

Track Control

The Track Control Desk with plug system

LISSY

The Individual Locomotive Control System



- » Train recognition
- » Block control
- » Shuttle train control
- » Point accurate stopping
- » Speed measurement
- » Shadow Station control



LISSY – the Individual Locomotive Control System

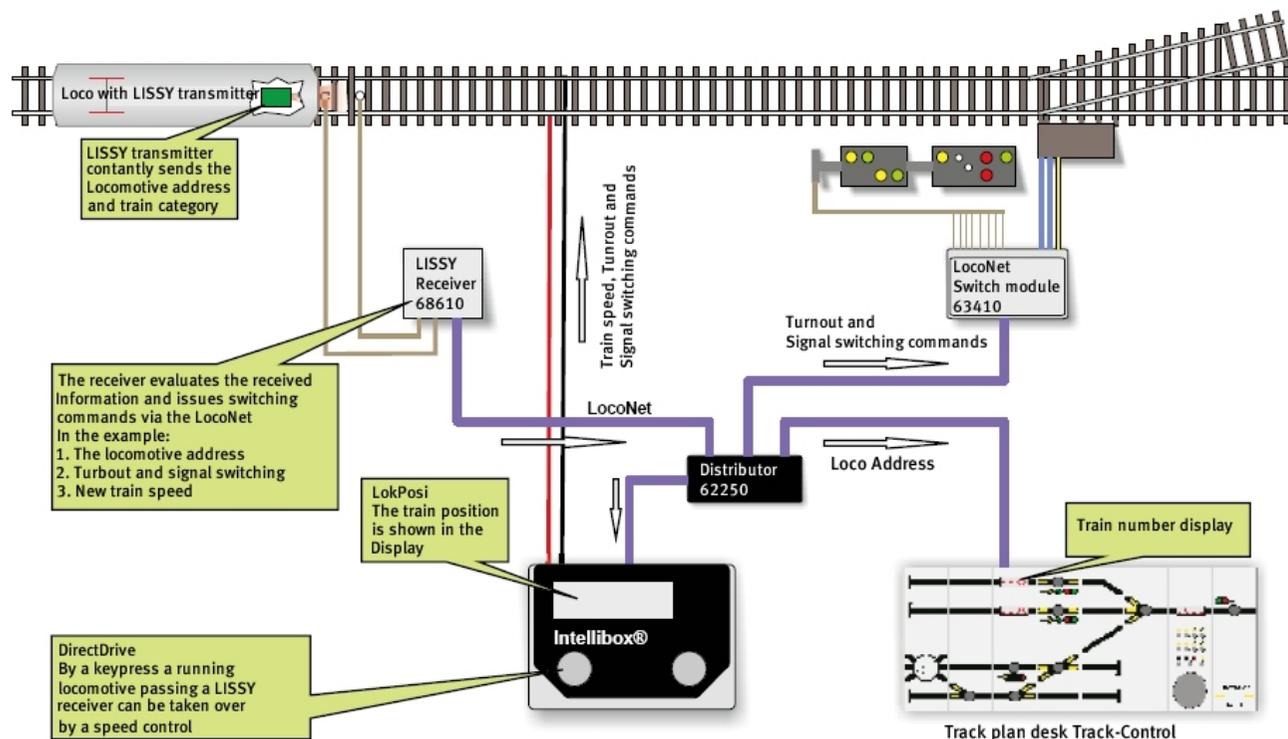
Finally, your digital layout can have all the things that have been possible on analog layouts for a long time. LISSY fulfils the demands of railway modellers, who wanted to have simple automatic control of their layout, with block systems and auto reversing, a digital system which up till now needed the aide of a computer. LISSY is the same as the Fleischmann Train Navigation and offers interesting functionality.

- Train recognition by Loco address and/or train category
- Shuttle train control
- Loco dependent shadow station control
- Digital block control
- Speed measurement
- Automatic control of special functions and locomotive speed
- Point accurate stopping at signals
- Functions without track isolation

LISSY

- » consists of an Infrared transmitter, which is installed under the vehicle, and a receiver module, whose two infrared sensors are built into the track. The locomotive address and train category sent by an Infrared transmitter are conveyed by the receiver to the LocoNet so various automatic control functions can be realized without the need of a computer.
- » recognizes the locomotive and indicates which train has entered on track 1 of the station.

- » controls the shuttle train service in the terminus of the single railed branch line.
- » administers your shadow station and finds an individual track for each train and automatically lets the trains depart from the shadow station again.
- » is a block system for digital layouts and automatically controls the block sections on the layout, without the need of a computer.
- » brakes a digital locomotive on approaching a red signal using the decoder's internal brake delay.
- » measures the speed of passing locomotives true to scale.
- » controls situation-dependant sound of locomotives e.g. whistle before a tunnel or blowing the horn at the whistling board before a railway crossing.
- » turns off the sound in locomotives equipped with "Intelli-sound" when it travels into invisible areas (shadow station, tunnel).
- » switches the light of a certain locomotive on or off after a set time, e.g. if the engine driver turned the locomotive off.
- » controls the locomotives' speed, e.g. upon station entry or in slow sections.
- » operates without the need for track interruption and can easily be built retro-fitted into a model railway layout.
- » The display is either on the Intellibox®, the LocoNet or TrackControl display or on a connected PC.



LokPosi

LISSY delivers the information for the Loco position display of the Intellibox® II. So that you always know where your Locomotives are located.

LISSY Receiver

- Train recognition
- Speed influence
- Auto. control of special functions
- Switching of solenoids and routes
- Start and brake delay at signals
- Digital block control
- Speed measurement
- Shuttle train control
- Locomotive dependent shadow station control with passing track
- The passing loop can have individual locomotives entering or by push of a button
- Individual locomotive stop times in automatic layouts In automatic layouts a number of locomotive special functions can be separately switched by delay times

The LISSY receiver is a module with two small, hardly visible IR sensors with a diameter of 3 mm which are installed in the track. Connection to the Intellibox is done using the LocoNet.

If the automatic functions are to be implemented independent of travel direction, the module can supervise two locations. Then only the address and train category of the passing locomotive are conveyed. In places where a travel direction dependent automatic function is to be implemented, the two sensors of a receiver are installed in the track one behind the other. In addition to the address and train category the speed and travel direction can be determined.

Part No. 68 610

LISSY Receiver including Sensors

Part No. 68 690

LISSY Sensors (2 single pieces)



LISSY Mini-transmitter

The LISSY Mini-transmitter module is for connecting to decoders which generate the LISSY-Signal. It is suitable for locomotives, which are equipped with an Uhlenbrock Locomotive or Sound decoder with LISSY output. It constantly sends the decoder address and train category. Equipped with a SUSI plug, it can

be plugged directly into H0 decoders. It must be soldered to the pads on Uhlenbrock mini-decoders

With dimensions of only 7 x 5.1 x 1.7 mm it fits under an NEM socket, for example.

Part No. 68 400

LISSY Mini-transmitter

LISSY Infrared transmitter

Each vehicle which is to implement an automatic control function must be equipped with a LISSY Infrared transmitter. The small module sends addresses, within the range 1-16382 and four train categories, such as ICE, passenger train or goods train.

The transmitter, like DCC decoders, can be programmed. The address and train category are configured with CVs.

Dimensions: 13.1 x 7.5 x 1.9 mm

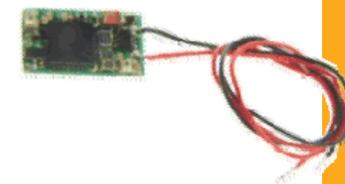
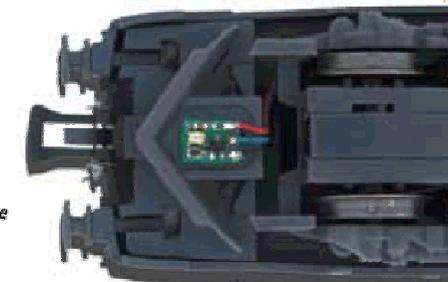
Part No. 68 300

Single LISSY Infrared transmitter

Part No. 68 301

LISSY Infrared Transmitter 5er Pack

Original size



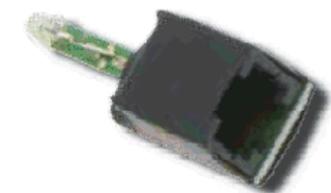
LISSY Single receiver

- Train recognition
- Speed influence
- Automatic control of special functions
- Switching of solenoids and routes
- Sending feedback messages

For simple switching functions the new LISSY Infrared receiver is now available. The sensor is integrated into the module. For installation a 4 mm hole is bored into the base plate between the sleepers and the receiver is inserted from underneath. The connection to the digital center is via a LocoNet cable.

Part No. 68 620

LISSY Single Receiver



LISSY Shuttle train control

- For single track shuttle tracks
- Pre-configured LISSY receiver for all terminuses
- Includes LISSY transmitters for 5 vehicles
- Usable with Intellibox®, Twin-Center and Piko Power-Box

The first LISSY Special edition. The modules are pre-configured for a single track shuttle train so it can be installed in the layout without any extra programming. The special edition modules can be reprogrammed for different functions like all other modules.

Part No. 68 010 LISSY Shuttle train control

LISSY-Creator

The fast Way to a LISSY-controlled Layout

- LISSY controlled layout planned on PC
- LISSY receiver simply programmed on the layout
- Routes specified on the PC and programmed into the Intellibox® II
- Administration of all address data on the layout Layout programming saving and printing

LISSY Creator is the new PC-program, for simple user friendly and rapid planning of a model railway layout with LISSY and to program all LISSY receivers with the necessary configuration.

The desired automation is designed on the basis of a layout track plan. Whether a shuttle service, holding point, shadow

LISSY Station control

- For stations with digitized turnouts
- Pre-configured LISSY receiver for a 3-track station with a passing loop or as station extension for 5 auxiliary tracks
- Includes LISSY 5 transmitters
- Usable with Intellibox®, TwinCenters and Piko Power Box

This special edition the LISSY receiver is pre-configured for a 3-track station with passing loop, so that the station can be installed directly in the layout without having to spend any additional time on programming the receivers.

Part No. 68 020 LISSY Station control

station or switching of locomotive special functions, all automatic controls, of LISSY's capability, can be setup with the LISSY Creator and planned into the layout.

Furthermore the program administers all addresses, that occur on your layout whether solenoid, feedback, LISSY receiver or train categories. Routes, which are needed for station controls, can likewise be programmed and changed.

Routes in the Intellibox® II and in the Track-Control route memory can also be directly programmed with the LISSY Creator. All layout data can be saved and printed.

Part No. 19 300 LISSY-Creator

LISSY Set

The fast Way to a LISSY System

Contains two LISSY Infrared transmitters, a receiver, a LocoNet cable and a manual.

Part No. 68 000 LISSY-Set

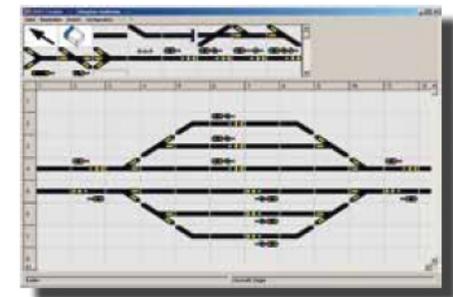
What is needed?

For **switching functions** that only depend on the locomotive address, the receiver module's two sensors can supervise two different tracks. On the other hand if speed and/or travel direction are to be evaluated, both sensors must be installed in the track one behind the other.

For a **shuttle train** a receiver module must be inserted at each end.

For **block system control** each block requires a receiver module.

For fully automatic control of a **shadow station** a module for the entry track, a module for the exit track and a module per track of the shadow station are needed.



Track-Control – the Uhlenbrock Track plan desk

Track-Control – the Start

The Basic set contains all items which are needed for a basic setup and that are only required once per desk: a connecting module, a power lead, a LocoNet cable, CD with the planning program and manual.

In addition there are 30 segments with tinted diffusers and connecting plug, 32 key caps, three Turnout PCBs, three signal

- Maximum flexibility with minimum expenditure: Each track controller's desk can be constructed from only a few different items.
- Frameless bench-mounting, only 12 mm high
- Plug system, no wiring required
- Switches digitized turnouts, signals, Uncouplers etc.
- Call up routes with start/end keys

The Basic Components

- Part No. 69 000** Basic Set
- Part No. 69 010** Expansion Set
- Part No. 69 091** Foils Turnout and Crossing symbols
- Part No. 69 092** Foils Track symbols
- Part No. 69 093** Foils Signal symbols
- Part No. 69 094** Foils Special symbols and blank fields
- Part No. 69 095** Foils with 10 illuminated Track symbols and 15 blank fields

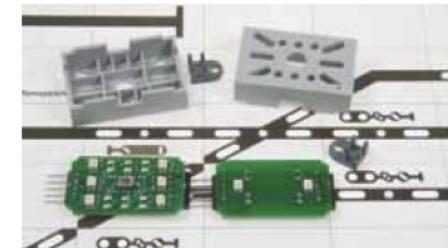
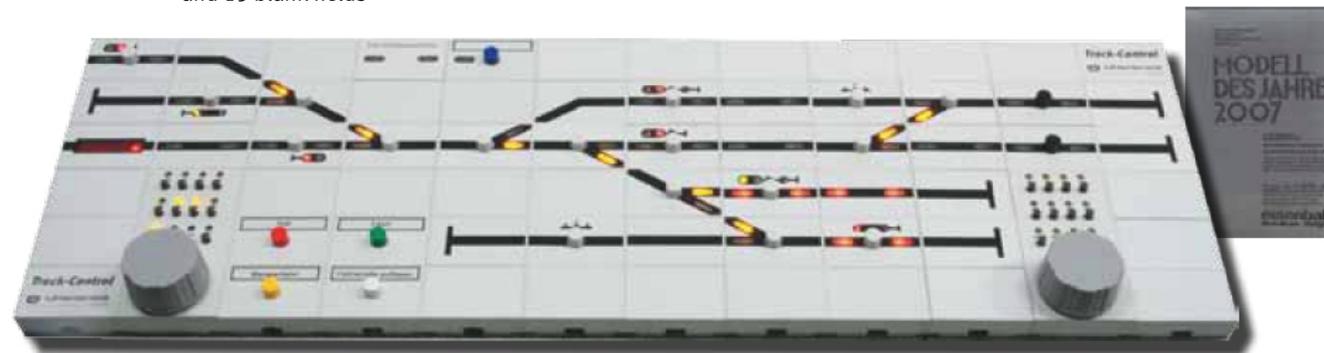
PCBs, four cross connection PCBs, two connecting PCBs without indicators and a foil set for the structure of a small control desk.

The layout grows – Track-Control too

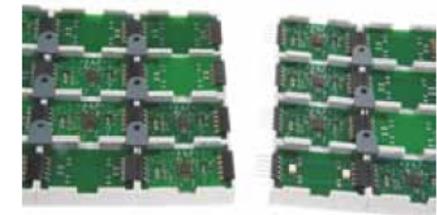
The expansion set contains 30 segments with tinted diffusers and connecting plug, 32 key caps, four turnout PCBs, four signal PCBs, two cross connection PCBs, four connecting PCBs without indicators and four different foils.

- Illumination of routes
- Occupied indicator
- Control of multi-function signals on routes
- Pilot signals indicate the state of several multi-function main signals depending on the selected route.
- Includes planning software and configuration TC-Edit

- Part No. 69 100** 6 Plastic segments with diffusers and connector clips
- Part No. 69 110** 5 each key caps in colours blue, yellow, green, red, black and white
- Part No. 69 210** 2 Cross connection PCBs
- Part No. 69 212** 4 Connecting PCBs without indicators
- Part No. 69 214** 2 Connecting PCBs with indicators
- Part No. 69 220** Turnout PCB
- Part No. 69 230** Signal PCB



- Simple programming and operation
- For connecting with all digital centers with LocoNet support, e.g. DAISY, Intellibox® and identically constructed devices.
- For the power supply a 16V AC transformer is needed e.g. our 45 VA transformer, Part. No. 20 040.
- Segment dimension 40 x 25 x 12mm



This is how a complete wired Uhlenbrock control panel looks from underneath.

The Uhlenbrock Control Panel

The Track-Control is based on the Siemens Track Plan Panel DrS2, which has been in service for the DB since the 60s. Its functionality has been adapted for the model railroader so they don't have to be a signaller in order to operate the panel

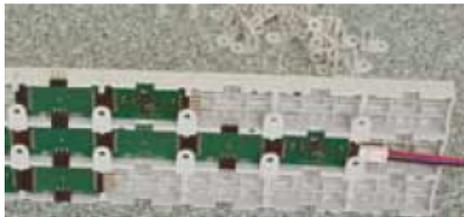
Step by Step to the Control Panel



1. **Plan your** control panel with the provided planning software on the PC. Print the track plan, the connecting plan and the parts list.



3. **Turn the** segments over and put the tinted diffusers, and, if needed, the key caps and PCBs, into the segments.



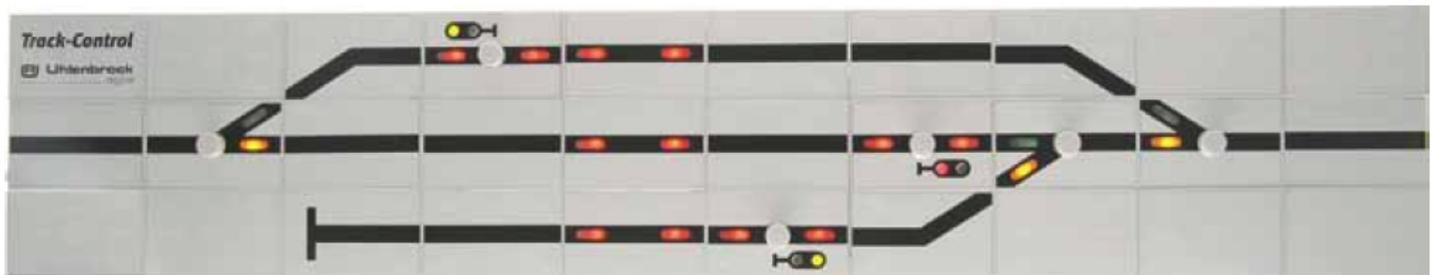
5. **Now your** track control desk is complete and the cable can be connected to the LocoNet.



2. **Stick the** symbols provided onto the individual plastic segments according to your track plan.



4. **Plug the** segments together and fix them in place with the enclosed connector plug. Connecting PCBs with or without indicators connects turnout or signal PCBs within a segment row. Cross jointers connect the individual segment rows to each other.



The control panel from the parts contained Basic Set in operational state.

Programming – very simple

What till now, was achieved only via laborious wiring of the individual keys and lamps is very simple and fast with the new control desk.

1. Keep the key of the segment that you wish to program pressed for 8 seconds, until a symbol on the segment flashes.
2. Press the key as often as needed till the desired symbol on the segment lights up.
3. On the digital center operate the turnout or the signal that you wish to control with this segment.

The simple programming of the segment is then complete. When all segments are

programmed your desk is operational.

In order to program more complex desk functions use the configuration program. Among these functions are starting/end keys for routes, the automatic allocation of a pilot signal to the main signal as a function of the route, as well as setting of multi-function signals with auxiliary keys, occupied messages and route indication.

Videos describing the assembly and programming of the Track-Control are included in the Basic Set and are also available from our internet site for free download.

Track-Control Route Buffer

- Stores up to 2000 control instructions for routes which can be called up at the track control desk
- Switching of routes with start/end keys
- Trigger the routes via the LocoNet, like with Feedback modules



Part No. 69 240
Track-Control Route buffer



Track-Control Train Number Display

With installation of the individual locomotive control system LISSY the train numbers of the trains passing the designated LISSY sensor are displayed, (e.g. at the exit track of the Shadow station).



Part No. 69 250
Track-Control Train number display



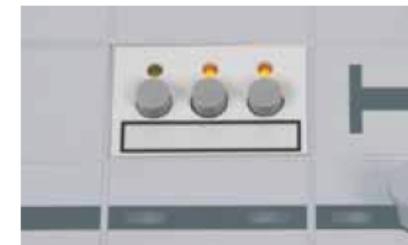
Track-Control 3-Key Segment

- For three switching possibilities
- For switching solenoids or Locomotive special functions
- To release feedbacks
- For switching the center's Stop/Go

By combining 3 keys in a segment you save space and have more flexibility in the organizing of the panel.

With the low priced module all additional functions in the model railway layout, such as lighting, boom gates, gate motors, the gantry crane lifting magnet, a water crane and much more can be controlled. Routes can also be set with these keys.

Part No. 69 260 Track-Control 3-key segment



Track-Control Joystick

- For controlling working models
- Occupies only one field position on the desk
- Replaces several key segments

The Joystick is used to control working models, for example our gantry crane or the water crane or working models of other manufacturers.

The Joystick can be moved in any direction so the switching functions up, down, right and left can be controlled. Special functions are switched by a slight pressure on the Joystick.

The segment produces instructions for locomotive or solenoid decoders.

Part No. 69 270 Track-Control Joystick





Part No. 69 300
Track-Control Speed
Controller



Track-Control Speed Controller

- Running of Locomotives
- Switches 16 special functions and the light function
- With DirectDrive function
- Up to 9999 locomotive addresses
- Rotary controller without end-stop and with reversing switch, AC and DC operating mode
- Shunting function (in combination with LISSY)
- Locomotive emergency stop

The speed controller is as large as three other desk segments and is easily integrated into the control desk. Up to 9999 locomotives can be selected and controlled with the figure keys f0 - f9.

The running speed is set with the continuous rotary knob. A press of the control knob changes the driving direction. The function keys control the light and switches up to 16 special functions.

DirectDrive

Do you forget locomotive numbers and names? Those are no longer needed!

Take control of the locomotive which passed over a certain LISSY receiver by the push of a button on the controller without entering the address.

The DirectDrive function, in combination with LISSY, forms the most convenient function which modern model railway controls can offer. Assign a LISSY receiver to a controller on the Track- Control and you can take control of a locomotive that passes the

LISSY receiver by the simple push of a button without having to input the locomotive address or name.

Further, LISSY receivers can be linked with signal sections so they save the address of the locomotive which is awaiting clearance at the corresponding signal. Now control can be taken of this locomotive on the controller by pressing the key on that Signal section and a key on the controller.

Full Catalogue 2011/2012

Our complete 84 page catalogue with all products, many tips and hints can be purchased from you dealer for 3.50 EUR, by sending stamps to the value of 5.00 EUR or online order on our internet site www.uhlenbrock.de.

Part No. 10 100 Catalogue 2011/2012

»Intellibox«, »IntelliSound« and »Uhlenbrock Digital« are registered Trademarks of the company Uhlenbrock Elektronik GmbH. Names used in this catalogue are the Trademarks of the particular companies. We reserve the right to change catalogue contents at any time.



Uhlenbrock Elektronik GmbH
Mercatorstraße 6
D-46244 Bottrop
02045-85830
www.uhlenbrock.de

Your Uhlenbrock Dealer