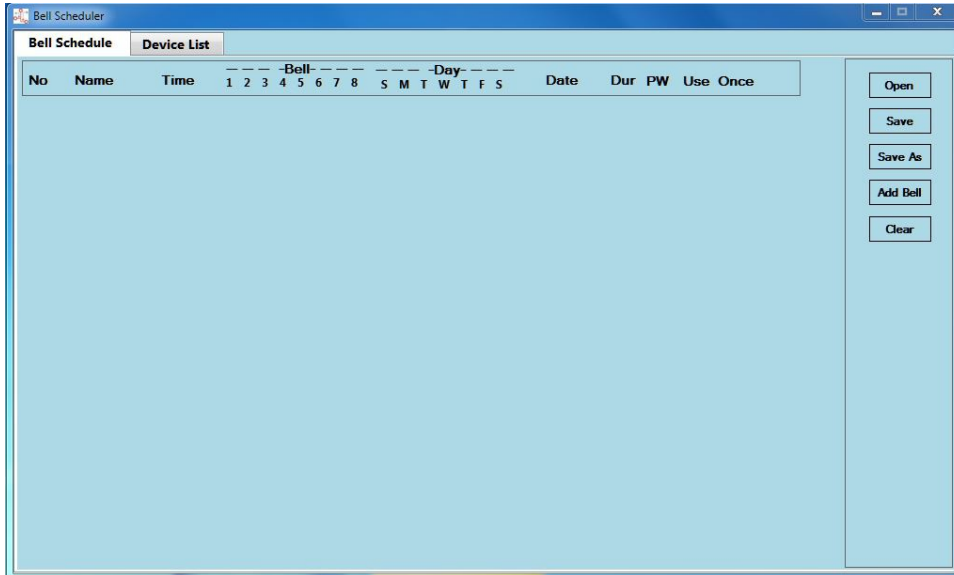


The **Linortek BellScheduler** software allows you to manage multiple Linortek Netbells on multiple buildings from one easy-to-use interface, without the needs of logging into each device, making the management of your bell systems much more convenient. To download the BellScheduler software, please go to our website Download - Support Programming page, under Special Programs section, click Download Linortek BellScheduler, select Save as on the download popup window: <https://www.linortek.com/downloads/support-programming/>. Once the Bellscheduler is downloaded, double click the program and it will open:



To use the BellScheduler to add/Upload bell schedules to an array of Netbell servers, please make sure all of your devices are connected to the same network with your computer, then use the Discover program to find the IP addresses and other information needed to use the BellScheduler.

The BellScheduler program has 2 tabs, **Bell Schedule** and **Device List**. Each one has buttons on the righthand side that corresponds to functions to manage the Schedule or Devices respectively.

**Bell Schedule:** This will display all the schedules for all of your Netbell devices, there are 5 buttons:

- Open:** Used to open a text file that contains a bell schedule into the program.
- Save:** Save the bell schedule into a text file.
- Save As:** Save the bell schedule as a new text file.
- Add:** Add a bell schedule event.
- Clear:** Clear the bell schedule from the program.

**Device List:** The **Device List** manages the Netbell servers you want to add bell schedules to. It has 7 buttons:

- Open:** Allow you to open a list of Netbell servers from your computer files, in .csv format.
- Save:** Save the list of Netbell servers in a .csv file.
- Save As:** Save the list of Netbell servers in a new .csv file.
- Add:** Add a device entry.
- Download:** Download bell schedules from one of the Netbell device if you have created one.
- Upload:** Upload the current Bell Schedule onto all of the listed Netbell servers.
- Clear:** Clear the Device List.

## ADD NETBELLS TO DEVICE LIST

To use the BellScheduler program, the first step is to add all your devices to the Device List. To add devices:

1. Open the Bell Scheduler software, then navigate to the **Device List** tab.
2. Click the **ADD** button to add a device to the device list. The software will open a new line.
  - Clear:** Checkbox used to determine whether or not to erase the previous bell schedules on the Netbell server. It is checked by default, which means it will clear the current schedules on the device once you upload new schedules using the BellScheduler. If you don't want to clear your old schedules on the device, uncheck this box, the new schedules adding from the Bellschedules will be added to your existing schedules.
  - Server Name:** Put your Netbell's name or IP address here. If you haven't renamed your Netbell (to rename your device, login to the webpage, go to Configure - Network Configure page, enter a new name in the Host Name box, then click

**REBOOT** button.) If you have multiple Netbells but haven't changed the device names, we recommend you to put the device IP address here

**Port:** Used when the device has been port forwarded, can be blank if port forwarding has not been setup on the device.

**UserName:** The username you use to login to the webpage, default is **admin** if you haven't changed it.

**Password:** The password you use to login to the webpage, default is **admin** if you haven't changed it.

**Delays (ms):** the delay in mS of the time between uploading bell events, 1000mS is the optimal delay that we have tested.

**CAUTION:** Too short of a delay will cause some events to be missed when uploading.

**Delete:** Removes the Netbell server entry from the Device List.

**Download:** Checkbox that determines which Netbell server to download a bell schedule from if you have created bell schedules on one of your devices, only one can be selected for downloading.

Repeat the above steps to add more Netbell servers that you wish to schedule, then click the **SAVE** button to save the devices.

If you have multiple Netbells and wish to add those devices to the BellScheduler at once, you can use the Upload function to do so by using a csv file. To create a list of devices, click the **SAVE AS** button to create a template, give this file a name on the popup window, then click Save button. Once you save the file, open it and it will display in four collums:

**Clear:** Enter 1 for clear, 0 for not clear

**Host:** Enter the device IP address or the device name

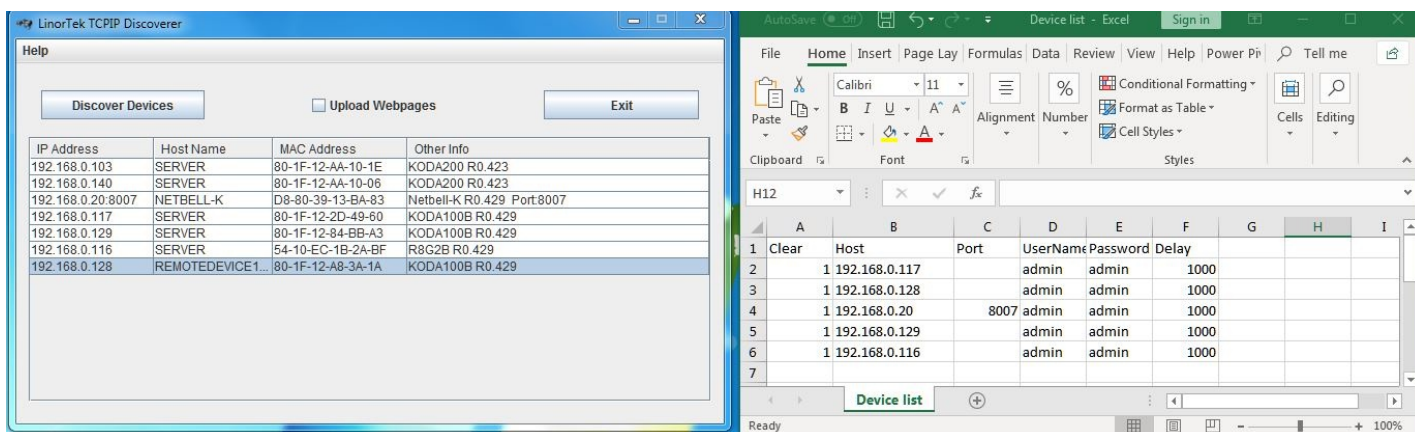
**Port:** Enter the port number if you have set

**UserName:** Enter the UserName for the device

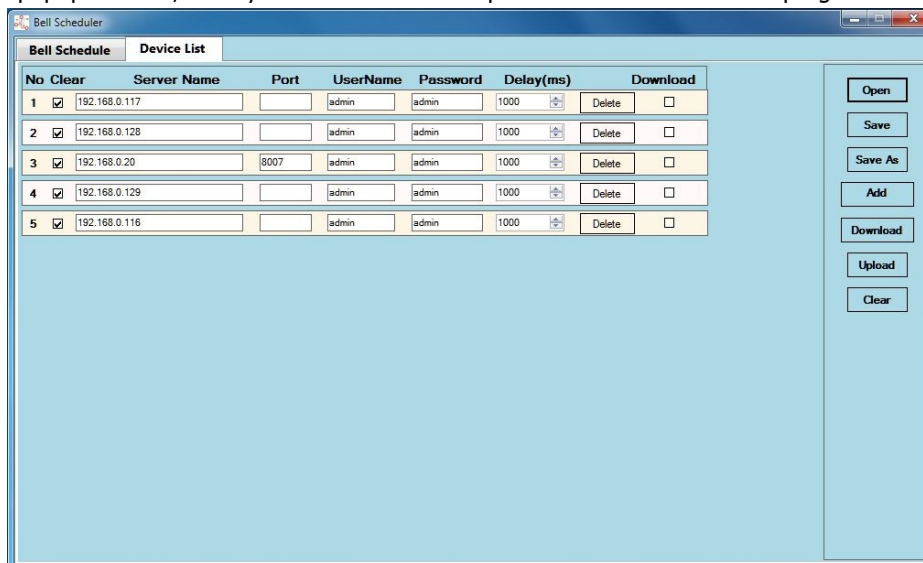
**Password:** Enter the Password

**Delay:** Enter 1000 here as the default delay time

Open the Discover program to get all the devices information and enter to the template for each device. Then click Save. Your device list will look like this:



To upload your device list to the BellScheduler, click the **Open** button on the BellScheduler program, select the file you just created, then click **Open** on the popup window, all of your devices will be imported to the BellScheduler program.



## BELL SCHEDULE

### Add One Bell Schedule

To add bell events to ring the Netbells, click the **Bell Schedule** tab. Once the Bell Schedule tab is open, it will display:

**Number:** The numerical order in which the bell event was added.

**Name:** Use any words for the name, max. 15 characters

**Time:** The time the bell event is set to trigger (HH,MM,SS; In a 24HR format).

**Bell:** Corresponds to the controlling relay the bell is wired into. If checked it is in use.

**Day:** Corresponds to the Day of the Week (Sunday - Saturday )the bell rings. If checked it is in use.

**Date:** Used to enter in a bell event for a particular calendar Day, the checkbox before the entry denotes whether to use this function or leave it blank. If checked then the days of the week will be left unchecked.

**Dur:** The numerical value of how long the bellschedule will ring after select Pause Width from the next step.

**PW:** Pulse Width, how to measure the pulse width duration(mS, Secs, Mins).

**Use:** Checkbox to determine whether or not to use this bell event.

**Once:** Checkbox to determine whether to use the bell event as a one time event.

**Delete:** Button used to delete the bell event.

To add a bell event, click the **Add** button on the BellScheduler window, the program will open a line, enter your event schedule following by the above format.

Repeat the above steps to add all your schedules.

### Add Multiple Bell Schedules from .txt File

You can also upload schedules to the BellScheduler with a .txt file with the **Upload** function. To use the upload function, you need to create a .txt file on your computer, open the .txt file, type **#Start** command at the very beginning of the file. The order/format for the schedules template:

NAME (15char max),HH 2digit(24hr), MM (2digit),SS (2digit) ,BELLS (1-8),DOW (Sunday-Saturday),bell duration(from 1-99),duration multiplier (Ms, Sec, Min). Separate the value with comma.

**NAME:** Use any words for the name, max. 15 characters

**HOURL(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 (YYYY):**4 digit number.

**MONTH (mm):**2 digit number.

**DAY (dd):**2 digit number.

**BELLS:** the relays that are wired to 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(KB, KL): 1 bell). Using the value "1" for the bell you want to schedule, put value "0" to not schedule the bell to ring. For example, if you have a Netbell-4, and you want to schedule all of the bells to ring at a certain time. then your BELLS value should be: 11110000.

**DAY OF WEEK (DOW):** The day you want the bell to ring. Starting from Sunday,and ending with Saturday. Use value "1" for the day you wish the bell to ring, and "0" to not use the schedule on that day. 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.

**PW (Pulse Width):** Ms, Sec, Min.

**Use:** Put 1 for use, 0 for this box uncheck.

Once: Put 1 for use once, 0 for this box uncheck.

After finishing the schedule template, click **Save**, then you can use to upload to the BellScheduler program.

### Bell Schedule Sample:

#Start

Morning bell,07,30,00,0000,00,00,11000000,0111110,8,Sec,1,0

Start,08,00,00,0000,00,00,11000000,0111110,3,Sec,1,0

Production,08,30,00,0000,00,00,11000000,0111110,4,Sec,1,0

Meeting,09,30,00,2018,11,6,11000000,0000000,5,Sec,1,0

First break,09,45,00,0000,00,00,11000000,0111110,5,Sec,1,0

Lunch,12,00,00,0000,00,00,11000000,0111110,3,Sec,1,0

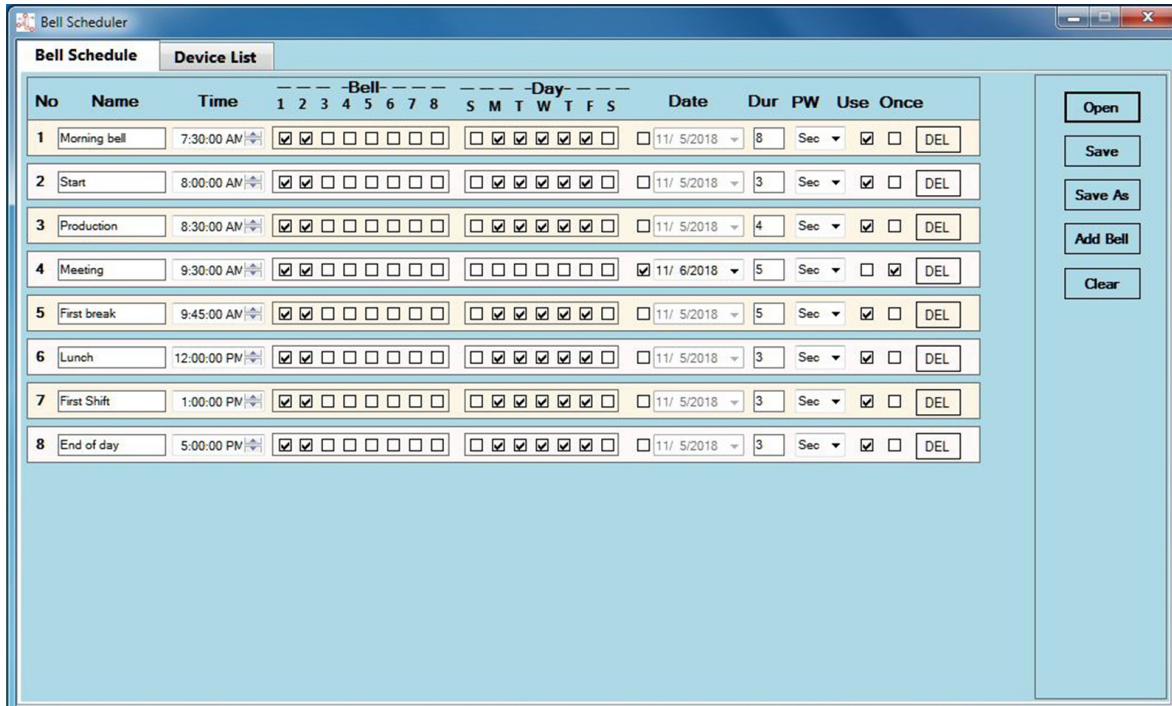
First Shift,13,00,00,0000,00,00,11000000,0111110,3,Sec,1,0

End of day, 17,00,00,0000,00,00,11000000,0111110,3,sec,1,0

Once the template is created, in the BellScheduler and on the Bell Schedule tab, click the **Open** button to load the bell schedule to the BellScheduler. Select the bell schedule file we have just created, then click the **Open** button on the popup window, you will see a list of your schedules uploaded from the template. You can edit each schedule, or add new ones if needed.

After the bell schedule is finalized and ready to upload navigate back to the **Device List** tab. Click the **Upload** button on the righthand side of the page, this may take a few minutes depending on how large the bell schedule is and how many devices you are uploading to.

Once finished uploading, it is advised to make sure every Netbell has the correct schedule by logging into the webpages using the Discover program.



### SAVING THE DEVICE LIST AND/OR BELL SCHEDULE

You can download both the **Device List** and/or **Bell Schedule** for your future use by using the Save As feature.

#### Saving Bell Schedule

On **Bell Schedule** tab, click Save As button, you can save your current schedules to a .txt file.

#### Saving the Device List

On the Device List tab, click **Save As** button, you can save your device list to a .csv file.