



## Software Update Instructions

### Important Preliminary Notes

Before beginning any software update:

1. You **MUST** update BOTH (When there are differences for some specific devices, they will be noted in the text):
  - SERVER software (.cry file)
  - Webpage software (.bin file)
2. Software compatibility notice: You cannot load Netbell software onto a Hourmeter or regular I/O controller. The software type is hard-coded to the device at the factory.

### Device Categories

These instructions cover the following controller types:

- Netbell-2
- Netbell-K
- Netbell-NTG
- Fargo & Koda
- WFMN-Di/ADI
- Ultra 300
- eIO-CPU

### Update Instructions by Device Type

#### A. For Netbell-2, Netbell-K, Netbell-NTG, FARGO, and KODA Controllers

##### 1. Required Downloads

Before starting the update process, download these essential files to your computer:

- **Support Programs:**
  - o Discoverer program (for locating devices on your network)
  - o Bootloader program (for loading SERVER software) Download link: <https://www.linortek.com/downloads/support-programming/>
- **Software Files:**
  - o SERVER software (.cry file) - specific to your device
  - o Webpage software (.bin file) Download link: <https://www.linortek.com/downloads/software-update/>

##### 2. Updating SERVER Software

Use one of our Discover tools (Windows-based or Java-based) to help locate your SERVER on the network, click the line with the SERVER you want to update and the

Discoverer will automatically open your browser to this device.



### Steps to update SERVER software:

#### 1. Prepare Bootloader:

- Open the Bootloader program
- Click “File” in the upper left corner
- Select and open the .cry file



#### 2. Access Device Boot Mode:

- Log in to your SERVER
- Navigate to System → Load/Reboot System

- Click "Boot Mode"



### 3. Program Device:

- Within 5 seconds of entering Boot Mode:
  - o Click "Locate LIA" (Step 1)
  - o When you see "LIA ID" (last four digits of SERVER's MAC address)
  - o Click "Capture target" (Step 2)
- After capturing the SERVER:
  - o Click "Program" (Step 3)
- Once "Programming Complete" appears:
  - o Reset the SERVER using either:
    - The physical Reset switch on the unit
    - "Reset LIA" button in Bootloader (Step 4)



### 4. Verify Update:

- Check version number through either:
  - o Discover program
  - o SERVER page: **System** → **Load/Reboot System**

*Troubleshooting: If Bootloader Can't Locate Device*

#### 1. Configure Windows Firewall:

- Open Control Panel
- Navigate to **System and Security** → **Windows Defender Firewall**

- Select Advanced settings
- Configure both Inbound and Outbound Rules:
  - o Create New Rule
  - o Select "Port"
  - o Choose UDP
  - o Enter port 16388
  - o Allow connection
  - o Apply to all domains
  - o Name and save the rule

#### 2. Direct Connection Method:

- Connect device directly to computer's Ethernet port
- Disable WiFi
- Access device using default IP: 169.254.1.1

#### 2. Updating Webpage Software

##### Option 1: Using Discoverer

- Check "Upload Webpages" box in Discoverer
- Select your device
- Choose the .bin file
- Click "Upload"
- Wait for "MPFS Updated Successful" message
- Click "Site main page"



##### Option 2: Through SERVER Interface

- Navigate to System → Load Web Pages
- Follow on-screen instructions
- Upload previously downloaded .bin file

## B. For WFMN-Di and WFMN-ADi Controllers

### 1. Required Downloads

Before starting the update process, download these essential files to your computer:

- Support Programs:
  - o Discoverer program (for locating devices on your network)
  - o Bootloader program (for loading SERVER software). Download link:

<https://www.linortek.com/downloads/support-programming/>

- Software Files:
  - o SERVER software (.cry file) - specific to your device

Download link:

<https://www.linortek.com/downloads/software-update/>

#### Special Notes:

- Only SERVER software (.cry file) update needed
- No webpage update required

#### 2. Update Steps:

- Follow SERVER software update steps from **Section A – Updating SERVER software** using the Bootloader
- After programming:
  - o Login via Telnet
  - o Run command: **upgrade**
  - o Device will automatically reboot if successful

```
Telnet 172.16.3.32
> upgrade
OK
Upgrade available. Rebooting...
>
```

If the programming wasn't completed or an error has occurred, you will receive the message shown below. Please reboot by running **reboot** command.

```
Telnet 172.16.3.32
> upgrade
OK
ERROR: firmware package on SPI flash is absent or corrupted
```

**Important Note:** For software version v0.62.4 or below: Screenshot all current configurations and triggers

- Device will require reconfiguration after update

#### C. For ULTRA300 and eIO-CPU Controllers

##### 1. Required Downloads

Before starting the update process, download these essential files to your computer:

- **Support Programs:**
  - o Discoverer program (for locating devices on your network)
  - o Download link:  
<https://www.linortek.com/downloads/support-programming/>
- **Software Files:**
  - o Server software (.img file) Download link:  
<https://www.linortek.com/downloads/software-update/>

#### Requirements:

- Single Image file (.cry) needed

- No additional programming tools required if IP address is known

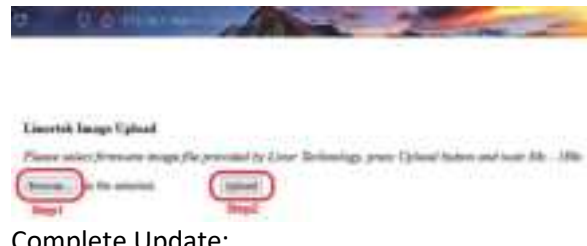
Update Process:

- Login and Access Update Menu
- Navigate to System → Load/Reboot system
- Check "Update Software"
- Click "Boot Mode"



Upload Image file:

- o Wait for bootloader page
- o Click "Browse"
- o Select Image (.img) file
- o Click "Upload"



Complete Update:

- o Wait for "Done!!!" message (up to 3 minutes)
- o Click "**Go to U300 App**" to exit bootloader mode



- Important Note: For Ultra300 version v.0.079 or below: Screenshot all configurations
- Update will reset to factory default

#### Additional Resources

Video tutorials available at:

<https://www.linortek.com/downloads/>