

BTD-200 Lightning Works Remote Connections

USER MANUAL INSTALLATION - OPERATION - MAINTENANCE

	LIGHT	NING	WOR	KS S	SERVER ADI	MIN		1	
Service Status: R	unning						Birai		
Settings Users	-								
Network Settings						Language			
Auto Choose Subnet	Advanced					English	~		
O Line All Submete							Save		
O Ose Al Jubricis									
					Save				
						Sto	p Service		
						Sta	rt Service		
Austable Scheete						Refre	ish Subnets		
Subnet	Use	Prefix Bits	Subnet Mask	Status	Adaptor Description				
60.1.9.21	Yes	24	255.255.255.0	Up	Intel(R) Ethemet Connection (14) I	219-LM			
127.0.0.1	No	8	255.0.0.0	Up	Software Loopback Interface 1				

BTD-200 Lightning Works Remote Connections



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Manual Number: 107982 Revision: 00A



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1 HOW TO USE THIS MANUAL

The manual is organised so that if you read it from start to finish you will have a good understanding of how to connect and operate the Lightning Works software using VPN and internet connections. This manual assumes a local installation of the BTD-200 Server and Lightning Works client is already in place and operating correctly. To follow the instructions in this manual you will need an understanding of the BTD-200 thunderstorm detection system and a basic knowledge of how IT systems are networked.

Please refer to the BTD-200 Lightning Warning System user manual for an overview of the system and full installation details for locally connected applications. You may need to refer to your IT department or IT support partner for assistance with some aspects of the topics covered in this manual.

We recommend you read the entire manual, we realise however that different people may be involved in the installation and use of the system, so the following guidance is given.

Overview of Remote Connectivity Operation and Options

Section 3, provides an overview of the remote connectivity capabilities of the Lightning Works applications. This section should be read by those responsible for installing and administering the system.

Server Admin Software Installation

Section 4, covers the installation of the software.

Configuration and Use

Section 5, covers use of the Lightning Works Server Admin software. This section should be read by the person responsible for installing and operating the system.

Section 6, covers how Lightning Works Clients and Lightning Works Messenger applications are configured for remote connection. This section should be read by the person responsible for installing and operating the system.

Accessing Multiple BTD-200 Sensors Using a Single Computer

Section 7, provides a brief description of how multiple instances of the Lightning Works Client may be run on a single computer.

Network and/or Internet Router Settings

To allow remote connections over the internet any connected routers and/or firewalls will need to be configured to allow port forwarding on the selected ports. It is outside the scope of this manual to describe how to enable port forwarding on your network



routers and firewalls. You may wish to consult your IT department about setting up your router and firewall.



2 GENERAL INFORMATION

2.1 Customer Satisfaction

At Biral we set our standards high and only your complete satisfaction is acceptable to us. If you believe your experience has not met these standards, we would be grateful if you would contact us, so we can discuss any issues you may have. We are also pleased to hear of any positive experience.

2.2 After Sales Support

Biral offers support by telephone and email for the lifetime of our products, even if there has been a change of ownership, so please get in touch if you require help. Similarly, if you have any questions about your new software, we are only a mouseclick or telephone call away. Our contact details are given below. For your convenience, our contact details are also on the label fixed to your equipment.

2.3 Safety

The Lightning Works Server Admin uses the internet to allow connections to the server. The internet services providers do not provide a guarantee of service provision, therefore the user should not rely solely on the Lightning Works Clients or Messenger to provide warnings of thunderstorm activity if a remote connection is enabled.

2.4 Contacting Biral

If you would like technical assistance, advice or you have any queries regarding the operation of the software please do not hesitate to contact us during normal business hours.

Contact us by telephone on: + 44 (0)1275 847787

Contact us by email at: <u>enquiries@biral.com</u>

If you bought your system from a local agent, you may wish to contact them in the first instance. No matter how you got your system Biral is here to help.



3 BTD-200 LIGHTNING WORKS REMOTE NETWORKING

This section explains the remote networking capabilities of Lightning Works and Lightning Works Messenger. Please take time to read this section as it will help you to understand the detailed instructions in later sections.

3.1 Use of the Internet for Remote Connections

The remote connection capabilities described in this manual rely on the internet. When considering using the internet to connect different components of your thunderstorm warning system you must consider the reliability of your internet connections at both the BTD-200 sensor site and all Client and Messenger application locations.

Biral does not recommend connecting the Lightning Works Messenger application to the Lightning Works Server using a remote connection. For maximum reliability, the Messenger application should be installed on the same computer as the Server.

3.2 BTD-200 System Remote Networking Overview

A basic installation of Lightning Works has the Server, Client, and Messenger applications on the same subnet of a local network. The Server sends a regular broadcast message that Clients and Messenger use to establish their connection to the Server. Up to five Clients and five Messenger applications may be connected to the Server at any time.

The remote networking capability of Lightning Works allows Client and Messenger applications to connect to the Server when they are not on the same local network. The remote connection may be made over a different subnet of the local network, through VPN or directly over the internet. This capability allows multiple remote users to access a single BTD-200 sensor, or one user to access multiple BTD-200 sensors. When one user has access to multiple BTD-200 sensors it is necessary to run multiple instances of the Client software. The system supports both local and remote Clients at the same time.

The basic installation of Lightning Works as described in the BTD-200 Lightning Warning System and Lightning Works Messenger manuals does not require any network related setup to work. When any of the remote networking conditions apply both the Server, the Client and the Messenger require additional configuration. The Server is configured using the Lightning Works Server Admin application, the Client and Messenger are configured using the Network Settings dialog accessed from the Client and Messenger File menu. Full details of the configuration process are provided in later sections of this manual.

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The Server communicates with the Clients and Messenger applications using port 25267. Where the remote connection passes through an internet access router or firewall on the server computer it may be necessary to set this port for port forwarding. The process of configuring internet access routers and firewalls for port forwarding is device dependent and therefore beyond the scope of this manual. Your IT Department or IT support partner will be able to assist you if necessary. In the unlikely event that your IT system already has an application using port 25267 you may select an alternative port.

To ensure you have control over who has remote access to the BTD-200 thunderstorm detection system the Server Admin application requires that Client and Messenger applications connect using a username and password. You may choose to have all remote connections use a common username and password, or you can assign a unique username to each Client or Messenger. The username and password is only required during configuration of the Client or Messenger not each time the Client or Messenger connects to the BTD-200 Thunderstorm Detection System.

3.3 Lightning Works Server Admin Overview

The Lightning Works Server Admin software is an application that works alongside the Lightning Works Server to enable remote connections to the server. Lightning Works Server Admin must be installed on the same computer as the Lightning Works Server.

Server Admin has two main functions, to configure the Server network connection and to manage the usernames and passwords that allow remote Client and Messenger applications to connect.

The default configuration of the Lightning Works Server is to transmit a broadcast message on port 25267 across the local network. Client and Messenger applications on the network will receive this broadcast message and then initiate a TCP/IP connection on port 25267 with the server. Many VPN connections do not support broadcast messages, so Server Admin allows these messages to be stopped or made on an alternative port. When broadcast messages are stopped locally connected Client and Messenger applications must be configured as if they were remote. This provides the Client or Messenger the network address of the server allowing them to initiate the TCP/IP connection with the Server. A benefit of a local connection using the Server network address is an almost instant connection as there is no wait for the broadcast message.

Server Admin also allows control over the subnets used for connection between the Server and Client or Messenger. The default configuration allows the Server to choose the subnet, but it is possible to specify all available subnets or a particular



subnet. It may be necessary to choose a particular subnet where the Server has multiple Ethernet adaptors.

3.4 Client and Messenger Network Settings Overview

The Client and Messenger Network Settings windows are used to specify the network address of the Server the Client or Messenger is to connect to. A valid username and password are also required for any remote connection. The port address for both the broadcast message and connection port may be specified if these have been changed from the default values.

The Network Settings window records details of previous connections that may be useful if a single instance of a Client is used to connect to different BTD-200 sensors from time to time.

3.5 Static and Dynamic IP Addresses

For a remote Client or Messenger to establish a connection with the Server it must know the Servers IP address. Where the Server has a static IP address, the address is entered in the Client or Messenger Network Settings window during initial configuration and does not require any subsequent change. If the Server has a dynamic IP address the address may change each time either the Server computer or the internet access router is rebooted. The internet service provider may also change a router's IP address from time to time. In such circumstances, the following measures can be taken to ensure a reliable connection between the Client or Messenger and the Server.

3.5.1 Public Internet IP Addresses

Many internet service providers do not offer a fixed public IP address as part of their normal offering. In practice, you may find your public IP address changes very infrequently even when the internet access router is rebooted, or power is cycled. However, when your public IP address does change it will be necessary to provide the new IP address to each remotely connected Client and Messenger.

To avoid this inconvenience, you may choose to purchase a fixed IP address from your internet service provider. Alternatively, you may subscribe to a public DNS service that provides you with a fixed computer name which automatically links to your dynamic public IP address. The use of names rather than IP addresses is covered in later sections of this manual.

You can find your public IP address by entering "what is my IP address" into any search engine.



3.5.2 Local Static and Dynamic IP Addresses

Where the computer on which the Lightning Works Server is installed is part of a company network it is likely that dynamic IP addresses are used. These addresses are typically assigned by the network server and change each time a computer joins the network, i.e., each time the computer is powered.

For remote Client and Messenger applications that connect via the internet a local dynamic address is not a problem as the remote Client or Messenger use the public IP address of the internet access router to establish the connection. For Client or Messenger applications on the local network where broadcast messages are not used it is necessary to specify the Server IP address when configuring them. The Client or Messenger will need to be configured each time the Server address changes which is not desirable. To avoid the need to continually reconfigure the Client and Messenger either of the following methods may be used.

You may use the computer's Device Name rather than the local IP address when configuring the Client and Messanger. A computer's Device Name can be found in the About page of the Window's Settings app.

Alternatively, the computer on which the Server is installed may be assigned a static IP address using the Windows networking utilities. Care is required when setting a static IP address to ensure it does not clash with the address of another device on the network. Consult your IT Department or IT support partner if you need assistance with static IP addresses.

3.6 VPN Connections

Where computers with Client and Messenger applications are connected to the Lightning Works Server using a VPN link for remote access, either the Server computer's local IP address or Device Name is used when configuring the Client and Messenger Network Settings. If the VPN connection allows broadcast messages, which is not normally the case, it is not necessary to undertake any configuration of the Client and Messenger Network Settings.

Some VPN products may use a different subnet to that used by the rest of the local network. In such cases it is necessary to use the Server Admin application to configure the Server to either use the VPN link subnet or to use all available subnets. Using all available subnets ensures that both local and remote Client and Messenger applications can connect.



3.7 BTD-200 System Compatibility

3.7.1 Hardware

The minimum system required for remote use of the Lightning Works Client and Messenger is a BTD-200 connected to a user computer running the Lightning Works Server software. The Lightning Works Server Admin **must** be installed on the same computer as the Lightning Works Server. The computer must have a reliable internet connection or provision for VPN access.

3.7.2 Software

The minimum software revisions of the BTD-200 sensor firmware and the Lightning Works Server, Client and Messenger software for remote operation are as follows:

BTD-200 Sensor	3.0.0.0
LW Server	4.0.0.0
LW Client	4.0.0.0
LW Messenger	2.0.0.0

The latest versions of BTD-200 sensor firmware and Lightning Works software along with full installation instructions are available to download from the Download pages of the Biral website <u>www.biral.com</u>.



4 LIGHTNING WORKS SERVER ADMIN INSTALLATION

4.1 Introduction

The Lightning Works Server Admin software should be installed after the BTD-200 sensor and Lightning Works software are installed and configured. Ensure a basic installation of the BTD-200 sensor, Server, and Lightning Works Client is working correctly before proceeding with Lightning Works Server Admin.

4.2 Software Licences

4.2.1 Lightning Works Messenger Licence

The Lightning Works Server Admin software remains the property of Biral and is protected by appropriate copyright law and international treaty provisions. The Licensee is granted the right to use the software, but not to de-compile or to in anyway alter the composition of the software. The software contains information of commercial value and worth to Biral.

In no event will Biral, its Directors or employees be liable for direct, indirect, incidental, exemplary, or consequential damages, expenses, or losses arising out of the use, or inability to use any or all of the Lightning Works applications.

No other warranties except those expressly set out above are implied or should be inferred. Biral makes no warranty concerning the fitness of the BTD-200 Thunderstorm Detector, its Lightning Works software or the Lightning Works Server Admin for a particular purpose or use. Biral does not warrant, guarantee or make any representations regarding the use or the results of the use of the BTD-200 Thunderstorm Detector or the software.

4.3 Compatible Operating Systems

The Lightning Works Server Admin software has been tested for use with the following Microsoft operating systems:

- Windows 10
- Windows 11
- Windows Server 2016 Standard
- Windows Server 2019 Standard
- •

The software may work with other Microsoft operating systems, but this has not been tested. Ensure the Windows software is fully updated.

Note: The Lightning Works Server Admin Software is not compatible with 32-bit computers.



4.4 Choosing the Computer

The Lightning Works Server Admin **must** be installed on the same computer as the Lightning Works Server.

The computer on which the software is installed must have reliable internet access if remote connections are desired.

It is necessary that the account used to install and run the Server Admin application has administrator access.

The chosen computer should have sleep mode and hibernation disabled as these power saving options stop the computer from running applications when it is not being actively used.

Only one installation of Lightning Works Server Admin is possible.

4.5 Installing the Software

4.5.1 Installation

To install the Lightning Works Server Admin software on a computer, follow the steps below.

- 1. Insert the BTD20.LW USB Drive into a suitable USB port of the computer, wait for the drive to be recognised and then use file explorer to locate the Lightning Works Server Administrator folder. Open the folder.
- 2. Double click on the **Lightning Works Server Administrator Setup** application to start installation.
- 3. The software will install in the default program directory of your computer. It is not possible to install the software in another location.
- 4. To install the software, you must accept the End User licence terms and conditions. Please read the licence terms and check the agree box to proceed with installation.





5. When the software has successfully installed you will see the following window.



The software is now ready to use.

4.5.2 Running the Lightning Works Server Admin Software

The Lightning Works Server Admin can be started by doubling clicking on the desktop icon.

4.5.3 Removing the Lightning Works Server Admin Software

To remove the Lightning Works Server Admin software, select Programs and Features in your computer's Control Panel. Locate the Lightning Works Server Admin entry in the list and click on it. Use the Uninstall option at the top of the list to remove the Lightning Works Server Admin software.



5 RUNNING LIGHTNING WORKS SERVER ADMIN

The Lightning Works Server Admin software is set up to always run with administrator access as it requires access to the Server service. When the software is run the Windows User Account Control dialog may be displayed to confirm you wish to run an application with administrator access. Press the "Yes" button to allow access. You may require the login details of an administrator account to complete this action.

Lightning Works Server Adm	in						- []
e Help								
ervice Status: F	LIGHTI Running	NING	i WOR	KS S	SERVER AD	OMIN	Bira	al
Network Settings						Language		
Auto Choose Subnet	Advanced					English		\sim
O Use All Subnets							Save	
					Save			
							Stop Service	
							Start Service	
Available Subnets						F	Refresh Subnets	
Subnet	Use	Prefix Bits	Subnet Mask	Status	Adaptor Description			
60.1.9.21 127.0.0.1	Yes No	24 8	255.255.255.0 255.0.0.0	Up Up	Intel(R) Ethemet Connection (1 Software Loopback Interface 1	4) I219-LM		
٢								>

The software will open and appear as shown in Figure 5-1 below.

Figure 5-1 LWSA Main Display – Normal mode

The main display shows the Status of the BTD-200 Lightning Works Server Service – This will be one of the following states:

- **Service not installed** the Lightning Works Server is not installed on this computer. Close the application and install the Lightning Works Server.
- Start Pending Waiting for the service to start.
- **Running** the Lightning Works Server service is running.
- **Stop Pending** Waiting for the service to stop.
- **Stopped** the Lightning Works Server service has stopped.

If the Status is "Service not installed" then the Lightning Works Server Admin has not been installed on the same computer as the server. Close the application and install the Lightning Works Server.



5.1 Settings Tab Details

The Settings tab is divided into 4 areas:

- Network Settings
- Available Subnets This is a list of available subnets found on the computer
- Language Settings To allow the user to change the displayed language
- Service Buttons To start and stop the service.

5.1.1 Network Settings

This area enables the administrator to select the network settings to be used by the server. By default, the Auto Choose subnet radio button will be selected and the Advanced checkbox unticked.

The options are:

- Auto Choose Subnet The server will broadcast on all subnets that are in use using the default port of 25267.
- Use All Subnets The server will broadcast on all available subnets using the default port of 25267.
- User Selected Subnets Available if the Advanced box is ticked. The user may select the subnets used to broadcast messages.

These settings do not need to change for default operation of the Lightning Works software when all Clients and Messenger applications are running on the same network.

5.1.2 Available Subnets

This is a list of all the subnets found on the computer. Pressing the Refresh subnets button will update the list.

5.1.3 Language Settings

The administrator can select the language used by the Lightning Works Server Admin application. The language can be changed at any time without restarting the application.

To change the language, click on the drop-down list in the Language area of the Settings tab. Select the desired language and then click the save button.

5.1.4 Advanced Mode

The Advanced mode settings can be enabled by checking the Advanced checkbox. This will bring up the advanced mode display as shown in Figure 5-2.



ervice Status:	Running							
Network Settings						Langu	lage	
 Auto Choose Subnet 	Advanced		No Broadcasts		Add Subnet	Engli	sh	
	Broadcast Port	Cor	nection Port		Edit Subnet		Save	
 Use All Subnets 	25267	25	267		Delete Subnet			
O User Selected Subnets					Save	I		
User Selected Subnets							Stop Servi	æ
Subnet	Broadcast Port	Connection P	ort No Broadca	ast			Start Servi	ce .
vailable Subnets							Refresh Sub	nets
Subnet	Use	Prefix Bits	Subnet Mask	Status	Adaptor Description			
60.1.9.21	Yes	24	255.255.255.0	Up	Intel(R) Ethernet Connect	ion (14) I219-LM	1	
107001	No	8	255.0.0.0	Up	Software Loopback Interf	ace 1		

Figure 5-2 LWSA Main Display – Advanced mode

5.1.4.1 No Broadcasts

By default, the Server sends a broadcast message on the subnets. Clients can use the broadcast message to establish a TCP/IP connection to the Server. Some network routers or VPNs block broadcast messages, checking the "No Broadcasts" check box stops broadcast messages being sent.

When broadcast messages are disabled all Client and Messenger applications, including ones on the local network, must be configured with the Server address.

5.1.4.2 Broadcast and Connection Ports

The broadcast and connection ports default to 25267. If these ports are in use by other applications used on the computer these ports can be changed.

Consult your IT Department or IP support partner if you wish to change the ports as your router/firewall settings may need to be updated.

5.1.4.3 User Selected Subnets

It is possible to specify which subnet to use for connection to the lightning Works Server. Selecting the "User Selected Subnets" radio button will enable the User Selected Subnets list and the "Add Subnet", "Edit Subnet" and "Delete Subnet" buttons. A subnet can be added to the User Selected Subnets list by pressing the



"Add Subnet" button. This will display the Subnet Details dialog as shown in Figure 5-3.

Subnet Details		
Subnet Address	OK	
Advanced	Cancel	

Figure 5-3: Subnet Details Dialog

Enter the subnet address and press the OK button to add the subnet to the list.

5.1.4.4 Save Button

When the settings have been updated, they must be saved to the server before they can be used. Pressing the "Save" button will display the following message box:



Figure 5-4: New Settings Message Box.

5.1.5 Starting and Stopping the Server Service

To enable the new settings, press the "Stop Service" button. This will stop the Lightning Works Server service. The Service Status will change to the "Stopped" message.

Note: Any connected Clients or Messenger applications will show the disconnected state.



To restart the service, press the "Start Service" button. The Service Status will change to the "Running" message.

5.2 Adding Users

To enable the Server to allow Client and Messenger applications to connect via a specific IP address at least one user must be set up to validate the connection. If required, each client can connect with their own username and password.

The usernames used by Lightning Works are not Windows domain usernames.

Users may be added or edited using the "Users" tab. This will display the users tab as shown in Figure 5-5.

ņ	Lightning Works Server A	dmin		– 🗆 X
ł	ile Help			
		LIGHTN	ING WORKS SERVER ADMII	Riral
	Service Status:	Running		Diai
	Settings Users	0		
	Add	Edit	Delete	
	User Name			

Figure 5-5 LWSA Users Tab

- To add users, click the "Add" button. A username and valid password must be entered.
- To edit a user username or password, click on the username to highlight it, then click the "Edit" button.
- To delete a user, click on the username to highlight it, then click on the "delete" button. A dialogue box will appear to confirm the deletion.



5.3 Updating The Language File

Occasionally, Biral may issue updated language files to include new languages or corrections.

New languages files can be installed by selecting the "Install Updated Language File" menu item in the Help menu. This will display an Open dialog where the updated language file can be selected and installed.

Language files will be called "Languages.db".



6 CONFIGURING CLIENTS FOR A REMOTE CONNECTION

To connect the Lightning Works Client or Messenger to a remote Server, the following is required:

- Public IP address of the computer where the server is installed. A public DNS name may also be used if it is available.
- The internet access router and potentially the firewall will have to have port forwarding set up to allow the broadcast and connection ports through.
- At least one user must be set up on the Lightning Works Server Admin.

Where the Server has been configured for No Broadcasts Lightning Works Clients or Messenger applications on the local network must also be configured. The following is required for local connections with no broadcasts:

- IP address of the computer where the server is installed. The Device Name of the Server computer may also be used.
- At least one user must be set up on the Lightning Works Server Admin.

6.1 Client / Messenger Network Settings

On the Lightning Works Client or Lightning Works Messenger, Select the "Network" menu item from the "File" Menu.

Note: On the Lightning Works Messenger, Admin Mode must be enabled to access this menu item.

Network Settings		
Disconnect	Disconnect before changing settings	
Specify Server Address	Advanced Options	
Server Address	Login Details	
Waiting for Bro	OK Cancel Reset to Defaults	

This will bring up the Network Settings Dialog as shown in Figure 6-1 below.

Figure 6-1: Network Settings Dialog



Press the "Disconnect" button. This will stop the Client or Messenger from waiting for a broadcast message. The dialog will now report disconnected as shown in Figure 6-2.

Network Settings	
Disconnect	Disconnect before changing settings
Specify Server Address	Advanced Options
Server Address	Login Details
Disconnected	
Connect	OK Cancel Reset to Defaults

Figure 6-2: Disconnected Network Settings

To connect to the remote server:

- Click on the "Specify Server Address" check box
- Enter the Public IP Address or public DNS name of the Server computer in the Server Address Box. For local connections, enter the Server computer IP address or Device Name of the Server computer.
- Press the "Login Details" button, this will display a "Network Login Details" dialog.
- Enter the Username and Password that was set up in Lightning Works Server Admin.
- Press the "Connect" button.

If the connection has been successful, the display will change to show the connection details in green, as shown in Figure 6-3.



Disconnect Disconnect before changing settings Specify Server Address Advanced Options	
Specify Server Address Advanced Options	
Server Address	
XXX XXX XXX Login Details	

Figure 6-3: Network Connection Made

Pressing the "OK" button will close the dialog.

6.2 Connecting Via VPN

Most Virtual Private Networks (VPN) do not allow broadcast messages. To connect via VPN, perform the following steps.

On the Server Admin, make sure that the "No Broadcasts" check box has been ticked, and the settings saved. Make sure that at least one user has been set up on the Lightning Works Server Admin.

Record the IP address or Device Name of the computer running the server. This will be the internal network address or name, not the public IP address.

On the computer running the Client or Messenger, make sure the VPN is open.

On the Client or Messenger, bring up the Network Settings dialog and Press the disconnect button.

To connect to the remote server via VPN:

- Click on the "Disconnect" button.
- Click on the "Specify Server Address" check box.
- Enter the IP Address or Device Name of the server computer in the Server Address Box.
- Press the "Login Details" button, this will display a "Network Login Details" dialog.



- Enter the Username and Password that was set up in the Lightning Works Server Admin.
- Press the "Connect" button.

If the connection has been successful, the display will change to show the connection details in green, as show in Figure 6-3. Pressing the "OK" button will close the dialog.

Note: The Client or Messenger applications will only be connected to the server while the VPN is connected. If the VPN loses its connection, then the Lightning Works connection will be lost. The connection will be restored automatically when the VPN connection is restored.

6.3 Advanced Network Settings

When the Advanced Options checkbox in the Network Settings dialog is checked the dialog will display as shown Figure 6-4.

twork Settings				
Disconnect		Disconnect before cha	anging settings	
Specify Server Ad	dress	Advanced Options	3	
Server Address			Broadcast Po	rt Connection Port
192.168.0.62		Login Details	25267	25267
Connect Previous Connections		ж	Cancel	Reset to Defaults
Name	Llee Addrees	Broadcast Port	Connection Port	Server Address
BTD200-1	No	25267	25267	Jerver Audress
BTD200-2	Yes		29520	192.168.0.62

Figure 6-4 Advanced Network Settings



6.3.1 Port Numbers

When disconnected it is possible to change the port numbers for the broadcast and connection messages. The port numbers used must match those set for the Server.

6.3.2 Previous Connections

Details of previous Server connections made by the Client or Messenger are shown when the Advanced Options checkbox is checked. For each connection the following information is provided:

- Name: Connection names are automatically generated but may be changed to something more descriptive by clicking on the name text.
- Use Address:

Shows "No" where the connection is reliant on a broadcast message and "Yes" where the Client or Messager uses a specified address to make the Server connection.

- Broadcast Port: The broadcast port number – if appropriate.
- Connection Port: The connection port number.
- Server Address:

The IP address of the Server computer. Depending on the connection method this may a local or Public IP address. Local Device Names and Public DNS names may also be used.

When the connection status is Disconnected doubling clicking on a connection name puts the information into the Specify Address and Login Details fields, along with the broadcast and connection port details.



7 RUNNING MULTIPLE CLIENTS ON ONE COMPUTER

If your organisation has BTD-200 sensors on different sites, you may wish to have multiple Client applications running on a single remote computer for administration and monitoring purposes. The following sections provide a brief overview of the standard Windows feature that support multiple instances of an application.

Note: It is not possible to run multiple instances of the Messenger application on a computer. The Messenger application should be run on the same local network as the Server where possible.

7.1 Adding Additional Clients

The following assumes that the Client has already been installed and successfully configured on the computer.

Using Windows File Explorer navigate to "C:\Program Files\Biral\Lightning Works Client". Right click on "Lightning Works Client.exe" and click on the "Create shortcut" option. Follow the instructions to create a shortcut on the desktop.

Right click on the shortcut you have just created and click on the "Properties" option. A Properties dialog box will appear.

- In the General tab, enter a suitable name for the shortcut. This may be the site name or other memorable text.
- In the Shortcut tab, locate the "Target" text box. At the end of the target name insert " /i:SiteName". For example, if your site name is Boxy Hill the text box should contain the following:
 - "C:\Program Files\Biral\Lightning Works Client\Lightning Works Client.exe" /i:BoxyHill

Note: Spaces are not allowed in application iteration names.

• Click on "OK" to confirm the changes and close the Properties dialog box.

You may now start the new iteration of the Client by double clicking the desktop icon. The iteration name will be displayed next to the Lightning Works icon at the top of the window.

The language.db file will need to be copied to the local app data folder for this iteration. Follow the instructions in the main manual for installing a language file.

The Client application can now be configured using the Network Settings, User Settings and Administrator windows and tabs as described above and in the main system manual.



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