



Winning Solutions...Worldwide

**DOWNLOAD FOR
WINDOWS®
Software Version 2.0
User Manual**

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There is a Mikohn product in every casino in the world. This simple statement is a testimony to MIKOHN's influence as a key supplier to the international gaming industry. Within its three core divisions, MIKOHN's diversified portfolio encompasses high-tech player tracking and management information systems, advanced system for the automation of table games, turn-key design and manufacturing for high impact interior and exterior signage and lighting displays, and a wide and growing number of proprietary specialty games.

DISPLAYS

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1. Overview and Installation

The MIKOHN DOWNLOAD FOR WINDOWS v2.0 program (DOWNLOAD from here on) is an application MIKOHN developed to transfer files back and forth between a computer running MICROSOFT WINDOWS 95®, 98®, or NT®, and a SUPREME, AGL, or MARK 2 logic board. Typically DOWNLOAD is loaded onto a laptop computer that is used on the casino floor to configure displays. The files used can be of any type, but most often will be *.pic*, *.mik*, *.pdf*, and *.sh~* animation files; *.fnt* font files; and *.txt* text files.

1.1 How to Install DOWNLOAD

DOWNLOAD requires four megabytes of free disk space on your computer. The installation program does not check for free disk space, and if the computer does not have sufficient free space, the installation will fail and report that certain files could not be found.

To install the program, perform the following steps:

1. Insert the DOWNLOAD installation CD or floppy disk one into your drive. Navigate to the drive and double-click on the *setup.exe* file.
2. The **Install** screen will appear with the message *copying files*. The installation may detect that certain WINDOWS files the program needs on your computer are older than the most recent versions. The program will overwrite the older files and prompt you to restart the computer. After restarting, return to the installation.
3. From the **Welcome** screen, follow the instructions. Change the directory here if you wish to store the program in another directory.
4. From the **MIKOHN DOWNLOAD** screen, choose how to display the program shortcut in the WINDOWS Start\Programs menu.

After you have progressed through all the screens, DOWNLOAD is ready to use. You do not need to restart your computer.

1.2 Initial Software Setup

If your computer is connected to the display logic board when you start DOWNLOAD, the files in the board's directory automatically load and will appear in the right side of the main screen under the display name, as shown in Figure 1.1.

If the computer is not connected to the sign, or if the Group and ID addresses (GRADR and IDADR) in the program and the logic board do not match, you will receive an **Error Getting Directory** message. If this message appears, verify that you have connected the computer to the board correctly. Afterward, if you still get the error message, verify that you have entered the correct Group and ID addresses. Refer to section 1.4.1 for instructions.

1.3 Overview of the DOWNLOAD Main Menu Screen

Figure 1.1 shows the DOWNLOAD Main Menu screen with several *.fnt* file examples in the SUPREME display window.

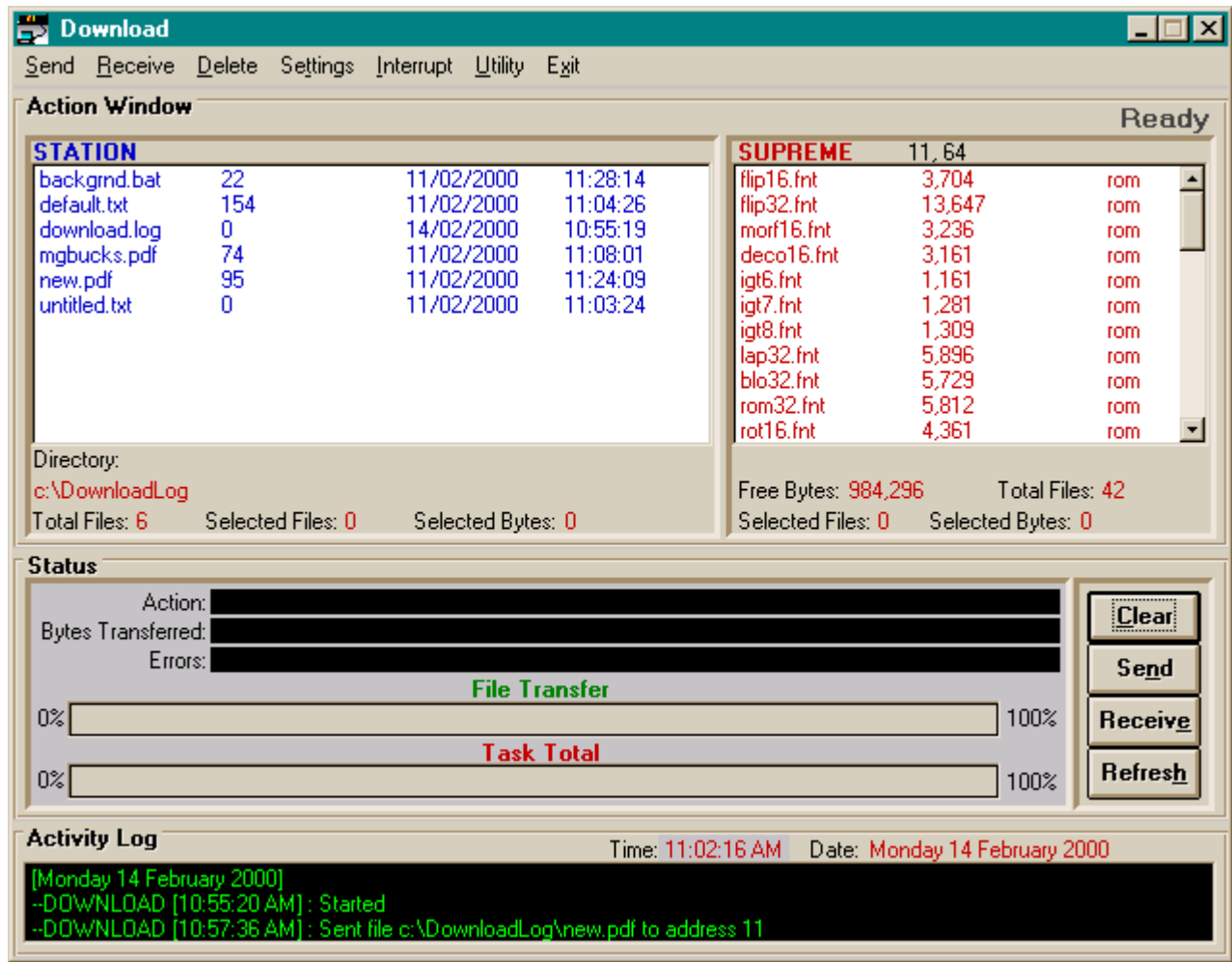


Figure 1.1 Main Menu Screen

Use the main menu bar at the top of the DOWNLOAD Main Menu screen to send, receive, and delete files; assign settings; send interrupts to the board; use utilities; and exit the program. Menu items and their sub-menus have corresponding *hot keys*, meaning they can be accessed via the keyboard without having to use the mouse. Hot keys are indicated by the underscored letter on a menu item. To access a hot key, press ALT + underscored letter.

The Main Menu screen is divided into five areas beneath the main menu bar: **Action Window** with Station and display information, **Status** window, command buttons, and **Activity Log**

The **Action Window** is divided into two sub-windows:

- The left-hand window displays the files in the **Station**, or computer, with details: name, size, and date and time created. The files are displayed in alphabetical order. **Directory**, at the bottom of the **Station** window, points to the files' location. Upon install the directory defaults to the C: drive. The next time DOWNLOAD is opened, **Directory** will show the last directory used. The bottom of the sub-window displays Total Files in the directory, number of Selected Files, and the number of Selected Bytes.
- In the right sub-window, you can find the display logic board name, SUPREME in this example, and next to it the board's Group address and ID address. Files stored on the board are listed in the order they arrived on the board. Files stored on the board's EPROM are listed first with their file sizes and are designated "rom." Any files you send to the board will be stored in the Flash drive. Flash files are listed after all ROM files in order of arrival, but will not show their drive location. Below the list of files you can find the number of Free Bytes, Total Files, Selected Files, and Selected Bytes on the logic board.

The **Status** window displays current activity: Action in progress, Bytes Transferred, and Errors that might occur. The File Transfer and Task Total progress bars indicate the percentage of the current file and the total files transferred.

To the right of the **Status** window are four command buttons. **Clear** deselects all files in the Station and in the display's window and makes both windows available. **Send** and **Receive** reproduce frequently used commands found on the main menu bar. **Refresh** reloads the contents of the logic board into DOWNLOAD and refreshes the contents of the display's window.

The **Activity Log** window lists all the actions executed by the program, including errors. This record is saved into the **download.log** file in the DownloadLog directory of the Station's root directory (for example, **C:\DownloadLog\download.log**). The program automatically creates this directory if it does not exist and overwrites the **download.log** file each time the program starts.

1.4 DOWNLOAD Settings

1.4.1 How to Select a Display's Addresses, Baud Rate, and Port Number

Upon startup, DOWNLOAD searches for the last used GRADR and IDADR. If the program cannot locate them, for example when you are configuring a new sign, you will receive the message *Error Getting Directory*. Then you must assign the new addresses under Settings from the main menu bar, shown in Figure 1.2. You may also wish to change addresses from the default 255, 64.

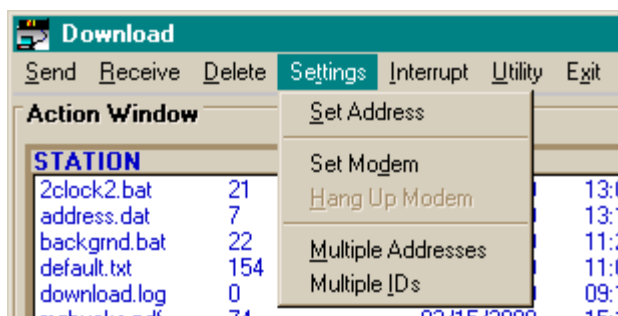


Figure 1.2 Settings Menu Options

To change a display's GRADR, IDADR, baud rate, and port number, perform the following steps:

1. Click on Settings from the main menu bar and select Set Address from the sub-menu. The Address Selection pop up box shown in Figure 1.3 will appear.
2. Type new values for GRADR, IDADR, baud rate, and the communications port number. The baud setting you assign must match the display's. A baud rate of 9600 is standard for most MIKOHN signs. In SUPREME logic boards, the J-4 controller port is fixed at 9600 baud. You can configure SUPREME displays to use 19200 baud with the J-3 DOWNLOAD port. DOWNLOAD allows you to choose 19200 from the drop down menu. You can configure AGL display logic boards to use 19200 baud with special EPROMs. The Port is set to 1 by default.

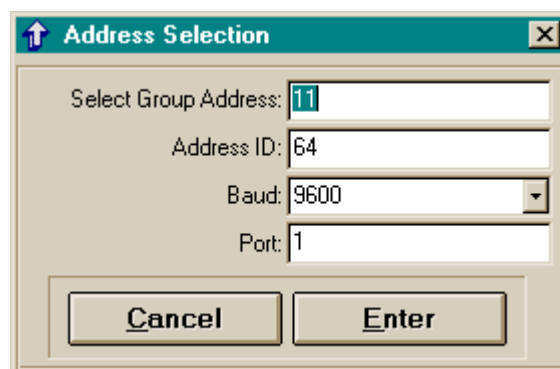


Figure 1.3 Address Selection Pop Up Box

3. Click on the **Enter** button. If any of the values you enter is out of the normal range, the program will announce this and allow you to select new ones.

1.4.2 How to Configure Displays at a Remote Site

You can use a modem to configure AGL display logic boards at remote sites. To do so, perform the following steps:

1. Click **Settings** from the main menu bar and select **Set Modem** from the sub-menu. The ***Modem Settings*** screen, shown in Figure 1.4, will appear. If no modem is found, the window will not launch.
2. If a number is required to dial an outside line, select the check box next to the ***Outside Line*** field and type the required number in the field.
3. Type the phone number in the ***Phone Number*** field. Do not use hyphens or spaces.
4. Click on the **Dial** button. You will see information about the call in progress in the ***Connection Status*** window. A message window will alert you about whether the call failed or was successful.

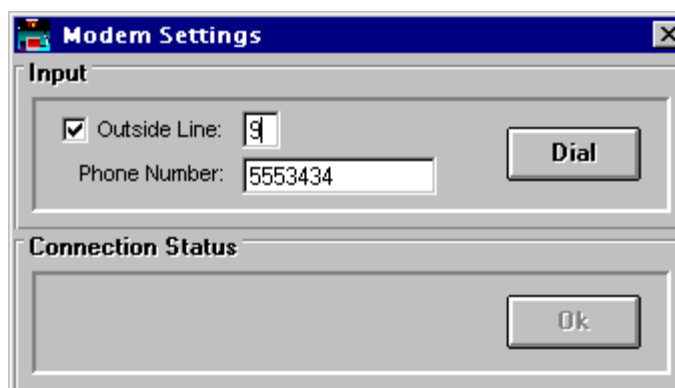


Figure 1.4 *Modem Settings Screen*

5. If the call was successful, click on the **OK** button to exit the screen. A label marked ***Modem Connection*** will appear on the Main Menu screen.
6. Click on the **Refresh** button to display the files on the board.

NOTE:

You can configure some remote SUPREME displays with a modem. Please contact MIKOHN Service for instructions.

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2. How to Transfer Files

2.1 How to Load Files into DOWNLOAD

Before you can transfer any files to the display's logic board, you first need to choose a computer directory that contains files DOWNLOAD will use. To do so, perform the following steps:

1. Click Send from the main menu bar and choose Change Path. The screen shown in Figure 2.1 appears.
2. Navigate to the drive and folder you would like to use. Click on a folder to display its contents in the *File Listing* window. Though you can highlight files, you cannot send individual files into DOWNLOAD.
3. To choose a folder, click on its name and then click on the **Accept** button. If you click on an individual file name and then click on the **Accept** button, DOWNLOAD still accepts the entire folder.

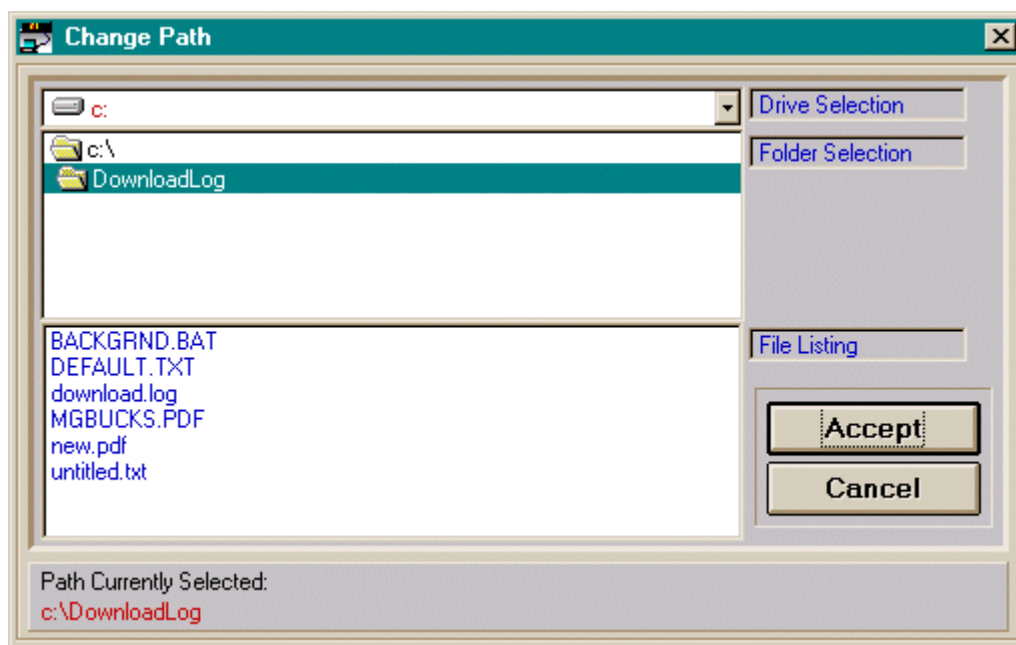


Figure 2.1 *Change Path Screen*

NOTE:

MIKOHN suggests that you maintain a different computer directory for each site and each display within the site.

2.2 How to Send Files to the Display Logic Board

2.2.1 Selecting Files to Use in DOWNLOAD

To select files to send from the computer to the display logic board, use one of the following methods:

- Click on the file name in the *Station* window to highlight a file. Any number of files can be selected this way.
- Click Send from the main menu bar, shown in Figure 2.3, and choose Select Files from the sub-menu. A new window will appear as shown in Figure 2.2. The default *.* selects all the files in the *Station* window. To customize your selections by file type, use the drop down menu, which displays file extensions commonly used in displays. After you select the file type, click on the **Enter** button.
- Enter the file name directly into the *File(s) to send* field of the *Select Files* window. If the file exists in the current directory, it will be selected and highlighted. Selecting single files is best accomplished with method *a*.

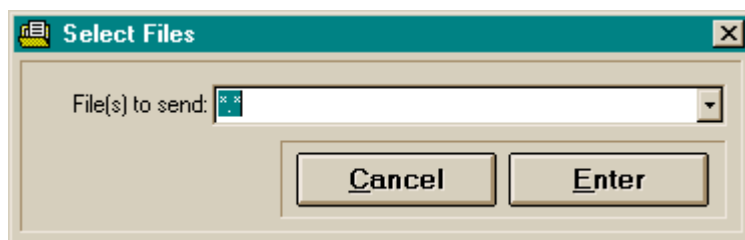


Figure 2.2 *Select Files Pop Up Box*

To deselect files, perform any of the following steps:

- Click on the **Clear** button next to the *Status* window.
- Right-click on selected items and choose Unselect All.
- Click the Send menu and choose Unselect All.

NOTE:

Once you select a file in either the *Station* or display window, the other window freezes and the text inside shows as gray. You cannot choose anything from the gray window until you click on the **Clear** button next to the *Status* window. The **Refresh** button clears both windows but updates the contents of the display's window first.

2.2.2 Sending Files to the Display Logic Board

You can send as many files as the display logic board can hold. To make sure that all will fit, select the files you want to transfer. Compare the Selected Bytes in the *Station* window with the Free Bytes in the display's window to be sure you have not selected too much information for the board.

After you select the file(s), perform any of the following steps to send them to the board:

- a. Click Send from the main menu bar, shown in Figure 2.3, and then click Send Selected Files from the sub-menu.

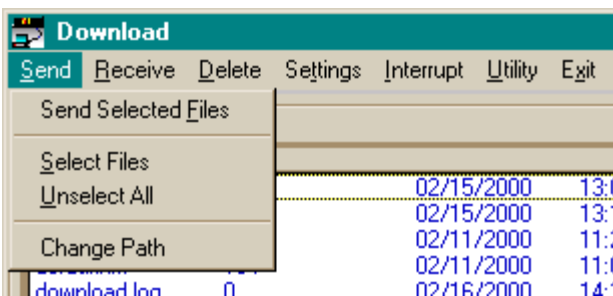


Figure 2.3 Send Menu Options

- b. Right-click on selected items and choose Send Selected Files from the list.
- c. Click on the **Send** button to the right of the *Status* window.
- d. Click on a file in the *Station* window and drag it into the display's window in one motion. If you have more than one file to transfer, wait until the final file is highlighted to drag.

While files transfer, you will see messages about their progress above the display window. After files transmit successfully, the program refreshes the contents of the display's window. The contents of the *Station* window remain unchanged. If a file that you send has the same name as one on the display logic board, the existing file will be deleted and resent from the computer without notification.

DOWNLOAD is now ready to send or receive more files or perform any other function.

NOTE:

DOWNLOAD sends all files from the *Station* window into the Flash (B:) drive of the SUPREME display logic board. The hardware in the SUPREME board limits the number of files in the Flash memory to 100. Any more will be ignored.

2.2.3 Stopping File Transfer

While files are in transit, a **Stop** button appears to the right of the *Status* window in place of the four buttons normally there. Click it to stop file transmission. The window shown in Figure 2.4 will appear, prompting you to choose whether to continue transferring files or to stop.

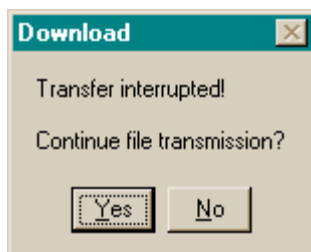


Figure 2.4 *Transfer Interrupted Pop Up Box*

2.2.4 Sending Files to More than One Display Logic Board

DOWNLOAD offers the option of sending the same files to several display logic boards during the same session. DOWNLOAD always sends files to all 255 Group addresses; however, only logic boards with the Group addresses you select will receive the files. All others will ignore the message.

To send files to more than one display logic board, perform the following steps:

1. Select all the files you wish to send.
2. Click Settings from the main menu bar and select Multiple Addresses from the sub-menu. The *Multiple Sign Addresses* screen shown in Figure 2.5 appears, and you can choose from among 255 Group addresses. Select the desired addresses and click on the **Accept** button. DOWNLOAD then sends all files out. Should any errors occur, DOWNLOAD reports them in the *Status* window and in the *Activity Log*.

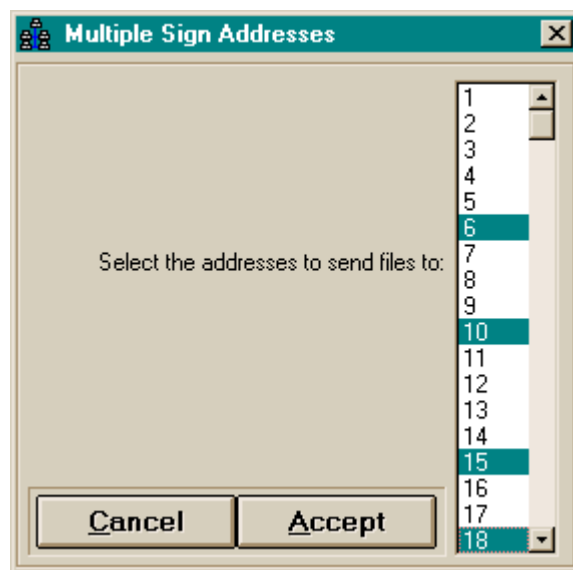


Figure 2.5 *Multiple Sign Addresses Screen*

Likewise, you can choose to send files to multiple sign IDs. To do so, perform the following steps:

1. Click Settings from the main menu bar and choose Multiple Ids from the sub-menu. The screen shown in Figure 2.6 appears, containing 64 ID addresses. This feature is helpful when there are more than 255 signs on the casino floor.
2. Select the ID addresses you desire. Then click on the **Accept** button.

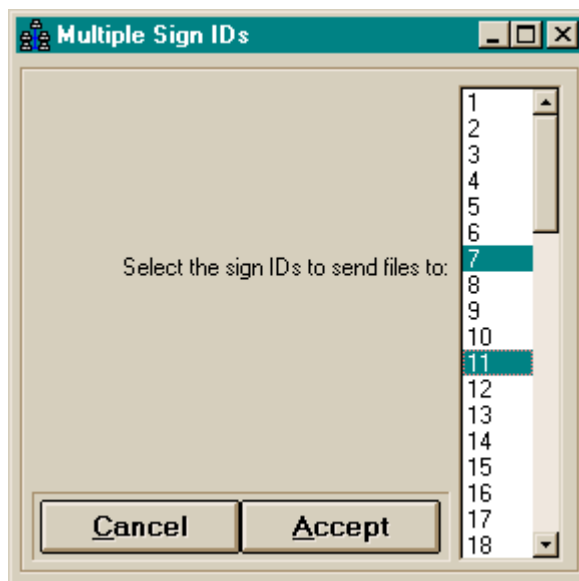


Figure 2.6 *Multiple Sign IDs Screen*

When you click on the **Accept** button in the *Multiple Sign Addresses* screen or the *Multiple Sign IDs* screen, DOWNLOAD sends the files to all the selected addresses or IDs. The **Stop** button does not appear during this action.

2.3 How to Receive Files from the Display Logic Board

The DOWNLOAD Receive function moves files from the display logic board onto the computer. You will see the received files in the *Station* window, where you can then edit them.

NOTE:

DOWNLOAD cannot receive *.pic* files, and you cannot select or receive files from the board's EPROM, designated as "rom" in the display's window.

If the GRADR under Settings is set to 255—the value for overhead graphic displays—then DOWNLOAD will attempt to receive files from all connected displays and you will not receive accurate information. Be sure to set the GRADR for the specific display you wish to receive from.

Use the Receive function to help troubleshoot displays. First, create a blank directory and load it into DOWNLOAD using the Change Path function described in Section 2.1. Then you can receive files into this directory to review them.

2.3.1 Selecting Files to Receive

Selecting and sending files to Receive works much the same as the Send function. Select the file or files to be received one of the following ways:

- a. Click on the file name in the display's window to highlight a file. Any number of files can be selected this way.
- b. Click Receive from the main menu bar, shown in Figure 2.8, and choose Select Files from the sub-menu. The screen shown in Figure 2.7 appears. The default *.* selects all the files in the display's window. To customize your selections by file type, use the drop down menu, which displays file extensions commonly used in displays.
- c. In the *Select Files* screen, enter a file name directly into the *File(s) to receive* field. If the file exists in the current directory, it will be selected and highlighted. Selecting single files is best accomplished with method *a*.

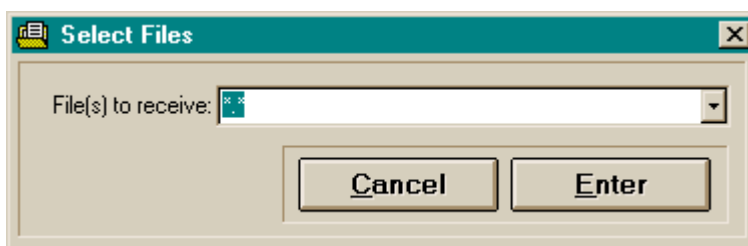


Figure 2.7 *Select Files to Receive Pop Up Box*

2.3.2 Receiving Files from the Display Logic Board

After you select your files, move them from the logic board to the computer any of the following ways:

- a. Click Receive from the main menu bar, shown below, and then click Receive Selected Files from the sub-menu.

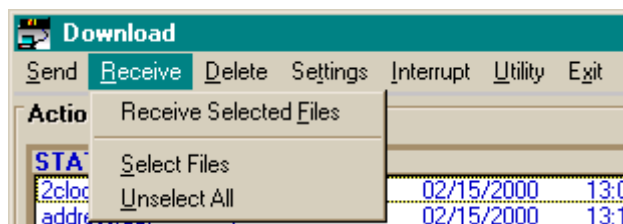


Figure 2.8 Receive Menu Options

- b. Right-click on selected items and choose Receive Selected Files from the list.
- c. Click on the **Receive** button to the right of the *Status* window.
- d. Click on a file in the display's window and drag it into the *Station* window in one motion. If you have more than one file to transfer, wait until the final file is highlighted to drag.

To stop receiving files in the middle of transmission, use the **Stop** button that appears to the right of the *Status* window in place of the four buttons normally there. See Section 2.2.3 for more on stopping transmission.

When the file receives successfully, the program refreshes the contents of the *Station* window. The contents of the display's window remain unchanged. DOWNLOAD is now ready to send or receive more files or perform any other function.

NOTE:

Received files load into the directory shown at the bottom of the *Station* window. If any files have the same name they will be overwritten. Be sure this is the directory you want before receiving any files.

3. How to Delete Files from the Display Logic Board

You can delete files shown in the display's window, which will delete them from the display logic board's Flash drive. Deleting unused files is an effective way to keep the Flash drive memory from filling up. Files designated as "rom" reside on the board's EPROM and will not delete. You cannot use DOWNLOAD to delete files in the computer, shown in the *Station* window. Figure 3.1 shows the Delete menu options.

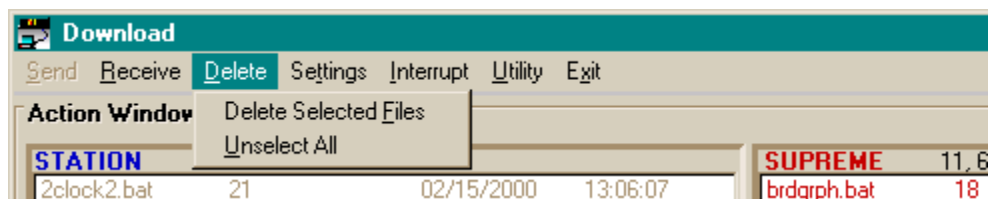


Figure 3.1 *Delete Menu Options*

You can delete one or more files from the display logic board either of the following ways:

- Select the file or files to be deleted from the display's window. Choose Delete from the main menu bar and click Delete Selected Files from the sub-menu.
- Right-click the selected files and select Delete Selected Files from the sub-menu.

DOWNLOAD will delete the files and refresh the contents of the display logic board and the display's window.

Using either option, if you choose not to delete any files, you can choose Unselect All from the sub-menu to deselect them.

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4. How to Send Interrupts to the Display Logic Board

Interrupt the display logic board to make a change in it. Figure 4.1 shows the Interrupt menu options.

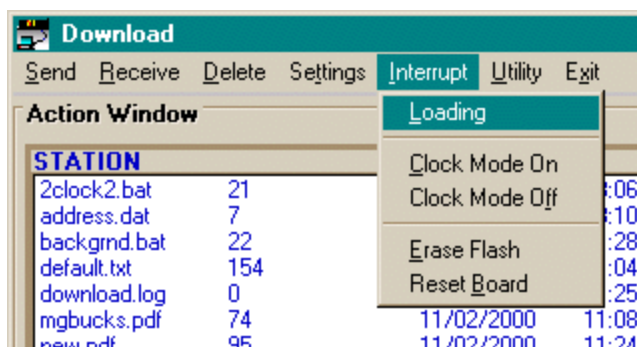


Figure 4.1 Interrupt Menu Options

- **Loading** is a command that turns the “LOADING...” message on or off on the sign. With AGL and MARK 2 displays, you *must* use this mode to send any files to the display logic board for the send to be reliable. This feature is not required to receive files from the board. SUPREMEs automatically move to Loading mode when you send a file to the board. The Loading command in non-functional with SUPREME displays, and if you check Loading here, then “LOADING...” is the only message the board will display.
- The **Clock Mode On** function is used on progressive displays only. Using SUPREME displays, selecting Clock Mode On turns off the odometer, removes currency symbols, and changes thousands and decimal separators to colon separators in the format: 00:00:00. Never use this mode to display windows with progressive information. Use it only for time functions such as countdowns. Selecting **Clock Mode Off** changes the display back to thousands and decimal separators with currency symbols. On AGL and MARK2 displays, **Clock Mode On** displays the time and day that are current on their respective display logic boards.
- With SUPREME logic boards only, the **Erase Flash** command erases the contents of the Flash drive and then resets the board. A pop up window asks you to confirm the action.
- With SUPREME logic boards only, **Reset Board** restarts the logic board if it should cease operation. The board settings recycle and appear on the display, followed by the progressive information. DOWNLOAD performs this action without prompting for confirmation.

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5. How to Use the DOWNLOAD Utilities

Figure 5.1 shows options found under Utility on the main menu bar. These allow you to make small changes to the Main Menu screen, edit file code, create *.pdf* files (Progressive Definition Files) and *backgrnd.bat* files to send to the display logic board, and convert *.fli* and *.flc* animation files to the *.mik* MIKOHN version.

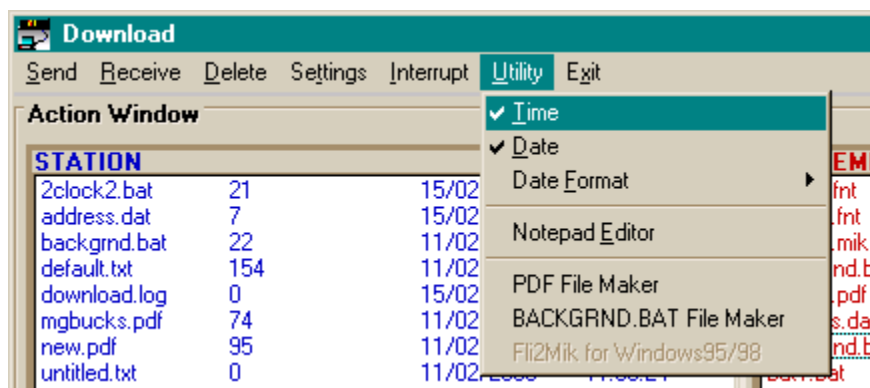


Figure 5.1 Utility Menu Options

- **Time** toggles the time label in the *Activity Log* window on and off.
- **Date** toggles the date label in the *Activity Log* window on and off.
- **Date Format** allows you to choose between US and World date formats and affects all dates displayed on the Main Menu screen.
- **Notepad Editor** activates WINDOWS NOTEPAD® and allows you to edit files from the *Station* window. If you wish to edit a file that resides on the display logic board, you must first use the Receive function to transmit that file to your computer directory. Figure 5.2 shows a *.pdf* file ready to be edited. When NOTEPAD is open, you cannot access the DOWNLOAD main menu screen.

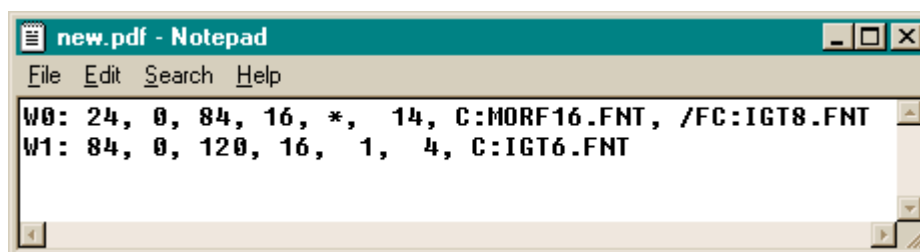


Figure 5.2 Notepad Editor Screen

To edit files in NOTEPAD from the *Station* (computer) from DOWNLOAD, perform the following steps:

- 1). Select a file in the *Station* window.
 - 2). Double-click the highlighted file, making sure that no other files are selected first, or click Utility from the main menu bar and choose Notepad Editor. If no file is selected, NOTEPAD opens a new document. You can open files using NOTEPAD's File menu option.
 - 3). Make and save your edits. NOTEPAD saves new files as text (*.txt*) files by default. To save under a different extension, go to the File menu option and choose Save As. Select All Files (*.*) from the *Save as type* field. Type the new name in the *File name:* field and give the file name the extension of the file type you want.
 - 4). When you exit NOTEPAD, the revised or new file appears in the *Station* window, ready to be used.
- **PDF File Maker** creates files that will describe the number and dimensions of windows that will display progressive information on a display such as the SUPREME. See Section 5.1 for a complete discussion of this utility.
 - **BACKGRND.BAT File Maker** configures the list of files in the *backgrnd.bat* file. See Section 5.2 for a complete discussion of this utility.
 - **Fli2Mik for Windows95/98** converts IBM animation files (*.fli* and *.flc*) to the MIKOHN animation file type (*.mik*). This utility is not available on Windows NT. Refer to Section 5.3 for a complete discussion of Fli2Mik.

5.1 PDF File Maker

Progressive Definition Files (*.pdf*) are used in progressive displays such as the SUPREME and define the various aspects of the PRGSV application. The PDF File Maker utility allows you to create files graphically rather than write them in code as shown in Figure 5.2. PDF File Maker guides you through several screens and prompts you for all the information required of a *.pdf*. You should have some experience with *.pdf* files before you attempt to create them here. Refer to the MIKOHN Animation Display “Fast Entry” Manual, P.N. 950-321-00, for more information on Progressive Definition Files.

Figure 5.3 shows the initial *PDF File Maker* screen. To access it, click Utility from the main menu bar and select PDF File Maker from the sub-menu. To create a *.pdf*, fill in the required information in this and the following seven PDF File Maker screens, ending with the final screen shown in Figure 5.11. Notice that each screen lists information about its function.

Figure 5.3 *PDF File Maker Screen 1: Display Information*

To create a *.pdf*, perform the following steps:

1. Select the Display Type you wish to use, either Graphics for animated displays or Overhead, generally used only for text and number displays.
2. Select the height and width of the display in number of panels. Use the arrows to increase or decrease the amount. The numbers must be the same number or less than the number of panels programmed on the display logic board.
3. Click on the **Next** button to move to the next screen.

At the *PDF Information* screen shown in Figure 5.4, PDF File Maker allows you configure files with existing templates (.pic). Templates are a background graphic with a window to fit progressive windows.

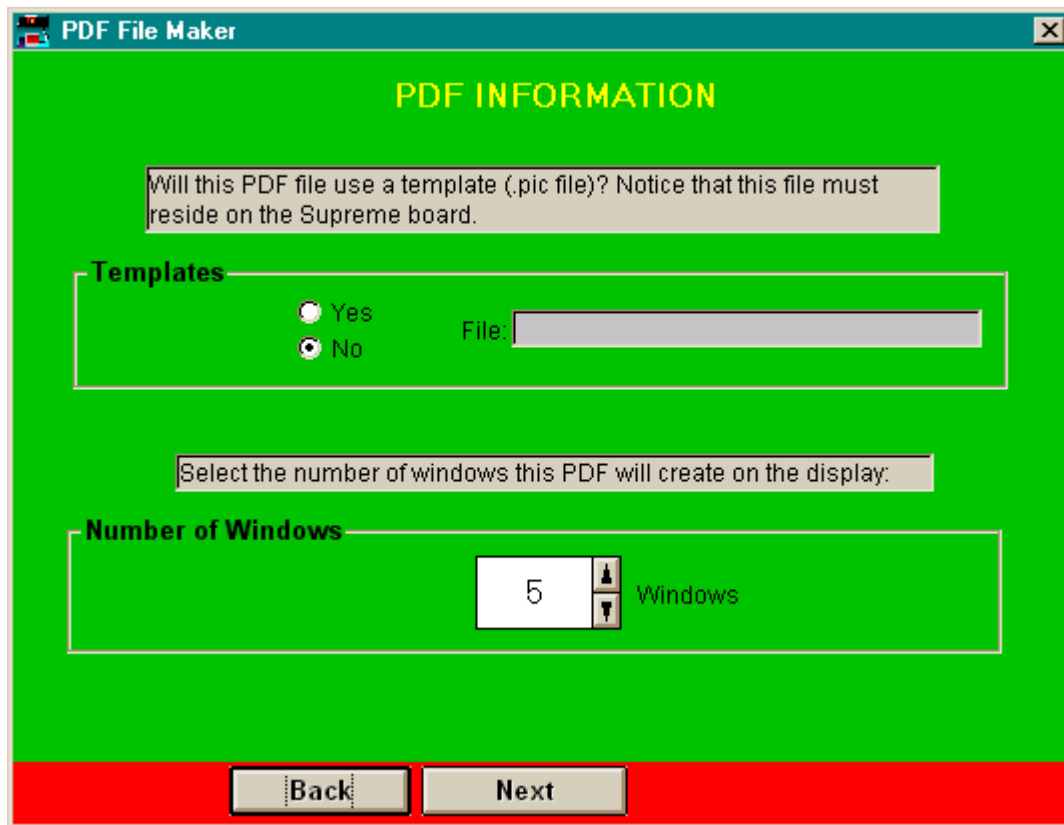


Figure 5.4 PDF File Maker Screen 2: PDF Information

If you choose not to use a template, select the **No** radio button and move to Step 3. If you would like to use a template, perform the following steps:

1. Select the **Yes** radio button under Templates.
2. Type the name of the template in the *File* field. The file must already exist in the display logic board's Flash drive. If you wish to use a template that does not reside on the board, click on the top right close window button to exit PDF File Maker. Then load the template file into DOWNLOAD (see Section 2.1 for instructions) and send it to the board. Reenter PDF File Maker and begin again.
3. Under Number of Windows, give instructions about how many windows to use on the display. You can assign up to eight rectangular windows that will each contain progressive information. Use the arrows to choose from one to eight. If you use a template, you are constricted by the number of windows and window sizes assigned in the template. Refer to the parameters you received with the graphic template file.
4. Click on the **Next** button.

The screen shown in Figure 5.5 simulates the space available on the display with a purple outline inside the black area. Here you can position and resize windows to configure your display. At the top left, you can see the display size in number of panels assigned in the first screen. At the top right of the screen, you can see the last window set and the number of windows set.

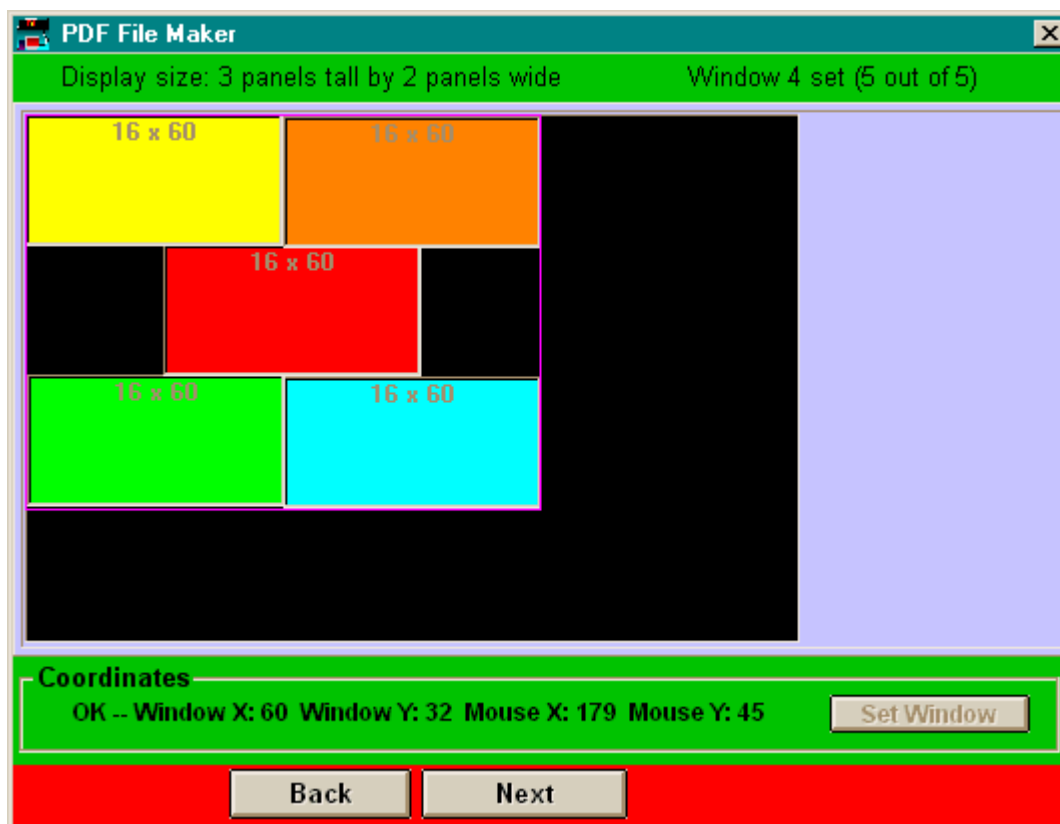


Figure 5.5 *PDF File Maker Screen 3: Window Simulation*

You may use all eight progressive windows, or you may use only one, and you may configure the windows a number of ways.

- To move a window, perform the following steps:
 - 1). Grab a window with the left mouse button and drag it to the desired position.
 - 2). Look in the Coordinates area to see the window position. If you place a window in between pixels or off the display area, you will see “Invalid” under Coordinates. You will not be allowed to continue until you move the window into acceptable coordinates. X and Y Coordinates must be divisible by four. If you are using a template, your windows must conform to the window area in the template.
- To increase or decrease a window’s size, click on the right mouse button and drag. As you change the size of a window, you will see its new dimensions displayed inside the rectangle.

To lock a window once it is the correct size and in the correct position, perform the following steps:

1. Click on the **Set Window** button. PDF File Maker prompts you to record the coordinates of the window so that you can align each subsequent window correctly.
2. Look at the top right of the screen to confirm that the window was set. You will see in parentheses the number of established windows.
3. You must set up as many windows as you assigned in the previous screen. Remember that window numbering starts at 0. Arrange each window and set it using the directions above.
4. When you finish setting all windows, click on the **Next** button.
- 5.

NOTE:

You cannot change a window in the window simulation screen once you have set it.

If you would like to change a window position after setting it, perform the following steps:

1. Click on the **Back** button.
2. Change the number of windows to a different number than you originally set.
3. Click on the **Next** button. The windows will have reset.
4. Click on the **Back** button and set the number of windows to your desired setting.
5. Click on the **Next** button to begin reconfiguring the window sizes and positions.

Figure 5.6 shows the *Settings* screen. Each row represents one progressive window in *.pdf* form and shows the legal settings for all the elements of the window's *.pdf*. The order of columns corresponds to the *.pdf* file code seen in Figure 5.2. Use the *Settings* screen to assign JPGroup, Mfile, and Font settings. You have already defined the X and Y coordinates in Screen 3 and should not alter them here.

Window	X1	Y1	X2	Y2	JPGroup	MFile	Font
Window 0	0	0	60	16	JP0	FILE 4	IGT6.FNT
Window 1	60	0	120	16	JP1	FILE 4	IGT6.FNT
Window 2	0	32	60	48	JP2	FILE 4	IGT6.FNT
Window 3	60	32	120	48	JP3	FILE 4	IGT6.FNT
Window 4	28	16	88	32	JP4	FILE 4	IGT6.FNT

Figure 5.6 PDF File Maker Screen 4: Settings

You can configure each window a number of ways.

- If you have assigned multiple windows, be sure use the drop-down menus to assign JPGroup and Mfile settings.
- If you use only one window, you can use the asterisk under the drop-down menus to instruct the display to use the settings defined on the display logic board.
- Assign a window's font with the drop-down menus. These contain the default fonts resident on the logic board EPROM. If you know the name of a new font you have sent to the logic board Flash drive, you can type it in the *Font* field.

When you have made all changes, click on the **Next** button.

Figure 5.7 shows the *Alternate Fonts* screen. Alternate fonts are required when an effect font such as FLIP, MORF, or ROT is selected to provide for characters that the effect fonts do not have. Alternate fonts might have to be used for errors or messages. The default is the six-pixel high error font.

PDF File Maker alerts you to any windows in need of alternate fonts. Choose the alternate fonts from the drop down menu in the third column.

When you have finished, click on the **Next** button.

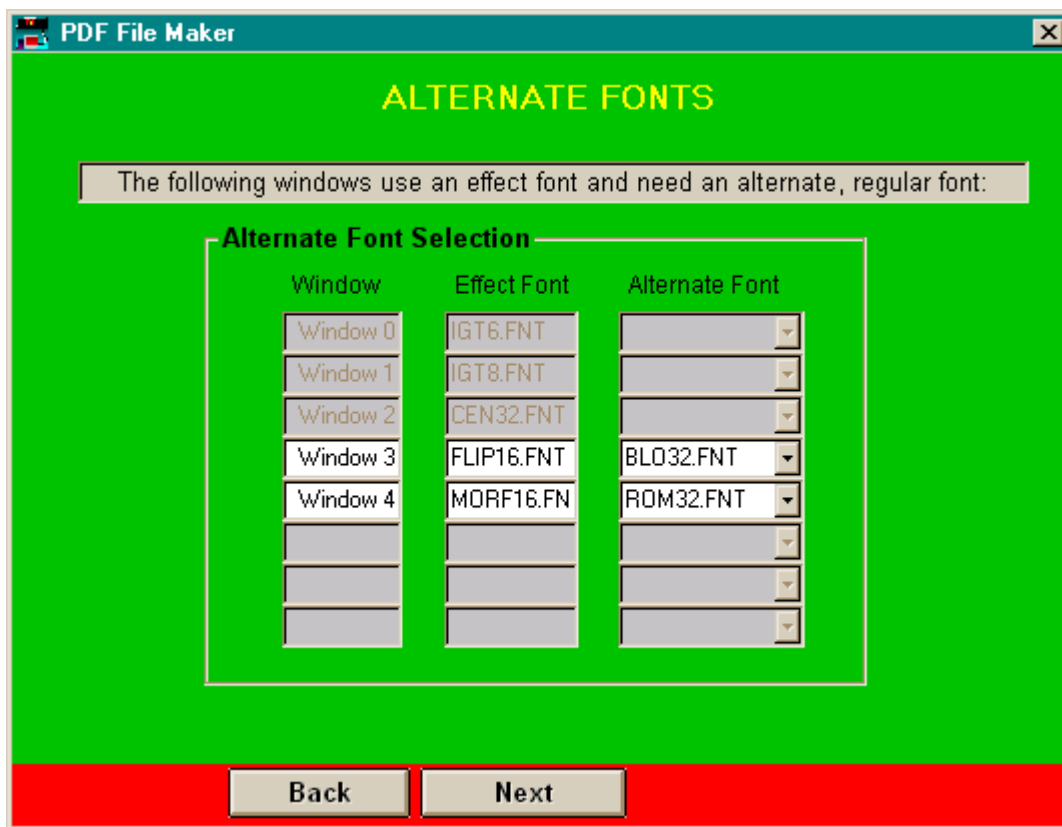


Figure 5.7 *PDF File Maker Screen 5: Alternate Fonts*

The *File Name* screen is shown in Figure 5.8.



Figure 5.8 PDF File Maker Screen 6: File Name

The *File Name* screen prompts you to type in a path and file name for the *.pdf* you have created. If the path and filename are correct, click on the **Next** button.

If you would like to browse for a directory before assigning a name, perform the following steps:

1. Click on the **Save As...** button. The screen in Figure 5.9 appears. If you typed in a path name in Figure 5.8, this directory shows in the *Save In:* field.
2. Keep this path or navigate to your chosen directory.
3. Type the name of the new file in the *File Name:* field.
4. Choose “Pdf” from the *Save as type:* field.
5. Click on the **Save** button.
6. From the *File Name* screen, click on the **Next** button.

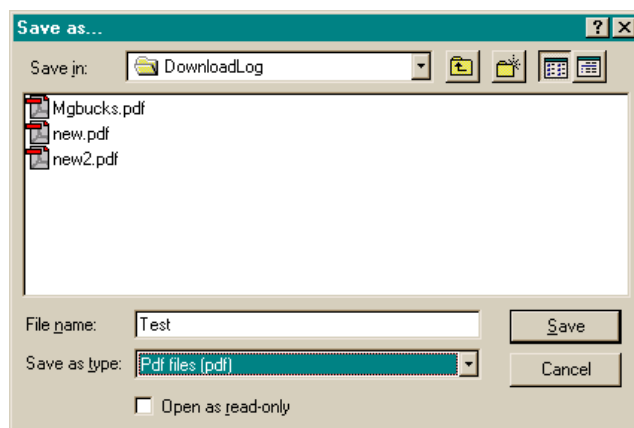


Figure 5.9 .pdf Save as... dialog box

The *Generating File* screen is shown in Figure 5.10.

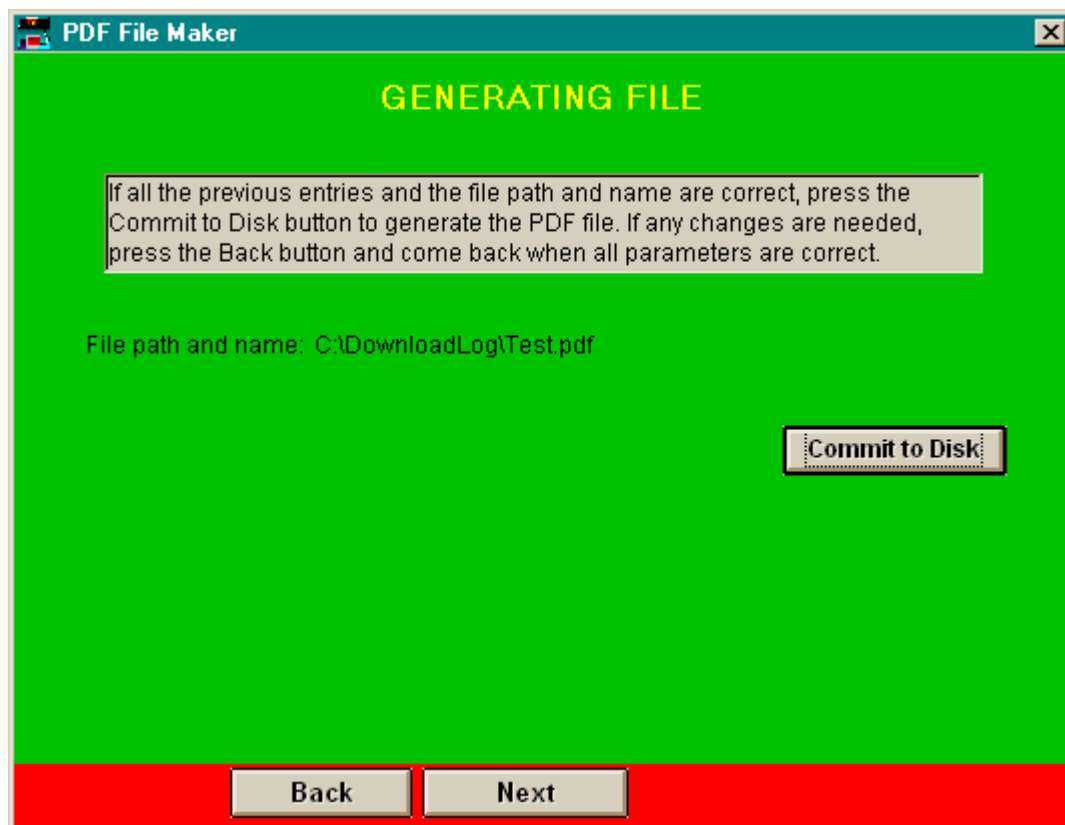


Figure 5.10 PDF File Maker Screen 7: Generating File

The *Generating File* screen asks you to confirm the path and file name. If you wish to make any changes to the *.pdf* before you commit it to disk, click on the **Back** button until you reach the necessary screen. Make your changes and return to this screen when all the parameters are correct. The **Next** button has no effect.

Click on the **Commit to Disk** button to save your file. You will see the screen in Figure 5.11, confirming that the file has been written.

Click on the **Exit** button to leave PDF File Maker. You can exit PDF File Maker any time using the close window button at top right.

The final PDF File Maker screen is shown in Figure 5.11. It shows that the *.pdf* was written.

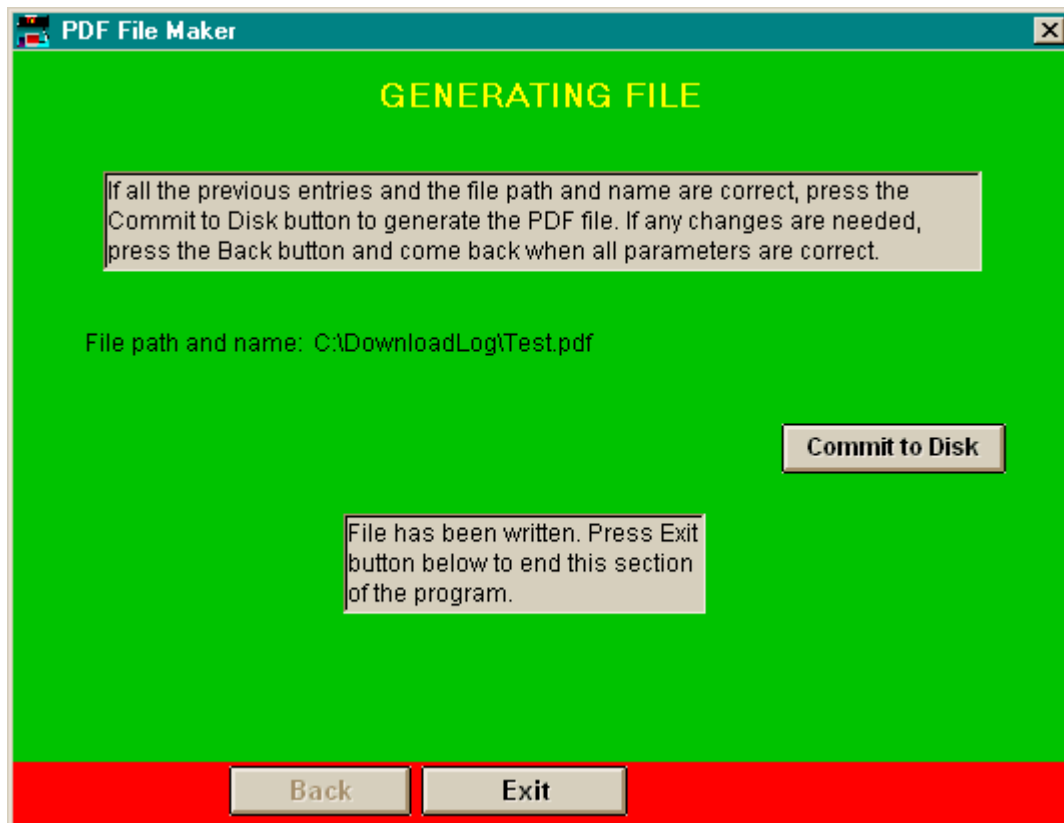


Figure 5.11 *PDF File Maker Screen 8: Generating File—Commit to Disk*

5.2 BACKGRND.BAT File Maker

Users experienced with creating batch files for displays can use this utility to graphically assign file parameters to the batch file, *backgrnd.bat*, which will execute on the display. Click Utility from the main menu bar and select BACKGRND.BAT File Maker from the sub-menu to see the screen shown in Figure 5.12.

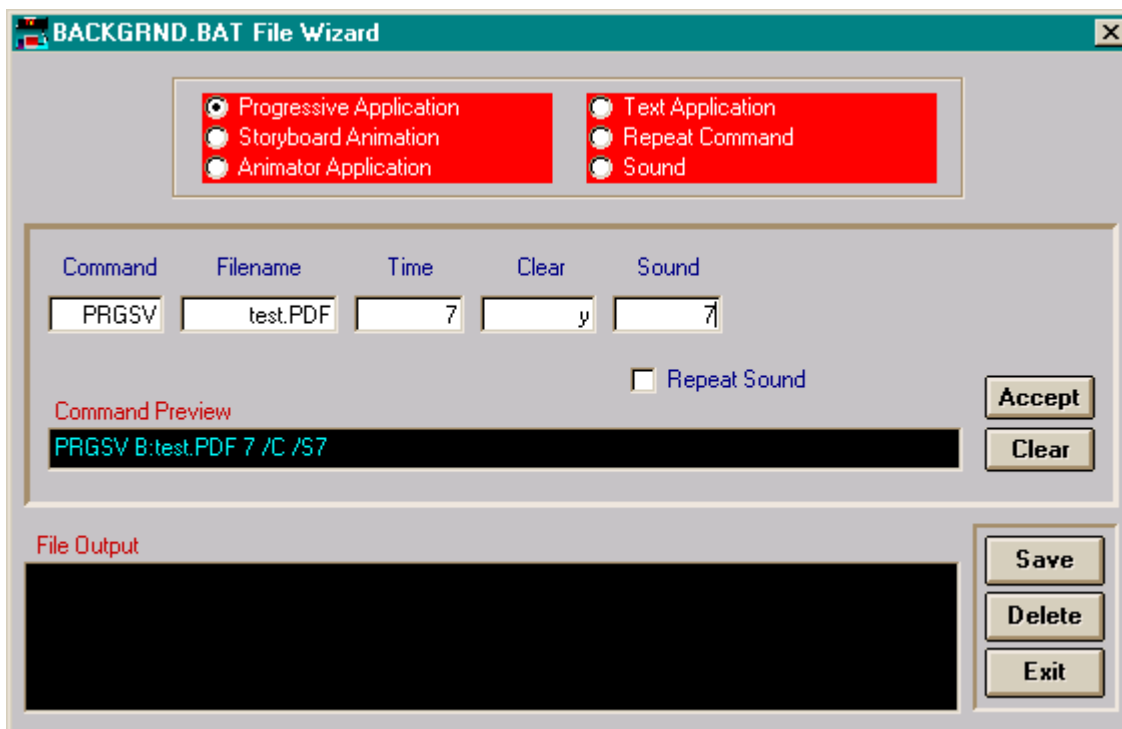


Figure 5.12 *BACKGRND.BAT File Maker: Progressive Application*

Remember that the batch file will execute in the order you assign here. In the top of the screen, click next to the type of file you would like to define first. Figure 5.12 is set to define the parameters of a Progressive Application. When you use the BACKGRND.BAT File Maker screens, you must fill in fields from left to right. This corresponds to the order the display expects to receive information.

To define the parameters of the PRGSV, perform the following steps:

1. Type the name of the file you will use in the **Filename** field. The utility automatically assigns a file extension. You will see the file name in the **Command Preview** line as the utility builds the batch file. The **backgnd.bat** directs all files to the B: (Flash) drive of the display logic board.
2. In the **Time** field, insert the number in seconds the progressive file will execute. Note that **Time** is optional.
3. In the **Clear** field, type in any letter character to instruct the display to clear. Leave the field blank if the display should not clear. Note that **Clear** is optional.
4. In the **Sound** field, type in the number of the sound file you wish to use. Note that **Sound** is optional, however, to use it you must first fill in the **Time** and **Clear** fields. Refer to the MIKOHN SUPREME DISPLAY User Manual, P.N. 990-015-02, for acceptable sound commands. Checking the **Repeat Sound** box instructs the sound device to play until it receives a new sound command.
5. If all values are correct, click on the **Accept** button. Your file parameters will appear in the **File Output** window.

After you configure all the parameters for your first file type, click on the second file type you wish to use. Figure 5.13 shows the screen set to configure a Storyboard Animation (.sh~). Notice that the Progressive Application previously accepted appears in the *File Output* window. *Storyboard* files require about 30KB of RAM to operate, although the files are small. The amount of RAM available is determined by the number of fonts loaded and applications running on the board.

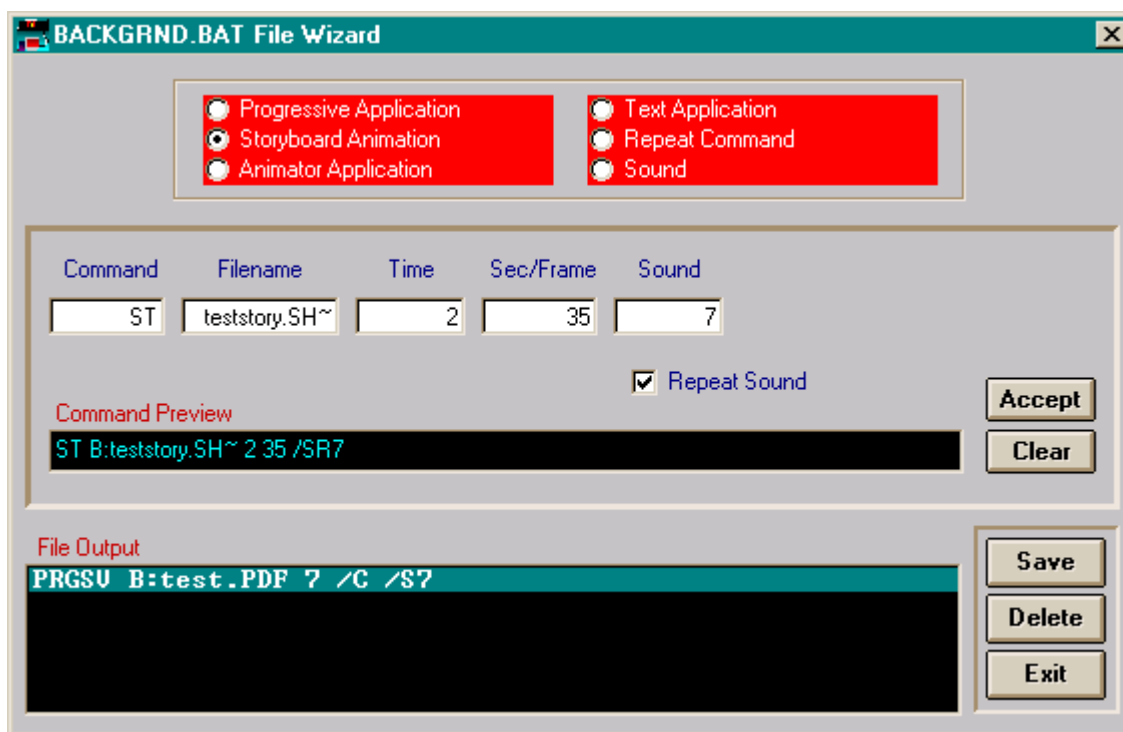


Figure 5.13 *BACKGRND.BAT File Maker: Storyboard Animation*

To define the parameters of the Storyboard Animation, perform the following steps:

1. Type the name of the file you will use in the *Filename* field. The utility automatically assigns a file extension. Notice the file name in the *Command Preview* line as the utility builds the batch file.
2. In the *Time* field, insert the number of times the file should play.
3. In the *Sec/Frame* field, insert the number of milliseconds per frame. The default is 35; however the number can be set as low as 1. The display will attempt to play the storyboard file at one millisecond per frame, but it cannot assure that speed. It will play as fast as possible.
4. In the *Sound* field, insert the number of the sound command you wish to use. Select the *Repeat Sound* check box if the sound should repeat.
5. Click on the **Accept** button when you finish with all fields.

Figure 5.14 shows the screen set to configure an Animator Application (.mik). Notice that the Storyboard Animation previously accepted appears in the *File Output* window. *Animator* files require minimal RAM to run but are large in size.

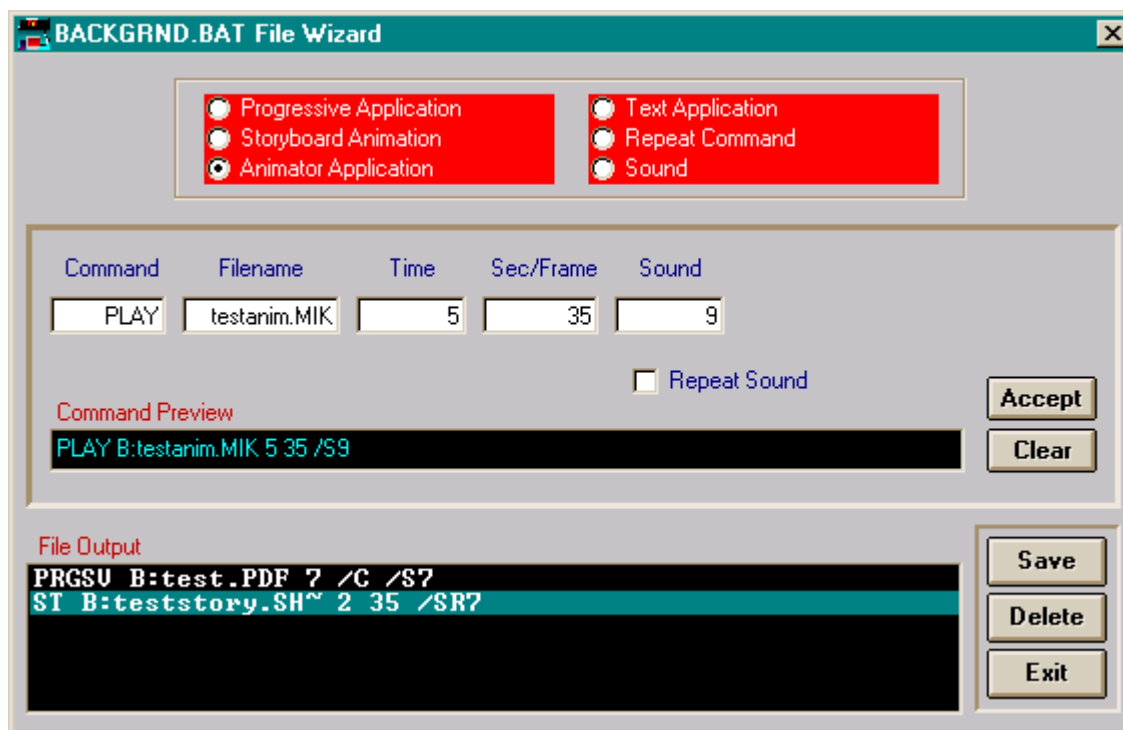


Figure 5.14 BACKGRND.BAT File Maker: Animator Application

To define the parameters of the Animator Application, perform the following steps:

1. Type the name of the file you will use in the *Filename* field. The utility automatically assigns a file extension. Notice the file name in the *Command Preview* line as the utility builds the batch file.
2. In the *Time* field, insert the number of times the file should play.
3. In the *Sec/Frame* field, insert the number of milliseconds per frame. The default is 35, however the number can be set as low as 1. The display will attempt to play the .mik file at one millisecond per frame, but it cannot assure that speed. It will play as fast as possible.
4. Tab to the *Sound* field and insert the number of the sound command you wish to use. Select the *Repeat Sound* check box if the sound should repeat.
5. Click on the **Accept** button when you finish with all fields.

Figure 5.15 shows the screen set to configure a Text Application (*.txt*). Notice that the Animator Application previously accepted appears in the *File Output* window.

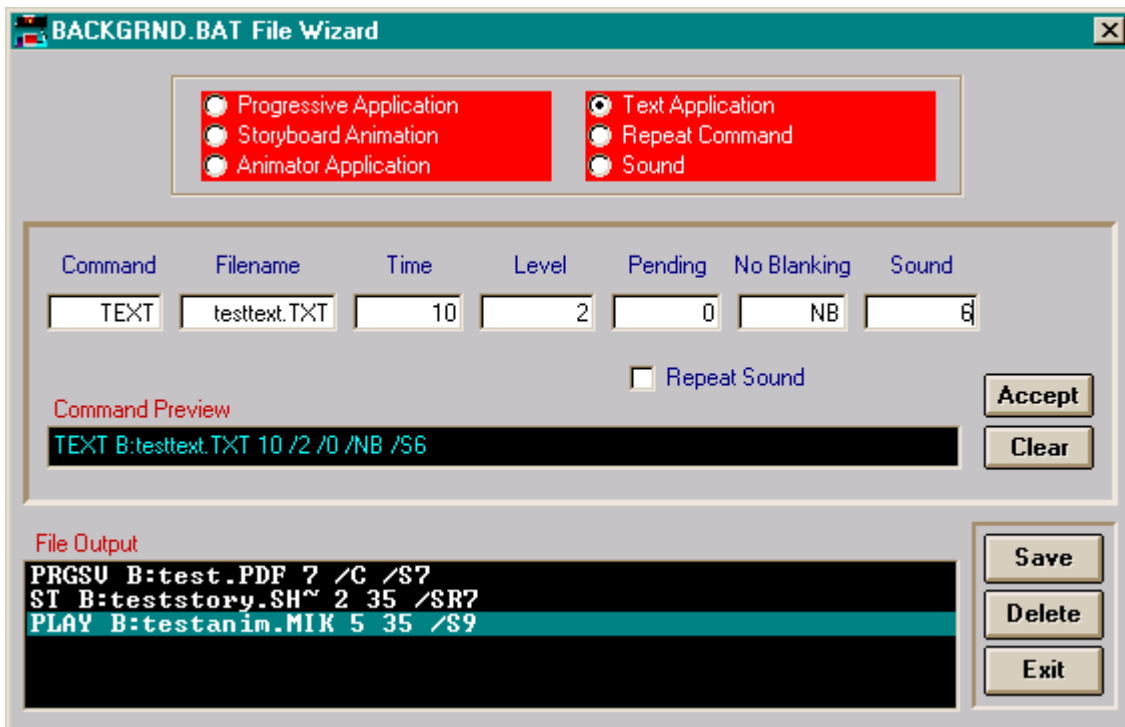


Figure 5.15 *BACKGRND.BAT File Maker: Text Application*

To define the parameters of the Text Application, perform the following steps:

1. Type the name of the file you will use in the *Filename* field. The utility automatically assigns a file extension. Notice the file name in the *Command Preview* line as the utility builds the batch file.
2. In the *Time* field, insert the time in seconds the file should play.
3. In the *Level* field, insert the JPGROUP level, numbered 0-7.
4. In the *Pending* field, insert the jackpot pending number you wish to use. MIKOHN recommends leaving the Pending value at 0.
5. In the *No Blanking* field, “NB” is already chosen to indicate that the screen will not clear when the next file plays. An example of this occurs when one file type should be surrounded by another file type on the display. If you leave the field blank then the display will clear.
6. In the *Sound* field, insert the number of the sound command you wish to use. Select the *Repeat Sound* check box if the sound should repeat. If you left the *No Blanking* field blank, then you will not be able to input a sound command.
7. Click on the **Accept** button when you finish with all fields.

Figure 5.16 shows the screen set to configure a Repeat Command. Notice that the Text Application previously accepted appears in the *File Output* window.

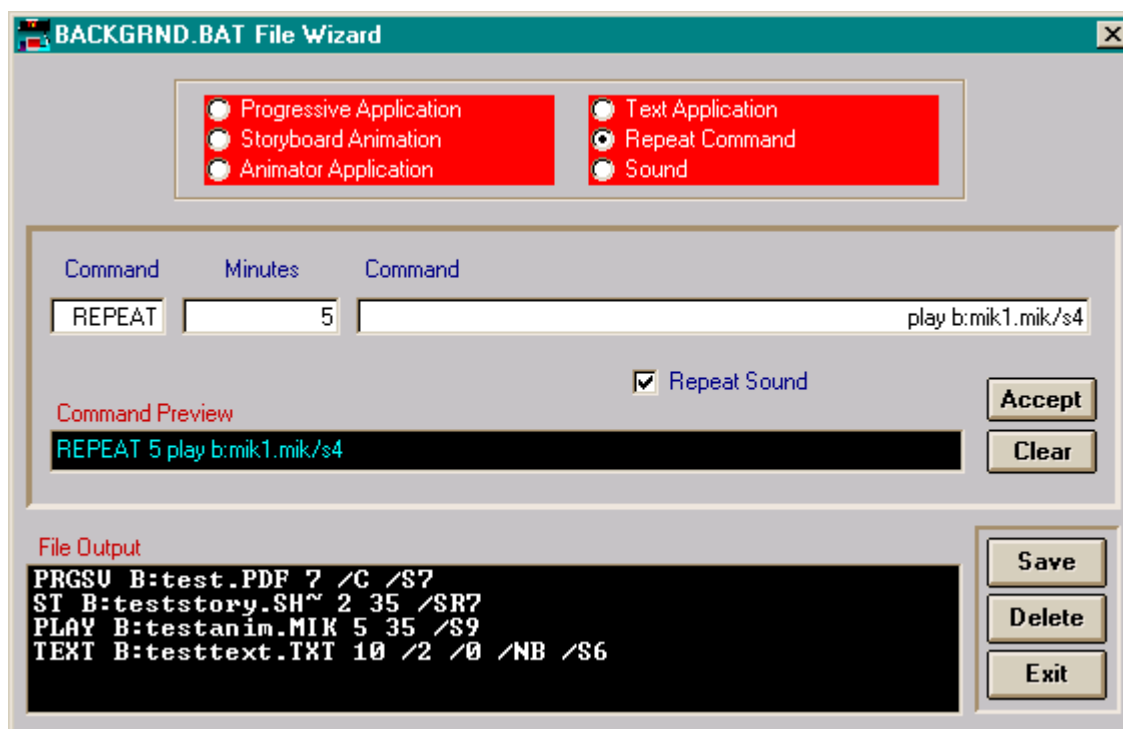


Figure 5.16 BACKGRND.BAT File Maker: Repeat Command

To define the parameters of the Text Application, perform the following steps:

1. Type the number of minutes that the file should wait to repeat in the *Minutes* field.
2. In the *Command* field, type the command, the drive (always B:), and the file and parameters you wish to use. Select the *Repeat Sound* check box if the sound should repeat. The command appears in the *Command Preview* window.
3. Click on the **Accept** button to keep your settings.

Figure 5.17 shows the screen set to configure a Sound. This is an optional screen that allows you to play sound not corresponding to a graphic or an event. Notice that the Repeat Command previously accepted appears in the *File Output* window.

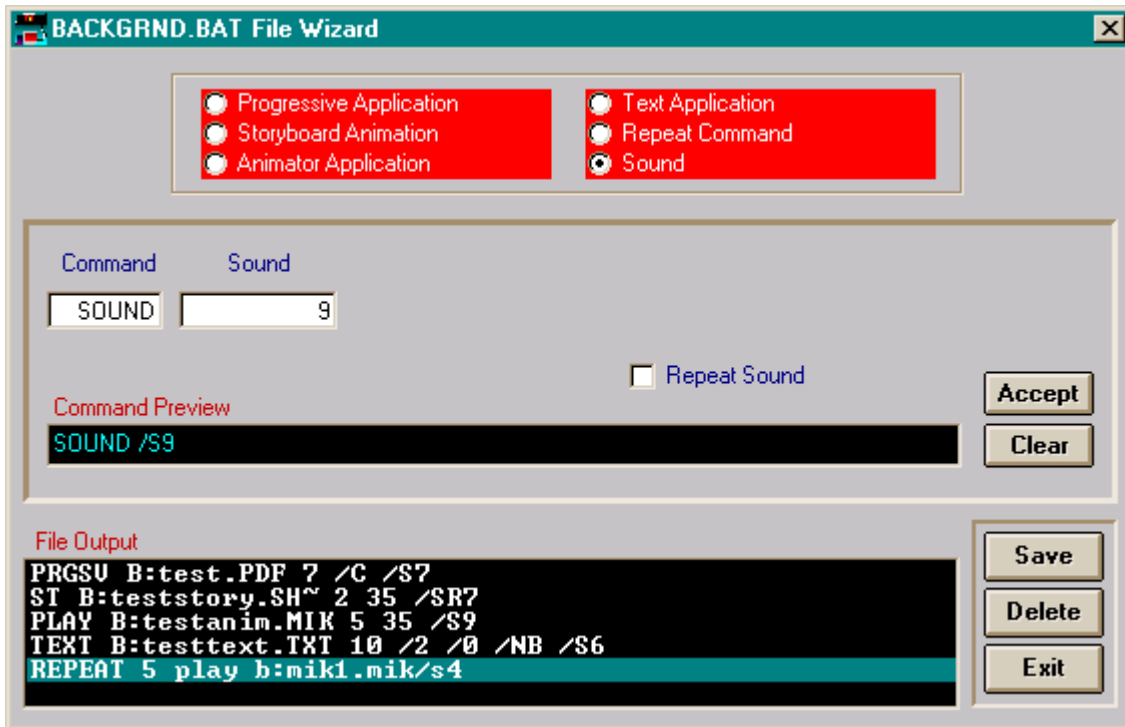


Figure 5.17 *BACKGRND.BAT File Maker: Sound*

To define the Sound, perform the following steps:

1. Type the value of the sound command you wish to use in the *Sound* field. Select the *Repeat Sound* check box if the sound should repeat.
2. Click on the **Accept** button.

If you would like to reconfigure any file after you accept it, perform the following steps:

1. Highlight the file in the *File Output* window.
2. Click on the **Delete** button to remove it.
3. Make a new file. It will appear and execute last in the list.

When all the elements of the *backgrnd.bat* are in place, click on the **Save** button. Then click on the **Exit** button. The new *backgrnd.bat* file is listed in the *Station* window of the DOWNLOAD Main Menu screen.

5.3 Fli2Mik for Windows95/98 Utility

1. Click on Utility from the main menu bar and choose Fli2Mik for Windows95/98 from the sub-menu. The screen in Figure 5.18 appears.
2. In the **Source File** field, navigate to the directory and file you would like to convert. Select the file and it will be copied into Fli2Mik.
3. Navigate to the directory that will be the file destination. If you would like to use the converted file immediately, make sure that the directory name in the **Station** window and the destination directory are the same. When you have selected it, the utility shows the directory and the file name with the **.mik** file extension in the **Destination** field. The screen shows “Ready to convert...”
4. At this stage if you would like to select a different file, click on the **Clear** button to reset all fields and begin again. If you choose not to convert any files, click the **Exit** button.
5. When you are ready to convert your chosen file, click the **Convert** button.

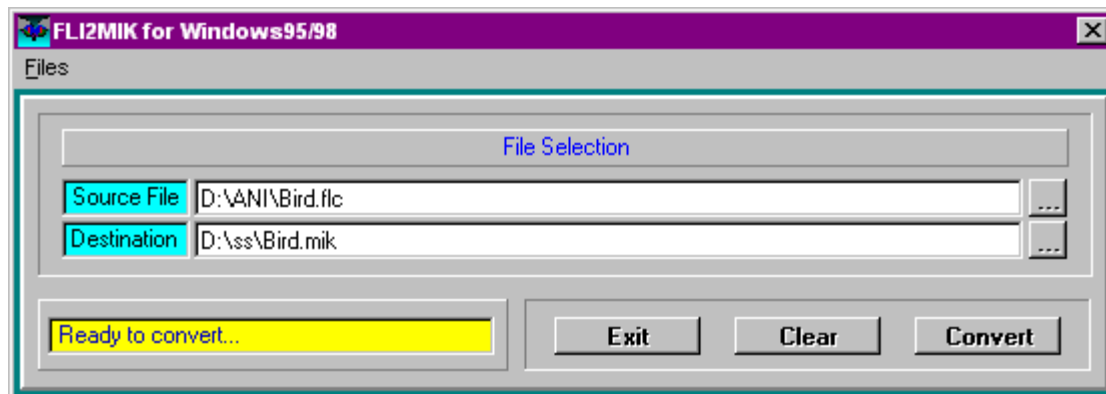


Figure 5.18 *Fli2Mik for Windows95/98 Screen*

The Fli2Mik utility opens in MS-DOS and converts the file. You should see the animation on the screen. When the frame count reaches the total count for the number of frames, the file has converted successfully. However, the animation file will continue to run. Exit MS-DOS. You will return to the Fli2Mik screen, where you can convert more files or **Exit**.

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6. How to Exit

From Exit on the main menu bar, shown in Figure 6.1, you can choose to view information about DOWNLOAD or exit the program. If you choose Exit Program, DOWNLOAD prompts you to confirm whether you want to exit. Click on either the **Yes** or **No** button.

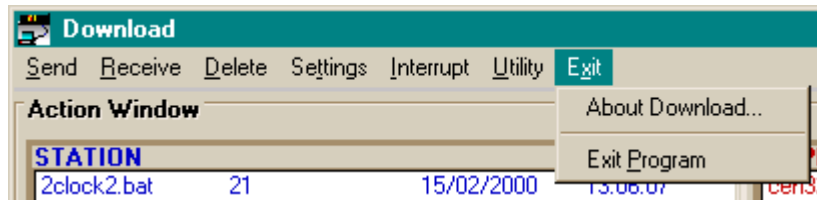


Figure 6.1 *Exit Menu Options*

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7. Troubleshooting: Observed Problems and Solutions

Table 7.1 lists observed problems found while using DOWNLOAD FOR WINDOWS v2.0 and their solutions.

Table 7.1 *Problems and Solutions for DOWNLOAD FOR WINDOWS v2.0*

Problem	Solution
Transmission failure after deleting several files or one very large file from the display logic board.	Reset the display logic board. This problem is caused by the board's disk not packing properly or packing a large amount after deletion.
A file fails to be received successfully from the logic board after several tries.	Exit DOWNLOAD and restart the program. If this fails, reset the logic board and reboot the computer. The computer's communications port might be hung in the open or closed position, preventing any tasks from executing.
Certain files generate an error message stating they cannot be opened.	Some files cannot be opened if they are in use by the computer. Other files might be too large for the program to handle. There is no way to use these files.
The file <i>Download.log</i> is not complete when you open it.	<i>Download.log</i> is open whenever DOWNLOAD is operating and is periodically saved to disk by the operating system. You must close DOWNLOAD for WINDOWS to completely update the contents of <i>Download.log</i>

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