

LimnTech LifeMark-100 Auto Layout System:

Path Import User Guide

Introduction

The Path Import feature allows users to import external path data onto the LifeMark-100 Auto Layout system, enabling precise pavement marking layouts. This guide provides instructions for importing "Virtual Line" and "P.A.S." (Pattern Automation System) data into the system. This feature is especially beneficial for using data acquired from non-LimnTech sources, such as new construction or layout alterations.

1. Virtual Line Import Guidelines

To ensure accurate data import, please adhere to the following guidelines:

- The file must be in **CSV format** (comma-separated values).
- The CSV file must include columns for **Latitude**, **Longitude**, and **Altitude** (altitude is optional but recommended).
- The coordinate system used is WGS84 datum:
 - Latitude and Longitude should be in decimal degrees, accurate to 8 or more decimal places.
 - Altitude should be in meters above the reference ellipsoid, accurate to 3 or more decimal places.
- Input points must be sorted consecutively in the **direction of the roadway**.
- Include an **empty row** to create breaks between line/path segments.
- For an example CSV file, <u>click here</u> (insert the actual link).

2. P.A.S. Import Guidelines (Optional)

If you wish to import transition data for trucks equipped with P.A.S., follow these guidelines:

- The file must be in **CSV format**.
- The CSV file must contain columns for:
 - Color
 - Previous Pattern
 - Next Pattern
 - o Latitude
 - o Longitude



- **Altitude** (optional but recommended)
- The coordinate system uses **WGS84 datum**.
- The **Color** field should be either **yellow** or **white**.
- The LLA (Latitude, Longitude, Altitude) coordinate indicates the transition from the "Previous Pattern" to the "Next Pattern" along the direction of the points in the virtual line CSV.
- Ensure that each transition coordinate matches a corresponding coordinate in the imported Virtual Line CSV.
- **Only one line color** is supported per path import.

Pattern Encoding Table

D	Solid Double
S	Solid Single
PL	Pass Left
PR	Pass Right
SS	Single Skip
DMS	Double Mini Skip
SMS	Single Mini Skip
NL	No Line
UNK	Unknown (see below)

Pattern Encoding Description

Transition Requirements

- For each line segment in the imported virtual line:
 - The "Previous Pattern" of the first transition must be unknown.
 - The "Next Pattern" of the last transition must be unknown.
 - The "Previous Pattern" must match the "Next Pattern" of the previous row.



For an example CSV file that adheres to these guidelines, <u>click here</u>.



3. Importing Path Data into the Web Portal

To upload your path data:

- 1. **Path Name:** Enter a name for the new path.
- 2. **Path Description:** (Optional) Provide a description for the new path.
- 3. Virtual Line CSV: Click on "Choose File" and select your Virtual Line CSV file.
- 4. **P.A.S. CSV (Optional):** Click on "Choose File" and select your P.A.S. CSV file if applicable.
- 5. Click **Preview Path** to review your data before finalizing the upload.

Path Name:	Please enter the name of the new path you would like to create
Path Description:	Optionally, please enter a description of the new path
Virtual Line CSV:	Choose File No file chosen
P.A.S. CSV (optional):	Choose File No file chosen
	Preview Path