Uhlenbrock Elektronik

LISSY Special Edition
Shuttle train control 68 010

What is a shuttle line?

A shuttle line is a track on which a train travels back and forth between stations at either end. It consists of the actual track, of desired length, and the end stops at which the train stops for a particular time and then departs in the opposite direction.

On a model railway this type of automation is a good example for controlling a tram or suburban train.
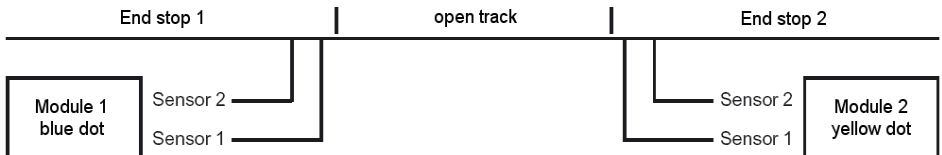
What does LISST do?

The following automatic time-controlled shuttle control is implemented:

- A locomotive passes over the sensors of the LISSY receiver
- The locomotive brakes to a stop, using its own internal setting
- An adjustable time delay passes, the same for all vehicles
- After the delay the direction changes (light changes)
- The locomotive starts in the opposite direction and accelerates to its original speed step.

Installing the transmitter and receiver

The transmitter is mounted under the vehicle as outlined in the Chapter 3.2 of the LISSY Manual and wired accordingly.

The two LISSY receivers with their Infrared sensors are installed in the shuttle line according the accompanying diagram and connected to the LocoNet. For the precise details refer Chapters 4.2 to 4.4 in the LISSY Manual.

End stop 1	open track	End stop 2
Module 1 blue dot — Sensor 2 — Sensor 1		Sensor 2 — Sensor 1 — Module 2 yellow dot

The section between the sensors and the end of the track must be long enough to allow the train with the transmitter to comfortably come to a stop. In a 'push' operation the total length of the train must be considered.

Programming the transmitters

The LISSY transmitter has a factory default address of 3. To program it to a different address refer to Chapter 3.3 of the LISSY Manual.

Programming the Receiver

The enclosed receiver modules are factory programmed for controlling a shuttle train, so that it travels back and forth with 10 stops before it takes off in the opposite direction.

Operating the Shuttle line

Place the vehicle on the track somewhere between the two double sensors. Set the desired speed on your controller. From now on the vehicle will travel back and forth between the two ends.

Changing the Waiting time

To alter the waiting time at the stop, change the value of LNCV 4 with the help of the "LocoNet Programming" menu in the Intellibox. The value programmed here represents the waiting time in seconds and can have a value of 1 to 255. A complete description of changing an LNCV can be found in Chapter 5 of the LISSY Manual.

Resetting the programming of the Shuttle controller

If the programming of the receiver modules is reset to the factory default the special settings of the shuttle line are lost. The settings of the receiver module are then like a normal receiver module 68 600 and outlined in Chapter 8.5.1 of the LISSY Manual. The programming for the shuttle line must then be re-entered manually.

Firstly all LNCVs must be set to a value of '0' by programming LNCV 2 to 98. Subsequently program the following LNCVs

LNCV	Description	Value Module 1	Value Module 2
0	Module address	1	2
2	Selection of automatic shuttle control	4	4
3	Active when vehicle travels from sensor 1 to 2	0	0
4	Waiting time set to 10 seconds	10	10
5	Additional waiting time of 1 second	1	1
10	Release automatic after 1 second	1	1

Module 1 (blue dot), Module 2 (yellow dot)