

GSC3000 & VRC2500 QUICK START GUIDE

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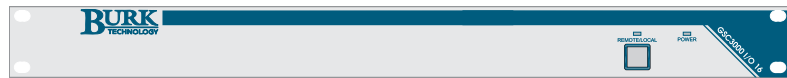
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The GSC3000 and VRC2500 transmitter remote control systems are designed to streamline your remote facilities management by providing a single control interface for your equipment while offering flexibility in control points and communication links. This Quick Start guide will take you through each step of installing and connecting to your GSC3000 or VRC2500 system. The Installation and Operation manual contains a system overview and diagrams of all included equipment, details on the systems' advanced features, and complete instructions for making use of all the features in the Lynx 5 software.

1 UNPACKING

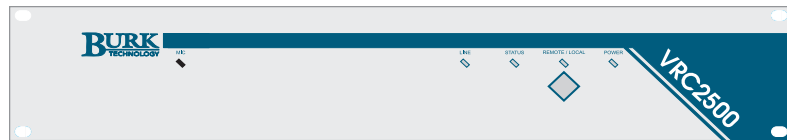
In addition to this Quick Start Guide, you will find the following in each package:

GSC3000 I/O Unit



- (1) GSC3000 I/O Unit (I/O 8 or I/O 16)
- (1) Installation & Operation Manual
- (1) Lynx Software CD
- (1) DB9-DB9 Null Modem Cable
- (1) DB9-DB25 Serial Cable
- (1) Power Cord
- (1) G-Bus Cable

VRC2500



- (1) VRC2500 Unit
- (1) Installation & Operation Manual
- (1) Lynx Software CD
- (1) DB9-DB9 Null Modem Cable
- (1) DB9-DB25 Serial Cable
- (1) Power Cord
- (1) Telephone Cable

Voice Interface, Wiring Interface & Command Relay

If you received a Voice Interface, Wiring Interface and/or Command Relay Unit as part of your system order, please refer to **Chapter 1** in the GSC3000 & VRC2500 Installation & Operation Manual for a list of package contents for each.

2 INSTALL LYNX SOFTWARE

You must install the Lynx software on your PC before you can configure your new GSC3000 or VRC2500 system.

If you wish to set up hardware connections first, proceed to step 5 and then come back to steps 2-4.

Before installing Lynx 5, please make sure your computer meets the following **minimum system requirements**:

- Microsoft Windows® 2000 Pro. or XP (Home or Pro.)
- 400 MHz processor
- 128MB RAM
- 100MB free hard drive space
- Available COM port for direct connection
- Modem for dial-up access
- Network Interface Card or dial-up networking for LAN/WAN (TCP/IP connectivity)
- Speakers for audible alarms

Note: Large or complex operations may require greater computer resources.

Installation Instructions

If you are upgrading from a previous version of Lynx, please refer to **Chapter 2** in the GSC3000 & VRC2500 Installation & Operations manual which you received with your system.

To install Lynx:

Note: Installing Lynx requires administrative privileges.

1. **Insert the Lynx CD in your CD ROM drive.** If AutoRun is enabled, the install window will open automatically. Otherwise, go to the Start menu, choose Run and type d:\launch.exe (where d:\ is your CD-ROM drive).
2. **Click the Install option** and follow the on-screen instructions to complete Lynx installation. The installer will ask for your CD Key, which is located on the Lynx 5 CD sleeve.

IMPORTANT! You must use the provided Lynx 5 CD key in order to activate the software. Although the Lynx 5 installer will automatically detect your Lynx 4 CD key, this key cannot be used for activation.

Note: Lynx 5 CD keys do not use the letter "O", only the number zero. If you enter the letter "O", the activation process will fail. Uninstall and reinstall Lynx 5 to re-enter the CD key correctly.

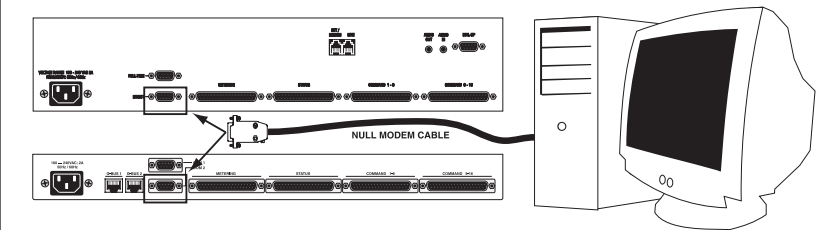
Note: The standard Lynx 5 license included with each GSC3000 or VRC2500 unit is for use with one station computer and on one personal computer. To add more licenses, please contact Burk Technology. Registering your copy is intended to be as easy as possible. If you have any trouble at all, please do not hesitate to contact Customer Support.

3. **Start Lynx by double-clicking the desktop icon.** You will need to fill out the registration information and activate Lynx before you can use Lynx to access and configure your site(s). The administrator account has a blank password to start.

3 PC CONNECTION


Once you have installed Lynx, you are ready to establish a connection from your PC to your GSC3000 or VRC2500.

To establish a connection with your PC:



1. **Connect the supplied null modem cable** to your PC's COM port and to the COM2 port on the GSC3000 or DIRECT port on the VRC2500.



Note: The COM1 port on the GSC3000 and the FULL-TIME port on the VRC2500 can also be used for a direct cable connection, but for the purposes of this Quick Start Guide please use COM2 or DIRECT.

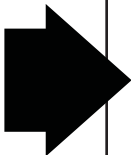
2. Start Lynx 5 (if not already running) by double-clicking the Lynx icon on your desktop.
3. **Create a new site** by clicking on the New Site icon  from the toolbar. This will open the Site Wizard.

4. The Site Wizard asks you to define specific settings for your Site. Click **Next** and back to navigate through the pages. When you are asked to setup your **Primary Connection**, choose **Direct** and select the PC COM port being used to connect to you GSC3000 or VRC2500. You will be able to Edit the Site later and change your connection method if desired.



For help with the available options in Site Wizard, refer to **Chapter 2** in the GSC3000 & VRC2500 Installation & Operations manual.



5. Once your Site has been set up, it will appear in the Site List. Select the site  you just created from the Site List and click on the green **Connect** icon .




4 UNIT CONFIGURATION

You must configure your GSC3000 I/O and Voice Interface, and VRC2500 units before you will be able to use them to control and monitor your site equipment.

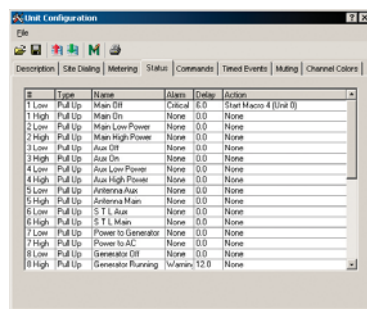
To configure I/O and Voice Interface Units:

1. **Select your site**  in the Site List and use the expand button to view all connected units in your site. A unit icon  will appear for every I/O and Voice Interface unit in the system.

Refer to Chapter 2 of the GSC3000 & VRC2500 Installation & Operation Manual for instructions on adding I/O and Voice Interface units to an existing GSC3000 site. Site capacity for the VRC2500 is not expandable and consists of one I/O and one Voice Interface unit.



2. **Select the unit you wish to configure** and click the **Unit Configuration icon**  in the toolbar. This will open the Unit Configuration Window. Only one unit can be configured at a time.

3. Use the tabs at the top to switch between the different configuration options. To set up your metering input and status input channels, select the **Metering** and **Status** tabs. For command outputs, select the **Commands** tab.



You can configure your unit at any time and do not need to set up each option before proceeding to the next section.

For detailed descriptions of each configuration option, please refer to Chapter 4 in the GSC3000 & VRC2500 Installation & Operation Manual.

4. Once you have set up your unit, click the **Save to Unit icon**  to upload these settings to the unit. You can also create an archive to save a local copy of your configuration, which you can edit off-line, by clicking on the **Save to Archive icon** .
5. If at this time you wish to configure each remaining I/O and Voice Interface units at your site, repeat steps 1-5. Remember you will be able to configure these units later.

5 CONNECTING SITE EQUIPMENT

Separate Command Relay and Wiring Interface units are used with the GSC3000 and VRC2500 to provide connections to your site equipment using push-on blocks to simplify connections – no soldering is required.

Connecting a Wiring Interface

The Wiring Interface is used to connect your metering and status inputs. The allowable input range for status inputs is $\pm 30\text{VDC}$, and 0-10VDC or -5 to +5VDC for metering inputs (specified in metering configuration). For help configuring metering and status inputs, or for help calibrating your metering inputs, see Chapter 4 of the GSC3000 & VRC2500 Installation & Operation Manual.

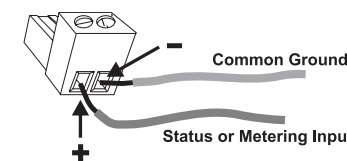
The GSC3000 and VRC2500 units will not tolerate a floating ground. If any of your inputs has a floating ground, use an isolation amplifier before connecting it to the Wiring Interface.

To connect metering and status inputs:

If you have two Wiring Interfaces, you must designate one for status and one for metering channels. For GSC3000 I/O 8 units only, the Wiring Interface will be used for both metering and status inputs.

Note: When using the Wiring Interface with an I/O 8, connect metering inputs to the channels on the Wiring Interface marked 1-8, and connect Status to 9-16.

1. **Connect your site equipment** to the provided two-pin push-on block connectors. Secure the wires with the built-in setscrews. The status or metering sample connects to the + terminal, and a common ground connects to the – terminal.
2. **Connect the push-on blocks** to the Wiring Interface with the setscrews facing up. Be sure to precisely align the connector terminals to the + and – contacts on the back panel of the Wiring Interface. If you have already set up all your channel properties in Unit Configuration (step 4), be sure to connect your equipment to the channels you specified during unit configuration.
3. Use the provided DB37 cable to **connect the SITE CONTROLLER I/O port** on the Wiring Interface to the **METERING or STATUS port** (depending on which inputs this Wiring Interface is used for) on the VRC2500 or GSC3000 I/O 16 unit, or the METERING/STATUS port on an I/O 8.

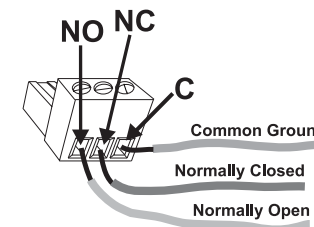


Connecting a Command Relay Unit

Each Command Relay has eight command output channels (each channel has an A and B relay). The I/O unit's command outputs are open collector, and can be momentary or latching. The allowable voltage range is 30VDC, 250mA maximum. Power for the Command Relay is supplied by the I/O unit through the DB37 cable. The DC power connector on the left side is *not* used with the GSC3000 and VRC2500. For help configuring command outputs, see Chapter 4 of the GSC3000 & VRC2500 Installation & Operation Manual.

To connect output channels:

1. **Connect your site equipment** to the provided three-terminal push-on block connectors. Secure the wires with the built-in setscrews. Connections are standard Form C, from left to right: normally open (NO), normally closed (NC) and common (C).
2. **Connect the push-on blocks** to the rear panel of the command relay with the setscrews facing up. Use care to properly align each terminal with the contacts on the back panel of the Command Relay unit. If you set up all your channel properties (labels, limits, alarms, etc.) in Lynx before installing the Command Relay, be sure to connect your equipment to the channels you specified during unit configuration.
3. Use the provided DB37 cable to **connect the DB37 port** on the Command Relay to **COMMAND 1-8 or COMMAND 9-16** on the VRC2500 or GSC3000 I/O unit.



6 REMOTE CONNECTIONS

In addition to accessing your site with a direct PC connection, you can connect remotely using a dial-up or full-time modem, or a PC on the same LAN/WAN as the computer with the modem connection. For direct LAN/WAN access, you can use GSC/VRC Web Interface for your remote connection. Please refer to Chapter 6 in the Installation and Operation Manual for instructions on making modem connections.

Dial-Up Connection

To establish a dial-up connection to remotely access your site in Lynx, an external dial-up modem is needed at the GSC3000 or VRC2500 site. Instructions for connecting a dial-up modem vary depending on whether it is being connected to a GSC3000 I/O Unit, Voice Interface, or VRC2500.

Full-Time Connection

A full-time (two- or four-wire) connection is a dedicated audio communication link which does not require dialing. This includes leased lines, RF link, or an audio STL/TSL. To establish a full-time connection to your site, a specialized external modem is needed at both the PC and remote site.

Digital communication links which support RS-232 do not need to use full-time modems to communicate with the site. Digital RS-232 links interface directly to the GSC3000 I/O or VRC2500.

TCP/IP (Site Sharing)

When one computer on the LAN/WAN has a modem connection to the remote site, other computers can share that connection using TCP/IP. This is called Site Sharing, and is set up in the Site Wizard when you create the site in Lynx. See Chapter 2 in the Manual.

Web Interface

Burk Technology offers the GSC/VRC Web Interface so that you can establish a direct TCP/IP connection to your remote site. The Web Interface also provides access from a Web browser. For more information on the Web Interface, contact sales@burk.com, or see the Web Interface Instruction Manual for the physical connections.