

Acousta-Graphics™ Release 1.3 Software



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1 INTRODUCTION

The Acousta-Graphics™ Release 1.3 Software is a program designed to control Altec Lansing MicroAudio programmable products. The software includes Acousta-Graphics™ Release 1.3, and a file conversion utility program.

Acousta-Graphics Release 1.3 is the controlling software program for the **8551B**, **8558B** one-third octave equalizers and can also program **8553B** dual channel one-third octave equalizer. It works in conjunction with the **8061A** MicroAudio Control Adapter or the **8063A** RS-232-to-MicroAudio Data Bus Converter. From the main graphics screen you can select the gain of each frequency band and overall master gain. The device may also be programmed in real-time.

2 SYSTEM REQUIREMENTS

The Acousta-Graphics Software will run on IBM PC, XT/AT, or 100% compatible computer systems which use PC-DOS/MS-DOS version 2.1 or greater and which have at least 512 kbytes of random access memory (RAM).

The graphics screens will work with CGA, MCGA, EGA, VGA, pc3270, Hercules, and AT&T400 or compatible graphics display adapters with the appropriate video monitors attached. This includes most laptop computer systems which can display a pixel resolution of 640 horizontal by 200 vertical.

The software can print text and graphics on Epson MX/FX-series printers or any dot-matrix printer capable of emulating an Epson printer. Also useable are laser printers which can emulate the HP LaserJet Series II, and the IBM QuietWriter Model 2.

A recommended desktop computer system might include 640 kbytes of RAM, one 360 kbyte floppy drive, one 30 Mbyte hard drive, one RS-232 serial port, one parallel printer port, one **8061A** MicroAudio PC Control Adapter, and an EGA-type display adapter and color monitor. A recommended laptop computer system might include 640 kbytes of RAM, two 720 kbyte 3½" disk drives, one serial RS-232 port, one parallel printer port, one **8063A** RS-232-to-MicroAudio Data Bus Converter, and a CGA-compatible LCD display.

3 CONVENTIONS USED IN THIS MANUAL

To make reading this manual a little easier, the following conventions and notations will be used.

- When you are to type a command to the computer, the keystrokes will be in **BOLDFACE** and will be capitalized for emphasis.
- **<RET>** means that you should press the RETURN or ENTER key.
- **<ESC>** means that you should press the ESCAPE key.
- Since PC-DOS and MS-DOS are functionally the same, both will be referred to simply as DOS.
- Variable filenames will be italicized to indicate that you should substitute or type the appropriate name of the file in its place.
- Programmable equalizers, programmable signal delays, etc., will be referred to as devices in a general sense. A specific kind of device may be a programmable equalizer.
- Whenever the prompt "Press any key to continue..." appears, you can

press any printable character key on the keyboard, or a function or cursor key. You can also press the RETURN or ESCAPE keys.

4 FILES CONTAINED ON THE DISKETTE

The Acousta-Graphics Software may be supplied on one 5¼" diskette or one 3½" diskette. In either case, you will have the following files:

- AG13VER1.EXE - This is the Acousta-Graphics program which controls the **8551B 8553B** and the **8558B** equalizers.
- AG12TO13.EXE - This program converts Version 1.2 datafiles into a format that is readable by Release 1.3.
- AG13 .DOC - This file, if included, will contain the latest update information regarding the software. You may read the file on-screen after you type the following command at your DOS prompt:

TYPE AG13.DOC <RET>

You may also print the file on your printer by typing:

COPY AG13.DOC PRN <RET>

The Acousta-Graphics Release 1.3 diskette does not contain any DOS. Attempting to boot the computer with the diskette in Drive A: will generate a "NON-SYSTEM DISK" error. To avoid potential problems, boot the computer in your usual way.

5 BACKING UP THE ORIGINAL ACOUSTA-GRAPHICS DISKETTE

It is preferable to make a backup or "working copy" of the original diskette to preserve the original and reduce the risk of accidental erasure or damage. To make a backup of the Acousta-Graphics Release 1.3 diskette, follow the steps below for your type of system.

5.1 Backing Up the Original Diskette on a Dual Diskette Drive System

1. Boot the computer system in the usual way.
2. Format a blank diskette in drive B: by typing:

A>FORMAT B: <RET>

3. Remove the DOS system disk from drive A: and insert the Acousta-Graphics diskette. Now, type the following command:

A>COPY A:.* B: /V <RET>

4. Remove the Acousta-Graphics diskette and store it in a safe place. The disk in drive B: should be used as the working copy or as the master diskette from which future copies are made. We strongly recommend that you keep this first

copy as a master backup of the original. You can easily create a duplicate copy as a working diskette by repeating Steps 2 and 3.

5.2 Backing Up the Original Diskette on a Hard Disk System

NOTE: *The Acousta-Graphics Release 2.0 System Management Software was developed to control PA-422 compatible products and utilizes a shell program with pull-down windows from which other programs can be run. The release 1.3 main program is accessible from this program. If this is the case refer to section 8.1 and 8.3. When using Acousta-Graphics release 1.3 on a hard disk system which already contains the Acousta-Graphics release 2.0 software you may install all of the release 1.3 software programs in the same directory as the release 2.0 software programs. This enables you to use the release 2.0 shell file-management-program.*

When using the Acousta-Graphics Release 1.3 without release 2.0 follow the steps below.

1. Boot the computer system in the usual way.
2. Format a blank diskette in drive A: by typing:

FORMAT A: <RET>

3. Make a subdirectory on the hard disk by typing:

MKDIR C:\AG13 <RET>

4. Change to the new directory by typing:

CD C:\AG13 <RET>

5. Remove the formatted diskette from drive A: and insert the original Acousta-Graphics Release 1.3 disk. At the DOS prompt, type:

COPY A:.* /V <RET>

6. Remove the Acousta-Graphics disk and store it in a safe place. Insert the blank formatted diskette in drive A: and type:

COPY *.* A: /V <RET>

This disk should be saved as the master backup of the original diskette.

6 INSTALLATION OF THE SOFTWARE

6.1 On a Hard Disk System

If you have a hard disk system and have followed the instructions in Section 5.2,

the software is already installed.

6.2 On a Dual 3½" System

If the programs reside together on one disk, the software is already installed. However, you may want to be able to boot your computer from the working Acousta-Graphics diskette. If you do, follow the steps below.

1. Boot the computer system in the usual way.
2. Format a blank diskette in drive B: by typing:

```
A>FORMAT B: /S <RET>
```

3. Remove the DOS system disk from drive A: and insert the Acousta-Graphics working diskette. Now, type the following commands:

```
A>COPY A:*. * B: /V <RET>
```

You now have a bootable Acousta-Graphics diskette in drive B:.

6.3 On a Dual 5¼" System

If the programs reside together on one disk, the software is already installed. However, you may want to be able to boot your computer from the working Acousta-Graphics diskette. If you do, follow the steps below.

1. Boot the computer system in the usual way.
2. Format a blank diskette in drive B: by typing:

```
A>FORMAT B: /S <RET>
```

3. Remove the DOS system disk from drive A: and insert the Acousta-Graphics working diskette. Now, type the following commands:

```
A>COPY A:*. * B: /V <RET>
```

You now have a bootable Acousta-Graphics diskette in drive B:.

7 SETTING UP THE DEFAULT CONDITIONS FOR THE SOFTWARE

The first time the main program (AG13VER1.EXE) is run, a default configuration and setup screen will appear as shown in Figure 1. To display the screen from a hard disk system, type the following commands:

```
C>CD C:\AG13 <RET>      (You must change to the ag13 directory where  
                        the programs reside...if not already there.)  
C>AG13VER1 <RET>      (Run the main Acousta-Graphics program.)
```

If you have a dual diskette system, insert the Acousta-Graphics working Diskette

in Drive A: and type:

A>AG13VER1 <RET> (Run the main Acousta-Graphics program.)

At this point, a title and copyright screen appears. At the bottom, you will see the prompt “Press any key to continue...”. Press a key to bring up the setup screen.

The current defaults are displayed in the “Current Default Settings” box. If you need to change any of the default conditions, you may do so by using the “←” and “→” cursor keys to move the large cursor bar horizontally across the menu until your choice is highlighted. As an alternative, you may also press the highlighted character within the selection you wish to change. If you use the cursor keys to highlight your choice, you must follow through by pressing <RET>. Afterwards, a pull-down menu will appear offering additional choices. These choices will be described in the following sections.

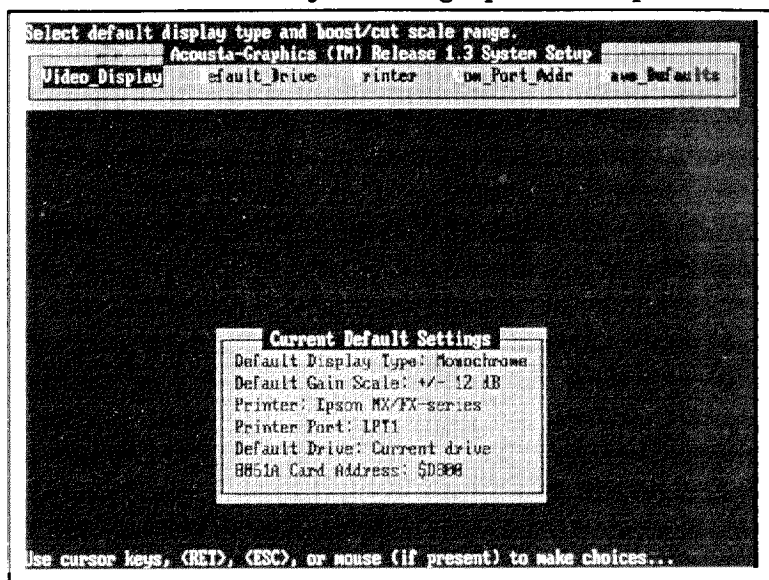


Figure 1 Configuration Setup Screen

NOTE: The <ESC> key can be used to return you to the next higher menu level.

7.1 Changing the Default Video Display and Gain Scale

To change the default video display type, press “V”, or highlight “Video Display” with the cursor bar and press <RET>. A pull-down menu will appear offering a choice between color and monochrome. You can use the “↑” and “↓” cursor keys to highlight your selection. If you have a color video monitor and a color video display adapter, then highlight “1) Color” and press <RET>, or press “1”. Otherwise, highlight “2) Monochrome” and press <RET>, or press “2”.

NOTE: If you have a CGA or compatible display adapter and a color monitor, only the setup screen, the help screen, the disk management screens, and the report title screen will be in color; the graphics screens will not. The graphics screen will be in color only on systems using an EGA or VGA-compatible display adapter and a color monitor.

After pressing <RET>, another pull-down menu appears offering a choice of gain scales. The 8551B, 8558B and the 8553B equalizers are shipped from the factory with a gain scale calibrated in 1 dB steps from -12 dB to +12 dB. The equalizer,

however, may be field-modified to have a gain scale range of ± 6 dB with $\frac{1}{2}$ dB resolution. Refer to the operating instructions for the **8551B/8558B** equalizers (Part No. 42-02-026902) or the **8553B** equalizer (Part No. 42-02-027634) for information regarding the modification. If the equalizer has been field modified, then highlight “**2** ± 6 dB Gain Scale” and press <RET>, or press “**2**”. Otherwise, highlight “**1** ± 12 dB Gain Scale” and press <RET>, or press “**1**”. As you make new selections, your choices will be displayed in the Current Default Settings box.

7.2 Changing the Default Drive

To change the default drive, press “**D**”, or highlight “Default Drive” with the cursor bar and press <RET>. A pull-down menu will appear offering a choice of six default disk drives. The default disk drive is the drive on which the data files will be stored or retrieved. It need not be the same drive as the one from which the program was run. However, since each data file requires only 62 bytes, it is usually more convenient to select “**1** Current drive” as the default drive. To make an alternate selection, highlight your choice with the cursor keys and press <RET>, or press the highlighted character within your choice.

7.3 Changing the Default Printer

To change the default printer, press “**P**”, or highlight “Printer” with the cursor bar and press <RET>. A pull-down menu will appear offering a list of printers. The present choices are “**1** Epson MX/FX series”, “**2** HP LaserJet Ser II”, or “**3** IBM QuietWriter 2”. To select a printer, highlight your choice with the cursor keys and press <RET>, or press the highlighted character within your choice. Although only three printers are listed, many more printers can be used if they can emulate one of the printers listed. This includes most dot-matrix and laser printers.

After making your printer selection, another pull-down menu appears offering a choice between two parallel printer ports, “**1** LPT1” or “**2** LPT2”. Choose the port to which your printer is attached by highlighting your selection and pressing <RET>, or by pressing the highlighted character within your choice.

7.4 Changing the Default Com Port Address

To change the default com port address, press “**C**”, or highlight “Com Port Addr” with the cursor bar and press <RET>. A pull-down menu will appear offering a list of five port addresses. There are three address locations at which the **8061A** pc control adapter may be addressed. If you are using the software with the pc control adapter, highlight the address which matches the hardware DIP switch setting on the card and press <RET>, or press the highlighted character within your choice. The **8061A** is shipped with a DIP switch selected default address of (\$E000) which is generally intended for use in a PC-XT compatible. For com port address selection and corresponding **8061A** DIP switch address settings see Table I.

If you are using the **8063A** RS-232 to MicroAudio Data Bus Converter, highlight the com port address to which the **8063A** is connected, e.g. COM1 or COM2, and press <RET>, or press the highlighted character within your choice.

7.5 Saving the Default Choices in the Configuration File

To save your default choices, press "S", or highlight "Save" and press <RET>. A pull-down menu will appear offering a choice between "Yes" and "No". If you highlight "Yes" and press <RET>, your default choices will be written into a configuration file called "ag1ver13.cfg". Each subsequent time the program is run, the program will

COM PORT ADDRESS	8061A ADDRESS DIP SWITCH SETTING							
	1	2	3	4	5	6	7	8
(D800)	ON	ON	ON	OFF	OFF	ON	OFF	OFF
(DC00)	ON	ON	OFF	OFF	OFF	ON	OFF	OFF
(E000)	ON	ON	ON	ON	ON	OFF	OFF	OFF

read this file and configure itself according to your choices. The file, however, must reside in the same directory, drive, etc., as the main Acousta-Graphics release 1.3 program.

Anytime the configuration file is not found, the main program will again display the setup screen.

Table I 8061A ADDRESS SELECTION

Therefore, if you want to change any default information at a later time, simply erase the configuration before running the program. This is done by typing the following command at your DOS prompt:

DEL AG1VER13.CFG <RET>

If you select "No" as your response under "Save", you will return directly to DOS. A configuration file will not be created.

8 STARTING THE ACOUSTA-GRAPHICS SOFTWARE

8.1 On a Hard Disk System

If using Acousta-Graphics release 1.3 in the same directory as release 2.0 (refer to the note in section 5.2), you may use the convenience of the shell program. If so then type the following commands at your DOS prompt.

CD C:\AG2 <RET> (Change to the directory where the Acousta-Graphics programs reside.)

AG2SHELL <RET> (Run the shell program.)

At this point, a title and copyright screen appears. Press any key to access the main shell menu screen.

A copy of the screen is shown in Figure 2. Using your cursor keys, highlight "Main Programs" and press <RET>, or press "M". Next, highlight "3) Acousta-Graphics Rel. 1.3 (for MicroAudio data bus EQ's)" and press <RET>, or press "3". After a moment, the main graphics screen will appear as shown in Figure 3.

If you are not using the shell program, then type:

C>CD C:\AG13 <RET>

(You must change to the ag13 directory where the programs reside...if not already there.)

AG13VER1 <RET>

(Run the main Acousta-Graphics program.)

Next, a title and copyright screen will appear. Press any key to access the main graphics screen. The main graphics screen is shown in Figure 3.

NOTE: *The title screen and main graphics screen will appear in color only on systems which have an EGA or VGA-compatible graphics display adapter and a color monitor.*

8.2 On a Dual 3½" System

1. If you have booted your computer system from the Acousta-Graphics system disk created in Section 6.2, then type the following command. If you booted your system in the usual way, go on to Step 2.

A>AG13VER1 <RET> (Run the main Acousta-Graphics program.)

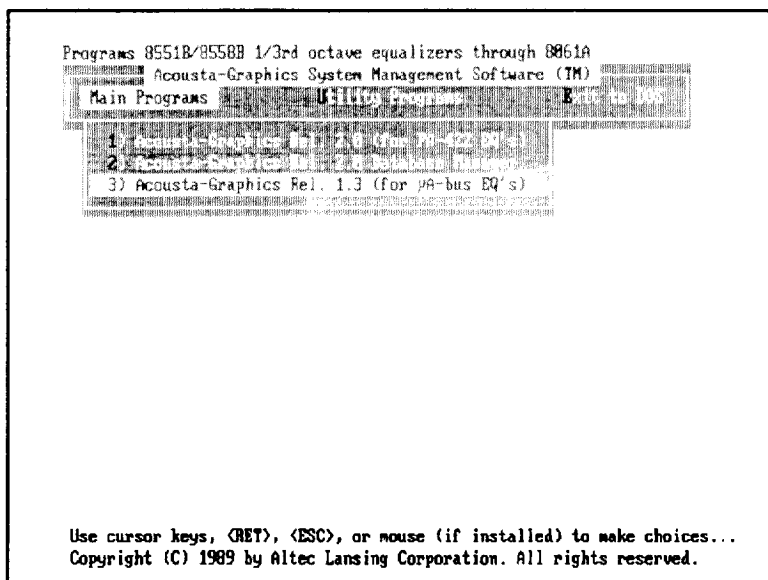


Figure 2 Shell Program Manager

2. If you have booted your computer system in your usual way, insert the Acousta-Graphics working diskette in drive B: and type the following commands.

A>B: <RET> (Change default drive to B: drive.)

B>AG13VER1 <RET> (Run the main Acousta-Graphics program.)

At this point, a title and copyright screen will appear. Press any key to access the main graphics screen. The main graphics screen is shown in Figure 3.

NOTE: *The title screen and main graphics screen are in color only on systems which have an EGA or VGA-compatible graphics display adapter and a color monitor.*

8.3 On a Dual 3½" System and Using Acousta-Graphics Release 1.3 with Release 2.0

If using Acousta-Graphics release 1.3 with release 2.0, then the release 2.0 programs must reside on the same diskette, directory, ect., as release 1.3 (see section

5.2), then you may use the convenience of the shell program by typing the following commands at your DOS prompt.

1. If you have booted your computer system from the Acousta-Graphics system disk created in Section 6.2, and the release 2.0 programs exist on the diskette then type the following command. If you booted your system in the usual way, go on to Step 2.

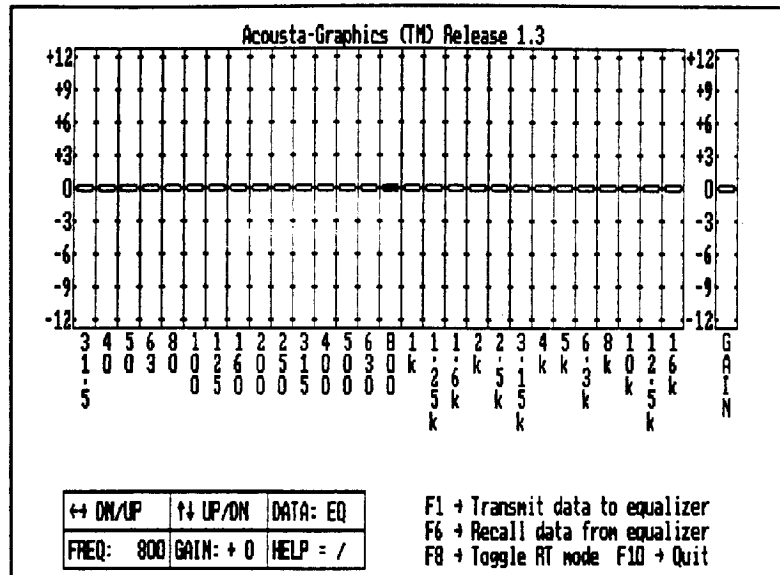


Figure 3 Main Graphics Screen

A>AG2SHELL <RET> (Run the shell program manager.)

2. If you have booted your computer system in your usual way, insert the Acousta-Graphics working diskette (that includes release 1.3 programs along with release 2.0 programs) in drive B: and type the following commands.

A>B: <RET> (Change default drive to B: drive.)
 B>AG2SHELL <RET> (Run the shell program manager.)

At this point, a title and copyright screen appears. Press any key to access the main shell menu screen. A copy of the screen is shown in Figure 2. Using your cursor keys, highlight "Main Programs" and press <RET>, or press "M". Next, highlight "3) Acousta-Graphics Rel. 1.3 (for MicroAudio data bus EQ's)" and press <RET>, or press "3". After a moment, the main graphics screen will appear as shown in Figure 3.

NOTE: The title screen and main graphics screen are in color only on systems which have an EGA or VGA-compatible graphics display adapter and a color monitor.

8.4 On a Dual 5¼" System

1. If you have booted your computer system from the Acousta-Graphics system disk created in Section 6.3, then type the following command. Otherwise, go on to Step 2.

A>AG13VER1 <RET> (Run the main Acousta-Graphics program.)

2. If you have booted your computer system in your usual way, insert the Acousta-Graphics working diskette in drive B: and type the following commands.

A>B: <RET> (Change default drive to B: drive.)
B>AG13VER1 <RET> (Run the main Acousta-Graphics program.)

At this point, a title and copyright screen will appear. Press any key to access the main graphics screen. The main graphics screen is shown in Figure 3.

NOTE: *The title screen and main graphics screen are in color only on systems which have an EGA or VGA-compatible graphics display adapter and a color monitor.*

9 EXITING FROM THE ACOUSTA-GRAPHICS SOFTWARE

To exit the program, press function key **F10** from the main graphics screen. A message prompt will appear asking you to verify your request to exit. Press <RET> to confirm your request or <ESC> to cancel.

If the program was started from the shell program (see note in section 5.2), you will be returned to the shell's main menu where you can press "E" to exit directly to DOS.

10 PROGRAMMING DEVICES FROM THE MAIN GRAPHICS SCREEN

10.1 An Explanation of the Main Graphics Screen

NOTE: *The program was written to display the graphic images on a 640 by 200 pixel display grid. On systems which use CGA, EGA, or VGA-compatible display adapters, the graphics image will fill the entire monitor's screen. However, on Hercules or compatible display adapters, the screen will be somewhat compressed since the 640 by 200 display grid will be mapped onto a 720 by 350 display grid.*

Shown in Figure 3 is the main graphics screen. The upper portion of the screen consists of 28 frequency bands and a master gain control. Each has an individual slider control knob which may be moved upward or downward using the cursor keys. One band, the 800 Hz band, has a slider knob which is solidly filled. On color EGA/VGA systems, this knob is red. Otherwise, the knob outline and its filling are white. The solidly filled rectangular knob moves horizontally to indicate the selected band, and vertically to indicate the gain. Its exact position in terms of the frequency band and gain are also displayed in the 1st and 2nd status boxes along the bottom (counting from left to right).

Normally, the gain scale ranges from -12 dB to +12 dB as shown. However, if the ±6 dB gain scale were chosen as the default condition, the scale would read from -6.0 dB to +6.0 dB.

Three boxes appear along the bottom of the screen. The 1st and 2nd boxes display the selected frequency band and gain. When necessary, messages and prompts will appear directly above the status box area.

10.2 Displaying the Acousta-Graphics Help Screen

One of the most important things to note on the screen is the message "HELP = /" located in the third box of the status boxes. This means that the Help screen can be displayed by pressing "/", the forward slash key. A copy of the Help screen is shown in Figure 4. You should review the help screen carefully.

10.3 Moving Around the Graphics Screen with the Cursor Keys

Before continuing, you should know that changing the screen settings will in no way affect the current programmed settings of the device unless the Real-time mode of operation is engaged. For information on the real-time mode of operation, refer to Section 10.10.

As previously mentioned, the "←" and "→" cursor keys select the frequency band or the master gain control. If the solidly filled knob, the cursor, is at the far left or the far right position of the screen, and you continue to press the "←" or "→" cursor key, the cursor will wrap-around to the other end.

The "HOME" key will immediately position the cursor to the leftmost frequency band (31.5 Hz). Pressing the "END" key will position the cursor at the master gain control. Another key, the "INS" (Insert) key, will position the cursor in the middle of the screen at the 800 Hz frequency band.

The "↑" and "↓" cursor keys adjust the gain of the selected frequency band. No wrap-around occurs here. If you reach the limits of the gain scale, a beep will sound to warn you.

The "PgUp" key will immediately set the gain of the selected frequency band to maximum (full boost). Pressing the "PgDn" key will set the gain to minimum (full cut). The "DEL" key may be used to reset to gain of the band to 0 dB.

10.4 Set All Gains for Flat Response

Sometimes you may need to set or reset the frequency bands and the master gain control to the same gain, usually to unity gain (0 dB). This is easily accomplished by typing "G". A prompt will appear above the status boxes. If you press <RET>, the program will reset all gains to 0 dB.

If the ±12 dB gain scale were chosen as the default range, you may also input any integer gain value between -12 and +12 dB. This action causes all frequency bands to be set to the new gain value. Positive gains, however, will cause the master gain setting to decrease proportionally in an effort to minimize the potential for system

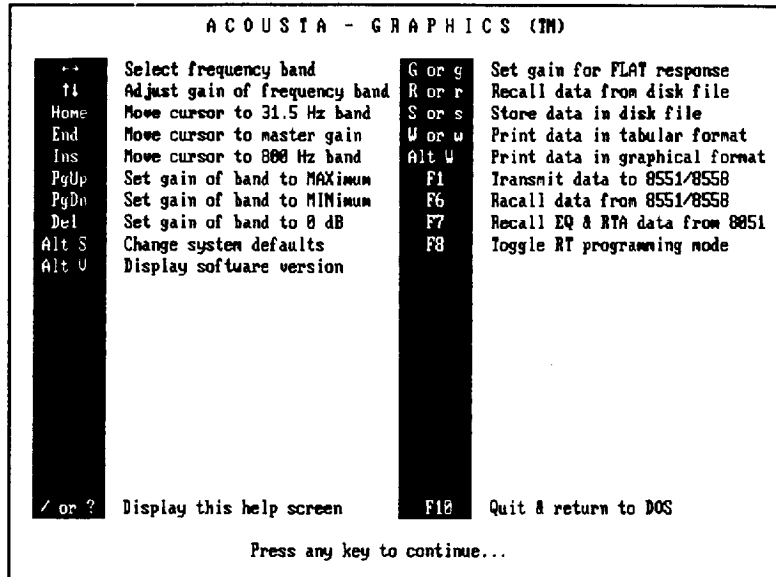


Figure 4 Help Screen

overload and possible system damage. If the Real-time mode were engaged (refer to section 10.10), the equalizer would be reprogrammed with the new gain values.

If you chose the ± 6 dB gain scale as the default range, you can only press <RET>. This will reset all bands, including the master gain, to 0.0 dB.

10.5 Storing Data in a Disk File

To store all the screen data in a disk file, press "S". The program will read the files from the current directory on the default drive and display them on the screen. You can abort the request and return to the main graphics screen by pressing <ESC>.

The program can display up to 512 files from which to choose. If the number of files exceeds 105 on page 1, the next screen page may be accessed by pressing "PgDn". To go back to the previous page, press "PgUp". The "Home" and "End" keys will display the first and last screen pages respectively.

Using the cursor keys, you can highlight a filename into which the data will be stored, or you may begin typing a new filename at the small blinking cursor after the prompt "Enter name of file to store: ". If you select a filename, the prompt "OK to overwrite? Y, N, or <ESC> to abort..." appears. If you press "Y", the contents of the selected file will be overwritten with the new data. If you press "N", the files will be redisplayed to permit another selection. Pressing <ESC> will abort the request and return you to the main graphics screen.

When typing a new filename, the first character typed will be placed in the first character position in the data field following the filename prompt. The BACKSPACE key may be used to correct any typing errors.

Since the 8551B, 8558B and the 8553B are one-third octave equalizers the program uses the default filename extension of ".E13". The "E" means that the device is an equalizer, the "1" means single channel programming, and the "3" means one-third octave. This extension is automatically appended to the end of a filename if one is not typed. Therefore, you do not need to type an extension unless a different extension is required.

If you need to write to a disk drive other than the default drive, simply precede the filename with the proper drive designator followed by a colon. For example, typing "b:mainhall" will store a file named "mainhall.e13" in the current directory on drive B:. You can also type a pathname such as "a:\bapchrch\chapel". In this case, a file named "chapel.e13" will be stored in the directory named "\bapchrch" on drive A: (if it exists).

You can temporarily change the default drive by pressing function key F10. When pressed, the prompt "Change current drive to: " appears. Enter a new drive designator followed by a colon and press <RET>, or press <ESC> to abort the request. If a new drive designator is entered, it becomes the current default drive until the program is exited.

10.6 Retrieving Data from a Disk File

To retrieve the data from a disk file, press "R". The program will read the files from the current directory on the default drive and display them on the screen. You can abort the request and return to the main graphics screen at any time by pressing <ESC>.

The program can display up to 512 files from which to choose. If the number of files exceeds 105 on page 1, the next screen page may be accessed by pressing "**PgDn**". To go back to the previous page, press "**PgUp**". The "**Home**" and "**End**" keys will display the first and last screen pages respectively.

Using the cursor keys, you can highlight a filename from which the data will be retrieved, or you may begin typing the name of an existing file at the small blinking cursor after the prompt "**Enter name of file to read:**". If you select a filename and the file contains valid Release 1.3 data, the data will be displayed on the graphics screen. If you select a file containing invalid data, the prompt "**Not valid 1.3 datafile. Press any key to continue or <ESC> to abort...**" appears. If you press a key other than **<ESC>**, the screen will reset to await your next selection.

When typing the filename to read, the first character typed will be placed in the first character position in the data field following the filename prompt. The **BACKSPACE** key may be used to correct any typing errors. Since extensions other than ".E13" can be used, you must type the full filename including its extension. Otherwise, a "**File not found.**" error will result.

If you need to retrieve a file from a disk drive other than the default drive, simply precede the filename with the proper drive designator followed by a colon. For example, typing "b:pressbox.e13" will retrieve a file named "pressbox.e13" from the current directory on drive B:. You can also type a pathname such as "a:\racetrak\pressbox.e13". In this case, a file named "pressbox.e13" will be retrieved from the directory named "\racetrak" on drive A: (if it exists).

You can temporarily change the default drive by pressing function key **F10**. When pressed, the prompt "**Change current drive to:**" appears. Enter a new drive designator followed by a colon and press **<RET>**, or press **<ESC>** to abort the request. If a new drive designator is entered, it becomes the current default drive until the program is exited.

If the Real-time mode of operation is engaged, the data will be displayed on the screen. The data, however, will not be automatically transmitted to the equalizer without confirmation. To reprogram the equalizer with the data, press **<RET>** after the verification prompt. Otherwise, press **<ESC>**.

10.7 Producing Printed Reports of the Data

The data can be printed in a tabular or graphical format along with related project information as shown in Figures 5 and 6 respectively. If you want to print a report with tabular data, press "**W**". Otherwise, press "**Alt W**" (hold down the "**Alt**" key and press "**W**").

The program responds by displaying the Report Title screen shown in Figure 7. Here, you can optionally enter a new report title and date, the project name, the project site, the system engineer, and the name of the associated datafile.

There are several text editing commands shown along the bottom to help you correct typing errors. Most of them are self-explanatory and will not be covered in detail here. Several commands of note are **<RET>**, "**Ctrl Z**" (Control-Z), and **<ESC>**. The **<RET>** key accepts the current data entry field and moves the cursor to the next line. Holding down the "**Ctrl**" key and pressing "**Z**" will accept all of the data entry fields as they are shown and will send this information along with the data

immediately to the printer. Pressing <ESC> will abort the print request and return to the main graphics screen.

Optional information you choose to enter will be remembered by the program as long as it is running. If you enter a new project name, for example, and press <ESC> to abort the print request, the project name will reappear when the next report title screen is displayed.

10.8 Transmitting All the Screen Data to the Equalizer

Once you have adjusted the parameters on the screen, you can press function key "F1" to transmit all the data to the equalizer. Before an actual transmission occurs, a verification prompt will appear on the screen to allow you the opportunity to confirm or cancel your request. If you press <ESC>, the transmit request will be canceled. If you press <RET>, the data will be transmitted to the device.

The data to be transmitted includes the gain for each frequency band and the master gain level. This command will not work when the Real-time mode of operation is engaged.

10.9 Retrieving All the Data from an Equalizer

Press function key "F6" to retrieve all the data from the device. Before the data is retrieved, a verification prompt will appear on the screen as shown to allow you the opportunity to confirm or cancel the request. Press <RET> to confirm or <ESC> to cancel.

The command instructs the equalizer to transmit the gain for each frequency band and the master gain setting.

NOTE: *The incoming data will overwrite any data shown on the graphics screen. Therefore, it is important to save the screen data in a disk file before retrieving any new data.*

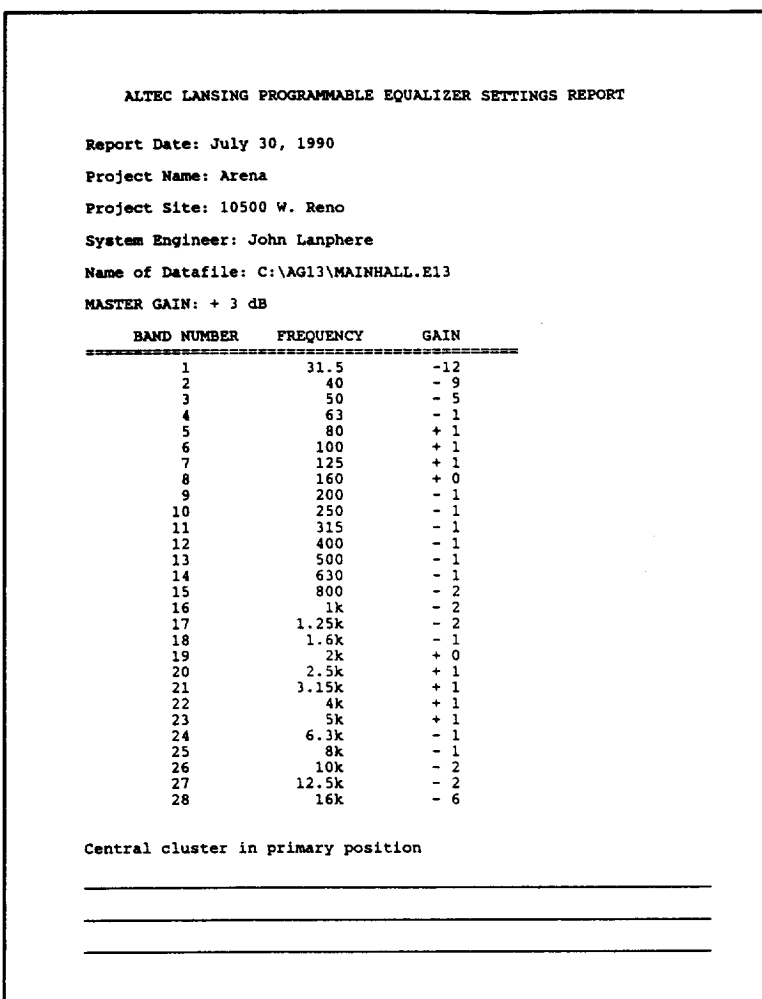


Figure 5 Printout with Tabular Data

10.10 Engaging the Real-time Programming Mode of Operation

Press function key "F8" to toggle the Real-time mode of operation on or off. Whenever the notice "RTP mode" is displayed in the upper right corner of the screen, any change in the screen data such as gain, filter setting, etc., will be immediately transmitted to the equalizer. To exit the real-time mode, press function key "F8" again.

11 MISCELLANEOUS COMMANDS

11.1 Displaying the Current Revision Level of the Acousta-Graphics Software

Press and hold down the "ALT" key and press "V" to display the current software release and revision level. The release and revision level will be displayed on the top line of the screen as shown in Figure 8. Among other miscellaneous information is the compilation date. Should a problem ever occur requiring you to contact the factory (refer to Section 14), please provide the revision level and the compilation date. This information helps us expedite a solution.

11.2 Changing the Default Conditions from the Main Graphics Screen

Press and hold down the "ALT" key and press "S" to display the setup screen. You

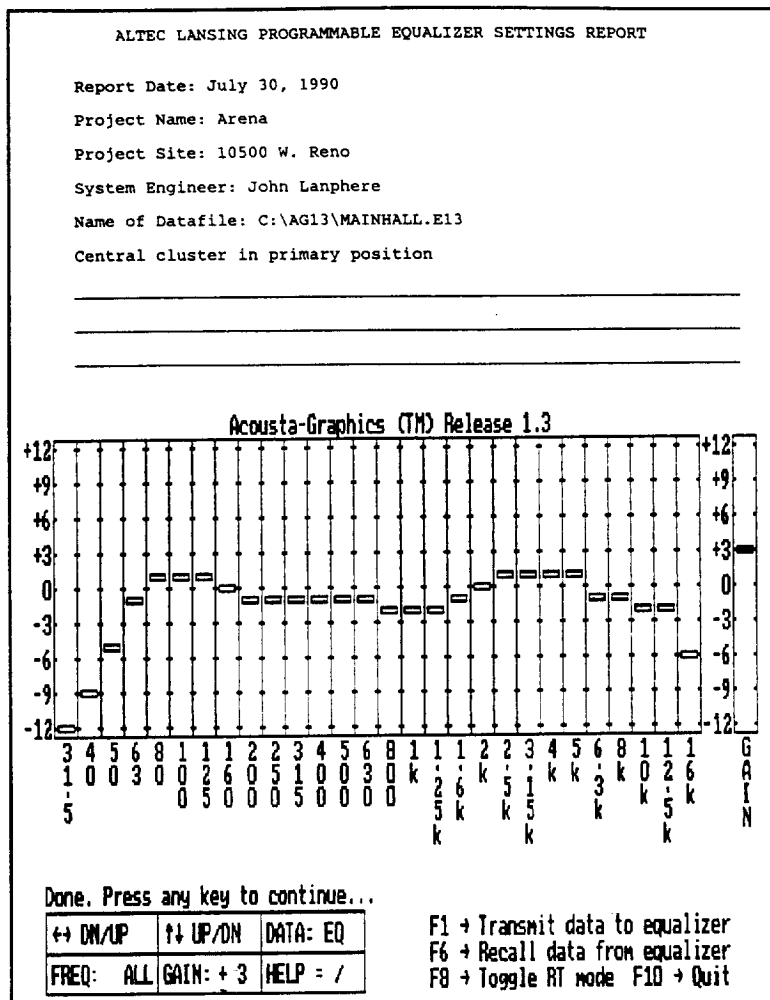


Figure 6 Printout with Graphical Data

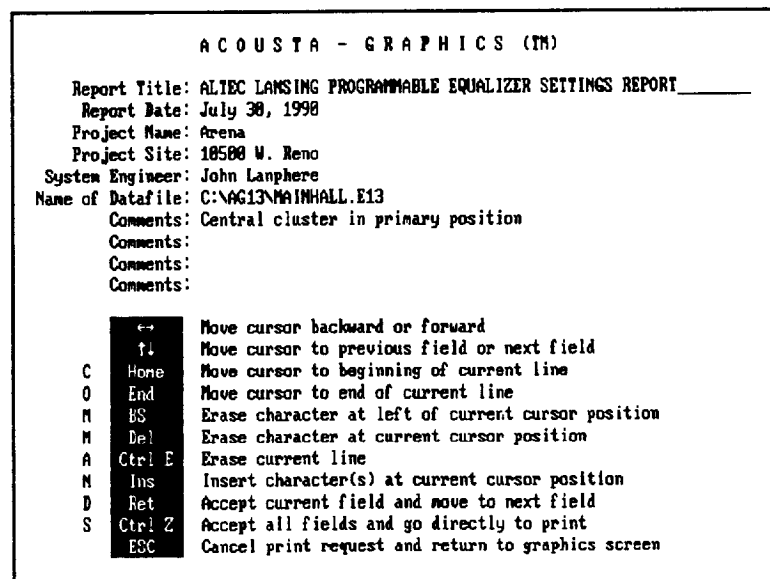


Figure 7 Report Title Screen

are permitted to change any of the parameters except the default port address. To change the default port address, you must exit the Acousta-Graphics software and erase the configuration file named "ag1ver13.cfg". Refer to Section 7.5 for additional information.

If you do not re-save the changes in the configuration file, the changes will only be in effect while the program is running.

12 USING THE FILE CONVERSION PROGRAM

Since earlier programmable equalizer products did not have master gain, files containing equalization settings created from Acousta-Graphics Release 1.2 can not be read by Acousta-Graphics Release 1.3 unless converted. To convert an earlier datafile type the following command:

```
C>AG12TO13 <RET>
```

(Display the conversion instruction screen.)

The instruction screen is displayed (refer figure 9). Follow the instruction that applies to your situation.

If using the shell program manager select the appropriate file conversion utility from the shell program's "Utility Programs" menu. A prompt will appear on the screen. Enter the name of the file to convert or press <RET> to display additional instructions.

13 ADDITIONAL SUPPORT INFORMATION

The operating instructions for related products, such as the 8551B/8558B One Third Octave Equalizers (Part Nol. 42-02-026902), the 8553B Dual Channel 28 Band

```
Acousta-Graphics (TM) Release 1.3, Revision 0
for IBM PC XT/AT and 100% compatible computers

Copyright (C) 1989 by Altec Lansing Corporation.
All rights reserved.

Date of Compilation: December 8, 1989

Compiled using: Turbo Pascal Ver. 5.5

For use with: CGA, EGA, UGA, pc3270, Hercules, and AT&T 6300

Current graphics driver is: EGAUGA

Turbo Pascal is a trademark of Borland International, Inc.
IBM, XT, AT, pc3270 are trademarks of IBM Corp.
Hercules is a trademark of Hercules Computer Technology, Inc.
AT&T 6300 is a trademark of AT&T

Press any key to continue...
```

Figure 8 Revision Level Screen

```
Acousta-Graphics (TM) Release 1.3 File Conversion Utility
Copyright (C) 1989 by Altec Lansing Corporation. All rights reserved.

Function: Convert Version 1.2 data files (58 bytes in length)
to Release 1.3 (62 bytes in length) and set the
MASTER GAIN to unity.

Syntax:  ag12to13 filename.xyz (convert specific file)
         ag12to13 *.EQ        (convert all .EQ files)
         ag12to13 *.RTA       (convert all .RTA files)
         ag12to13 *.*         (convert all files)

Note:    Use *.* with extreme care. Batch or text files of exactly
58 bytes in length may undergo a conversion attempt which
may corrupt the file. However, files with lengths other
than 58 bytes will be ignored.

Press any key to continue...
```

Figure 9 Conversion Instruction Screen

MicroAudio One-third Octave Equalizer (Part No. 42-02-027634), the **8063A** RS-232 to MicroAudio Data Bus Converter (Part No. 42-02-030001), and the **8061A** MicroAudio PC Control Adapter (Part No. 42-02-026009), provide a wealth of supporting information.

14 GETTING HELP

If you are having difficulty with the Acousta-Graphics Release 1.3 Software, please write

Acousta-Graphics Software
P.O. Box 26105
Oklahoma City, OK 73126-0105 USA

or telephone

country code 01
(405) 324-5311

between the hours of 9:30 AM to 11:30 AM or 1:30 PM to 4:30 PM, North American Central time (15:30–17:30 or 19:30–22:30 GMT), Monday through Friday. Ask for the Technical Services Manager. Unfortunately, we are unable to accept collect telephone calls.

You can also contact us via Telex at 160369 or by FAX at (405) 324-5311. To expedite help, please provide the following information:

- Nature of problem
- Circumstances or conditions for problem to occur
- Revision level of Acousta-Graphics Release 1.3 (See Section 11.1)
- Compilation date (See Section 11.1)
- Type of computer system including video display adapter, amount of memory, printer model, etc.
- DOS version (type **VER <RET>** at your DOS prompt)

Every effort will be made to provide prompt and reliable support.

15 TRADEMARK NOTICES

AT&T

XT™

AT™,

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HP™,

HP LaserJet™

MS-DOS®

Acousta-Graphics™

AT&T

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Seiko Epson Corporation

Hercules Computer Technology, Inc.

Hewlett-Packard Company

Microsoft Corporation

Altec Lansing Corporation