



*EasyView Software  
for the Galaxy Controller*

Product Manual  
Select Code 193-104-105  
Comcode 107488710  
Issue 8  
January 2008



*Product Manual*  
*Select Code 193-104-105*  
*Comcode 107488710*  
*Issue 8*  
*January 2008*

*EasyView Software*  
*for the Galaxy Controller*

**Notice:**

The information, specifications, and procedures in this manual are subject to change without notice. Lineage Power assumes no responsibility for any errors that may appear in this document.



# ***Table of Contents***

## ***Limited Use Software License Agreement***

<i>Title and License Grant</i>	1
<i>Software Use</i>	1
<i>Limited Warranty</i>	1
<i>Exclusive Remedies and Limitation of Liabilities</i>	1

## ***Software Maintenance Agreement***

<i>Maintenance</i>	3
<i>Maintenance Fee</i>	3

## ***Obtain and Install Software***

<i>Downloading and Installing the Software</i>	5
<i>Restoring Site and Setup Configuration</i>	5

## ***Setup Sites Tutorial***

<i>Configuring a Site</i>	7
<i>Description</i>	7
<i>Password</i>	7
<i>Connect Password</i>	8
<i>Site Notes</i>	8
<i>Phone Number</i>	8
<i>Serial Port Setup</i>	8

## ***Connect to Site***

<i>Connection Process</i>	13
---------------------------	----

## ***Troubleshooting***

<i>Common Difficulties and Remedies</i>	15
---	----



## ***Limited Use Software License Agreement***

The terms and conditions of this Agreement will apply to the SOFTWARE to be supplied and derivatives obtained therefrom, including any copy. The term SOFTWARE includes all programs and related documentation supplied.

If you have executed a separate Software Agreement covering the SOFTWARE supplied herewith, such Software Agreement will govern.

### ***Title and License Grant***

The SOFTWARE is copyrighted and/or contains proprietary information protected by law. All SOFTWARE, and all copies thereof, are and will remain the sole property of Lineage Power or its suppliers. Lineage Power hereby grants you, the LICENSEE, a personal, non-transferable and non-exclusive right to use all SOFTWARE, in whatever form recorded, which is furnished to you under or in contemplation of this Agreement and for which payment has been received. This grant is limited to use on a single processor at a time, as listed on the accompanying order form. Any other use of the SOFTWARE or removal of the SOFTWARE from a country in which use is licensed shall automatically terminate this license.

You agree that any user of the SOFTWARE licensed hereunder shall comply with the terms and conditions of the License Agreement and shall refrain from taking any steps, such as reverse assembly or reverse compilation, to derive a source code equivalent of the SOFTWARE.

### ***Software Use***

A. You are permitted to make a single archive copy, provided the SOFTWARE shall not be otherwise reproduced, copied, or, except for documentation, disclosed to others in whole or in part. Any such copy shall contain the same copyright notice and proprietary marking, including diskette markings, appearing on the original SOFTWARE.

B. The SOFTWARE,

1. together with any archive copy thereof, shall be either returned to Lineage Power or destroyed when no longer used in accordance with this License Agreement, or when the right to use the SOFTWARE is terminated; and
2. shall not be removed from the country in which use is licensed.

### ***Limited Warranty***

A. Lineage Power warrants that the SOFTWARE will be in good working order and will replace, without charge, any SOFTWARE which is not in good working order if returned to the location where you obtained it within 90 days of delivery to you. At its option, Lineage Power may refund the purchase price of the SOFTWARE.

B. Lineage Power does not warrant that the functions of the SOFTWARE will meet your requirements or that SOFTWARE operation will be error-free or uninterrupted.

C. Lineage Power has used reasonable efforts to minimize defects or errors in the SOFTWARE. However, you assume the risk of any and all damage or loss from use, or inability to use the SOFTWARE.

D. Unless a separate agreement for SOFTWARE maintenance is entered into between you and Lineage Power, Lineage Power bears no responsibility for supplying assistance for fixing or for communicating known errors to you pertaining to the SOFTWARE supplied hereunder.

E. You understand that, except for the 90-day limited warranty recited above, Lineage Power its affiliates, contractors, suppliers and agents make no warranties, express or implied, and specifically disclaim any warranty or merchantability or fitness for a particular purpose.

Some states or other jurisdictions do not allow the exclusion of implied warranties or limitations on how long an implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from one state or jurisdiction to another.

### ***Exclusive Remedies and Limitation of Liabilities***

A. You agree that your sole remedy against Lineage Power, its affiliates, contractors, suppliers, and agents for loss or damage caused by any defect or failure in the SOFTWARE regardless of the form of action, whether in contract, tort, including negligence, strict liability or otherwise, shall be the replacement of Lineage Power furnished SOFTWARE, provided such SOFTWARE is returned to Lineage Power with a copy of your sales receipt.

B. Regardless of any other provisions of this Agreement, neither Lineage Power nor its affiliates, contractors, suppliers or agents shall be liable for any indirect, incidental, or consequential damages, including lost profits, sustained or incurred in connection with the use, operation, or inability to use the SOFTWARE or for damages due to causes beyond the reasonable control of Lineage Power, its affiliates, contractors, suppliers and agents attributable to any service, products or action of any other person.

C. This Agreement shall be construed in accordance with and governed by the laws of the State of New Jersey, U.S.A.



## **Software Maintenance Agreement**

Attachment to the Limited Use Software License Agreement

### **Maintenance**

- (a) During the one-year period following delivery of SOFTWARE to LICENSEE, Lineage Power will furnish maintenance to LICENSEE at no additional charge in the form of telephone support and, from time to time, updates for SOFTWARE. After expiration of such period, such maintenance will be furnished subject to the fees specified in the section, "Maintenance Fee."
- (b) Lineage Power will furnish such telephone support during regular business hours (8:00 a.m. to 5 p.m. U.S. Central Time, excluding weekends and holidays) to two (2) employees of LICENSEE identified in writing to Lineage Power. Such telephone support shall be for LICENSEE to report problems to Lineage Power and for Lineage Power to disseminate user information and furnish a reasonable amount of assistance to LICENSEE in using SOFTWARE. Telephone support will be furnished only for the then-current version of SOFTWARE (such support for the previous version will be discontinued ninety (90) days after a new version is delivered to LICENSEE) when used on a single processor. The telephone number for such support will be furnished to LICENSEE.
- (c) Updates to SOFTWARE may include minor enhancements and/or revisions to correct known problems. Appropriate documentation will be included in updates. One copy of each update will be furnished to LICENSEE.
- (d) Lineage Power may discontinue furnishing maintenance for licensed SOFTWARE upon one (1) year's written notice to LICENSEE.

### **Maintenance Fee**

- (a) For the furnishing of maintenance during the second year, as specified in the "Maintenance" section, LICENSEE shall pay to Lineage Power a fee, based on fifteen percent (15) of the then-current published SOFTWARE price. Such fee for the second year shall be payable within thirty (30) days after expiration of the first one-year period specified in the "Maintenance" section.
- (b) If LICENSEE reinstates the furnishing of maintenance following a lapse of such prior maintenance, LICENSEE shall pay all prior fees due for the time period that maintenance was not furnished, plus an additional reinstatement fee to be specified by Lineage Power.
- (c) If maintenance is not taken, LICENSEE may upgrade to the then-current release of SOFTWARE which corresponds to the SOFTWARE, at a fee which shall be twenty-five percent (25%) of the then-current published price for the licensing of SOFTWARE.

No additional maintenance or training, excluding that maintenance and training provided for under the contract, the Limited Use Software Agreement of this SOFTWARE maintenance agreement, shall be provided unless it is pursuant to a new and separate purchase order or contract.

In order to receive support, LICENSEE must sign and return this agreement to

Lineage Power Customer Service  
3000 Skyline Drive  
Mesquite, Texas 75149 USA

I have read all of the terms and conditions of this license and accept them for the users at my company.

By \_\_\_\_\_ Date \_\_\_\_\_

Print Name \_\_\_\_\_ Title \_\_\_\_\_

Signature \_\_\_\_\_ Company \_\_\_\_\_



## ***Obtain and Install Software***

### ***Downloading and Installing the Software***

To download the current software version, go to the Lineage Power web site:

<http://www.lineagepower.com>

### ***Restoring Site and Setup Configuration***

If the installation process finds EasyView already installed on your computer, you will be asked if you would like a backup made of that installation. If you answer 'yes', that installation is copied into a directory called \BACKUP off of the EasyView directory. For example, if EasyView is being installed in c:\Program Files\Tyco\EV then the backup of the previous installation would be created in c:\Program Files\Tyco\EV\BACKUP.

After the installation is complete you should copy "setups.cfg" and "sites.cfg" from c:\Program Files\Tyco\EV\BACKUP to c:\Program Files\Tyco\EV. These two files contain all of your port setups and site configurations. It would also be a good idea to maintain a backup of these two files off your PC in case of emergency.



## *Setup Sites Tutorial*

### *Configuring a Site*

Once you start Galaxy EasyView by selecting its icon, you will enter the Default screen. This is where the system alarms, warnings, and site description are displayed. To configure a site, press the **F11** key from this screen, or select **Setup Sites** from the **Options** menu. A site is setup by defining each of the following:

### *Description*

This is the name by which the site will be known. If the first letter of the description is a 1, 2, 3, or 4, the toolbar numbers can be used for quick connection to the site.

### *Password*

A valid password must be used to log into a site. Each site has four passwords:

- **User:** Enter the password to allow regular user login. Once logged in to the Galaxy controller as a regular user, you can only view the state of the system. All alarms, warnings, histories, statistics, channel readings, etc., can be obtained. However, no configuration capability is allowed to a regular user. A regular user can not change any system parameter.
- **Super-User:** Enter the password to allow super-user login. Once logged in to the Galaxy controller as a super-user, you have all the privileges of a regular user and also the capability to configure system parameters except for system passwords.
- **Administrator:** Enter the password to allow administrator login. If you login to the Galaxy controller as an administrator, you have all the privileges available to the regular user and the super-user, along with the capability to change system passwords.
- **TL1:** Although this is not an option in EasyView, this is another system password which allows Transaction Language (TL1) interface to the Galaxy controller through the auxiliary port.

## **Connect Password**

You must select whether to automatically use one of the above passwords or to manually enter a password during the connection process. If you select among ADMINISTRATOR, SUPER-USER, or USER, EasyView will automatically send the corresponding password specified above. However, if you select MANUALLY ENTERED, EasyView will wait for you to enter the password through your keyboard, once the connection with the Galaxy controller has been established and “Enter Password:” prompt has been received.

### ***Site Notes***

This is a notepad to write any notes associated with this site.

### ***Phone Number***

This field can be used to edit the phone number of the Galaxy controller. When connecting to a site, this number will be prefixed by a Dialing Prefix specified in the serial port setup.

### ***Serial Port Setup***

This selection defines the entire connection method except for phone number and password. If you connect to all sites by a modem, a single Serial Port Setup will suffice. If you also connect directly to the local port of a controller, a second Serial Port Setup will define the direct connection.

If a suitable Serial Port Setup choice is not listed, you must define one by:

1. Clicking on **Show Serial Port Setups**.
2. Clicking on **Add**.
3. Clicking on **Modify**.

A Serial Port Setup is configured by defining each of the following:

- **Description:** The name by which the setup will be known.
- **Set Default Modem Values:** This option will set all fields except for the **Description** field to preset values suitable for a modem connection.
- **Set Default for Datakit:** When selected, this will set all fields except for the **Description** field to preset values suitable for a Datakit connection.

- **Inter Character Delay:** This is the delay (in milliseconds) between each character transmitted through the comm port. This delay may be necessary when making a connection through Datakit.
- **Login Inter Character Delay:** This is the delay (in milliseconds) between each character transmitted through the comm port during the login procedure only. This delay may be necessary when making a connection through Datakit.
- **Status Update Rate:** This is the interval (in seconds) at which EasyView updates voltage, current, alarms, and warnings on the default screen and on the status bar. 30 seconds is adequate.
- **Receive Time-out:** This period (in seconds) indicates that the comm port will time-out if no characters are received from the controller within the specified time limit after sending a command. This value should always be greater than the status update rate. 45 seconds will usually work properly.
- **Communication Port Parameters:** This box allows you to select the parameters for the communication port of your PC that is going to make connection with the Galaxy controller. The following selections are to be made:
  - **Comm Port:** This is the serial port of your host PC that will be used to communicate with the Galaxy controller. Refer to your PC manual for an appropriate number for this port. Select from **COM4** to **COM9**.
  - **Port Type:** This will be the type of connection you will be making with the controller. Select the port type of **MODEM** if you will be dialing in to the controller using a modem. If you have a Datakit connection, select **DATAKIT** and if you will be connecting directly to the controller using its Local port, select **DIRECT**.
  - **Baud Rate:** This will be the speed at which you will be communicating with the Galaxy controller. High speed modems (9600 baud and up) require settings higher than their stated rate (up to a maximum of 57600). For instance, if your modem supports 9600 or 14400, you should select **38400**. The modem will automatically autobaud for a proper connection. If you are using direct connection, select up to **9600**.
  - **Data Bits, Parity, Stop Bits:** These are the data transmission parameters. To communicate with Galaxy controller, select **8** data bits, parity of **NONE**, and **1** stop bit.

- **Handshaking:** This is set for the flow control of data. This will normally be set to none. If data overruns occur, try **HW** first and then **SW**. Backup and restore will not work with SW (software) handshaking.
- **Data Carrier Detect:** Check this box to enable EasyView to detect a dropped connection. Normally, this box should be checked. If telephone lines are noisy and EasyView reports “Galaxy Logged off” unexpectedly, uncheck this box.
- **Dialing Prefix:** Specifies character string that EasyView will send to the modem to instruct it to dial subsequent digits specified in the phone number field of Site setup. For Hayes compatible modems, this string is ATDTW for dial tone lines and ATDPW for dial pulse lines. This is also a good place for entering access codes. For instance, if your local access code is 9, enter ATDTW 9. If your long distance access code is #7, enter ATDTW #7. Once you have entered the local access code here, do not include it with your phone number in the Site Configuration screen.
- **Redial on Busy:** Check this box if you want EasyView to call the controller again once it detects a busy tone.
- **Connect Strings:** This box allows commands, responses, time-out, and pause values for up to 5 connect strings. This enables you to set up a login sequence, since all 5 commands are sent to the comm port in order. Each of the entry fields are described below:
  - **Command:** Specifies the character string that EasyView will send to the comm port. If port type is modem, refer to your modem manual for its recommended initialization strings. Compression will be turned off. Normally, software (control-s) handshaking will be disabled. Each line of command is to be terminated by ^M (Shift 6, Shift M), which is a sequence code for carriage return. There are some macros built in to EasyView that you can use to enter as a command. They are:
    - **AUTOBAUD:** Sends repeated carriage returns to the port until the response is received or time-out is exceeded.
    - **BREAK:** Sends a break to the port.
    - **PHONENUM:** Sends the phone number of the site.
    - **TERMINALMODE:** Enters terminal mode, enabling you to manually send commands to the Galaxy controller.

- **Response:** Specifies the character string expected to be received through the comm port in response to the command. Typically, your response strings will be:
  - “**OK ^M^J**” from a modem in response to an initialization command.
  - “**CONNECT**” from a modem when phone number is dialed and connection is established. See your modem manual.
  - “**PASSWORD:**” when carriage returns are sent to the Galaxy controller. This response is valid for all port types.
  - “**DESTINATION**” when carriage returns are sent to datakit.
  - “**:**” when dialout ^M command is sent to datakit.
  - “**Connected**” when connection is established with Galaxy controller through datakit.
  
- **Timeout:** This is the time period (in seconds) EasyView waits for a response after sending the command. If the specified response is not received, the operation is aborted. It is recommended that you configure the timeout to be 3 seconds if your command is an initialization string for your modem. If the command is your dial string ATDTW followed by the phone number or if it is the substitution string PHONENUM, your recommended timeout is 45 seconds. If you are connecting to the controller through the local port, i.e., your command is AUTOBAUD or some carriage returns (^M^M), your recommended timeout is 2 seconds.
  
- **Pause:** This is the time period (in seconds) EasyView waits after receiving a response and before sending the next command. This is necessary if your configured response is only a part of the response received from the port. For instance, if your response string is CONNECT and your modem actually sends a CONNECT 14400, you need to pause at least two seconds so that you have enough time to receive complete response before you send another command.



## ***Connect to Site***

### ***Connection Process***

Before you connect to any site, the site setup must be completed as described previously. From the default screen, select **F12** or from the **Connect** menu, select the **Connect to Site** option. You may now select one of the listed sites. EasyView will start the connect process and display the commands it is sending to the Galaxy controller and responses it is getting back. When the connection process is completed, EasyView will obtain the site description, alarms, and warnings of the Galaxy controller and display them on the default screen.



# ***Troubleshooting***

## ***Common Difficulties and Remedies***

The following are common difficulties and possible remedies when trying to connect to a site using EasyView:

*Selected communication port not responding, i.e., you do not see any response from the port when EasyView is sending the connect strings.*

- Wrong Comm Port selected in the **Serial Port Setup** screen. Select correct port.
- Not enough pause between commands. Commands are being transmitted too fast before any response could be checked. Enter the complete response that is received from the port or increase pause in the **Serial Port Setup** screen.
- Your modem does not recognize these connect strings. Refer to your modem manual and enter appropriate connect strings.
- Close other applications using the same port.

*The connection to the site cannot be completed.*

- Wrong phone number in the **Site setup** screen.
- Missing access code, such as 9, #7, etc., with the Dial Prefix in the **Serial Port Setup** screen.
- Double access codes. The access code is included with the phone number and with the Dial Prefix.
- Not enough time for connection to establish. Increase the timeout in the connect string of the Serial Port Setup screen.

*Password is not recognized by the Galaxy controller.*

- Check the password you have entered and the **Connect Password** field in the **Site setup** screen.
- The Parity is not set as **NONE** in the **Serial Port Setup** screen.
- In case of super-user or administrator login, another user is logged in with same security level.

*EasyView disconnects from the Galaxy controller even before the Default screen is updated.*

- The **Receive Timeout** value is greater than the Timeout value set on the Modem Port Configuration window for the controller.

*Unrecognizable characters are received after the connection is made with the Galaxy controller.*

- Check your baud rate. The entered baud rate should be higher than the baud rate supported by your modem. For example, if your modem supports 9600 or 14400, enter **38400** as your baud rate.