LSI Internet Data Hub
GT510
INSTALLER AND USER’S MANUAL.

WARNING! The GS wireless receiver system is designed to aid in the collection of information and is in no way a substitute for safe operating practice.

WARNING! Carefully read and understand this manual before proceeding.
Read and understand the following:

For your safety and that of the people that come into contact with LSI products, understand the significance of the instructions included in this guide, respect all laws and regulations and comply with applicable standards.

Pay particular attention to items bearing the alert symbol △ and the following words:

**WARNING!**

*Warning:* this denotes an instruction that if not complied with may lead to serious injury or death.

**CAUTION!**

*Caution:* this denotes an instruction that if not complied with may lead to product failure or property damage.

**IMPORTANT!**

*Important:* this denotes an instruction that if not complied with may lead to product performance issues.

**WARNING!** The system must be installed in compliance with LSI instructions and using LSI supplied components only. Failure to install all parts, or replacing parts or components with parts or components not supplied by LSI, may lead to system failure, serious injury or death.
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1. INTRODUCTION

1.1 General Definition of the LSI Internet Data Hub Application

*LSI Internet Data Hub* is a software application. It acts as a hub that receives and transmits data using the Internet protocol. LSI Internet Data Hub gathers data from *LSI Gateways* via USB and from other *LSI Internet Data Hub* applications. Data is then transmitted to connected *LSI Dashboard* software applications and other *LSI Internet Data Hub* applications.

*LSI Internet Data Hub* runs as a Windows service; it starts automatically when Windows boots up and runs in the background without needing user intervention.

1.2 PC Installation

1.2a System Requirements

Windows 2000, XP, Vista (32/64bit) or Windows 7 (32/64bit).

1.2b LSI Internet Data Hub and USB Driver Installation

Before starting installation, make sure that no *LSI Gateway* is connected to the computer.

1. Download the installation file from [www.loadsystems.com/internetdatahub](http://www.loadsystems.com/internetdatahub).

2. Install the file and follow the steps from the installation wizard.

When transferring the files, the installation wizard will automatically execute the USB driver installation; a Windows warning will recommend to stop the installation, ignore this warning and select **Continue Anyway** (Windows XP) or **Install this driver anyway** (Windows Vista, Windows 7).

1.2c LSI Gateway Connection

**Windows Vista / Windows 7:**

1. Connect the *LSI Gateway* to the computer; the device will automatically be installed.

**Windows XP:**

1. Connect the *LSI Gateway* to the computer; **Found New Hardware Wizard** will appear.

2. If Windows asks to connect to Windows Update to search for software, select **No, not this time** and then click **Next**.

3. Select **Install the software automatically**, then click **Next** to continue.

4. A Windows warning indicating that the driver has not been tested will recommend to stop the installation, ignore this warning and select **Continue Anyway**.

5. When the installation wizard has finished installing the software, click **Finish** to close the wizard.

When the installation is completed, the **Device Manager** will appear as shown below:

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2.1 Network Configuration

There are three possible network configurations that allow data reception from the LSI Internet Data Hub application:

1. Local area network (LAN)
2. Internet using port forwarding
3. Internet using a VPN (secured data tunnel) that links two sites

2.1a Local Area Network

This is the most simple and most secure network configuration. The host computer running LSI Internet Data Hub and the client computer receiving the data are connected to the same local area network (LAN). No additional network configuration is required as long as both computers can access each other.

2.1b Internet Using Port Forwarding

The host computer and the client computer are connected by the Internet.

- The host computer network must be accessible from the internet using a static IP address.
- The host computer network firewall must be configured to forward a port to the host computer. All the data that will enter that port will be forwarded to the host computer.

2.1c Internet Using a VPN

Using a VPN, the connected LANs virtually become a single LAN. The data is encrypted and can only be decoded by the router of the remote network. Configuration is as simple as for the local area network method.

2.2 Data Sources

There are two types of data source: local and remote. A local data source is a device (normally an LSI Gateway) that is connected to the host computer. A remote data source is another LSI Internet Data Hub instance running on a remote computer.

2.3 User Interface

LSI Internet Data Hub can be configured and monitored through its embedded web interface that runs on port 50000. The web interface can be accessed with an Internet browser (e.g. Internet Explorer, Mozilla Firefox):

1. Open an Internet browser
2. In the browser’s address bar, enter “http://computer name or IP address:50000” where computer name or IP address is the name or the IP address of the host computer running LSI Internet Data Hub. E.g.: http://192.168.0.15:50000
3. Press Enter to access the web interface

The status page will be displayed by default. This page lists the currently active data sources, the number of connected clients and the last message generated by the software application.

Use the Enable auto refresh or Disable auto refresh link to either enable or disable the auto refresh function.
refresh feature. Click **Refresh page now** to refresh the page immediately.

The **Data sources** table is used to display the active data sources.

**Type**: the data source type, local or remote

**Address**: The **LSI Gateway** id number (local data source) or the computer/IP address (remote data source)

**Port**: The local communication port used by the **LSI Gateway** (local data source) or the Internet port (remote data source)

**Status**: displays whether **LSI Internet Data Hub** is connected or not connected to the data source. The cell background color is grey when the data source has been disconnected by the user. When the data source connection is lost, the cell background color is red. **LSI Internet Data Hub** will periodically try to re-connect to a data source with which the connection has been lost.

**Connection**: Click the **Connect** or **Disconnect** link to connect to, or disconnect from, the data source.

**Edit**: Click the **Edit** link to modify the address and/or the port of a remote data source. A local data source cannot be edited.

**Delete**: Click the **Delete** link to delete the data source.

**Connect to locally available LSI Gateways**: scan for locally available **LSI Gateways** and automatically connect to them.

**Add remote data source**: click this link to add a remote data source. Enter the **Address** of the remote data source: this may be a computer name or a private IP address (LAN or VPN configuration), or a public IP address (port forward configuration). The default Internet Port to access the data sent by **LSI Internet Data Hub** is **60000**.

The **Connected clients** field displays the number of connected clients. A client can be either an instance of **LSI Dashboard** or another instance of **LSI Internet Data Hub**. A client must connect to the port **60000** of a host computer in order to receive data from **LSI Internet Data Hub**.

The **Last message** field displays the result of the last user operation with the date and time.
3.1 Limited Warranty

LOAD SYSTEMS INTERNATIONAL INC. (hereafter “LSI”) warrants its products (the “Products”), for a period of twenty four (24) consecutive months after delivery of such Products to the user (as evidenced on a LSI document) (the “Warranty Period”), when installed and used in accordance with specifications described in LSI Installer and User’s Manual, as amended from time to time, LSI technical materials and any related writings published by LSI with respect with such Products and any industry standards, will be free from defects in materials and workmanship. During the Warranty Period, LSI or its designated service representative shall repair, or at its option, replace any Product that is confirmed to be defective by LSI, in its sole discretion, in accordance with the Limited Warranty Services Procedures described below.

3.2 Warranty Services Procedures

In order to benefit of this-mentioned Limited Warranty coverages and benefits, the purchaser must notify LSI’s customer service or LSI’s authorized distributor or representative originally responsible for the sale of the Products within 10 days of the occurrence of a suspected defect in materials or workmanship, prior to the expiry of the Limited Warranty Period in order to obtain a Return Authorization Number. A proof of purchase of the Product, such as an invoice or a receipt certifying the validity of the Warranty, must be presented in order to obtain Limited Warranty coverage. In any event, even if a Return Authorization Number is provided to purchaser, LSI reserves the right to inspect the damaged Product or part before the final decision of repairing or replacing the defective Product or part.

The Product or part shall be returned to LSI or its designated service representative, accompanied by the Return Authorization Number with prepaid shipping charges. The purchaser must insure the shipment or accept the risk of loss or damage during the shipment. Purchaser shall also pay any tariff or duty applicable to the return of defective part or Product. LSI will, at its option, repair or replace the Product or part returned to LSI or to its designated service representative. LSI owns all parts or Products replaced, repaired or removed from a repaired Product. If LSI repairs a Product, the Product Warranty coverage Period is not extended and the Limited Warranty shall expire as if uninterrupted upon the occurrence of the 24th month from shipping from LSI. If LSI replaces a Product, the replaced Product is warranted for the remainder of the original term or sixty consecutive (60) days, whichever is longer.

LSI reserves the right to require from you the user or owner of the Products, prior to determining if the Limited Warranty coverage is applicable, that LSI receive the data logging equipment used with the Products and that LSI be authorized to retrieve all information from such data logging equipment in order to, among others, ensure that the written instructions and applicable standards, including safety margins, were respected and not exceeded during Product use. Failure by you the owner or user of the Product to supply such information shall be deemed a material default of the terms and conditions of this Limited Warranty and shall be irrevocably construed as evidence that the Product was misused or abused. Consequently LSI shall irrevocably be relieved of any obligations to compensate you the user or owner of the Product for any and all damages resulting from Product failures when data logging equipment, and access to its content, cannot be freely and readily provided, unhampered, to LSI.

LSI will pay ground freight transportation costs of replacement or repaired parts or Products to the destination in Canada and the continental United States of America (the “Territory”). LSI will not pay any transportation costs of replacement or repaired parts to destination outside of the Territory. Shipping and handling costs to locations outside the Territory shall be the responsibility and borne by Purchaser or Owner of the Product prior to any shipment by LSI. (Contact LSI to get a Return Authorization Number and the address to ship parts).

3.3 Exclusion of Other Warranties

THE ABOVE WARRANTY IS THE SOLE WARRANTY APPLICABLE AND THERE ARE NO EXPRESS, LEGAL OR IMPLIED WARRANTIES OR CONDITIONS IN RELATION TO ANY PRODUCTS INCLUDING ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY, NON-INFRINGEMENT OR FITNESS FOR A PARTICULAR PURPOSE AND THOSE OTHERWISE ARISING BY STATUTE OR OTHERWISE IN LAW OR FROM A COURSE OF
DEALING OR USAGE OF TRADE, WHICH ARE EXPRESSLY DISCLAIMED. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY LSI OR ITS EMPLOYEES OR REPRESENTATIVES SHALL CREATE A WARRANTY OR CONDITION OR IN ANY WAY INCREASE THE SCOPE OF LSI'S OBLIGATION. LSI DOES NOT WARRANT THAT THE BUSINESS RESULTS OBTAINED FROM THE USE OF THE PRODUCTS WILL BE APPROPRIATE OR ADEQUATE FOR THE PURCHASER.

3.4 Exclusion

This Limited Warranty does not cover and shall not apply to:

- Any Product that is misused or abused, including being altered, modified or repaired not in accordance to LSI written instructions or authorizations and any use not in compliance with LSI's instructions and/or industry standards and practices;
- Any incidental costs or expense, such as shipping charges to LSI or an designated service representative as well as the technician out-of-pocket expenses including traveling, lodging and meal expenses, if any;
- The damages caused during the transport or the moving of the Products;
- Damages caused by accidents, abuse, misuse, a force majeure (described as events outside a LSI's or any Product user's control, including war, riot, strikes, embargoes) or external cause;
- Any cost, damage or expenses for field labor or any other expenses related to or arising from the replacement of defective parts.
- Products used for pile-driving, wire rope activated clamshell or dragline applications. If purchaser uses the Products for pile-driving, wire rope activated clamshell or dragline application, the limited warranty will be deemed to have been violated for abuse.
- Any costs associated with providing LSI with data logging equipment.

3.5 Limitation of Liability

To the maximum extent permitted by applicable law, in no event will LSI be liable to the purchaser or any third party for any indirect, special, consequential, incidental or exemplary damages whatsoever, including but not limited to loss or revenue or profit, lost or damaged data, business interruption or any other pecuniary loss whether based in contract, tort or other causes of action, even if LSI has been advised of the possibility of such damages. In any event, the total liability of LSI arising from any cause of action or claim whatsoever, whether (1) in contract, (2) in tort (including negligence, whether sole, joint, contributory, concurrent or otherwise, but not including intentional, reckless or wanton tort), (3) under strict liability, (4) under any environmental or antipollution law or regulation, (5) connected with any toxic or hazardous substance or constituent, (6) arising out of any representation or instruction, or under any warranty, (7) or otherwise, arising out of, connected with, or resulting from the design, manufacture, sale, resale, delivery, repair, replacement or use of Products or the furnishing of any service shall in no event exceed the price allocable to and paid to LSI for the individual unit of Products or service or part thereof which gives rise to the cause of action or claim.

SOME STATES OR JURISDICTIONS DO NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

3.6 Recommended Practices

LSI recommends careful consideration of the following factors when specifying and installing the Products. Before installing a Product, the Installation, Operation, and Maintenance instructions provided with the unit must be read and understood and complied with.

3.7 Choice of law

This Limited Warranty shall be governed by and construed in accordance with the laws of : 1. For Products sold in Canada: the Province of Quebec or, For Products sold in the USA: the State of Florida, without giving effect to principles of conflicts of law. You agree that the exclusive venue for any disputes arising under this Agreement shall be the state and federal courts located in Orlando, Florida.

3.7a Entire Agreement

This document contains the entire agreement of the parties regarding the subject matter of the Product and supersedes all previous communications, representations, understandings and agreements, either oral or written, between you and LSI.
**Technical Support:**

*LSI* Technical Support is available 24 hours a day, 7 days a week from our **Houston** and **Dubai** locations.

Please direct all technical support questions to either of these locations or contact us via email:

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