

Netbell-NTG Quick Setup Guide

Thank you for purchasing the Linortek-NTG tone generator and controller. This powerful multi-tone generator can easily be wired into an existing PA system to schedule and play automated messages or play a pre-recorded message based on user-defined conditions.

1. Finding the IP Address on Your Network

By default, the Netbell is DHCP enabled. When a Netbell SERVER unit is first installed on your network, it automatically obtains an IP address from your router via DHCP if your router is set up to assign one. If your router is not set this way, please use Option 3 to use default IP address to access the software, as well as how to set a static IP address for your device.

There are several ways to find the Netbell IP address on your network.

Option 1: Using the Discoverer Program to locate the IP address

We have developed two types of Discover apps to help our customers find the IP address on the network:

- Our upgraded Discover app, developed for Windows PC and Android phones
- A Java-based app that can be used on all types of computers, as long as your computer has Java runtime installed.

If you are using a Windows computer, we strongly recommend using the upgraded Discover app.

To download the Discoverer program, please go to: <https://www.linortek.com/downloads/support-programming/>.

- **Linortek Discover for Windows**

The program you download from our website is a zip file, you will need to extract the file first after downloading. After extracting the zip file, you will see a file called “Linortek_Discover_Windows.exe”, double click the file, you will most likely to see a popup window stating that “Windows protected your PC, Microsoft Defender SmartScreen prevented an unrecognized app from starting. Running this app might put your PC at risk.” with a “Don’t run” button. You need to click **More info**, the app name, publisher information will display, click Run anyway to open the app, it won't harm your computer.



Alternatively, you can download the Java-based Discover program if you believe you have the Java runtime installed on your PC.

- **Linortek Java-Based TCP/IP Discoverer**

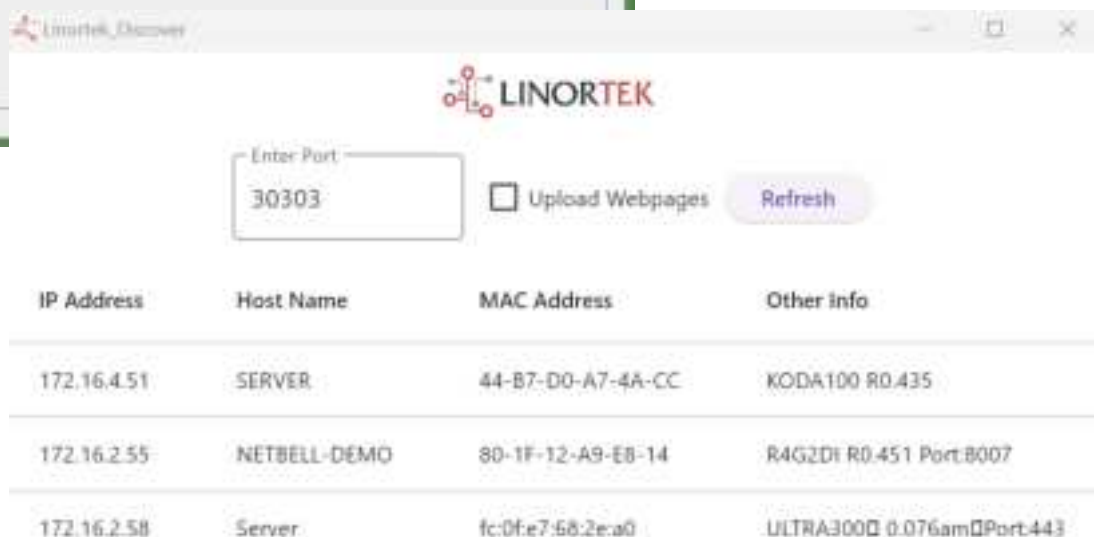
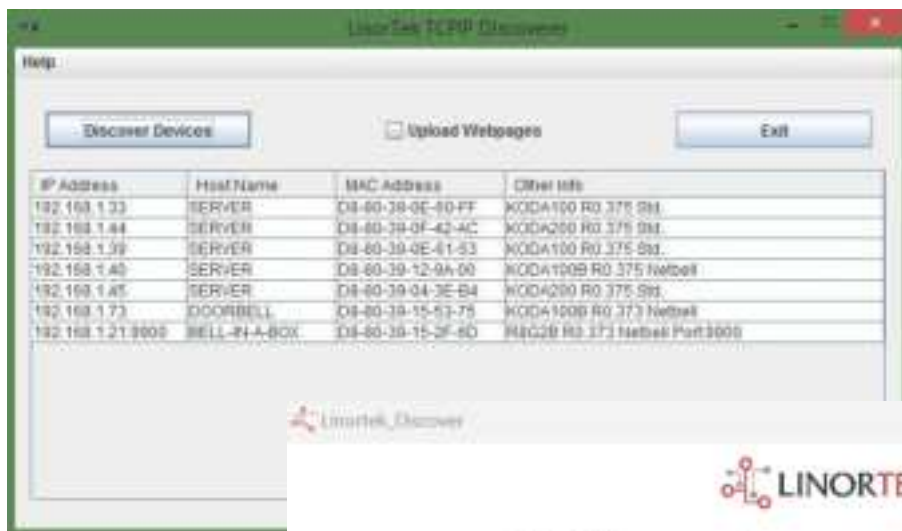
The Linortek TCP/IP Discoverer is a program that will automatically locate your Netbell server. Because discoverer is a Java program, Java runtime needs to be loaded to use this feature. Java can be found here:

<https://www.java.com/en/download/>.

When downloading the Java Discoverer program, sometimes you will see a popup warning message depending on your browser security settings, asking if you want to keep or discard this file, please click the Keep button as this is a Java program, it won't harm your computer.

Once Discover locates your device, it will display:

1. Port Number (Discover for Windows App only, it will display the port number of your device, by default it's set to 30303, which is used for most of Linortek products.
2. IP Address
3. Host Name
4. MAC Address
5. Other Info:
 - a. Blue LED (if on)
 - b. Product Name
 - c. Server Software Revision



Click the device you want to use shown on the Discoverer program to launch the SERVER web pages in your browser. Click the Login button on the homepage. **Default username/password is: admin/admin.** You may change these as you desire or disable this feature in the **Settings** menu.

Option 2: Using Command Prompt on your PC to ping the device

If you can't make the Discoverer program to work, you can ping the server to get its IP address on your network. Here is how:

1. Open the Start menu on your PC and type **cmd** on search bar, select **Command Prompt**.
2. Type **ping server** and press Enter.

If the ping is successful, you should receive replies from the address that you are trying to ping. Open your browser and type in the IP address displayed on the command prompt window.

Option 3: Connect directly to your PC to use the default IP address

If you still have trouble finding the IP address, or your network doesn't support DHCP, you can connect the SERVER directly to your computer's Ethernet port, **TURN OFF WiFi**, open your browser, and type in the SERVER's default IP address: **169.254.1.1** to access the webpage to setup your device.

Once logging in the page, you can set a static IP address by going to **Configure - Network Config** page. Once a static IP address is assigned, you can connect it to your network, access the software through the static IP address.

2. Ensure Audio File System is Enabled

Navigate to the **Settings** drop-down menu and select **Settings**. Ensure the **Use Audio File System** Checkbox is checked, and the **UART Usage** field is set to **Audio**.

The screenshot shows the LINORTEK web interface. At the top, there's a navigation bar with links: Home, Services, Tools, Logs, Settings, Configure, and System. Below this, the 'Settings' page is displayed. It contains a grid of settings. In the middle-right section, the 'Use Audio File System' checkbox is checked and highlighted with a red rectangle. Below it, the 'UART Usage' dropdown menu is also highlighted with a red rectangle, showing 'Audio' as the selected option. Other settings include 'Use Active Mail' (checked), 'Require Login' (checked), 'Use IP Ranges' (unchecked), 'Use RESTful IP Ranges' (unchecked), 'Use Remote IP Ranges' (unchecked), 'Use RESTful Authentication' (unchecked), 'Extend Relay Range' (unchecked), 'Use Relay Radio Buttons' (unchecked), 'SSS Port No.' (443), 'Use System eMail' (unchecked), 'Use Fahrenheit' (unchecked), 'POM Dynamic Relays' (unchecked), 'CLR ROMs on Start' (checked), 'RTC Temperature Compensation' (checked), 'Use AM2302' (unchecked), 'Save Report' (unchecked), 'Use Metric' (unchecked), 'Switch Bypass 1' (unchecked), 'Switch Bypass 2' (unchecked), 'Setting 19' (unchecked), 'WiFi Report' (unchecked), 'Active Landing Page' (unchecked), 'Invert Relay Control' (unchecked), and 'Setting 24' (unchecked). At the bottom of the settings grid are 'SAVE' and 'CANCEL' buttons. The footer of the page reads: 'Version v19.04.20K Copyright (C) 2013-2019 Linor Technology Inc. - All rights reserved. Standard Rad Version'.

3. Setting Time and Date

When first configuring your Netbell-NTG you will need to verify the time and date on your home page. Your Netbell-NTG is configured by default to use Eastern Standard Time (GMT-5) and will apply correction for Daylight Savings Time. If your location is not on Eastern Time zone, please make sure to set your Time Zone first. Using an Incorrect time zone will cause the BELLS to ring at the wrong time.

To set your Time Zone, go to **Settings - Time/Date** and enter your local Time Zone (for example, -5 for Eastern Time Zone, -6 for Central Time Zone, -7 for Mountain Time Zone, -8 for Pacific Time Zone), make sure the **Use NTP Update** box is checked (when this box is checked, the Netbell will update its time from the NTP server every 30 minutes by default), then click the **SAVE** button. The system will update its time at its next interval (30 minutes). If you want to get immediate update, you can manually set it to the standard time on the Time box (one hour BEHIND your current time if you use Daylight Savings Time). For example, if your current time is 9:35am, you should put 8:35am on the **Time** box.

If you wish to use your internal NTP server, please check the following instructions.

<https://bit.ly/3YUf8UN>

CAUTION: Incorrect settings might cause your devices unable to update the time from the NTP server.

4. Assigning Audio Tones to Relays

The Netbell-NTG uses a relay to trigger a tone on the Netbell-NTG controller. The relay is just a tool for this purpose and not functioning as a physical switch in this case. You can assign the audio tone to any relays (1-8), so you can use the scheduling function to schedule that tone from the **Services - Bells** page.

Tip: when you go to **Services - Relays** page, only 4 relays are visible. To enable 8 relays, go to **Settings - Settings** page, check the **Extend Relay Range** box, then click **SAVE**. To view all 8 relays, go to **Services-Relays** page, change the **relays4** to **relays8** from the URL. For example, the URL on your Relays page might look like this:

<http://172.16.10.105:8007/p/relays4.htm>, you can change it to: <http://172.16.10.105:8007/p/relays8.htm> to see 8 relays.

The device comes installed with 40 default sounds from the factory, these sounds can be heard at

<https://www.linortek.com/netbell-standard-sound-list/>. We use the tone named “**BELLT001**” and assign this tone to relay 1 (bell#1) for this instruction.

1. Navigate to **Tasks** page on your Netbell-NTG
2. Click the **Edit** icon at the end of the first available line
3. Enter a name (if desired) in the Schedule Name field
4. Check the **Use** box
5. Set **Device A** to **RELAY**
6. Set **Data A** to **01+** (This refers to the Bell 1 on the bell schedule page for bell 2, 3, ... use 02+, 03+, ...)
7. Set **Device C** to **SEND UART**
8. Set **Data C** to **PBELLT001OGG** (This must be an 8-character name preceded by **P** and followed by **OGG**. This must be capitalized)
9. Set **Action** to **ON**, click **SAVE**

Set Schedule

This page allows the user to edit the settings for the individual scheduled task selected on the previous page. Click "Save" to save changes made or click "Cancel" to return to the previous page. Leaving the page without clicking save will result in your changes being ignored by the Fargo server.

Schedule Select:

Schedule Name:

Use ☒ Log ☐ Email ☐

IF

Device A:

Data A:

Logic:

Device B:

Data B:

THEN

Device C:

Data C:

Action:

Now you have assigned a tone to relay 1. To test the sound manually, go to **Services - Relays** page, click the red dot under State column, when it turns green, the assigned tone should be played through your speakers.

5. Scheduling Audio Playback

Once the audio system is enabled and a tone is assigned to a relay, you can then program your Netbell-NTG for audio playback. This can be done using the Netbell-NTG's Bell Schedule, or by using an external signal such as a push button switch as a trigger.

Creating a Bell Schedule from the Bells Page

The Netbell-NTG comes with up to 500 bell event schedules that you can set recurring events on hourly, daily, weekly, or custom intervals. The scheduling function is a great tool for break times, shift changes, automated reminders, or training drills. To add an event schedule, navigate to the **Services** dropdown menu, then select **Bells**. At the bottom of **Bells** page you will see the following:

- Name: The name of your schedule, 15 character max (Use letters and numbers only)
- Time: Select the time from the drop down box for your schedule (24hr format) (HH:MM:SS)
- Duration: Enter any number in the Duration box and select a duration multiplier (mS, Sec, Min), skipping this box might cause your schedule to not work. The duration the Netbell-NTG plays depends on the length of the audio file. For example, if the audio file is 10 seconds, it will play for 10 seconds regardless of the duration you set here.

Click the **Add** button, your first schedule will show above. The schedule is applied to Bells 1 and 2, M-F by default. You can change it by clicking the pips under **Bell** and **Day** column; to control the relay you assigned the tone to and what day (from Sunday to Saturday: S M T W T F S) you want the schedule to be used. The selected bell will show as GREEN (otherwise GREY). If you want to add a schedule to a specific date using the calendar scheduling. The day of the week is disabled when this feature is used, a date will be displayed instead.

If you have multiple Netbell devices and you want to have the same schedules for each device, or you want to save a copy of your current schedules, you can download/upload the schedules into the Netbell system using .txt format after creating your full schedules. For instructions of how to use the **Download & Upload** Bell Schedule function, please refer to the Scheduling Audio Playback on the Netbell-NTG Instruction Manual.

Video Tutorial: Netbell-NTG Initial Setup - Basic Settings: <https://bit.ly/4cOsANn>

Using a Push Switch to Trigger a Tone

You may also program your Netbell-NTG to play a tone upon input from an external trigger such as a push button. For detailed instructions on how to use a push switch to trigger sound, please refer to Using an External Trigger for Emergency on Netbell-NTG, which can be downloaded here: <https://bit.ly/3XwFFXd>

Creating Custom Sounds

The device comes installed with 40 default sounds from the factory, 16 sounds can be activated by schedules and digital inputs . You can create custom sounds or record messages and save them to the built-in micro SD card to play your Netbell-NTG. The Netbell-NTG uses the .ogg file format for the playback of audio. If your custom sounds or messages are not in this format you will need to convert the file to an .ogg file. For more information on how to create custom sounds for your Netbell-NTG, please refer to the manual

Video Tutorial: How to Create Custom Sounds for Netbell-NTG PA System Controller: <https://bit.ly/4ge6Ltu>

For more information on Netbell User Manual, Video Tutorials for installation and schedule settings are available on our website Download page: <https://www.linortek.com/downloads/>

6. Contact Support Team

If you need assistance on setting your devices, please feel free to contact us at <https://www.linortek.com/technical-support/>