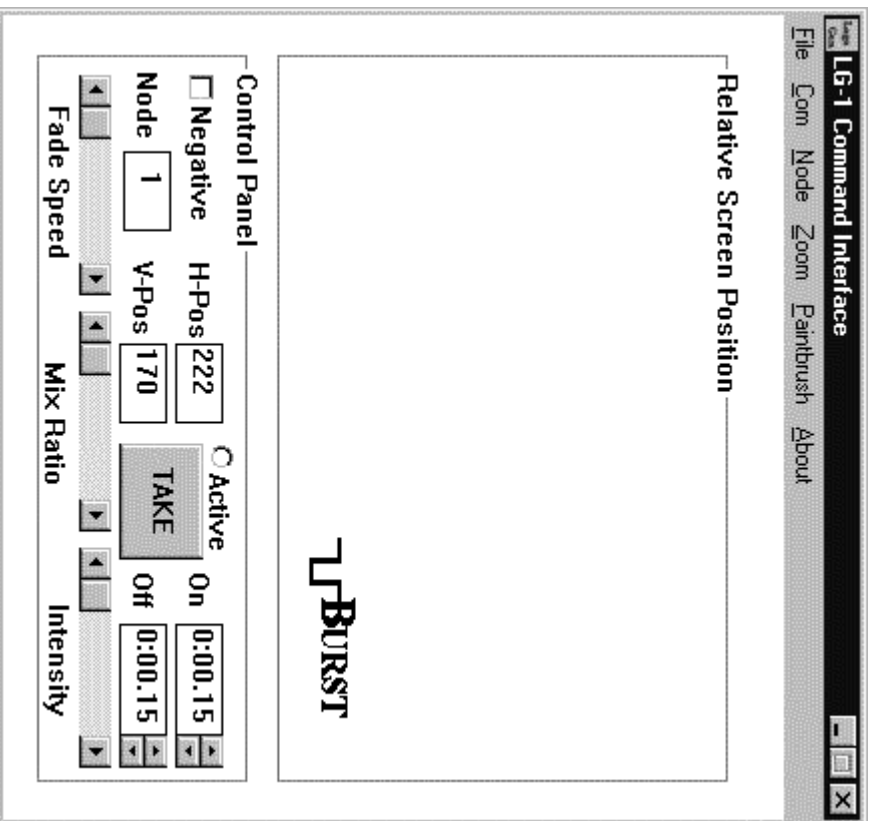


The LG-1 Plus Video Logo Generator Manual



BURST ELECTRONICS Inc

PROFESSIONAL VIDEO AND AUDIO ELECTRONICS



BURST ELECTRONICS Inc
E. Mockingbird Lane
PO Box 1468
Corrales, NM 87048 USA
(505) 898-1455 • FAX (505) 898-0159
burstelectronics.com

Rev 10/99

Table of Contents

| | |
|---|----|
| TABLE OF CONTENTS | 1 |
| INTRODUCTION | 3 |
| • WHAT'S NEW | 3 |
| • INSTALLATION | 3 |
| Win95/Win98 | 3 |
| DOS/Win3.x | 4 |
| WHAT IS LOGOGEN | 5 |
| MENU | 6 |
| • FILE MENU | 6 |
| <i>Open Logo File</i> | 6 |
| <i>Download Logo to</i> ... | 6 |
| <i>Save Settings in LG-1 NV-RAM</i> | 7 |
| <i>Exit</i> | 7 |
| • COM MENU | 7 |
| • NODE MENU | 8 |
| <i>Wake Current Node</i> | 8 |
| <i>Wake All Nodes</i> | 8 |
| <i>Put All Nodes to Sleep</i> | 9 |
| <i>Set ID to Current Node</i> | 9 |
| • ZOOM MENU | 9 |
| • PAINTBRUSH MENU | 9 |
| • ABOUT MENU | 10 |
| VIRTUAL DISPLAY | 10 |
| CONTROL PANEL | 10 |
| <i>Negative</i> | 11 |
| <i>Node</i> | 11 |
| <i>H-POS</i> | 11 |
| <i>V-POS</i> | 11 |
| <i>TAKE</i> | 11 |
| <i>Fade Speed</i> | 12 |
| <i>Mix Ratio</i> | 12 |
| <i>Intensity</i> | 12 |
| <i>On</i> | 12 |
| <i>Off</i> | 12 |

| | |
|--|-----------|
| THE LG-1 PLUS HARDWARE | 12 |
| FRONT PANEL SWITCHES | 12 |
| <i>Mix</i> | 13 |
| <i>Speed</i> | 13 |
| <i>Level</i> | 14 |
| ↔ | 14 |
| ↑ | 14 |
| <i>Take/Time</i> | 14 |
| <i>Active LED</i> | 14 |
| <i>Lock LED</i> | 14 |
| <i>Power LED</i> | 14 |
| CREATING YOUR OWN LOGOS | 14 |
| TIMED-TAKE | 16 |
| NODE: ID AND ADDRESS | 16 |
| CONTROLLING A SINGLE LG-1 | 16 |
| CHANGING LG-1 ID ADDRESS | 16 |
| CONTROLLING A SINGLE LG-1 IN MULTIPLE TANDEM CONFIGURATION | 17 |
| CONTROL ALL LG-1's SIMULTANEOUSLY | 18 |
| COMMANDS FROM DOS | 18 |
| SERIAL PARAMETERS | 18 |
| TIME CONVERSIONS FOR TIMED-TAKE | 18 |
| WIRING DIAGRAMS | 19 |
| DB9-RJ11 | 20 |
| DB25-RJ11 | 21 |

● Introduction

Congratulations on your purchase of the LG-1 Plus Logo Generator from Burst Electronics, Inc. We hope that this manual will cover any questions that you may have concerning the operation of this product.

There are two areas that this manual will cover. The first being the software used to control the LG-1 with a computer, and the second being the operation of the LG-1 by using the front panel switches.

The LG-1 Command Interface software is designed to control the LG-1 from a PC based Microsoft Windows environment. This program serves two primary functions. First is to facilitate the transfer of logo graphics data to the LG-1 hardware, and second is to allow remote Graphical User Interface (GUI) control of the LG-1.

The Front Panel Switches are used primarily for manual control of the position and appearance settings of your logo.

● What's New

- **Timed-Take:** When Timed-Take is active the LG-1 will control your LOGO automatically in user defined timed increments.
- **RS232 Loop:** Ability to control multiple LG-1's with a single computer using an RS232 port.
- **Node ID:** An ID#, called a node, can now be set for each LG-1. The factory default of this value is 1.
- **Save Settings:** The ability of the windows software to save the image attributes into the LG-1 NVRAM.
- **Save Logo:** A separate function that will save logo image data into the LG-1 NVRAM

● Installation

Win95/Win98

1. Install the DB9 - RJ11 adapter to an open serial port on your PC.
2. Attach RJ11 cable from your PC to the LG-1's RS232 port labeled HOST.
3. Apply video to the LG-1, and connect the output video of the LG-1 to a video monitor.
4. Apply power to the LG-1, and confirm video with a logo is now displayed on your video monitor, and that the ACTIVE LED and LOCK LED are lit up (if the ACTIVE LED is not lit up, depress the TAKE switch).

5. Run the file called SETUP9X.BAT (loads LogoGen to your hard drive, places an icon on your desktop, and places a shortcut in your Start Menu).
6. Double click the Icon called LOGOGEN.
7. Select the communication port that you are going to use, by clicking on COM in the main menu bar, and selecting the appropriate COM port. Selecting a port that is in use by another device will trigger a warning dialog window explaining the problem. LogoGen supports COM1 to COM4.
8. Wake the LG-1 by clicking on NODE, then clicking on WAKE-UP ALL NODES.

DOS/Win3.x

1. Install the DB9 - RJ11 adapter to an open serial port on your PC.
2. Attach RJ11 cable from your PC to the LG-1's RS232 port labeled HOST.
3. Apply video to the LG-1, and connect the output video of the LG-1 to a video monitor.
4. Apply power to the LG-1, and confirm video with a logo is now displayed on your video monitor, and that the ACTIVE LED and LOCK LED are lit up (if the ACTIVE LED is not lit up, depress the TAKE switch).
5. Create a directory for the LogoGen on your hard drive (e.g. C:\LG1).
6. Copy the files on the LOGOGEN installation disk to this directory.
7. Launch Windows
8. Click File
9. Click New (Program Group).
10. Write in a description for this window (e.g. LG1), then click OK.
11. Again, click on File.
12. Click on New (Program Item).
13. Type in the path (e.g. C:\LG1\LOGOGEN.EXE)
14. Click OK.
15. Click OK.
16. Double click the Icon called LOGOGEN.
17. Select the communication port that you are going to use, by clicking on COM in the main menu bar, and selecting the appropriate COM port. Selecting a port that is in use by another device will trigger a warning dialog window explaining the problem. LogoGen supports COM1 to COM4.
18. Wake the LG-1 by clicking on NODE, then clicking on WAKE-UP ALL NODES.

• What is LogoGen

LogoGen is a windows based program that we have created to help you operate the LG-1 with your personal computer. The LogoGen program can be broken down into three areas: the Menu, the Virtual Display, and the Control Panel (see Figure 1).

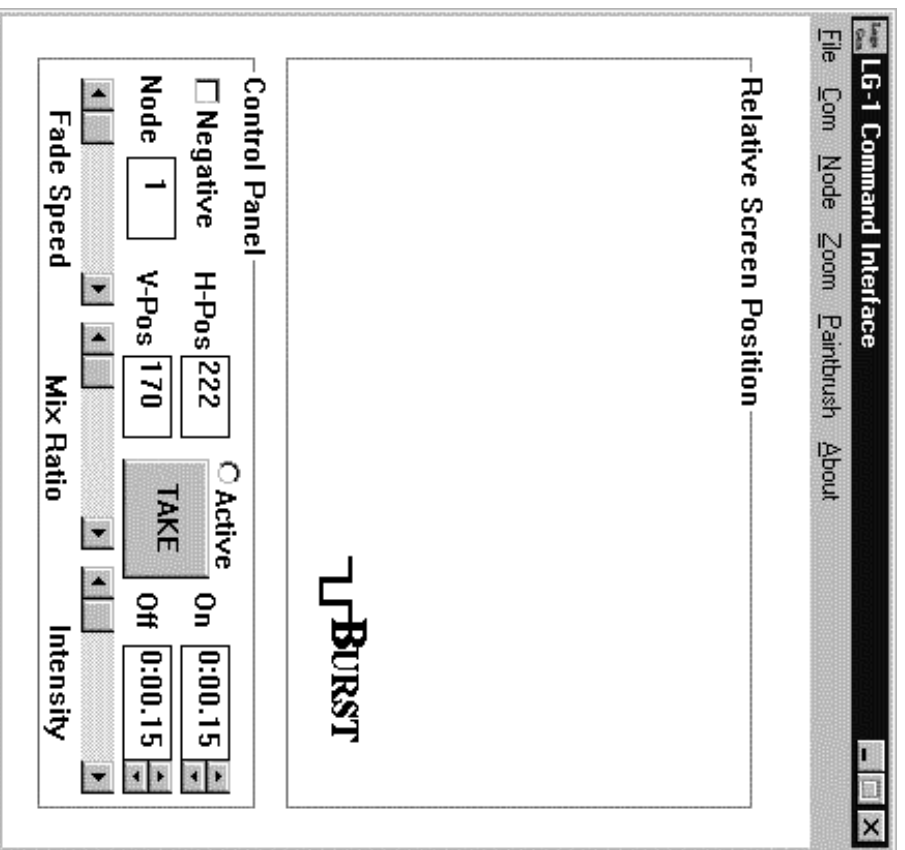


Figure 1

● Menu

- File Menu

The FILE Menu contains the links for sending and saving logo's to the LG-1 hardware. These links are as follows, (see Figure 2)

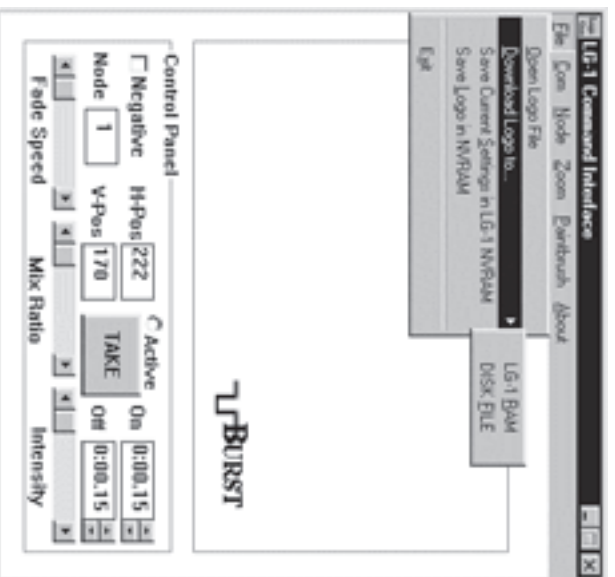


Figure 2

Open Logo File

Download Logo to...

Save Current Settings in LG-1 NVRAM

Exit

Open Logo File

The Open Logo File link will activate a standard windows file dialog box where a bitmap (BMP) image can be selected for download.

Download Logo to...

The Download Logo to... link allows you to choose how you want your logo saved. There are three ways to download a logo file.

- LG-1 Ram: Saves your logo to a volatile ram that does not permanently save the logo in the LG-1. This option is used if you are going to frequently load logos into the LG-1 and are not concerned about the logo being retained after a power cycle.

- **Disk File:** This option is used to store a raw copy of the logo into a disk file. It is essentially a copy of the logo portion of the data stream that would be sent to the LG-1's ram/nvram. Use this option if you are using your own software to communicate with the LG-1.

Save Settings in LG-1 NV-RAM

The Save Settings in LG-1 NV-RAM link saves the attributes that you have chosen for your logo (i.e. fade speed, mix ratio, intensity, etc.), but does **NOT** save the logo image itself.

- **Save Logo in NV-RAM:** Saves your logo to a non-volatile ram that permanently saves a logo in the LG-1. Use this option if you are expecting to lose power to the LG-1 but want to keep the logo saved.

Exit

This option does exactly that, it exits LogoGen, removes any TSR's from memory, and frees up the COM port that you were using.

- **COM Menu**

The COM menu allows you to choose which RS232 communications port you have assigned by the software to control the LG-1. The chosen communications port is configured by the software to operate at 9600 baud, no parity, eight data bits and one stop bit (9600, N, 8, 1). If you select a port that is either not present or in use, the interface software will alert you with a warning window and maintains the previous port setting. The currently selected port will be indicated by a check mark (Figure 3).



Figure 3

- **Node Menu**

The Node menu contains links that allow you to wake/sleep an LG-1, and set an LG-1 with it's own unique identification address (called a Node ID). The links are as follows, (see Figure 4)



Figure 4

Wake Current Node

Wake All Nodes

Put All Nodes to Sleep

Set ID to Current Node

Wake Current Node

YOU MUST WAKE AN LG-1 BEFORE YOU CAN CONTROL AN LG-1.

This link uses the information displayed in the NODE dialog box, located in the CONTROL PANEL at the lower left-hand side of the windows software, to command a single LG-1 that may be networked to several other LG-1's. Factory default Node ID is 1. (See Node in Control Panel)

Wake All Nodes

This link commands all LG-1's to accept data from the computer regardless of their unique Node ID.

Put All Nodes to Sleep

This link stops all connected LG-1's from receiving information from the computer. This command should be used when you are ready to communicate with a different Node ID, or when you are going to close LogoGen.

Set ID to Current Node

This link, in conjunction with the NODE dialog box (located in the CONTROL PANEL of the interface software), is used to set a unique address for each LG-1. The factory default setting for this is 1, but you can change the ID to any number between 1 and 255.

- Zoom Menu

This link shows the file name of the currently displayed logo on the VIRTUAL SCREEN and a true sized representation of the logo, 256 scan lines wide by 64 scan lines high (see Figure 5).

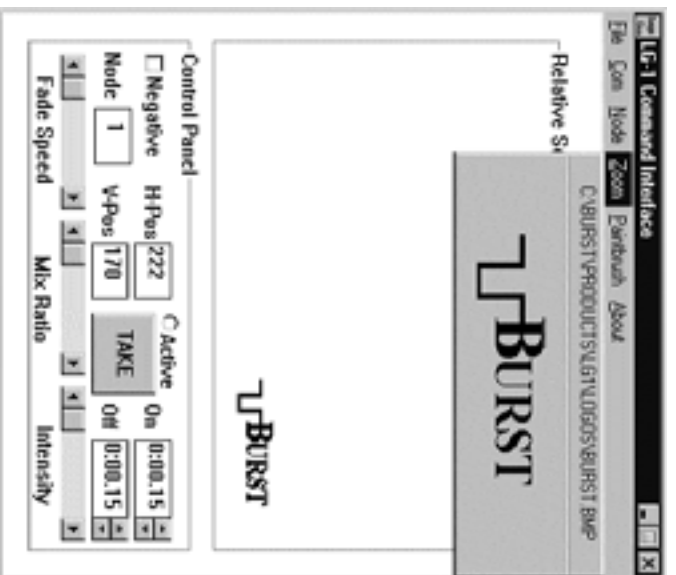


Figure 5

- Paintbrush Menu

The Paintbrush link will run Microsoft Paintbrush. It is simply a shortcut so you don't have to change application windows to find Paintbrush. For more information on creating and editing logos for the LG-1 using Paintbrush, see the section called CREATING YOUR OWN LOGOS.

- **About Menu**

The About link will present you with a dialog box calling out the version number and copyright information. If you need to contact Technical Support please make a note of the version number you are using (see Figure 6).

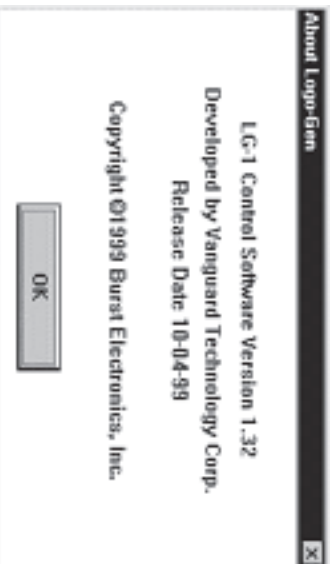


Figure 6

- **Virtual Display**

The LG-1 Command Interface Virtual Display area is simply a box on the screen with the words "Relative Screen Position" at the top. This box gives you a representation of where the logo is located on your overlaid video. A scaled down version of the current logo (not necessarily the logo stored in the LG-1) is displayed in this box. By placing the mouse cursor on the logo and holding down the left mouse button, the logo can be grabbed and dragged to a new location inside the box. This will change the position of the logo, in real time, on your video monitor. This function also updates the H-POS and V-POS values in the Control Panel (see CONTROL PANEL).

- **Control Panel**

The Control Panel is made up of ten individual controls.

- Negative**
- Node**
- H-POS**
- V-POS**
- Take**
- Fade Speed**
- Mix Ratio**
- Intensity**
- On**
- Off**

The use of each control is described below.

Negative

The Negative check box is used to invert the meaning of the picture elements (pixels) in the current logo. In normal operation (Negative box is not checked), pixels which appear black on the Virtual Display will be replaced with the LG-1 generated logo (The logo appearance is determined by Intensity and Mix Ratio controls described below). Pixels which appear white on the virtual display will be replaced with video from the video input to the LG-1. In other words, the black pixels represent the logo data. The white pixel area is transparent, and therefore the background video shows through. Checking the Negative box will invert the white and black areas of the logo. This will cause the logo to be inverted on the Virtual Display. (NOTE: Checking the Negative box does **NOT** cause the logo to be instantly inverted on your video monitor. You must download the inverted logo data to the LG-1 before this setting takes effect.)

Node

This dialog box allows you to select a single LG-1 when you have several LG-1 logo generators connected to a computer (Factory default for this setting is 1). To choose a particular Node ID, type the value in the box, and then press the TAB button on your keyboard. This box also allows you to set an ID address to your LG-1 by placing a numerical value ranging from 1 - 255 and then clicking on SET ID TO CURRENT NODE function in the NODE menu (see **NODE:ID and Addressing**).

H-POS

The H-POS dialog box allows you to directly enter the horizontal position for the logo. The valid range for the horizontal position is 0 - 232. Upon pressing TAB the new horizontal position will be updated on the Virtual Display and the LG-1 hardware. If an invalid range has been entered, a dialog box will appear showing the valid range for H-POS.

V-POS

The V-POS dialog box allows you to directly enter the vertical position for the logo. The valid range for the vertical position is 0 - 180. Upon pressing TAB the new vertical position will be updated on the Virtual Display and the LG-1 hardware. If an invalid range has been entered, a dialog box will appear showing the valid range for V-POS.

TAKE

The TAKE button is used to toggle your logo on and off. The rate at which the logo is faded depends on the setting of the Fade Speed slider (described below).

Fade Speed

The Fade Speed slider is used to control the rate at which a logo transitions from on to off, and off to on. By moving the slider to the right, you will decrease the time it takes for your logo to fade on or off.

Consequently, by moving the slider to the left, you will increase the time it takes for your logo to fade on or off. The approximate fade rate range is 0.25 seconds to 5.0 seconds.

Mix Ratio

The Mix Ratio slider is used to adjust the transparency of your logo.

With the slider pushed fully to the left, the image data of your logo will be completely transparent, and with the slider pushed fully to the right, the image data of your logo will appear solid.

Intensity

The Intensity slider is used to adjust the greyscale level of your logo.

With the slider fully pushed to the left, the intensity of the logo will be at the maximum black level (7.5 IRE). With the slider pushed fully to the right, the intensity of the overlaid logo will be at the maximum white level (100 IRE).

On

The On dialog box is used when you wish to use the TIMED-TAKE function of the LG-1 (see **Timed-Take Operation**). The values listed in this box are an indication of the amount of time that your logo is on. This is set by clicking on the up or down arrow keys in the right-hand side of the dialog box, and is incremented by 15 second intervals. These values range from 15 (± 1) seconds to 1 hour 3 minutes 45 seconds.

Off

The Off dialog box is used when you wish to use the TIMED-TAKE function of the LG-1 (see **Timed-Take**). The values listed in this box are an indication of the amount of time that your logo is off. This is set by clicking on the up or down arrow keys in the right-hand side of the dialog box, and is incremented by 15 second intervals. These values range from 15 (± 1) seconds to 1 hour 3 minutes 45 seconds.

● The LG-1 Plus Hardware

Front Panel Switches

Most of the controls listed in the LG-1 Command Interface software can be accessed by using the Front Panel Switches. These switches are labeled as follows (see Figure 7).



Figure 7

Mix

Speed

Level

←→

↑

Take/Timed

Save Set
Save Set

Also, there are three LED's labeled:

Active

Lock

Power

On the rear panel is an RCA connector labeled GPI (General Purpose Interface). This is a trigger for a Take function (see Figure 8).



Figure 8

Here is an explanation of the front panel switches and how they are used.

Mix

The Mix switch controls the transparency of your logo. By holding the switch up your logo will appear more solid, and by holding the switch down the logo will be made transparent.

Speed

The Speed switch controls how fast your logo will fade when you activate the Take switch (or activate a GPI trigger). Hold the switch up for a faster transition, down for a slower transition. The approximate fade rate range is 0.25 seconds to 5.0 seconds.


Level

The Level switch controls the intensity level of your logo. If you hold the Level switch up the logo will become more white, and if you hold the switch down the logo will become more black. The limits of this range are 7.5 IRE (black) to 100 IRE (white).




This switch controls the horizontal position of your logo. Holding the switch up will move your logo to the left, and holding the switch down will move your logo to the right.



This switch has two functions. The first function controls the vertical position of your logo. Holding the switch up will move your logo up, and holding the switch down will move your logo down. The second function is a Save Settings command. This is accomplished by using the  switch and the Take/Timed switch (see Save Settings in Take/Timed).

Take/Timed

This switch has three functions, Take, Timed-Take, and Save Settings.

- Take: Flip the switch up to toggle your logo on and off
- Timed-Take: Flip the switch down to activate an automated Take cycle (see Timed-Take Operation)
- Save Settings: Flip both Take and  at the same time to save the image attributes to the LG-1's non-volatile ram.

Active LED

An indicator light that informs you if your logo is being overlaid onto the input video signal (On: Active. Off: Inactive)

Lock LED

An indicator light that informs you of the quality of the input video. If the LED is on, your video signal is of a quality good enough for the LG-1 to overlay your logo cleanly. If the LED is not on, or if it blinks, the quality of the input video is poor and your logo will be fuzzy or jumpy.

Power LED

An indicator light that informs you of the current state of the LG-1 (On: power on. Off: not powered)

● Creating Your Own Logos

Logos can be created in any application that is capable of generating a black and white bitmap image (BMP). There are two simple rules for creating an image which is compatible with the LG-1 hardware and LogoGen software.

1. The image must have a resolution no greater than 256 pels x 64 pels (256 pixels horizontally and 64 scan lines high).
2. The image must be in a black and white format (**NOTE**: there is a difference between a greyscale image and a color image which is using just two colors).

If you are using Microsoft Paintbrush to create a logo, you will first need to set the size and color settings for your logo. This is done by clicking on IMAGE from the Paintbrush menu, then clicking on ATTRIBUTES (see Figure 9).



Figure 9

In the IMAGE ATTRIBUTES dialog box, select PELS (pixels) for the units and then type 256 for the width and 64 for the height. Now select the BLACK AND WHITE bullet for the COLORS (see Figure 10).



Figure 10

You are now ready to begin creating a logo in Paintbrush. You may use any of the tools available in the paint program to create the logo. When you are finished, save the logo, and close Paintbrush. You are now ready to import your logo into LogoGen (see **Download Logo to...**).

● Timed-Take

This portion of the manual covers the procedure for Timed-Take.

1. Run LOGOGEN.EXE.
2. Send a **Wake** command to the LG-1 (Click on **Node**, then click on **Wake All Nodes**).
3. In the **Control Panel** of LogoGen, locate the **ON/OFF** dialog boxes (ON is the duration, in 15 second intervals, the LOGO will be active, and OFF is the duration, in 15 second intervals, the LOGO will be inactive)
4. By using the UP/DOWN arrow keys, change the ON duration to your desired setting (maximum setting is 1hr 03min 45sec).
5. Again by using the UP/DOWN arrow keys, change the OFF duration to your desired setting (maximum setting is 1hr 03min 45sec).
6. Click on **File**, then click on **Save Current Settings in LG-1 NVRAM**.
7. Activate timed-take by flipping the **TAKE** switch down, or by creating a permanent contact closure between the inside sleeve and the outside sleeve of the **GPI** trigger (**NOTE**: So long as a contact closure is present on the GPI trigger, the front panel **TAKE** switch will become inoperable, however, the LogoGen software can still command a **TAKE** function).

Set Timed-Take for each LG-1 separately. This will insure any other settings that you have installed will not be lost.

● Node: ID and Addressing

Controlling a Single LG-1

If you have only one LG-1 to command, you won't need to concern yourself about ID#'s or loop through RS232. You can communicate with the LG-1 by clicking on **NODE**, then click on **WAKE-UP ALL NODES**.

Changing LG-1 ID Address

If you have multiple LG-1's and want to control them from a single computer, use these steps to set a unique Node ID for each unit.

1. Connect a single LG-1 to your computer with the RS232 cable.
2. Set the ID# for each LG-1 separately by clicking on the **NODE** dialog box in the **CONTROL PANEL** window.

3. Type in a numeric value that you wish to use (i.e. 1 - 255), then press TAB (**TAB MUST BE PRESSED FOR THE SOFTWARE TO RECOGNIZE THE CHANGE IN NODE ID**).
4. Click on NODE in the main menu bar, then click on SET ID TO CURRENT NODE.
5. Click on FILE in the main menu bar, and then click on SAVE CURRENT SETTINGS IN LG-1 NVRAM.

The above steps have now saved the new Node ID to the LG-1 NVRAM. Remove this unit from power, video, and RS232. Attach a second LG-1 to RS232, video, and power. Repeat steps to program all additional LG-1's.

Controlling a Single LG-1 in Multiple Tandem Configuration

With the assumption that you have loaded a unique Node ID into several LG-1's, you can now communicate to each individual unit by following these steps.

1. Connect your computer using the DB9 - RJ11 adapter to the HOST port of an LG-1.
2. Connect a second RJ11 cable from the LOOP port of the first LG-1 to the HOST of a second LG-1 (continue this tandem loop for all additional LG-1's).
3. Apply power to the LG-1's.
4. Launch LOGOGEN.EXE.
5. In the NODE dialog box, type in the unit ID that you wish to command, then press the TAB button on your keyboard (**TAB MUST BE PRESSED FOR THE SOFTWARE TO RECOGNIZE A CHANGE IN THE NODE ID**).
6. Click on NODE in the main menu bar.
7. Click on WAKE-UP CURRENT NODE.

You are now in control of the LG-1 that corresponds to the number listed in the CURRENT NODE dialog box.

After you have your logo where and how you want it, click on FILE, then click on SAVE CURRENT SETTING IN LG-1 NVRAM. If you wish to communicate with another LG-1, then you must put the current LG-1 to sleep by clicking on NODE, and then click on PUT ALL NODES TO SLEEP.

Control All LG-1's Simultaneously

The WAKE-UP ALL NODES command allows you to send and control multiple LG-1's on a single serial port at the same time. These steps will program all RS232 connected LG-1's identically.

1. Click on NODE, then click on WAKE-UP ALL NODES.
2. Load your logo and change the settings to your liking.
3. Then click on FILE, then click on SAVE CURRENT SETTINGS IN LG-1 NVRAM.
4. Click on NODE, then click on PUT ALL NODES TO SLEEP.

Next time you apply power to any of these units, the settings you have saved will be displayed on your video monitor.

● Commands from DOS

Serial Parameters

The LG-1 communicates by ASCII at 9600, 8, N, 1. Appendix A lists all of the available commands that can be sent to the LG-1.

Time Conversions for Timed-Take:

These conversions are used with the DOS commands APAX and APlx. Each numeric value equals one 15 second interval (1 = 15 seconds), a few examples are:

3 = 45 seconds

60 = 15 minute

245 = 1hr, 1min, 15sec

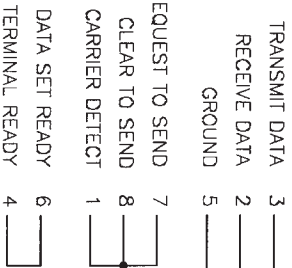
These values only take effect when the LG-1 is placed into Timed-Take and are ignored when Timed-Take is not active. The minimum and maximum values for this function ranges from 1 - 255 (15 seconds to 1hr, 3min, 45 seconds).

| Command | Data | Response |
|---------|------------|---|
| ATT | None | N/A |
| ATO | None | N/A |
| AT1 | None | N/A |
| AFR | 1 byte | N/A |
| AFL | 1 byte | N/A |
| AIR | 1 byte | N/A |
| AHP | 1 byte | N/A |
| AVP | 1 byte | N/A |
| ALM | 2048 bytes | N/A |
| ASS | None | N/A |
| ASI | None | N/A |
| ACI | None | N/A |
| ANI, nn | 2 bytes | N/A |
| APAx | 1 byte | N/A |
| APix | 1 byte | N/A |
| Wk, nn | 2 bytes | N/A |
| SP | None | N/A |
| ARS | None | An ASCII 'S' followed by six bytes which encode the current settings |

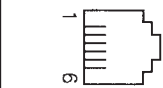
Description

Toggle Take state (mirrors operation of Take Button)
 Take state to 0 or OFF
 Take state to 1 or ON
 Fade Rate (0-100)
 Fade Level (0-100)
 Intensity Reference (0-100)
 Horizontal position (34-154)
 Vertical Position (4-55)
 Load overlay Mask (a 1 in the mask gates the overlay,
 a 0 in the mask gates normal video)
 Save Settings - Move current settings from RAM to NVRAM
 Save Image - Move current image from RAM to NVRAM
 Blinks LED
 Changes Old ID to a New ID (0h - FFh)
 Set Active increments for Timed-Take (see Conversions)
 Set Inactive increments for Timed-Take (see Conversions)
 Wake up a Node ID (0h - FFh)
 Puts all Nodes to Sleep
 Retrieve Settings
 byte 1 - Mix
 byte 2 - Speed
 byte 3 - Level
 byte 4 - HPOS
 byte 5 - VPOS
 byte 6 - FLAGS
 (if the LSB of the FLAGS byte is set, the take is active)

(DB9 TYPE)

RJ11WRJ11
Cable

Socket (Female) Type



DB9 VIEW

R111 VIEW

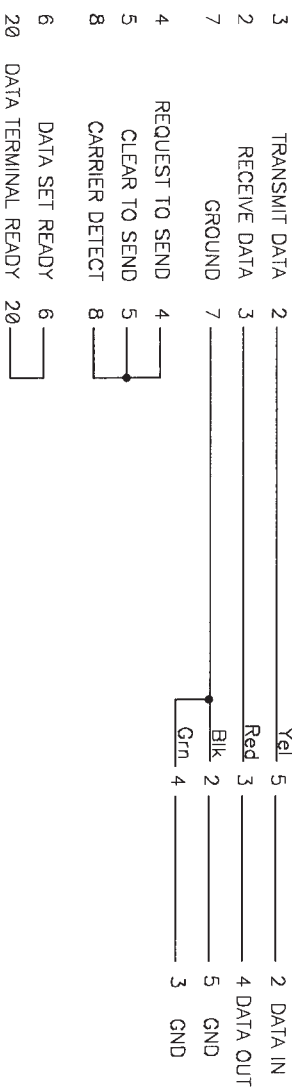
| | | |
|--------------------------------|--|-------|
| Title SERIAL INTERFACE ADAPTOR | | |
| Size A | BURST ELECTRONICS Corrdes, New Mexico 87048 | Rev D |
| Date 3-5-98 | Drawn by WJK | |
| Filename db9_d.scm | Sheet 1 | of 1 |

SERIAL INTERFACE
(DB25 TYPE)

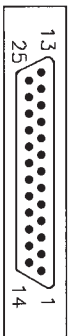
Direct Modern Connection Computer Connection
RS232C Modern Port RS232C Serial Port

DB25 Male DB25 Female

RJ11W RJ11 Controlled
Cable Device
RJ11

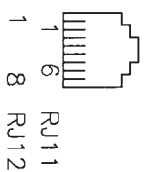


Plug (Male) Type



Socket (Female) Type

DB25 VIEW



| | | | |
|--------------------------------|----------------------------|----------|--------|
| Title SERIAL INTERFACE ADAPTOR | | | |
| Size | BURST ELECTRONICS | | Rev |
| A | Corrales, New Mexico 87048 | | D |
| Date | 3-5-98 | Drawn by | WJK |
| Filename | db25_d.scm | Sheet | 1 of 1 |

BURST ELECTRONICS Inc
E. Mockingbird Lane
PO Box 1468

Corrales, NM 87048 USA

(505) 898-1455 • FAX (505) 898-0159
burstelectronics.com