

NETBELL QUICK SETTING INSTRUCTION

The Netbell is very easy to use. After wiring your bells/buzzers to the Netbell controller, powering it on, connecting the Netbell to your network, you will need to find its IP address to access the Netbell webpage by using our Discover program or other methods listing below.

FIND THE IP ADDRESS ON YOUR NETWORK

The Netbell is DHCP enabled, when a Netbell SERVER unit is first installed on your network, it automatically obtains a web address from your router via DHCP if your router is set up to assign one. If your router is not set this way, it is suggested that you turn that feature on so you can operate the Netbell SERVER and assign it the IP address of your choosing. There are several ways to find the Netbell IP address on your network.

1. Using Discover Program to locate the IP address

Discover is our special designed program that will automatically locate your Netbell SERVER. The Discover is a Java program, Java runtime needs to be loaded to use this feature. Java can be found here: <http://java.com/en/download/index.jsp>.

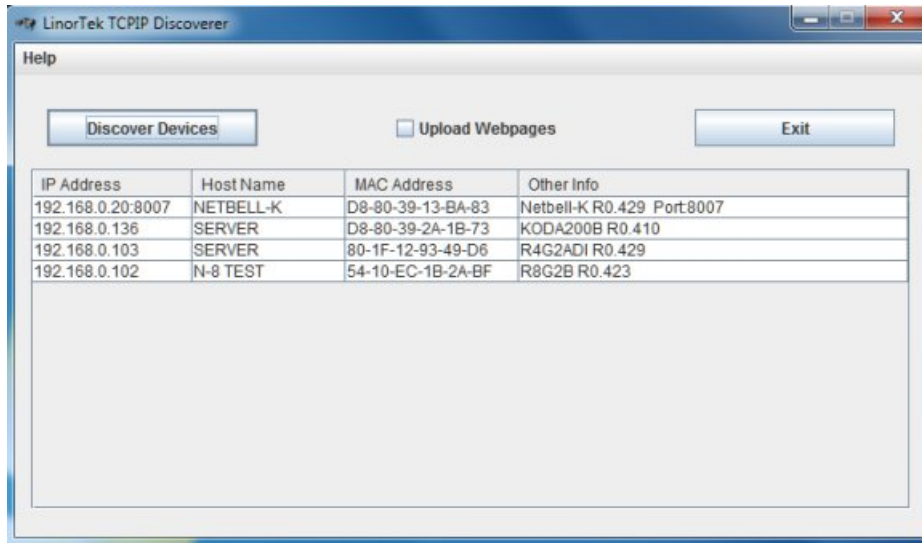
To download the **Discover** program, please go to: <https://www.linortek.com/downloads/support-programming/>

Use of **Chrome & Firefox browsers** is recommended. If you prefer to use Internet Explore browser, please note that when you download the Discover program, Internet Explore saves this program as a Zip file by default. In order to use the Discoverer, you need to select Save as and rename the file as "Linortek Discoverer.jar" when you download with Internet Explore browser.

When downloading the Discover 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 Discoverer locates your device, it will display:

- 1.IP Address
- 2.Host Name
- 3.MAC Address
- 4.Other Info:
 - a).Blue LED (if on)
 - b).Product Name
 - c).Server Software Revision



Click the device you want to use shown on the Discover program, launch the SERVER web pages in browser. Click 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.

2. Using cmd command on your PC to ping the IP address

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

1. To bring up the run dialog, press the Windows key+R.
2. Or open the Start menu on your PC and type in cmd on search bar, select cmd program.
3. 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 ping window.

3. Connect directly to your PC to use the default IP address

If you still have trouble finding the IP address, you can connect the SERVER directly to your computer Ethernet port, **TURN OFF** the WiFi, open the browser, type in 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.

RELAY CONTROL BELLS

Netbell uses relay outputs to control the bells. It is here you can turn the bells on and off manually or set your bells duration by setting the relays as well as their labels and status. To set your relay properties, go to **Service - In/Out (Relays)** page. The Relay that you are editing is identified by the line on which you clicked the **Edit** icon on the **RELAY** page. You can give a name for the relay (bell) on the **Set Relay** page after clicking the Edit icon. Enter a 15 character Relay Name. The Netbell default pulse width is 4 second (which means the bell will ring 4 second for each schedule), you can change this number by entering your desired Pulse Width and Pulse Width Multiplier on Set Relay page here, you can also set different bell ringing duration for each schedule on Bells scheduling page below.

Please note: When you set a duration on **Bells** page for each schedule, it will overwrite the pulse width of that relay

After you connect your bell to one of the Relay Outputs, you can test the bells by clicking the **RED** dot under **STATE** on the **RELAY CONTROL** section. When the RED dot turns green, you bell should ring, if not, please check the wiring.

SET TIME ZONE

Before starting scheduling your bells, please make sure to set your **Time Zone** first. **CAUTION:** Incorrect Time Zone may cause the BELLS not ringing at the right time.

To set your **Time Zone**, go to **Settings**, select **Time/Date** from the drop down menu, enter your local Time Zone (for example, **-5** for Eastern Time Zone, **-6** for Central Time Zone, **-7** for Mountain 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 **SAVE** button, you are now ready to schedule your bells.

If you use Daylight Savings Time in your area, make sure the **Use Daylight Savings Time** box is checked, and set the standard time on the Time box (one hour **BEHIND** your current time). For example, if your current time is 9:35am, you should put 8:35am on the Time box.

Note: If you wish to use the Netbell as a standalone device after the initial setup, please uncheck the **Use NTP Update** box so that the SERVER won't look for NTP server to update its time.

If you wish to use your internal NTP server, please check the **How to Use Your Internal NTP Server for Linortek Devices** for instructions. **CAUTION:** Incorrect settings might cause your devices unable to update the time from the NTP server. You can check the instruction from this link:

<https://www.linortek.com/download/How-to-Use-Your-Internal-NTP-Server-for-Linortek-Devices.pdf>

The screenshot shows the LINORTEK web interface. At the top, there is a navigation menu with the following items: Home, Services, Tasks, Logs, Settings, Configure, and System. Below the menu is the 'Time/Date' settings page. The page includes a header with the LINORTEK logo and a 'PAUSE' button. The main content area contains a form for setting the time and date. The form has the following fields and options:

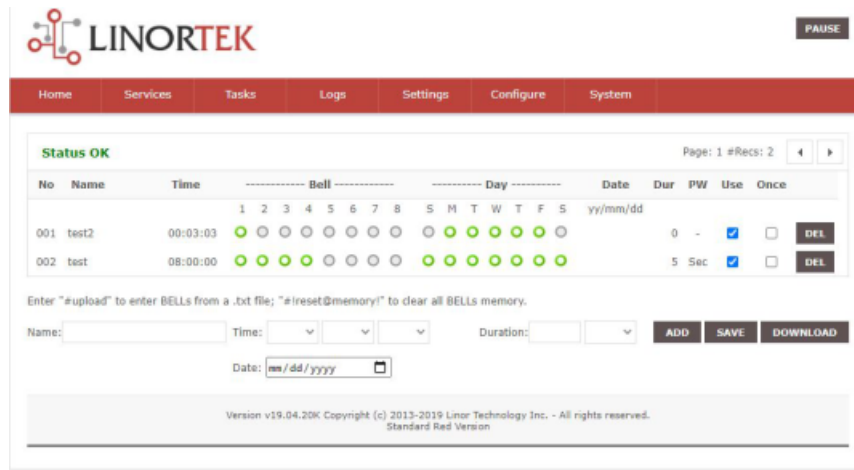
- Time: 12:35:39 (Format HH:MM:SS Always use Standard Time.)
- Date: 20/04/24 (Format YY/MM/DD)
- Time Zone: -5
- Use Daylight Savings Time
- Use MIL Time (24hr clock)
- Use NTP Update
- RTC Cap Sel 12.5pf (7pf def)
- RTC Crystal Freq: 32769.0 (32768.0 + if dock is slow. 32768.0 - if fast.)
- NTP Web Site: time.nist.gov
- NTP Interval: 30
- Log NTP Event

At the bottom of the form are 'SAVE' and 'CANCEL' buttons. Below the form is a footer with the text: 'Version v18.04.200 Copyright (c) 2013-2018 Linor Technology Inc. - All rights reserved. Standard Red Version'.

ADD BELL SCHEDULES

There are two ways to add bell schedules to ring the bells in Netbell system: Add bell schedules with BellScheduler desk app and add schedules from Netbell bell scheduling page

1. ADD BELL SCHEDULES FROM BELL SCHEDULING PAGE



You can add bell schedules from the Netbell webpage. To add an event schedule, click **Services** then select **Bells**, the **Add Schedules** page, go to **Add** section which is located at the bottom of Bells page.

Name: The name of your schedule, 15 character max (**Use numbers and letters only**)

Time: Select the time from the drop down box for your schedule (**24hr format, HH:MM:SS**)

Duration: Enter a number (1-99) in the duration box and select a length (mS, Sec and Min), this is how long the bell rings for this schedule. If it's empty, the bell will ring for 4 second by default.

Then click **Add** button, your first schedule will show up. The schedule is applied to Bell 1, 2, M-F by default. You can change it by clicking the pip under Bell and Day column, depends on which relay you connect the bell 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 schdules.

DOWNLOAD & UPLOAD BELL SCHEDULE

If you want save a copy of your current schedules, or edit the schedules, or switch different schedules for special days, you can use the Download & Upload function to do so. We only cover the Download & Upload function on the webpage here. For Bellscheduler app Download & Upload, please refer to the Bellscheduler app instruction.

Download Bell Schedule

To download the bell schedules, simply click the DOWNLOAD button at the bottom right conner, your browser will open a new window shown the schedules you have created, which starts with **#Start** command.

1. Create a .txt file,
2. Copy and paste the bell schedules to your text file, please make sure command #Start is copied at the very beginning of the schedules as it is shown on the download page.
3. Click Save after you paste the schedules.

EDIT BELL SCHEDULES

If you want to make any changes to your existing schedules, you can download your existing schdules andave to .txt file, edit it and then upload to your Netbell system.

Netbell schedules format

1. Your bell schedule should always start with **#START** command.
2. The order for the schedules is: NAME (15char max),HH (2-digit,24hr), MM (2-digit),SS (2-digit), YY (2-digit), MM(2-digit), DD(2-digit), BELLS (1-8),DOW (Sunday-Saturday),bell duration(from 1-99),duration multiplier (Ms, Sec, Min),Use(1-digit), Once(1-digit).
Seperate the value with comma.
 - **NAME:** Use any words for the name, max. 15 characters
 - **HOOR(HH):** 2 digit number, 24 hours format. For example, if you want to set a scheduler at 3 clock in the afternoon, you need to set it as 15 in the HH area.
 - **MINUTE (MM):**2 digit number.
 - **SECOND (SS):**2 digit number.
 - **YEAR (YY):**2 digit number.
 - **MONTH (mm):**2 digit number.
 - **DAY (dd):**2 digit number.
 - **BELLS:** the bells you want to schedule, from 1-8, depending on the Netbell models you purchase. (Netbell-8: 1-8 bells,

Netbell-2: 1-2 bells, Netbell-4: 1-4 bells, Netbell-K: 1 bell). Using the value "1" for the bell you want to schedule, put value "0" for not on schedule bell. For example, if you have a Netbell-4, and you want to schedule all of the bells ringing at a certain time. then you BELLS value should be: 11110000.

- **DAY OF WEEK (DOW):** The day you want the bell ringing. Starting from Sunday, ends with Saturday. Use value "1" for the day you wish the bell ringing, "0" for no bell ringing. For example, you want to schedule your bell ringing from Monday to Friday, your DOW setting should be: 0111110.
- **DURATION:** How long you want the bell ring, from 1-99.
- **DURATION MULTIPLIER:** Ms, Sec, Min.
- **USE:** Use value "1" to put this schedule in use, "0" for not in use.
- **ONCE:** Use value "1" to put this schedule to use only for once, "0" for use in normal schedule.

Upload Bell Schedules

To upload the existing schedules in to Netbell system, copy and paste command **#upload** in the Name block, then click the **ADD** button, you will be directed to the upload page. Browse the file you created from your computer, then press **Get Bells** button, come back to the Bells page, your schedulers are already there! The page will also show you how many records have been uploaded.

If you want to make changes for the schedules you just uploaded, for example, to change which bell rings at certain days, simple click the pips to check/uncheck, then click the **SAVE PIPS** button, your changes will be saved.

Also you can refresh your bell schedule page by typing **#refresh** command in the Name block, then click the **ADD** button, the page will update the status of all your setting.

If you want to clear all the schedulers you have set and upload a new one, you can do so by copy and paste **#!reset@memory!** command into the Name block, then push Add, your old schedulers will be deleted from your bell memory.

Bell Schedule Sample:

#Start

New test,06,00,00,18,09,27,10000000,0000000,8,Sec,1,0

Morning bell,07,00,00,18,06,27,10000000,0000000,3,Sec,1,0

8AM,08,00,00,18,07,12,11000000,0000000,4,Sec,1,0

9AM,09,00,00,00,05,10000000,0111110,3,Sec,1,0

2. ADD BELL SCHEDULES WITH BELLSCHEUDLER DESKTOP APP

The Linortek BellScheduler app allows you to manage multiple Linortek Netbell devices from the BellScheduler deskapp, without the need of logging into each device, making the management of your bell systems much more convenient.

To download the BellScheduler software, please go to our website **Download-Support Programming** page, under Special Programs section, click Download **Linortek BellScheduler**, select Save as on the download popup window.

For more information on how to use the BellScheduler for multiple devices or locations, please refer to Netbell BellScheduler Quick Setting Instruction, the instruction can be found here: <https://www.linortek.com/downloads/documentations/>

USE NETBELL AS A STANDALONE DEVICE

We strongly **RECOMMEND** you to connect the Netbell to your network while using it so that you can get the most accurate time from the NTP server for your Netbell server. When you install the Netbell at the location where network is not available, you can use it as a standalone device. After setting up your Netbell as the instructions below, then go to Time/Date page, uncheck the Use NTP Update box so that the SERVER won't look for the NTP server to update its time when it's used as offline, then click **SAVE** button. Now you can install the Netbell at any locations as you like, it will ring your bells at your schedules.

When you use the Netbell as a standalone device, and find the time running faster or slower after a certain period, you can adjust the Real Time Clock (RTC) Crystal Frequency value from Settings - Time/Date page to adjust the time.

Here is how to adjust the RTC Crystal Freq.:

For example, your current RTC Crystal Freq. is 32769.8, and you are losing one second a day, then you need to change the RTC Crystal Freq. to be 32769.9, and check to see if you still loose the time in one or two days later.

If the clock is one second fast, you need to change the RTC Crystal Freq. to be 32769.7 to adjust the real time.

Please note, do not change the number too big at each time. 1-2 second will be good.

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/>

CONTACT SUPPORT TEAM:

Phone: 1-336-485-6566 Email: support@linortek.com

Video Tutorials for installation and software configuration are available on our website **Download** page.

For quick access to the videos, use your smartphone to scan this QR Code:

