 |  25 |
N026 |  26 |     | N027 |  27 |     | N028 |  28 |     | N029 |  29 |     | N030 |  30 |
N031 |  31 |     | N032 |  32 |     | N033 |  33 |     | N034 |  34 |     | N035 |  35 |
N036 |  36 |     | N037 |  37 |     | N038 |  38 |     | N039 |  39 |     | N040 |  40 |
N041 |  41 |     | N042 |  42 |     | N043 |  43 |     | N044 |  44 |     | N045 |  45 |
N046 |  46 |     | N047 |  47 |     | N048 |  48 |     | N049 |  49 |     | N050 |  50 |

File: On-Line                                        Mode: Off-Line
```

***Figure 3-19. Director Microphone Forced to Output “HOT”***

```
Help  File  Keys  System  Status  Sort  Screen        Options   Intercom
                                                   Alpha  PROD    Port    2
                                                   Data Changed           √

                          Connecting Ports
Alph | Port | →M→ | Alph | Port | →M→ | Alph | Port | →M→ | Alph | Port | →M→ | Alph | Port | →M→ |
DIR     1          PROD    2          HOT     3     F  N004    4          N005    5
N006    6          N007    7          N008    8        N009    9          N010   10
N011   11          N012   12          N013   13        N014   14          N015   15
N016   16          N017   17          N018   18        N019   19          N020   20
N021   21          N022   22          N023   23        N024   24          N025   25
N026   26          N027   27          N028   28        N029   29          N030   30
N031   31          N032   32          N033   33        N034   34          N035   35
N036   36          N037   37          N038   38        N039   39          N040   40
N041   41          N042   42          N043   43        N044   44          N045   45
N046   46          N047   47          N048   48        N049   49          N050   50

File: On-Line                                          Mode: Off-Line
```

***Figure 3-20. Producer Microphone Forced to Output "HOT"***

## System, Special Functions

When you select "Special Functions" from the System menu, the Special Function Assignments screen will appear (Figure 3-21). This screen allows you to restrict access to the special function key assignments or rename the special functions. To apply restrictions, move to the "AUC" column. Use the SPACE BAR or click with a mouse to place or remove check marks as desired:

A Access Restricted: A check mark under "A" prevents keypanel operators in your intercom system from assigning this special function to keys from their keypanels.

U Univ Scroll Restricted: If your intercom system is trunked with other intercom systems, a check mark under "U" prevents keypanel operators in the other intercom systems from assigning this special function to keys from their keypanels. Normally you will want to restrict outside keypanel access, so a check mark is placed here by default.

C CSedit Scroll Restricted: A check mark under "C" prevents CSedit users on other intercom systems from assigning this special function in their intercom systems. Normally you will want to restrict outside CSedit access, so a check mark is placed here by default.

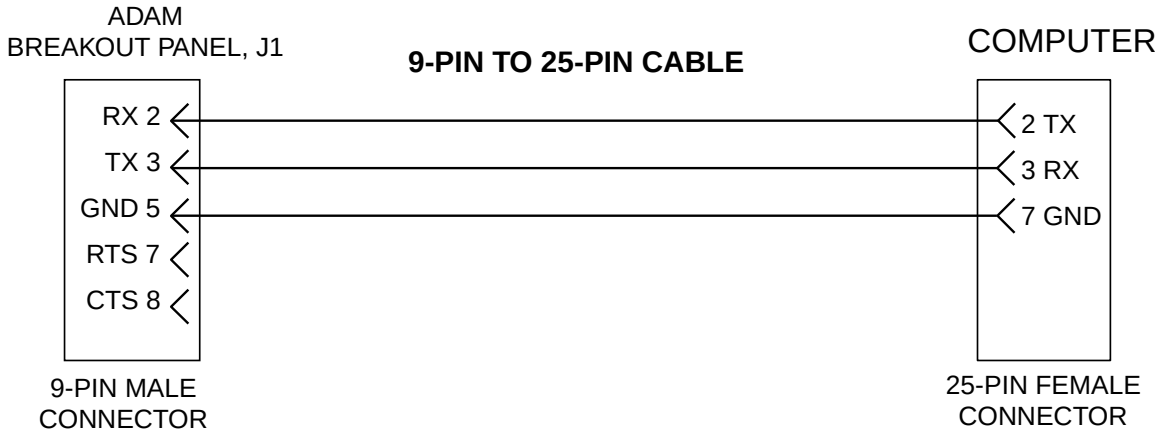
To rename a special function, position the cursor in the "Alpha" column and enter a new name (4 characters max.)

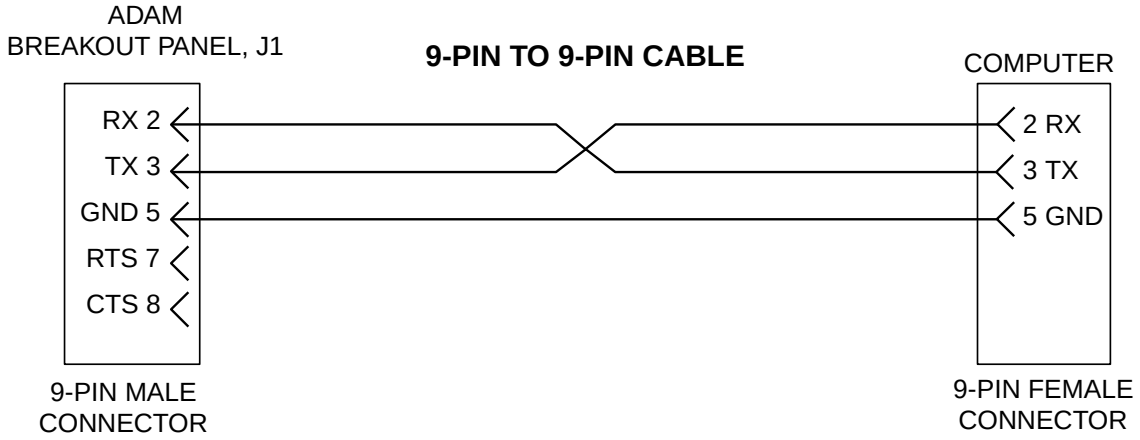
```
Help  File  Keys  System  Status  Sort  Screen        Options   Intercom

                 Special Function Assignments
Alpha | Special Function | Chg | AUC |
 ---- | No Assignment    |  ·  | ·√√ |
 AC   | All Call         |  ·  | ·√√ |
 AF   | Auto-Follow      |  ·  | ·√√ |
 AL   | Auto-Listen      |  ·  | √√√ |
 AR   | Auto-Reciprocal  |  √  | ·√√ |
 AM   | Auto-Mute        |  ·  | ·√√ |

File: New                                              Mode: Off-Line
```

***Figure 3-21. The Special Function Assignments Screen***

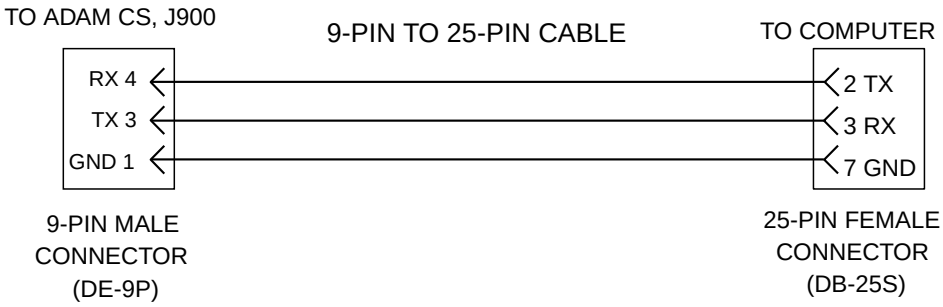
## Appendix

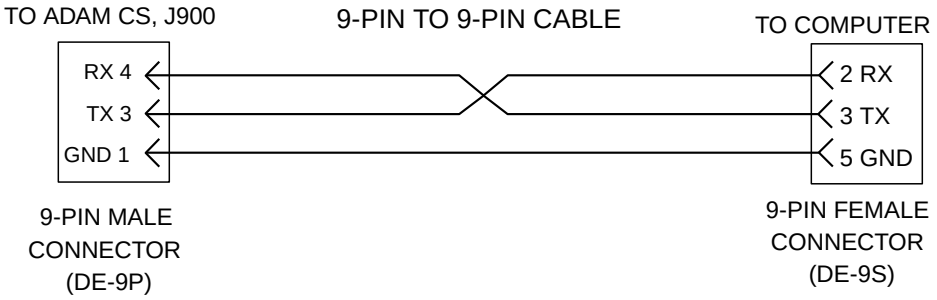
## PC to Intercom System Interconnect Cable Wiring for ADAM Intercom



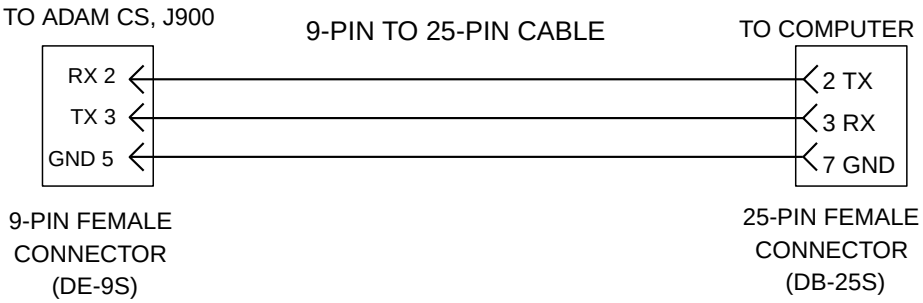



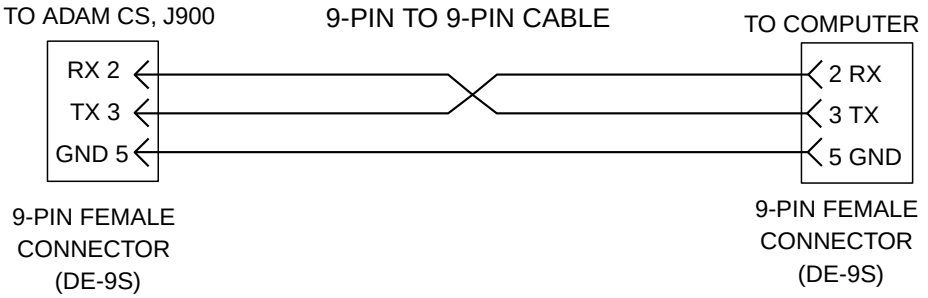
## PC to Intercom System Interconnect Cable Wiring for ADAM CS Intercom




**ADAM CS FRAME WITH FEMALE J900 CONNECTOR**




**ADAM CS FRAME WITH MALE J900 CONNECTOR**

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# ADAM™
# ADVANCED DIGITAL AUDIO MATRIX

## ADDENDUM 1

**Intercom System Effectivity: ADAM AND ADAM CS**

**Manual Effectivity: CSedit User Manual, 9350-7077-300, Rev B, 8/96**

**Description: Logging Feature**

RTS™

## Introduction

This addendum supplements manual number 9350-7077-300, Revision B, “CSedit Intercom Configuration Software for ADAM and ADAM CS Intercom Systems”. It describes the logging feature which was added to CSedit.

## Logging Description

You use logging to record intercom key activations and deactivations. Each time a key is pressed or released, a new record is created. If you select Log to File, each new record will be uploaded to the configuration computer and appended to a text file. You specify the directory where the text file is stored (the default directory is the directory where the CSedit program is located), while the name for the text file is created by CSedit and is of the format yearmonthday.log. Example 970609.log would be the log file created for June 9, 1997.

If you select Log to Port, the log data is output on a dedicated RS232 port of the intercom system. If you have the appropriate communications software to communicate with this port, you can use it to capture the logging text to a file or to monitor intercom activity. For the ADAM Intercom System, the dedicated logging port is located on J9 of the XCP-ADAM-MC Master Controller Breakout Panel: pin 3 is RX and pin 8 is TX. For the ADAM CS Intercom Frame, the dedicated logging port is located on J902: pin 3 is RX and pin 8 is TX. In either case, the port parameters are 9600 baud, no parity, 8 data bits, 1 stop bit. There is no handshaking on this port.

The format for each log record is as follows:

Yymmdd,hhmmssff,nnn,aaaa,mm,ff,nnn,aaaa,xx,(27 blank spaces)

Each log record ends with a DOS new-line (carriage return/line feed). Total record length is 70 characters, plus the CR/LF. The data fields in each record are delimited by commas, and the data in the fields are as follows:

yymmdd - Date

hhmmssff - Time (ff = frames)

nnn,aaaa - requester's port number and corresponding 4-character alpha

mm,ff,nnn,aaaa - target matrix number, function type, function number, function alpha. (Target matrix number 00 means the local matrix.)

xx - one of the 4 pairs TY, TN, LY, or LN, where T=talk, L=Listen, Y=yes (key on), and N=no (key off)

Example: if a keypanel at intercom port 4 with alpha "DIR " calls local party-line 3 with alpha "CAM ", the following might be logged:

970522,17220413,004,DIR ,00,PL,003,CAM ,TY,(27 blank spaces)

There are some peculiarities when it comes to trunking. For example, suppose JOE calls FRED (a P-P in a different matrix). A line such as the following might be logged: date/time,017,JOE ,07,PP,103,FRED,TY,(27 blank spaces)

This might then be followed by one or two lines which connect JOE to a trunk. For example, the following line might get added: date/time,041,TK19,00,PP,017,JOE ,LY,(27 blank spaces). This reflects that port 41 (trunk 19) effectively turned on a listen key assigned to JOE so that the trunk could hear Joe, i.e. so that Joe's audio is fed to the trunk.

# ADAM™
# ADVANCED DIGITAL AUDIO MATRIX

## ADDENDUM 2

**Intercom System Effectivity: ADAM and ADAM CS**

**Manual Effectivity: CSedit User Manual, 9350-7077-300, Rev B, 8/96**

**Contents: DIM Tables Description**

RTS™

## Introduction

This addendum supplements manual number 9350-7077-300, Revision B, “CSedit Intercom Configuration Software for ADAM and ADAM CS Intercom Systems”. It describes the DIM Tables feature which was added to CSedit.

## Dim Tables Description

A Dim Table is simply a list of two or more keypanels that are located in close proximity to one another. Normally, in this situation, feedback could occur if two or more keypanels have keys activated to communicate with a common destination, or if one keypanel has a key activated to talk to the destination and another is receiving audio from the destination even though it does not have a key activated (for example, the destination is talking to it). By using dim tables, the intercom system will automatically mute, or dim, one or both keypanel speaker outputs while this situation exists. When you configure a dim table, you can also define the amount of speaker dimming.

Setup and use dim tables as follows:

1. From the CSedit System menu, select Dim Tables.

```
Help  File  Keys  System  Status  Sort  Screen  Log  Options  Intercom
                  +-------------------+
                  | Port Alphas       |
                  | Party Lines       |
                  | IFB Buses         |
                  | Special Lists     |
                  | Relays            |
                  | ISOs              |
                _ | Dim Tables        |
                  | Digital Inputs    |
                  | Force & Inhibit   |
                  | Special Functions |
                  +-------------------+
```

***Figure 1. System Menu, DIM Tables***

2. A pick list of dim tables will appear. Dim tables have default names Dim 01, Dim 02 etc. You can change these names as you configure the dim tables.

```
+====================+
|   Name   | DIM |   |
|----------+-----+---|
| Dim 01   |   1 |   |
| Dim 02   |   2 | _ |
| Dim 03   |   3 | _ |
| Dim 04   |   4 | _ |
| Dim 05   |   5 | _ |
| Dim 06   |   6 | _ |
| Dim 07   |   7 | _ |
| Dim 08   |   8 | _ |
| Dim 09   |   9 | _ |
| Dim 10   |  10 | _ |
| Dim 11   |  11 | _ |
| Dim 12   |  12 |   |
+====================+
```

***Figure 2. DIM Tables Pick List***

3. Select a dim table and press Enter. The Dim Table Port Assignments screen will appear as shown below. In this example, the table for Dim 01 is shown:

```
 Help  File  Keys  System  Status  Sort  Screen      Options  Intercom
                                              +================================+
                                              | Name  Dim 01    Dim Table    1 |
                                              +================================+


+==============================================================================+
|                           Dim Table Port Assignments                         |
|----+-----+---+----+-----+---+----+-----+---+----+-----+---+----+-----+---+---|
|Alph|Port | S |Alph|Port | S |Alph|Port | S |Alph|Port | S |Alph|Port | S |   |
|----+-----+---+----+-----+---+----+-----+---+----+-----+---+----+-----+---+---|
|N001|   1 | • |N002|   2 | • |N003|   3 | • |N004|   4 | • |N005|   5 | • |   |
|N006|   6 | • |N007|   7 | • |N008|   8 | • |N009|   9 | • |N010|  10 | • | _ |
|N011|  11 | • |N012|  12 | • |N013|  13 | • |N014|  14 | • |N015|  15 | • | _ |
|N016|  16 | • |N017|  17 | • |N018|  18 | • |N019|  19 | • |N020|  20 | • | _ |
|N021|  21 | • |N022|  22 | • |N023|  23 | • |N024|  24 | • |N025|  25 | • | _ |
|N026|  26 | • |N027|  27 | • |N028|  28 | • |N029|  29 | • |N030|  30 | • | _ |
```

***Figure 3. The DIM Table Port Assignments Screen for DIM 01***

4. Position the cursor in the "S" column next to each keypanel that is very close to another keypanel and is having a feedback problem. Click the mouse or use the spacebar to place a check in the column.

☞ There may be several keypanels closely spaced in a room, but there may only be feedback between one keypanel and another keypanel right next to it. In this case, place only those two keypanels in the dim table. If two other keypanels are having a separate feedback problem, use a different dim table for those keypanels.

5. After you have placed the desired keypanels in the dim table, use the tab key to select the window at the upper-right of the screen.

```
+================================+
| Name  Dim 01    Dim Table    1 |
+================================+
```

... then press Enter to open the window:

```
+================================+
| Name  Dim 01    Dim Table    1 |
| DIM Gain  -6DB  DIM Index   12 |
| Data Changed                 • |
+================================+
```

6. If desired, position the cursor over the "Name" field and type in a descriptive name for the dim table. You can use up to 8 characters. For example, let's say that there are several keypanels located in a control room. A few of these keypanels located on the left side of the room have a feedback problem. Several other keypanels located on the right side of the room have a separate feedback problem amongst themselves but not with the keypanels on the left side of the room. You could create two dim tables. Name one table CR1LEFT (control room #1 left). Name the other CR1RIGHT. Now place keypanels in the respective dim tables as previously described.

7. Select the "DIM Gain" field and press Enter. The gain table will appear (Figure 4). Scroll up or down in the table to select the desired amount of dimming, then press Enter. The selected value will appear in the window at the upper-right of the screen. Use the minimum amount of dimming required to eliminate feedback. Generally, start with -6dB. Then, increase the amount of dimming if feedback still occurs, or decrease the amount of dimming if feedback is only a slight problem. Remember that any subsequent adjustments to the volume controls on the respective keypanels may cause the feedback problem to return.

```
                    +================================+
+==========+        | Name  Dim 01    Dim Table    1 |
| Gain |   |        | DIM Gain  -6DB  DIM Index   12 |
|------+---|        | Data Changed                 √ |
| +6DB |   |        +================================+
| +5DB | _ |
| +4DB | _ |
| +3DB | _ |
| +2DB | _ |
| +1DB | _ |
|  0DB | _ |
| -1DB | _ |
| -2DB | _ |
| -3DB | _ |
| -4DB | _ |
| -5DB | _ |
| -6DB | _ |
| -7DB | _ |
+==========+
```

***Figure 4. The DIM Gain Table***

8. Any time you make a change to a dim table, a check mark will appear next to "Data Changed". Any changes that you made will be sent to the intercom system when you select "Activate Chgs" from the "Intercom" menu. However, a few other changes need to be made first; press the Escape key as needed to return to the main menu screen.

9. In order for dim tables to work, you must assign the dim function as a level 2 talk key assignment for each key that has a feedback problem. For example, let’s say that keypanels N001 and N002 are located right next to one-another, and both have key 1 assigned to communicate with DIR1. Assume that both keypanels have already been assigned to dim table "CR1LEFT". Make the level 2 assignment as follows:

10. From the menu bar, select the "Keys" menu, then select "Ports".

11. Select port N001 from the pick list and press Enter.

12. Position the cursor in the T2 column for key 1 and type DIM as shown (Figure 5).

☞ You could also use the "Select Key Assign Type" pick lists at the right side of the screen to assign the dim function. The dim function is located in the "Special Functions" pick list. Generally, you will only use this method when assigning the dim function at the keypanel rather than from within CSedit.

13. Press Escape to return to the main menu. To continue the example, you would repeat the dim key assignment for keypanel N002.

14. When you are finished setting up dimming, send your changes to the intercom system by selecting "Activate Chgs" from the "Intercom" menu.

15. Check operation by going to the keypanels and activating the keys that have the feedback problem. Note that -6dB dimming causes a significant reduction in the speaker output level. If a situation allows it, you might try changing to -3dB of dimming for example. Just remember that adjusting the volume controls on the keypanels may cause the feedback problem to reappear.

☞ When you activate dimming on a keypanel, the intercom system will not dim that keypanel, but only any other keypanels that are communicating with the same destination. This applies when the other keypanels have keys activated to talk to the destination or when the destination has keys activated to talk to them. Only by activating keys at other keypanels will the speaker at your keypanel be dimmed.

```
 Help  File  Keys  System  Status  Sort  Screen      Options  Intercom
+=============================================+  +============================+
| Setup  1                            Use  Main |  | Alpha  N001      Port    1 |
|======+======+======+=====+======+======+=====|  +============================+
| Talk |  T1  |  T2  | Res |Listen|  L   | Res |
|------+------+------+-----+------+------+-----|
|   1  | DIR1 | DIM  |  •  |   1  | ---- |  •  |  +----------------------------+
|   2  | ---- | ---- |  •  |   2  | ---- |  •  |  |   Select Key Assign Type   |
|   3  | ---- | ---- |  •  |   3  | ---- |  •  |  |      For Matrix LOCL       |
|   4  | ---- | ---- |  •  |   4  | ---- |  •  |  |----------------------------|
|   5  | ---- | ---- |  •  |   5  | ---- |  •  |  | Ports                      |
|   6  | ---- | ---- |  •  |   6  | ---- |  •  |  | Party Lines                |
|   7  | ---- | ---- |  •  |   7  | ---- |  •  |  | IFBs                       |
|   8  | ---- | ---- |  •  |   8  | ---- |  •  |  | Special Lists              |
|   9  | ---- | ---- |  •  |   9  | ---- |  •  |  | Relays                     |
|  10  | ---- | ---- |  •  |  10  | ---- |  •  |  | ISOs                       |
|  11  | ---- | ---- |  •  |  11  | ---- |  •  |  | Special Functions          |
|  12  | ---- | ---- |  •  |  12  | ---- |  •  |  +----------------------------+
|  13  | ---- | ---- |  •  |  13  | ---- |  •  |
|  14  | ---- | ---- |  •  |  14  | ---- |  •  |
|  15  | ---- | ---- |  •  |  15  | ---- |  •  |  +============================+
|  16  | ---- | ---- |  •  |  16  | ---- |  •  |  |         Data Changed       |
+=============================================+  +============================+
File: New                                                   Mode: Off-Line
                                                         Assign: LOCL ----
```

***Figure 5. A Keypanel with Dimming Assigned to a Talk Key***