[R] Uhlenbrock Elektronik

Electronic for smarter trains

E41 072

NEW ITEMS 2004

- **LISSY**
  Locomotive-specific driving system

- **LocoNet-Display**
  with model-railroad clock

- **76 200 Decoder**
  Multi-protocol decoder for „coreless"
  motors with speed regulation and
  Sound interface SUSI

- **Infrarot-Throttle**
  Remote control for
  DC and AC layouts

- **6021-LocoNet-Adapter**
  featuring an infrared
  receiver, for using LocoNet
  devices connected to the
  6021 Control-Unit

LISSY-SYSTEM
LOCOMOTIVE-SPECIFIC DRIVING SYSTEM

To be connected to LocoNet. For use with Intellibox, TwinCenter and Märklin Control-Unit (through the 6021-LocoNet-Adapter).

You'll finally be able to add to your digital layout features which have been common practice on analog layouts. LISSY fills the wishes of model-railroad hobbyists who drive their analog layouts automatically and who, up to now, weren't able to have automatic features like block-control, shadow stations as well as repetitve train operations ("Pendelstrecken" – see below) on a digital layout without having to resort to using a computer.

Lissy consists of an infrared-emitter, to be mounted on the locomotive, and of a receiver module, whose two infrared sensors are to be mounted in the track.

The locomotive address and „train class" which are sent by the infrared sender are received by the infrared sensors and transmitted over the LocoNet bus. In addition to this, the following automatic train control features can be obtained without using a computer:

LISSY – TRAIN RECOGNITION
tells which train is on which track.

LISSY – BLOCK CONTROL
controls the block sections on your layout without using a computer.

LISSY - REPETITIVE CONTROL (german: PENDELSTRECKE)
controls repetitive train operations, including signal control and automatic locomotive speed down/up and stop. A train, for example, could travel to the end of the line, stop, pause, reverse direction and then travel back to its originating point. This activity could be programmed to repeat indefinitely. This could be accomplished using nothing more than a pair of LISSY receivers – no additional circuit boards or controllers as is commonly done with DC systems.

LISSY – TRAIN-DEPENDENT SHADOW STATION CONTROL
manages your shadow stations and automatically finds a free track for your trains. It can also let your trains start from shadow stations.

LISSY – SIGNAL-CONTROLLED TRAIN CONTROL
stops each digital locomotives at a red signal - using the deceleration factor which has been setup in the locomotive decoder.

LISSY – PAUSE-CONTROL
makes your trains stop for a while at a specific place and then, after the desired wait time, starts them again.

LISSY – SPEED CONTROL
Decreases or increases the train speed as required, e.g., before entering a station or while driving along a „slow track".

LISSY – TRAIN CONTROL
intelligently controls the functions of trains and locomotives. E.g. by letting the loco emit a sound just before entering a tunnel. If used with „IntelliSound" modules, LISSY can also reduce the sound volume of trains and locos as they enter non-visible parts of the layout (e.g., tunnels or shadow stations). LISSY can also control the lights and the functions in a time-dependent manner, such as turning off the lights of a locomotive sometime after it has been parked by its engineer.

LISSY – SPEED MEASUREMENT
measures the speed of your trains, of course taking their scale into account.

LISSY – VERY USER FRIENDLY
because the LISSY-System can be universally used. It works without requiring any track sectioning, without the need for additional components and does not require a computer. It can be easily added to any model-railroading layout.

LISSY INFRARED-EMITTER

Each train, locomotive or wagon which is to perform some kind of automatic action must be equipped with a LISSY infrared transmitter. This is a module measuring 0.53" x 0.33" x 0.10". It broadcasts its address in the range of 1 through 16382 as well as one of four possible train classes. The infrared emitter can be programmed using DCC or Motorola Command Stations.

LISSY INFRARED-RECEIVER

A LISSY-receiver has to be placed at each location of the layout where one wishes to perform some kind of automatic action. Each LISSY-receiver can be configured using the „LocoNet Programming" procedure.

A LISSY-receiver is a module featuring two small, hardly noticeable infrared sensors which have a diameter of 3 mm (about 0.1") which are embedded in the track. The LISSY-receiver „talks" to the Intellibox through LocoNet.

If the automatic actions are not to be dependent on the driving direction, then the two infrared sensors can be used independently on two tracks. They report the address and train class.

Conversely, the two sensors can be placed a small distance apart, along the same track, in order to be able to deduce the train's direction and speed – and, perform automatic actions which also take those two parameters into account (e.g., slow down a train if it is travelling too fast).

The information collected by LISSY-receiver modules can be seen on the Intellibox display. The automatic actions can be monitored through the LocoNet-Display module.

What is needed?

- In order to perform automatic actions which depend on the address and/or train class, the two sensors of a LISSY-receiver can be placed on different tracks of the layout, as if they were two independent receivers. If the automatic actions are to be dependent also on the train speed and/or driving direction, then the two sensors of a LISSY-receiver must be installed along the same track.

- Each Pendelstrecke (as described above) requires one LISSY-receiver module at each end.

- In case of a block system, each block requires a LISSY-receiver module

- For the automatic control of shadow stations, a LISSY-receiver module must be placed at the shadow station entry track, at the shadow station exit track and at each track of the shadow station.

Item no. 68 000 LISSY-Startset (2 Transmitters, 1 Receiver, Manual)
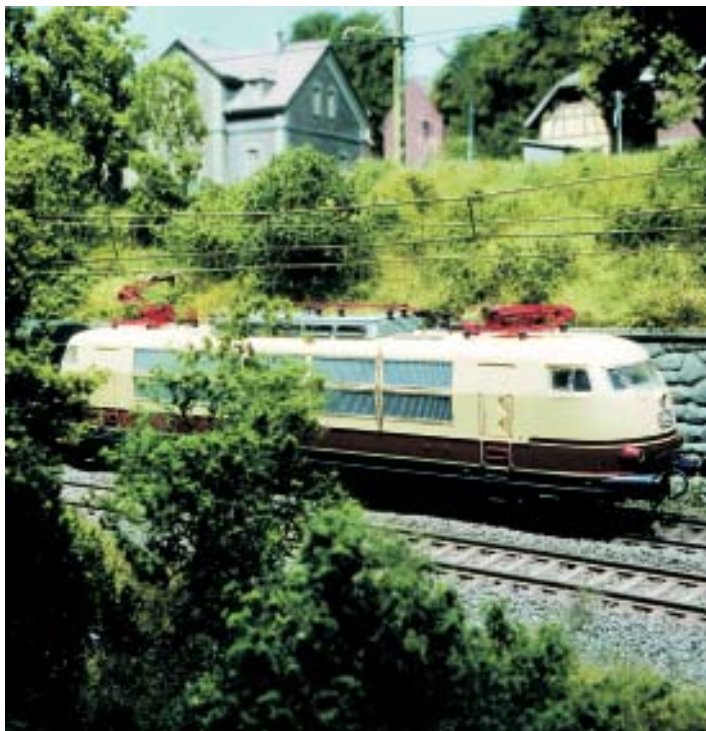Item no. 68 300 LISSY-Transmitter
Item no. 68 600 LISSY-Receiver
Item no. 60 800 LISSY-Manual
Item no. 63 450 LocoNet-Display

LN DIGITAL 2

Available starting from July 2004.

LOCONET-DISPLAY
WITH MODEL-RAILROADING CLOCK

Connected to LocoNet, this display module shows everything occuring on your layout:

■ The driving direction and speed of a specific locomotive
■ The position of 8 consecutive turnouts
■ The status of 16 consecutive feedback contacts (track occupancy detectors)
■ The address, train class, driving direction and speed of a locomotive which has just passed over a specific LISSY-receiver
■ All of the actions performed from the IRIS infrared remote control
■ The time (model-railroading clock)

This module features a two-row LED display which can be easily read at a distance. There are 6 different display modes. One can define up to 16 different custom displays by setting up specific parameters for each display mode. Each of these custom displays can easily be selected by using turnout commands.

Includes a 2,15 m LocoNet cable.

Item no. 63 450 LocoNet-Display

LN DIGITAL 2

Available starting from June 2004.

DECODER 76 200

MULTIPROTOCOL DECODER FOR „AC" MOTORS WITH SPEED CONTROL AND SOUND INTERFACE

- Speed regulated multi-protocol decoder for DCC and Motorola
- For locomotives with „AC" motors made by Märklin or HAG, does not require „DC conversion" of the motor (works without requiring a „permanent magnet")
- With SUSI sound interface (four-poles mini-connector) for connection to sound modules or to modules for controlling additional functions (f1 through f12)

- Low level motor noise thanks to the high-frequency motor control (18,75 KHz)
- Configurable minimum, maximum and medium speed
- Dimmable, driving direction dependent locomotive lights
- 2 additional function outputs controllable through f1 and f2, dimmable
- Switching speed (half speed), can be activated using f3
- Acceleration/Deceleration delay can be turned off through f4
- Automatically operates also on analog AC and DC layouts
- Supports both the Motorola old as well as the Motorola new digital formats
- DCC 14, 27, 28, 128 speed steps - 9999 addresses
- Can be programmed using Motorola and DCC Command Stations
- Overheating protection
- Each decoder output is short-circuit protected
- The decoder Flash-ROM can be updated (software updateable)
- Max. motor current output: 1,2 A
- Max. functions current output: 4 x 1,0 A
- Max. total current output: max. 1,2 A

Item no. 76 200

| H0 | ~AC | =DC | ♪♪Mot | ♪♪DCC | _DIGITAL 2_ |

Avalable starting from August 2004.

INFRARED-CONTROLLER
REMOTE THROTTLE FOR ALL DC AND AC LAYOUTS

Enjoy the freedom! Comfortably operate your DC or AC layout through our infrared remote – no calbes needed.

- Infrared remote throttle for all DC and AC (Märklin) layouts
- Optimal and realistic driving characteristics
- Operates up to a distance of 10 m / 33 feet
- Selectable acceleration and deceleration factors, as well as switching speed
- Very low speed operation abtainable thanks to the PWM (Pulse Width Modulation) motor control
- 10 speed steps are directly selectable per remote keypress
- Up to 4 layouts or layout sections can be operated from a single infrared remote
- Connects very easily: two poles to the power transformer (16V AC) and two poles to the layout
- 2 A current output
- Automatic turn-off in case of short circuit

Using the infrared controller, one can operate analog DC or AC layouts, without any cables or wires. The system consists of the IRIS remote and the receiver.

Each IRIS remote has four „transmission channels". Each receiver can be configured so that it reacts to commands issued through any or only through a specific „transmission channel". This makes it possible to use a single IRIS to control up to four receivers, each one operating independently of each other.

The IRIS remote can be used to control the locomotive driving direction and speed. The speed can be continuously increased or decreased by keeping an IRIS key pressed – or, one of 10 speed levels can be directly choosen from 10 different settings by pressing a single key on the IRIS remote. There is a keypress for activating „switching speed" (half speed): this allows for finer locomotive low-speed control, up to one half of the locomotive maximum speed. This makes precise switching operations easier.

The IRIS remote allows to choose among four possible acceleration/deceleration factors.

The [stop]-key on the remote immediately turns off power to the locomotive, thus immediately stopping it.

Power is provided to the receiver by a 14-16 V transformer (2 A).

The system is meant for indoor use. It operates up to a distance of 10 m / 33 feet.

The infrared throttle is the locomotive control system for the expert model-railroader.

Item no. 26 200 Set for DC
Item no. 26 300 Set for AC
Item no. 66 510 IRIS remote
Item no. 26 210 Receiver for DC
Item no. 26 310 Receiver for AC
Item no. 20 045 Transformer 45 VA

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Available starting from May 2004.

6021-LOCONET-ADAPTER

WITH INFRARED-RECEIVER, FOR USING
LOCONET DEVICES WITH THE CONTROL-UNIT

Increase the value of your 6021! Are you using a Märklin Control Unit 6021 to control your digital layout, and are you interested in the capabilities of Uhlenbrock products? Here is the solution!

By using the LocoNet-Adapter, you will be able to connect the following devices to your 6021:

- IRIS – the infrared remote for your locomotives and turnouts (the whole 1 through 256 address range)
- FRED – digital throttle for 4 locomotives
- DAISY – digital throttle with LED display for 80 locomotives and 256 turnouts
- IB-Control – stationary throttle with two speed knobs and keyboard functionality
- Profi-Control – the engineer-like control panel/throttle
- IB-Switch – Keyboard and Memory in a single device
- Feedback modules – for train control in automatic operations
- Switch-Control – for connecting a CTC panel
- LISSY – the system which provides automatic layout control without a computer
- LocoNet-Display with model-railroading clock – to show locomotives' speed level, driving direction, turnout status, feedback status (block occupancy) and for use with LISSY as well as with IRIS

The LocoNet adapter for the 6021 is connected to the left side of the 6021 Control Unit (or any device connected to that side, e.g., a Märklin Keyboard). Power is provided by the Control Unit. Thanks to the integrated infrared receiver, the IRIS remote can be directly used without any additional wires or adapters.

The module features a programming key which can be used for configuring/ programming all LocoNet devices through a Märklin Keyboard. The address range is: 80 locomotives and 256 turnouts.

Item no. 63 820 6021-LocoNet-Adapter
Item no. 64 820 IRIS-Set for the 6021 (6021-LocoNet-Adapter + IRIS-remote)

LN DIGITAL 2   Available starting from September 2004.

UHLENBROCK CD-ROM 2004/2005

In this CD-ROM, titled „Technik für Modelleisenbahnen", you'll find all of our products, product descriptions and manuals as well as FAQ's, Tips and Tricks and more.

Item no. 18 040 In german language

Available starting from June 2004.

DIGITAL-PRAXIS FÜR DIE MODELLBAHN
VOL 1 - GRUNDLAGEN FÜR DEN DIGITALEN FAHRSPASS

Der Modellbahner wird bei der Digitalisierung seiner Modellbahnanlage mit einem sehr komplexen Thema konfrontiert.

Der bekannte Autor und Anlagenbauer Rolf Knipper bringt anhand praktischer Beispiele, die später auf Messen gezeigt werden, fachgerechtes Grundwissen praktisch auf den Punkt. An den beiden Anlagenprojekten Elberfeld (DCC) und Kottenforst (Motorola) wird die fachgerechte Digitalisierung der Modellbahn erklärt.

Das Buch wurde mit zahlreichen Aufnahmen vom Bau der Anlagen sowie vielen Zeichnungen und Skizzen versehen, damit die einzelnen Schritte einfach nachvollzogen werden können. Ausserdem erklärt der Autor die verwendeten Digitalkomponenten, wie Intellibox, IB-Switch, Motorola- und DCC-Decoder, SUSI-Soundschnittstelle und IntelliSound, den Standard Digital 2 und den Decodereinbau.

Ein Praxisratgeber für Anfänger und Fortgeschrittene!

Hardband, 160 Seiten, 17 x 24 cm, mit ca. 200 Abbildungen und 45 Zeichnungen, durchgehend 4-farbig

ISBN 3-9807748-3-X

Item no. 16 010 In german language

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Please visit our website to obtain the most recent information regarding the Intellibox, our suggested pricelist or a listing of authorized dealers, plus various publications to download.

Each product comes with a two year guarantee.

We reserve the right to change without notice the features and specifications of the products listed in this brochure.

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