

Contents

Digital system	6
Decoder	18
General Accessories	20
Lightings	24
Couplings	25
Wheel Sets	28
Tracks	33
ROCO LINE with bedding	38
ROCO LINE flex tracks	45
ROCO LINE without bedding	46
Track Accessories	54
H0e tracks	58
TT Accessories	60
Books	62
Where do I find what?	64



Dear ROCO fans,

as well as highly detailed and engineered models from Epoche I up to the latest trains, ROCO offers a wide range of products.

From steam engines to diesel trains to the latest ICE or Railjet, no wish will be left unfulfilled. The range also includes a reliable selection of accessories, platforms and the latest steering technology, such as the Z21 system. This catalogue gives you an overview of our programme's broad spectrum.

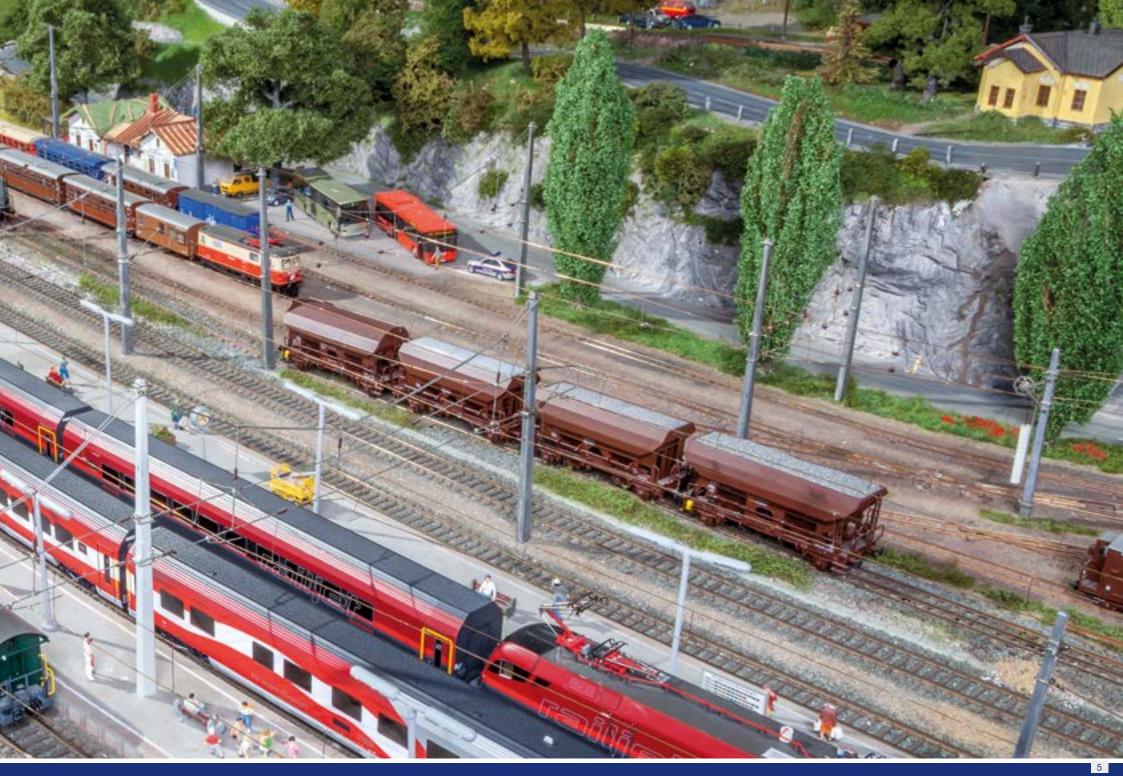
Our team is available for any questions you might have either in our customer service department or at our public expos. Your specialist retailer can always provide you with competent advice about deliveries and technical issues.

Have fun browsing!

Your ROCO team



4 www.roco.cc







Digital control centre Z21

The Z21 digital control centre connects your model railway system, your digital locomotives and wagons via WiFi to your tablet, smartphone or the Z21 wlanMAUS. No additional networking knowledge is needed for this. You can extend your Z21 digital control centre easily due to the large number of interfaces. This also makes it the ideal basis for PC-based automation.

The Z21 is a complete Plug & Play System consisting of:

- Digital control centre Z21
- Z21 app for control of all system components
- Power supply
- WiFi router





Z21 multiMAUS

The Z21 multiMAUS is a digital control centre that enables you to control your trains, use digital functions, switch points and signals and much more. The clear design in combination with easy operation handling makes the multiMAUS a benchmark in the field of digital model train control systems and not just for digital beginners. Digital professionals also can profit from a large variety of advanced functions so that they can drive their locomotives absolutely true to the originals.

Possibilities

- ▶ 64 locomotives with 5-character names
- ▶ Up to 29 functions can be activated per locomotive
- ▶ Up to 1024 magnetic items switchable
- ▶ Write and read configuration variables (DCC CVs)







10813

Z21 WLANMAUS

Control unit with many operation functions. Several Z21 WLANMAUS can be simultaneously operated – possible with all Z21 systems (z21 start combined with WiFi Package 10814, 10818). The Z21 wlanMAUS gives you wireless freedom around your layout.

The Z21 WLANMAUS also offers:

- ▶ Wireless freedom through WiFi transmission
- ▶ 29 functions per locomotive
- ▶ 100 locomotive addresses can be stored in the database and can be assigned with names (up to
- ▶ Operated with commercially available standard batteries (3 x AAA, not included in the delivery)
- ▶ Up to 2048 magnetic items switchable



Further information:

www.z21.eu

The **721** and **5**

The Let system	Z 21 start	z21 WiFi Package	z21	Z21
for novices and experts	Available in start set	10814/10818	Available in start set	10820
	without WiFi Packag		incl. WiFi router	incl. WiFi router
Plug & play system	 ✓	Ø	☑	Ø
2 X Bus connection on the front side	\square	\square	\square	☑
1 X Bus connection on the backside				\square
For digital DC and AC locomotives (DCC and MM)	☑	Ø	☑	☑
POM programming, POM readout, CV programming and CV readout		\square	☑	☑
B-Bus and R-Bus	☑	\square	\square	\square
Configurable with Maintenance	✓	Ø	☑	☑
Regulation with comfortable Z21 app and diverse hand held controller		\square	☑	☑
Photorealistic driver's cab on Android table and iPad		\square	☑	☑
LocoNet and sniffer Bus connection				☑
CAN Bus - allows comfortable configuration of new Z21 components				☑
Adjustment options for track voltage				✓
Separate programming track output with Zimo decoder update procedu	ure \square			Ø

z21 WiFi Package



10814

The z21 WiFi package contains a preconfigured router and the activation code for the z21 start. This way the z21 start can accept commands for locomotives and turnouts via the WiFi interface and process them. System requirement is a Windows PC or notebook as well as an existing Internet connection.



 \neg

z21 unlock code



10818

The z21 activation code is required if you already have your own router. Please note that extended network knowledge is necessary for this purpose.



www.roco.cc





10805

Z21 light BOOSTER

- ▶ Power 3 A (track output)
- ▶ RailCom* cutout (allows use of RailCom* track occupied detector)
- ▶ Terminal loop feature with short-circuit detector
- ▶ Connection via B bus

10851

Suitable power supply 54 W (see page 10)

Suitable power supply 54 W (see page 10)



10806

Z21 single BOOSTER

- ▶ Power 3 A (track output)
- ► Adjustable track voltage (12 V-24 V)
- ▶ RailCom* global detector
- ▶ Terminal loop feature with short-circuit detector
- ▶ Brake generator feature configurable
- ▶ Connections via CAN bus, B bus, CDE bus
- ► Configuration and update simply by app or PC via CAN

10851



10807

Z21 dual BOOSTER

- ▶ Power 2x 3 A (track outputs)
- ▶ Voltage can be set for both track outputs separately via app or PC via Z21 (12-24 V)
- ▶ RailCom* global detector
- ▶ Terminal loop feature can be separately configured by means of short-circuit detector
- ▶ Brake generator feature can be separately configured for
- ▶ Connections via CAN bus, B bus, CDE bus
- ▶ Configuration and update simply by app or PC via CAN

10857

Suitable power supply 120 W (see page 10)

10804

Z21 CAN HUB

- ▶ Additional 2 A power supply for CAN BUS
- ▶ 3 CAN outputs
- ▶ 1 Z-CAN output with booster signal amplification
- ▶ Ideal for large track layouts with many CAN users
- ▶ Including a connecting cable for CAN bus

10850

Suitable power supply 36 W (see page 10)

Z21 DETECTOR

10808



- ▶ Track-occupied detector for 8 sections
- ▶ Occupied message by means of power monitoring of track sections
- ▶ RailCom* detector for loco identification
- ▶ Connection via CAN bus and R bus
- ► Configuration and update simply by app or PC

Z21 DETECTOR x16

10819



- ▶ Track occupancy sensor for 16 track sections
- ▶ Occupied signal is triggered by the power monitoring of the track sections
- ▶ Connection via R-Bus
- ▶ Configuration via buttons or POM CV programming

Z21 multi LOOP



- ▶ Ideal for terminal loops, triangular junctions and turntables
- ▶ Compatible with RailCom*
- ▶ Operated by short-circuit detector, switching contacts or sensor tracks
- ▶ Compatible with DCC, MM and analogue mode

^{*} RailCom is a registered trademark of Lenz Elektronik GmbH







10789

Z21 CDE Booster Adapter

The Booster Adapter allows to connect up to 15 boosters with CDE interfaces to the booster bus. An X-bus port is provided to supply voltage to the adapter. Status LEDs display the 12-V supply as well as an active CDE end stage; besides, the adapter has an overcurrent or short-circuit protector at the CDE output.

The booster adapter can be used on the following central units or amplifiers:

- ▶ Digital amplifier (10764)
- ▶ multiZENTRALEpro (10832)
- ▶ z21 and z21 start
- ▶ Z21 (10820, 10822)



10775

8-fold turnout decoder DCC

The turnout decoder can switch up to eight turnouts. If light signals are used, one needs one double-spool relay (Item no.: 10019) per signal. All outputs are short-circuit proof. Overall, the decoder can be loaded with up to 2 Ampere; this also applies to every single connection for the period of one second!

The address range is between 1 and 256. The connection is made with two cables onto the two rail profiles.

If a high output is required, of course it is possible to create one's own supply network, which is supplied out of a booster of its own.



10851

Switching power supply 54 Watts

Power supply for the digital control centre Z21 (10820), digital amplifier (10764), multiZENTRALEpro (10832) und digital booster 10765).

▶ Overload fuse, short circuit proof, back feed protection

Technical data:

Input voltage: 230 V ~ Output voltage: 20 V = Output current: 3 A



10857

Switching power supply 120 Watts

- ▶ Short-circuit protection against overload. overvoltage and overtemperature
- ▶ Perfect with the Z21 dual BOOSTER (10807)

Technical data:

Input voltage: 100-240 V ~ Output voltage: 20 V = Output current: 6 A



10850

Switching power supply 36 Watts

- ▶ Power supply for the Z21 CAN HUB (10804) and z21 start
- ▶ Overload fuse, short circuit proof, back feed protection



US version

Switching power supply 18 V/4 A



Connection cables for digital components

10754



Highly flexible 6-pole spiral cable

Connection between multiMAUS 10810 and 10820, 10822, 10815, 10764.
Suitable for the FLEISCHMANN multiMAUS from the digital Starter Sets.
Length approx. 2 m

10756



6-pin data bus replacement cable

The cable is a replacement cable for the Lokmaus 10760, 10792, multiMAUS 10810, FLEISCHMANN multiMAUS, turnout keyboard 10770 or RouteControl 10772.

Length approx. 2 m



10764

Digital amplifier

The amplifier provides two direct connections ('master' & 'slave') for a multiMAUS and, for example, another mouse. The amplifier prepares the 'Master mouse' data for running and switching operation.

50 VA power in combination with transformer 670601, 10851.

The track output delivers 3.2 A. Dimensions 115 x 122 x 40 mm



10765

Digital booster

Additional amplifier to 10764 for the supply of larger systems. The 10764 amplifier should not be used as a booster for safety reasons. Power max. 3.2 A. A maximum offour boosters are used per system, or more in combination with the brake generator 10779.

50 VA power in conjunction with transformer 670601 or 10851.

Maximum current 3.2 A at the track exit.

10757



Booster connection cable

Spare cable for connecting boosters (10765, 10789, 10805, 10806, 10807) with:

- ▶ Digital amplifier (10764)
- ▶ Digital central power unit (10820, 10822, z21)
- ▶ Brake generator (10779)
- ► Connecting the boosters mentioned above among each other

10758



4-pin data bus distributor module

To connect further input units (for example Lokmaus or multiMAUS). This distributor module can also be used as an extension of existing lines to units on the slave output.

Note: The cable of the Master Lokmaus should not be extended in order to avoid impairing the quality of the data transmission.

10753



CAN BUS Cable

For connecting Z21 CAN devices.

136100



Z21 Loconet Slave cable

A special cable that allows to use the Z21 as Loconet Slave on another central control unit.

Z21

Further information:

www.z21.eu





12 www.roco.cc

Photorealistic driver's cab

Converting or upgrading to digital model railways will reward you with many advantages. To be able to drive the locomotives as the driver himself is just one of the features which will make your eyes light up. As the locomotive driver, be amazed by the photorealistic views of the driver's cabs, which are equipped with original switches, controls from the relevant locomotive model, and interactive functions. Every control-related button and lever can be selected and provides the relevant action for your locomotive model. The Z21 app covers 8 individual driver's cabs starting with the driver's cab of the Re 4/4 up to NS 1200, which are just waiting to be controlled by you. Because digital locomotive driving also needs practice to achieve mastery. Please note that the driver's cabs are only available on iOS and Android devices.

- Main switch
- Locomotive brake
- Car brake
- 123456789 Direction switch
- Whistle
- Emergency stop
- Train front light
- Fan
- Pantograph
- Brake line pressure

Driver's cab of NS 1200



Driver's cab of Re 4/4



Z21 operating mode

The Z21 digital control centre connects your railway system and your digital locomotives with your tablet and smartphone via Wifi.



The Z21 system is compatible with many well-established PC-based model railway controllers.

Furthermore the system is perfectly suited to control your garden railway.

^{*} RailCom is a registered trademark of Lenz Elektronik GmbH

Zzı

Just by optimizing and updating the already known and well-proven Z21 app, you will discover many new functions and possibilities, which will allow you to create and experience your digital model railway world in even more exiting ways.

The Z21 app allows you to create a detailed library of locomotives. Here you can easily add all locomotive-specific data, as well as main control information (such as, e.g., locomotive address, speed levels, locomotive functions and maximum speed). In addition the Z21 system also supports automatic synchronisation with multiple input devices (such as, e.g., multiMAUS and Z21 app). This opens up the path to your locomotive and model railway enjoyment.

Smartphone view





Download from the app store for iOS or in Google Play for Android!

The app is available as a free download and can also be tested without the Z21 system.



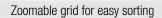
Data: Basic data of the locomotive such as name, pictures, address and decoder type

There is a choice of many symbols

Additions are made via the locomotive database: All Roco sound models after 2015 can be imported



Create and administer system



Simple creation of your platform arrangement

Simple connection/docking of the control centre elements



Easy customization of the functions and short description

- ▶ DCC and Motorola^{**} formats individually adjustable for each locomotive and magnetic article
- ▶ Read out and get feedback of locomotives via RailCom*
- Save and reload database and layout with the import- and export-function
- Wireless controlling via tablet and smartphone and the WLANMAUS
- ► High-capacity administration (up to 9999 locomotive and 2048 turnout adresses)

To make adding your models even easier and more convenient, the Z21 app provides you direct access to the ROCO/FLEISCH-MANN locomotive database. Here you can simply enter the article number and automatically import all information, incl. model picture, in your personal Z21 app database.

The Z21 app also makes it very easy for you to create a signal box to suit your model system, and takes into account all relevant accessories (such as, e.g., trade occupied sensors, double-diamond crossings, light signals, etc.). Thanks to the integrated Drag & Drop function, as well as simple connection of docking of the control centre elements, even complex platform configurations are realized easily.

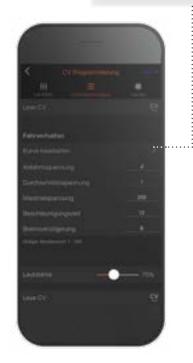
^{*} RailCom is a registered trademark of Lenz Elektronik GmbH

^{**} Motorola is a registered trademark of the Motorola Inc., Schaumburg Illinois., US.

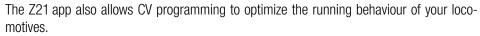


Selection and configuration of accessories

Suitable for the majority of ROCO/FLEISCHMANN decoders

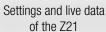




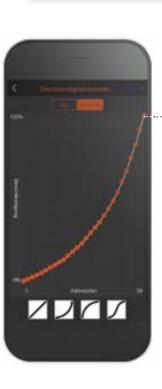


Models which are already equipped with a RailCom* compatible ZIMO decoder also allow innovative CV programming using POM. This allows you to directly address the relevant decoder and read out live. The example is especially helpful when customizing the locomotive driving characteristics (such as, e.g., starting voltage, acceleration, and braking behaviour, as well as the sound decoder volume). When doing so, the relevant characteristic curves can be automatically downloaded, evaluated, and processed graphically.





Automatic download of characteristic curves and subsequent evaluation. Graphical representation in plain text



A programming track, as well as the constant repositioning of your locomotives is therefore unnecessary. With decoders or RailCom* you can of course always revert to traditional CV programming, which the innovative programming help also offers. A new feature for the CV programming is the direct display of the relevant bits, which is a particular help during complex programming, such as, e.g., function mapping.

^{*} RailCom is a registered trademark of Lenz Elektronik GmbH



Speaker set

10889



With this speaker set you can retrofit any sound. Complete set with sound box and connection cables.

Dimensions: 10 x 15 x 9 mm



The new generation of feedback decoders

The characteristics of the locomotive decoders 10894, 10895 and 10896:

Advanced reset and protection functions; all outputs are short-circuit proof. Overcurrent protection for motor and function outputs by switching off and automatic restart. DC and AC analogue operation, with optional unregulated or load-sensing motor control. Software update capability via Z21 (An update via the z21 from the starter sets is not possible). Low-noise motor control, suitable for all kinds of DC and bell-type armature motors. Full NMRA function mapping with enhancements; Dimming, flashing, high beam / low beam switchover via function key. Time limit of the coupler control for overload protection (ROCO-Digi-coupling). Support of braking distances; Locomotive addresses are programmable; Comfortable change of the operating parameters, so the loco does not have to be opened.

The characteristics of the sound decoders 10890, 10891, 10892 and 10893 (can be used in addition to the loco decoders):

Powerful sound amplifier. Acceleration and load dependency of sound reproduction. Loading of sound projects is possible.

Detailed technical information about the decoders can be found in the operating instructions as well as on:

www.zimo.at

6-pin decoder (NEM 651)

10887



6-pin decoder, angled pins; can be updated; multiprotocol operation possible; motor control; braking tracks supported; locomotive addresses programmable; comfortable change of operating parameters possible: i.e. the locomotive does not have to be opened; overcurrent protection; RailCom*

Suitable for Gauge H0e, TT and N.

Technical data:

- ► DCC + RailCom*, DC analogue, MM, AC analogue
- ▶ Dimensions: 13 x 9 x 2.6 mm
- ▶ 0,7 A motor, total (peak 1.5 A)
- ▶ 6 function outputs
- ▶ 4 outputs for additional functions

Corresponds to: ZIMO MX617L

8-pole sound decoder (NEM 652)

10890



Sound decoder with wires and 8-pole plug; can be updated; multiprotocol operation possible; motor control; braking tracks supported; comfortable change of operating parameters possible: i.e. the locomotive does not have to be opened; overcurrent protection; RailCom*

Technical data:

- ▶ DCC + RailCom*, DC analogue, MM, AC analogue
- ▶ Dimensions: 30 x 15 x 4 mm
- ▶ 1,2 A motor, total (peak 2.5 A)
- ▶ 10 function outputs
- ▶ 2 outputs for additional functions
- ▶ Servo control cables or SUSI
- ► Function low voltage 5 V (200 mA)
- ► External energy storage (16 V) directly connectable
- ▶ 3 Watt audio, 4–8 Ohm, 32 Mbit, 6 channels

Corresponds to: ZIMO MX645R

PluX22 sound decoder (NEM 658)

10891



Sound decoder with 22-pole plug; can be updated; multiprotocol operation possible; motor control; braking tracks supported; comfortable change of operating parameters possible: i.e. the locomotive does not have to be opened; overcurrent protection; RailCom*

Technical data:

- ▶ DCC + RailCom*, DC analogue, MM, AC analogue
- ▶ Dimensions: 30 x 15 x 4 mm
- ▶ 1,2 A motor, total (peak 2.5 A)
- ▶ 9 function outputs
- ▶ 2 outputs for additional functions
- ▶ Servo control cables or SUSI
- ► Function low voltage 5 V (200 mA)
- ► External energy storage (16 V) directly connectable
- ▶ 3 Watt audio, 4–8 Ohm, 32 Mbit, 6 channels

Corresponds to: ZIMO MX645P22

8 pole sound decoder (NEM 652)

10892



Sound decoder with wires and 8-pole plug; can be updated; multiprotocol operation possible; motor control; braking tracks supported; comfortable change of operating parameters possible: i.e. the locomotive does not have to be opened; overcurrent protection; RailCom*

Technical data:

- ▶ DCC + RailCom*, DC analogue, MM, AC analogue
- ▶ Dimensions: 20 x 11 x 4 mm
- ▶ 0,8 A motor, total (peak 1.5 A)
- ▶ 6 function outputs
- ▶ 2 logic level outputs for additional functions
- ▶ Servo control cables or SUSI
- ▶ 1 Watt audio, 8 Ohm, 32 Mbit, 6 channels

Corresponds to: ZIMO MX648R

* RailCom is a registered trademark of Lenz Elektronik GmbH



PluX16 sound decoder (NEM 658)

10893



Sound decoder with 16-pole plug; can be updated; multiprotocol operation possible; motor control; braking tracks supported; comfortable change of operating parameters possible: i.e. the locomotive does not have to be opened; overcurrent protection; RailCom*

Technical data:

- ▶ DCC + RailCom*, DC analogue, MM, AC analogue
- ▶ Dimensions: 20 x 11 x 4 mm
- ▶ 0,8 A motor, total (peak 1.5 A)
- ▶ 4 function outputs
- ▶ 2 logic level outputs for additional functions
- ▶ Servo control cables or SUSI
- ▶ 1 Watt audio, 8 Ohm, 32 Mbit, 6 channels

Corresponds to: ZIMO MX648P16

8 pole decoder (NEM 652)

10894



Decoder with wires and 8-pole plug; can be updated; multiprotocol operation possible; motor control; braking tracks supported; comfortable change of operating parameters possible: i.e. the locomotive does not have to be opened; overcurrent protection; RailCom*

Technical data:

- ▶ DCC + RailCom*, DC analogue, MM, AC analogue
- ▶ Dimensions: 20 x 11 x 3.5 mm
- ▶ 1,0 A motor, total (peak 2.5 A)
- ▶ 6 function outputs
- ▶ 2 logic level outputs for additional functions
- ▶ Servo control cables or SUSI

Corresponds to: ZIMO MX630R

PluX16 decoder (NEM 658)

10895



Decoder with 16-pole plug; can be updated; multiprotocol operation possible; motor control; braking tracks supported; comfortable change of operating parameters possible: i.e. the locomotive does not have to be opened; overcurrent protection; RailCom*

Technical data:

- ▶ DCC + RailCom*, DC analogue, MM, AC analogue
- ▶ Dimensions: 20 x 11 x 3.5 mm
- ▶ 1,0 A motor, total (peak 2.5 A)
- ▶ 6 function outputs
- ▶ 2 logic level outputs for additional functions
- ▶ Servo control cables or SUSI

Corresponds to: ZIMO MX630P16

PluX22 decoder (NEM 658)

10896



Decoder with 22-pole plug; can be updated; multiprotocol operation possible; motor control; braking tracks supported; comfortable change of operating parameters possible: i.e. the locomotive does not have to be opened; overcurrent protection; RailCom*

Technical data:

- ▶ DCC + RailCom*, DC analogue, MM, AC analogue
- ▶ Dimensions: 22 x 15 x 3.5 mm
- ▶ 1,2 A motor, total (peak 2.5 A)
- ▶ 9 function outputs
- ▶ 2 logic level outputs for additional functions
- ▶ Servo control cables or SUSI

Corresponds to: ZIMO MX633P22

^{*} RailCom is a registered trademark of Lenz Elektronik GmbH





Control element and switching power supply

10788



This controller set is best suited for beginners and running just one train. It consists of one controller and plug-in transformer, designed to compliment each other. The controller gives a definite forwards and backwards control and speed settings. The control knob clicks gently into a zero position. Automatic overload protection. Easy connection to the layout using the pressure connection clips.

Technical data:

Running voltage: 0-14 V=/0,6 A

Separate accessory output: 14 V=/0,85 A

Light transformer for high capacity

670601



This transformer is the high capacity power pack for the operation of electromagnetic items such as signals, point machines, relays, illumination and other accessories

- ▶ It has an integrated thermal protection switch against short circuit and overload
- ▶ Easy connection to the layout using the pressure connection clips
- ▶ Distribution with 10726

2 outputs:

Cable: 16 V~/2.5 A (for 10764 and 10765); Clips: 14 V~/2.85 A

The transformer replaces the former article 6706 (FLEISCHMANN) and 10725 (ROCO).

Connectors and cables

10602

Cable plugs



Adapters for connecting three single cables with flat connector system (10603). 10603

3-pole connector



10605

5-pole connector



10608

8-pole connector

device.



10616

Necessary for connecting var. accessories (turnouts, light,

signals, etc.) to the new transformers/switching power

supplys. Input is a coaxial socket, outputs - via a luster

connection system 10603) and via a fixed cable with

a coaxial connector to the control device or the digital

terminal and four 3-pole connector zones (to our existing

16-pole connector



Single-pole cable. Different colours. Conductor cross section 0,2 mm². Length 10 m

10630







Switching power supply

Attention: Not suitable for z21 and Z21!

10723

10726

For accessory feed.

Power distributor



3-pole flat ribbon cable

Conductor cross section 0.2 mm². Length 10 m





5-pole flat ribbon cable

Conductor cross section 0.2 mm². Length 10 m 10625



8-pole flat ribbon cable

Conductor cross section 0.2 mm². Length 10 m



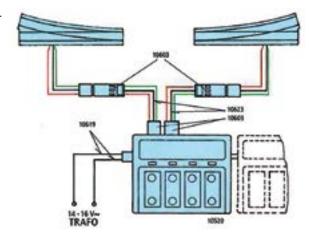


Change over button

10520

Change over button with feedback function. For four magnetic items switched off at the end (turnouts, semaphore signal, relays, etc.).



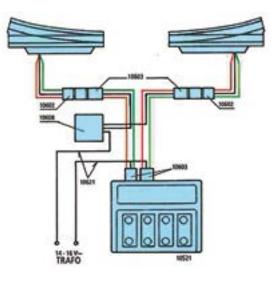


Change over button

10521

Change over button without feedback function. For four solenoid-operated articles (turnouts, signals, relays) without automatic end-position switch-off.



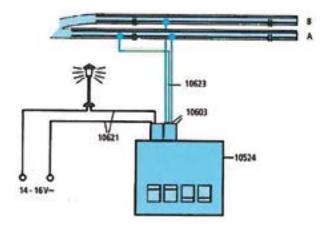


Change over switch

10524

The switch is used wherever alternating switch-on connections are necessary (Lighting, Separate track sections). It is connected via the connector zone. Each individual switch is designed for maximum permissible current of 0.5 A.





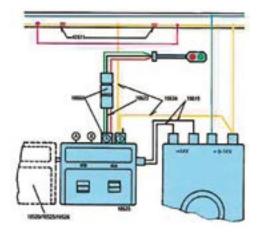
Light signal switch

10525

Signal switch with feedback and train control.

With one switch, two two-aspect light signals (e. g. 40020), can be operated without magnetic drive.





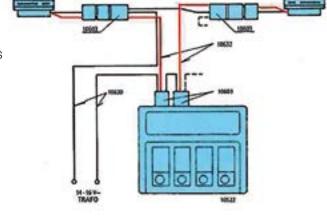


Single action button for uncoupling tracks

10522

Use this unit wherever power must be supplied for a short time. The individual buttons are electrically insulated and thus they can operate different power circuits.



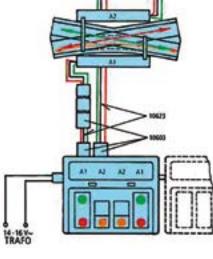


Change over button

10526

Change over button with feedback. For single-slip turnouts and symmetric three-way turnouts.





Connecting cable

10619

For switches 10520, 10525, 10526, Length 1.20 m

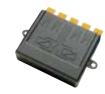


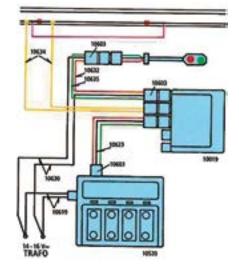


Universal relay

10019

With four change-over contacts. Current load per contact: max. 1.5 A

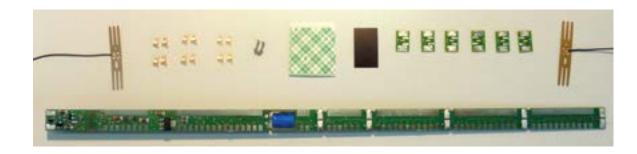






Lightings

40420



LED universal lighting set for 4 axle H0 wagons with a length from 170 up to 316 mm

The six LED modules with a warm white LED each can be optionally positioned on the carrier board so that an adaption to the interior is possible. The carrier board can be shortened however the power supply is still possible on both sides. It can be used in analogue as well as digital operation with AC or DC. With 16 pin PluX interface. The LED modules can be switched in groups in digital operation.

40360



Universal lighting kit for 4-axled H0 wagons.

Contains a 300 mm flexible strip conductor, 5 bulb carriers, 5 bulbs 16 V/22 mA, 2 wheel current pick-up contacts, fastening material.

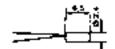
40361



Universal lighting kit for 2-3-axled H0 wagons.

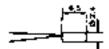
Contains a 150 mm flexible strip conductor, 2 bulb carriers, 2 bulbs 16 V/22 mA, 4 wheel current pick-up contacts, fastening material.

40321



Light bulb with leads 16 V/22 mA 5 pc/pack.

40322



Light bulb with leads 12 V/60 mA 5 pc/pack.

93517

93518

109088

93728



101366

101365



Tubular bulb 16 V, 30 mA CC.

Bulb, plug-in-socket

2.8, 12 V, 50 mA

Bulb, plug-in-socket 2.8, 16 V, 30 mA Dil

Bulb, plug-in-socket 4.8, short version, 16 V, 50 mA Bulb, plug-in-socket 4.8, long version, 16 V,

1 Da

50 mA

93733

Lighting unit for Lighting unit for intermediate wagon 43014



40314



Interior lighting retrofit set and headlights

Interior lighting retrofit set and headlights (bulb) with direction of travel dependent light change for IR/IC driving coaches 44935/44936/44937, (1:100).

In addition: Replacement bulbs 12 volt: 93518 and 93734. Replacement bulbs 16 volt: 109088 and 93517.





Interior lighting retrofit set and headlights

Interior lighting retrofit set and headlights (bulb) with direction of travel dependent light change for coaches 44942/44959, (1:100).

In addition: Replacement bulbs 12 volt: 93521 and 93734. Replacement bulbs 16 volt: 93728 and 93517.

Couplings

40395



Universal coupling for NEM 362 standard coupler pocket, 12 pc/pack

40397



Universal coupling for NEM 362 standard coupler pocket, 50 pc/pack

40396



Height adjustable universal coupling. Spacing extended by approx. 2 mm per coupler. 12 pc/pack 40343



Close coupling mechanism retrofit set for 2-axle wagons up to 140 mm in length. Drawbar with standard coupler pocket (NEM 362). Without close coupling heads. 12 pc/pack 40344



Close coupling mechanism retrofit set for 2-axle cars over 140 mm and for bogie cars up to 170 mm in length.

Without close coupling heads. 12 pc/pack

40270

4 pc/pack.

40271

50 pc/pack.



Close coupler head with advanced uncoupler for NEM 362

40281



Close coupler head with advanced uncoupler

Suitable for FLEISCHMANN vehicles with trunnion pocket. 2 pc/pack

40286



Close coupling heads with advanced uncoupler Suitable for Ade-cars, height adjustable. 2 pc/pack 40287



Close coupling heads with advanced uncoupler, height adjustable 2 pc/pack



40411



Digital coupler kit with feedback feature

Consists of 1 multi protocol special decoder for AC and DC operation and 2 couplings. The couplings can be controlled only by this decoder. If decoders of other manufacturers are used, the couplings can be damaged.

Suitable for 8-interfaces NEM 652. Automatic driving current recognition Motorola*/DCC or analogue DC/AC. Automatic driving recognition 14/28/128 settings.





40326

Close coupling retrofit kit With coupling draw-bar 2 pc./pack

Electric coupling, 4-pole

This coupling is used for extending the supply and control voltages from locomotive to wagon, or from wagon to wagon. 2 pc./pack





Standard D-link coupling

for NEM 362 standard coupler socket. 2 pc./pack

40244



Hook coupler for **FLEISCHMANN** standard

coupler, sockets. 2 pc./pack

40375



Claw coupling for Swedish **LKAB ore car,** 2 pc./pack.

40376



Central buffer coupling "AK69e" for NEM shaft with dovetail fitting. Standard coupler

pocket. 2 pc./pack

40390



H0e stirrup coupling

2 pc./pack



6516

PROFI slot coupling 1 pc./pack

386516

PROFI slot and rivet coupling (bulk pack) 50 pc./pack

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* Motorola is a registered trademark of the Motorola Inc., Schaumburg Illinois., US.







Wheel sets

40179

Replacement wheelset, AC

2 pc./pack, Ø 10 mm, Axle length: 23.8 mm



40180

Replacement wheel set, AC

2 pc./pack, Ø 10 mm, Axle length: 23.8 mm. One side insulated.



40181

AC fine-cast metal spoke wheel set

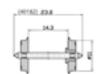
2 pc./pack, Ø 11 mm, Axle length: 24.75 mm



40182

DC NEM standard wheel set

2 pc./pack, Ø 11 mm, Axle length: 23.8 mm



40183

AC wheel set

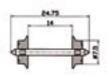
2 pc./pack, Ø 11 mm, Axle length: 23.8 mm



40184

AC wheel set

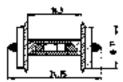
2 pc./pack, Ø 7.5 mm, Axle length: 24.75 mm



40186

Wheel set with 18 kΩ resistor

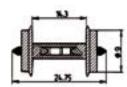
2 pc./pack, Ø 11 mm, Axle length: 24.75 mm



40187

Wheel set with 18 kΩ resistor

2 pc./pack, Ø 9 mm, Axle length: 24.75 mm



40188

DC NEM standard spoked wheel set

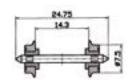
2 pc./pack, Ø 11 mm, Axle length: 24.75 mm, One side insulated.



40189

DC NEM standard wheel set

2 pc./pack, Ø 7.5 mm, Axle length: 24.75 mm. Insulated on both sides.



40190

DC NEM standard fine-cast spoked wheel set. With split axle.

2 pc./pack, Ø 11 mm, Axle length: 24.75 mm



AC wheel set

6560

Axle length: 24 mm. Ø 11 mm. Not insulated. To convert all 2- and 3-axled FLEISCHMANN wagons fitted with disc wheels, as well as all 4-axled wagons with a length of 282 mm for use on 3-rail, centre pick up AC voltage tracks.



6561

AC wheel set

Axle length: 25 mm. Ø 11 mm. Not insulated. To convert all 4-axled wagons with disc wheels (except wagons which should be fitted with 6560) for use on 3-rail, centre pick up AC voltage tracks.



6562

Exchange spoked wheel set for AC operation

Axle length: 23.5 mm. Ø 11 mm. Not insulated. To convert FLEISCHMANN coaches with spoked wheels for use on 3-rail, centre pick up AC voltage tracks.



6563

Exchange double spoked wheel set for AC operation

Axle length: 24 mm. Ø 11 mm. Not insulated. To convert all FLEISCHMANN goods wagons fitted with spoked wheels for use on 3-rail, centre pick up AC voltage tracks.

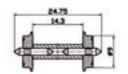




40191

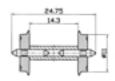
2 pc./pack

Standard wheel set DC, with split axle, Ø 9 mm,



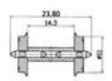
40192

Standard wheel set DC, with split axle, Ø 11 mm, 2 pc./pack



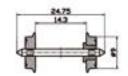
40193

Wheel set with forked axle DC, for passenger cars type N28, Ø 11 mm, 2 pc./pack



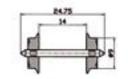
40194

NEM standard wheel set DC insulated on one side, Ø 9 mm, 2 pc./pack



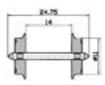
40195

AC-wheel set Ø 9 mm, 2 pc./pack



40196

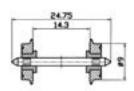
AC-wheel set Ø 11 mm, 2 pc./pack



40197

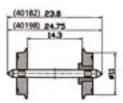
NEM standard wheel set DC, insulated on both sides,

Ø 9 mm, 2 pc./pack



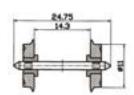
40198

NEM standard wheel set DC, insulated on one side, Ø 11 mm, 2 pc./pack



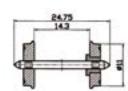
40199

NEM standard wheel set DC, insulated on both sides, Ø 11 mm, 2 pc./pack



40264

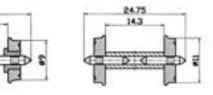
RP-25 wheel set
DC insulated on one side,
Ø 11 mm, 2 pc./pack



40266

RP-25 wheel set
DC insulated on one side,
Ø 9 mm, 2 pc./pack

RP-25 wheel set
DC with split axle, Ø 11 mm
2 pc./pack



40267

0

40067

DC traction tyre sets

For wheels, 12.5–13.8 mm diameter. 10 pc./pack

Ø 6.8–8.2 mm. 10 pc./pack

40068 Ø 8.3–10.2 mm. 10 pc./pack

40069 Ø 10.3–12.8 mm. 10 pc./pack

40070

Ø 12.9-14.6 mm. 10 pc./pack

40071

Ø 14.7-16.5 mm. 10 pc./pack

40072

Ø 16.5-19.0 mm. 10 pc./pack

0

AC traction tyre sets

40073 For wheels, 8.8–10.2 mm diameter. 10 pc./pack

40074 Ø 10.3–12.4 mm. 10 pc./pack

40075 Ø 12.5–15.3 mm. 10 pc./pack

40076

Ø 15.4-17.5 mm. 10 pc./pack

40077

 \emptyset 17.5–20.0 mm. 10 pc./pack





Smoke generator

40160



Smoke generator for BR 80, BR 36, BR 03.10 and "Württemberger C"/BR 18.1 for analogue and digital locomotives.

SEUTHE steam-smokedistillate

10908



Contents: 50 ml

Preparation set for locos

40014



Accessories for upgrading model locomotives.

Figure set: Engine driver and fireman

40001



Painted., 3 pc. each/pack

H0 Railway figures (unpainted)

40000





For do-it-yourself painting 24 pc./pack

AC pick-up shoes

40500



Short version. Length 42 mm. 40501



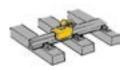
Long version. Length 56 mm. 82111



Long version, slim. Length 56 mm.

Brake shoes

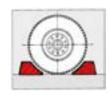
40004



For clipping onto the rail. 12 pc./pack

Chocks for H0 trucks

40005



12 pc./pack

Hobbyist's saw

10900



All purpose hobbyist's saw. For cutting track sections to size.

Lubricating grease

10905



particularly suited for plastic gears and provides an excellent glide effect. Contents: 8 g

Oiler

10906



Practical tool for properly "lubricating" sintered bearings of model locomotives. One drop per lubricating point is sufficient!

Excevator shovel for gantry crane

46807



Fully functional model that can be used with the mobile cranes 40110 and 40111.

Microfibre cloth





Ravenna Viaduct kit

15011



Length: 55.5 cm Height: 33.0 cm

Bridge pier Ravenna

15012



Height: 22.0 cm

Bridge arch Ravenna

15013



Length: 18.4 cm

▶ In co-operation with



Box girder bridge

40080



Length: 22.86 cm Width: 7.5 cm

Arched bridge

40081

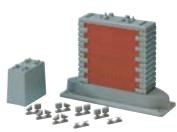


Length: 45.7 cm Width: 7.5 cm

The bridges can be clipped together within in minutes without using adhesives.

Bridge pillars

40082



Height: 9.4 cm. Suitable for bridges 40080 and 40081.

Display cases

40025



For models with maximum length of 22 cm. Size (L x W x H): 23.8 x 7.5 x 7.5 cm (without model)

40026



Display case for items with a maximum length of 29 cm.

Size (L x W x H): 35 x 6 x 8 cm



The ROCO LINE track is a high quality sleeper track. It is equally suitable for model railway beginners as well as for professionals. With a few simple steps and without any special technical knowledge, you can build a coherent model railway layout that's true to the original. The sleeper track made of nickel silver is highly resistant to corrosion and shows barely any scuffs after years of use. Due to its specific rail profile and surface sealing, dirt can hardly settle on the rails. There is a consistant contact between the rail and the wheels and thus an uninterrupted power supply of the vehicles is guaranteed. In addition, the conventional slightly curved railhead ensures an acoustically and mechanically smooth running of the vehicles on the layout.

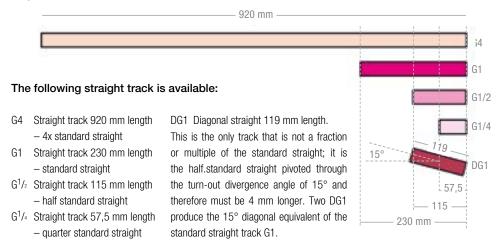
The profile height of 2.1 mm gives the ROCO LINE track its original look. With seven parallel circuits, eight different turnout designs as well as flexible tracks the ROCO LINE offers you almost all options to build a model railway layout true to the original. Through the transitional rail joiners (42612), the ROCO LINE track layout can be easily connected to all kinds of systems with 2.5mm rail profile.

Orientation

The ROCO LINE track system uses both article numbers and "descriptive" short designations for different elements of its geometry. These short designations, e. g. G1 for standard straight track will be shown on all track plan illustrations, instructions, packaging and on the track units themselves.

Straight tracks

In principle you can build the ROCO LINE track layout with only two straight tracks of different lengths. All other straight tracks (except the diagonal track) are parts or multiples of the standard track. It's that simple!



Curved Tracks

A full circle (360°) requires 12 units of curved tracks. The track separation of 61.6 mm assures that trains with correct scale length express coaches may pass without touching even on adjacent R2/R3 radius track.

ROCO LINE offers 5 basic radii with a parallel track separation of 61.6 mm:

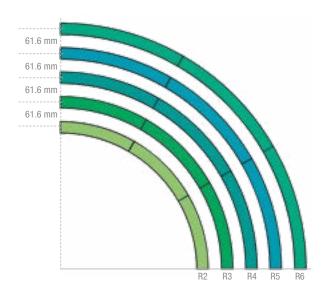
R2 curve 30°. r= 358 mm

R3 curve 30°, r= 419.6 mm

R4 curve 30°. r= 481.2 mm

R5 curve 30°, r= 542.8 mm

R6 curve 30°, r= 604.4 mm



Large radii for turnouts and transition curves:

R9 curve 15°. r= 826.4 mm

R10 curve 15°, r= 888 mm – revers curve for the 15° turnout

R20 curve 5°, r= 1962 mm – revers curve for the 10° turnout



These curved units may be assembled into a complete 360° circle as well. For R9 and R10 a total of 24, for R20 a total of 72 sections is required. These generous radii are often used as transitional radii in combination with the standard radii R2-R6. So you could start e.g. with three curves R20 and connect them to one curve R10 and continue your layout with 30° curves R2-R6.



Examples for combining individual elements

With the help of some examples we will show, how to combine individual elements of the ROCO LINE track system. Only a few important illustrations can be shown here.

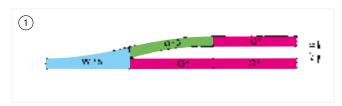


Illustration 1

A simple branch with reverse curve, assembled with a standard straight track G1, one WI15 and one R10. Both tracks will end exactly at the grid line and have the correct separation of 61.6 mm.



Illustration 2

A third track is added to the track sidings. The straight trough track of the turnout is usually, in prototype as well as in the model, placed in the diagonal direction. This track formation appears to be quite simple but leads to compromises in many conventional track systems. The ROCO LINE track system maintains the correct parallel of 61.6 mm and all three tracks end exactly at the grid line. This is made possible by an 8 mm length extension unit (D8), which is supplied with each 15° turnout.



Illustration 3

A single or double slip turnout can be used instead of a standard turnout. Here too the shortened diagonal requires a geometrically correct length compensation. Two 4 mm units (D4) solve this problem without additional trouble for the modeler.

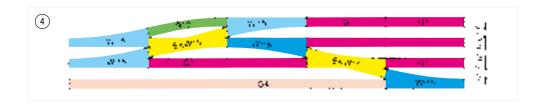


Illustration 4

Crossings may be arranged either left or right hand. To save the modeler the problem of correct choice at time of purchase and to avoid limiting their utilisation by having different crossing designs, all ROCO LINE crossings are supplied with the previously mentioned 4 mm units. As shown in this example, the identical crossing may be used alternatively as right- or left hand crossing. The example also shows how a single slip may be bypassed, as is done by the prototype, by using two turnouts and one R10. The advantage of this track formation compared to a double slip turnout is the possibility of parallel entry or simultaneous entry and exit of trains into and from a station.



Illustration 5

This shows how the slim 10° turnouts may be easily incorporated into a track formation which contains only 15° turnouts and crossings. Please note that the reverse curve to the 10° turnouts is formed by two track sections R20.

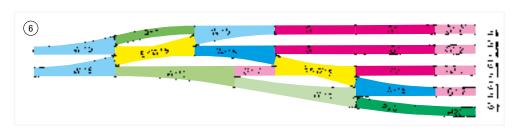


Illustration 6

Instead of the reverse curve to the 10° turnout it is of course possible to insert another 10° turnout, with the straight trough track of the turnout placed at the diagonal. For this arrangement the 10° turnouts are supplied with a 5 mm unit (D5) which assures the correct length to the next grid line. Here again the track separation and the track ending at the grid spacing are maintained.

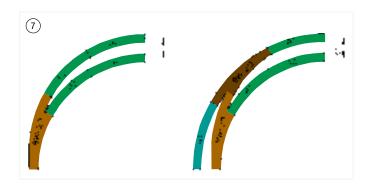


Illustration 7

With the left- or right hand curved turnouts it is possible to form the track branches and connections shown above, whereby the completion of the 90° circle sector is easily achieved with standard R2 or R3 track units.

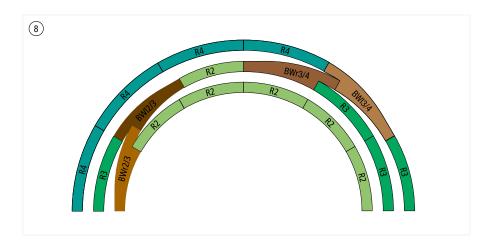


Illustration 8

With the left and right turnouts R2/3 and R3/4, the track connections as shown in the illustration, can be built via three parallel turnouts from radius 2 to radius 4 within a semicircle. To complete the 180° circle sector you can use the standard track pieces R2, R3 and R4.

Super silent ROCO LINE tracks

"Gleise" stands at ROCO LINE as an abbreviation for "geh leise!" meaning "run quietly". The train glides through the super silent ROCO LINE track layout. Only the uniform "tack-tack" of the wheelsets on the rail joints is audible and ensures acoustically the realistic railway atmosphere. The very good conductivity of the nickel silver profiles, as well as the polarizable switch frog pieces also ensure a smooth and jolt-free running of the trains on your own small model railway world.

Due to its intelligent as well as clear geometry, the ROCO LINE track layout requires only a few track elements. At the same time, the ROCO LINE track layout with its generous branch radii, different 15° turnouts, slender 10° turnouts, elegant curved turnouts and flexibility can be used even for the most unusual track figures.

Turnouts

The ROCO LINE turnouts with their slender crossing frogs guarantee a flawless and visually appealing model railway operation that is true to the original. All turnouts are supplied without turnout mechanisms. Optionally, manual (40297/40298) or electric above ground turnout mechanisms (40295/40296) can be mounted. For underground operation the switch turnout mechanism 10030 can be used.

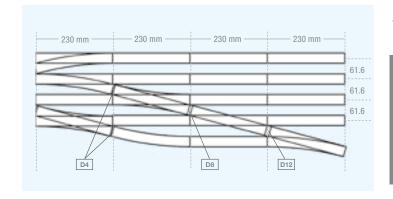
Polarization

Polarization is necessary for good running properties, in particular for small locomotives. The polarization of the turnout frogs is mostly prepared. If you use the electric turnout machines 40295/40296, a connection can be made with a few easy steps. For this purpose only three short electrical connections between the connecting sockets that are located at the front of the drive and under the side-mounted sleeper rust of the point must be made. For this no soldering is required. If an underground drive 10030 is used, one of the four switches can be used for the polarization.

Spacers

Turnouts or crossings occasionally come with attached diagonal spacers (D4, D8, D12). These are necessary in order to extend the straight line according to grid dimensions during the installation of diagonal turnouts. At crossings, they enable you to continue your layout either left or right. No additional compensation pieces thus are required for the construction of a railway station complex.

36 www.roco.cc



The spacers are also available individually as spare parts:

Without bedding:

Art. Nr.: 98000 (D2) Art. Nr.: 98001 (D4) Art. Nr.: 98002 (D5)

Art. Nr.: 98003 (D8) Art. Nr.: 98008 (D12) With bedding:

Art. Nr.: 98004 (D2) Art. Nr.: 98005 (D4) Art. Nr.: 98006 (D5) Art. Nr.: 98007 (D8)

Art. Nr.: 98009 (D12)

ROCO LINE with bedding

For standard ROCO LINE track systems with a 2.1 mm rail section, the track bed is already included. This means that anything is possible with regards to your own individual set up, regardless of what base the track runs on. You also save yourself the time-consuming and painstaking job of ballasting the tracks.

The intelligent as well as clear geometry of the ROCO LINE track system includes only a few of the track elements. On the one hand, this creates planning security and saves money, time and stress, but at the same time leaves enough leeway for variable and unusual layouts. This means there are no limits to your creativity and imagination.

The sturdy nickel silver section of the track system combined with the strong, plastic base guarantees a robust and trample-proof track. This means that many slip ups are forgiven. The clip elements integrated into the plastic grill provide extra security for track joints and enable robust and swift construction of your track system and thus also guaranteea diverse operation.

ROCO LINE without bedding

Wherever the superior appearance of the ROCO LINE track with bedding is not required, e. g. inside tunnels, the ROCO LINE track without bedding offers an economical alternative. Individualists who want to model a particular type of permanent way and will not shy away from labours of hand-ballasted roadbed will also appreciate this track.

The ROCO LINE tracks with or without bedding are geometrically identical. The qualitative characteristics, such as 2.1 mm solid nickel silver rails profile and NIROSTA spring steel fishplates are, of course, the same for tracks with or without bedding.

The exact scale, diminutive design of rail profiles, rail fastening hardware and sleepers has the obvious disadvantage that the stiffness of the separate track units is lower than that of tracks that are supported by bedding and core unit.

Consequently ROCO LINE tracks without bedding should only be used on a well constructed support base.



Straight tracks

42506

Straight track G4

Length 920 mm (4x standard length).



42510

Straight track G1

Length 230 mm (standard length).



42512

Straight track G½

Length 115 mm (half standard length).



42513

Straight track G1/4

Length 57.5 mm (quarter standard length).



42511

Straight track DG1

diagonal straight element. Length 119 mm.



Circuit track

42518

Circuit track

with potential-free switching contact. Length 115 mm (G½).



Decoupler track

42519

Electric uncoupler track

Length 115 mm (G½),

The electromagnetic drive is completely hidden inside the bedding.



Feeder tracks

42521

Feeder track (G½)

with EMC interference suppressor. Not suitable for digital operation! Length 115 mm.



42517

Digital feeder track (G½)

This feeder track is not equipped with interference suppressors for radio interference suppression and therefore only approved for use in digital systems.



		42528	42512	j
	42511			92.4 mm
42532	42512	42510	42512	}
230 mm	115 mm	—— 230 mm —	115 mm-	



Curved tracks

42522

Curved track R2 Radius 358 mm, 30°.

42523

Curved track R3
Radius 419.6 mm, 30°.

42524

Curved track R4 Radius 481.2 mm, 30°.

42525

Curved track R5 Radius 542.8 mm, 30°.

42526

Curved track R6 Radius 604.4 mm, 30°.

42527

Curved track R9 Radius 826.4 mm, 15°. R2

R3







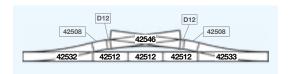
12 pieces of radii R2–R6 are needed for each full circle.

42508

Curved track R2 1/4 Radius 358 mm, 7,5°.



R2 1/4



42509

Curved track R3 ¼
Radius 419.6 mm, 7,5°.

ğijiğ

R3 1/4

42528

Curved track R10

Radius 888 mm, 15°. (Opposite curve for 15° turnouts and crossings).





42530

Curved track R20

Radius 1962 mm, 5°. 2 piece constitute complementary curve for 10° turnouts and crossings.





Turnouts 15° / Crossings

42538

Turnout left WI15

Length 230 mm, branch angle 15°, branch radius 873.5 mm. Especially inexpensive version without distancers and without preinstalled polarization.

Suitable motor: 42620 or 42624.

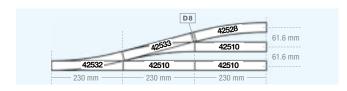




42539

Turnout right Wr 15

Built as 42538.



42532

Turnout left WI15

Built as 42538, with pre-installed polarization. An 8-mm spacer element (D8) is included for diagonal installation.

Suitable motor: 42620 or 42624.





42533

Turnout right Wr15

Built as 42532.

42546

Single slip turnout EKW15

Length 230 mm, standard design with internal switch rails. Branch radius 531 mm, crossing angle 15°.

For diagonal installation two D4 and one D12 are included.



Suitable motor: (2x) 42620 or (2x) 42624.

42594

Double slip turnout DKW15

Length 230 mm, Design "Baeseler" with external switch rails. Effective branch radius 1050 mm, crossing angle 15°. Owing to the electrical characteristics of this type of double slip turnout it is necessary to always use it polarized. For diagonal installation two D4 and one D 12 are included.



Suitable motor: (2x) 42620 or (2x) 42624.

42543

Three-way turnout DWW15, frog angle 10.8°,

First divergence to the left, second divergence to the right. Length 287.5 mm (G1+G $\frac{1}{1}$), branch radius 873.5 mm each, branch angle 15° each. To adapt the length a 57.5 mm G $\frac{1}{1}$ 4 straight track element and spacers D12 and D4 are included.



Suitable motor: (2x) 42620 or (2x) 42624.

40



Crossings

42597

Crossing K15

Length 230 mm, crossing angle 15°. By using a 10019 relay it is possible to polarize the frogs and incoporate the crossing like a normal solenoid accessory in a route locking. The railroad lines that cross each other are not electrically isolated.

Two D4 and one D12 are included for diagonal installation.



42598

Centrepiece for double crossover DGV15

Length 115 mm. Suitable in combination with 15° turnouts/diamond crossings with slips (42538, 42539).

The railroad lines that cross each other are not electrically isolated.



Turnouts 10° / Crossings

42580

Turnout left WI10 manually operated, frog angle 8.1°,

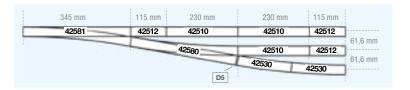
Length 345 mm, branch radius 1946 mm. A 5-mm spacer element (D5) is included for diagonal installation.

Suitable motor: 42620 or 42624.



42581

Turnout right Wr10 manually operated Built as 42580.



42591

Single slip turnout EKW10

Length 345 mm, branch radius 959 mm, crossing angle 10°. Standard design with internal switch rails.

For installation crossing from left or right two 2.5 mm spacers (D2) and one 8 mm (D8) are included.



Suitable motor: 42620 (2x) or 42624 (2x).

42549

Double slip turnout DKW10

Length 345 mm, branch radius 959 mm, crossing angle 10°. Standard design with internal switch rails. For installation crossing from left or right two 2.5 mm spacers (D2) and one 8 mm (D8) are included.



Suitable motor: 42620 (2x) or 42624 (2x).

The spacers are also available individually as spare parts:

Art. Nr.: 98004 (D2)
Art. Nr.: 98005 (D4)
Art. Nr.: 98006 (D5)
Art. Nr.: 98007 (D8)
Art. Nr.: 98009 (D12)

More illustrations and examples see page 49.

Curved turnouts

42523 42551 42562 42566

R2/R3

R2/R3: The use of the curved turnout R2/R3 for long 'to-scale' express train coaches (length over buffers more than 300 mm) is inconvenient.





42558

Curved turnout left BWI2/3, manually operated

Radius of main track and branch track 358 mm (R2), arc angle 30°.

Suitable motor: 42620 or 42624.

Especially inexpensive version without preinstalled polarization.

42556

Curved turnout left BWI2/3, manually operated

With polarization.

42559

Curved turnout right BWr2/3, manually operated

Radius of main track and branch track 358 mm (R2), arc angle 30° .

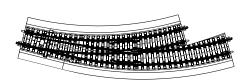
Suitable motor: 42620 or 42624.

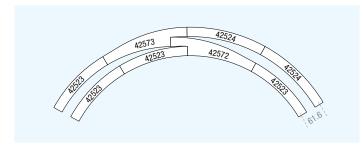
Especially inexpensive version without preinstalled polarization.

42557

Curved turnout right BWr2/3, manually operated With polarization.

R3/R4





n:

42573

Curved turnout right BWr3/4, manually operated

Radius of main track and branch track 419.6 mm (R3), arc angle 30°. Suitable motor: 42620 or 42624.

42572

Curved turnout left BWI3/4, manually operated

Radius of main track and branch track 419.6 mm (R3), arc angle 30°. Suitable motor: 42620 or 42624.

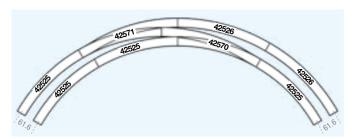
- ▶ Newly designed frog pieces ensure a smooth crossing
- ➤ Switch opening/width in the frog piece area according to NEM standards

12



R5/R6







42570

Curved turnout left BWI5/6, manually operated

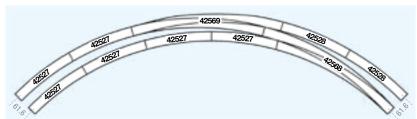
Radius of main track and branch track 542.8 mm (R5), arc angle 30°. Suitable motor: 42620 or 42624.

42571

Curved turnout right BWr5/6, manually operated

Radius of main track and branch track 542.8 mm (R5), arc angle 30°. Suitable motor: 42620 or 42624.

R9/R10







42568

Curved turnout left BWI9/10, manually operated

Radius of main track and branch track 826.4 mm (R9), arc angle 30°. Suitable motor: 42620 or 42624.

42569

Curved turnout right BWr9/10, manually operated

Radius of main track and branch track 826.4 mm (R9), arc angle 30° . Suitable motor: 42620 or 42624.

Track sets - The ABC of ROCO LINE tracks

A proven idea – complete track sets for youngsters as well as grown-up model railway enthusiasts – becomes even more attractive with the ROCO LINE track system with bedding: excellent appearance as well as rugges and reliable for setting up and operating. During the succession of track formations A-E the beginners learns the clear geometric design. The track set are also an economical means for the experienced modeler to become acquainted with the ROCO LINE track system by obtaining a universally applicable basic stock of the major track elements.

The individual sets contain the coloured tracks shown in the illustrations. The sets contain manually operated turnouts which may be fitted with electromagnetic bedding turnout drive 42620 or with the electric turnout drive 42624 (with DCC decoder).

The individual sections just have to be clipped together as shown in the illustrations and a train can start running. The ROCO LINE tracks are held together without additional fasteners and can be assembled directly on the floor.

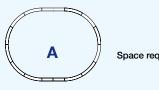
Track set A

42010

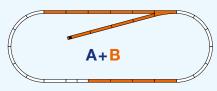
Track set B

42011

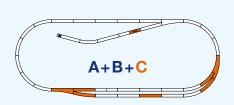
Track set C



Space requirement ca. 120 x 100 cm



Space requirement starting with set B ca. 240 x 100 cm



The track set A is the minimum layout contained in all starter sets and cannot be purchased separately. All other tracks sets are extensions of this lavout.

If the layout assembled from set A through C should have double track, set D

should be used. The layout will then have a third station track. Track changes in

both directions make the operation even more interesting.

Track set A consists of:

- 12 curved tracks R2 (42522)
- 1 straight track G1 (42510)
- 1 straight track G 1/2 (42512)
- 1 feeder track (G 1/2) (42521)

Running round and round becomes boring. Adding a single turnout and siding makes the layout more interesting. Set A + B is actually the minimum track layout to start a model railway. Therefore Set B is also part of some starter sets. Track set B consists of:

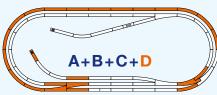
- 13 straight tracks G1 (42510)
- 1 buffer stop kit (42608)
- 1 manual turnout left WI15 (42538)
- 1 roadbed end piece (42651)

A long passing siding and a hand-operated uncoupler are part of set C and bring additional diversification into the operation.

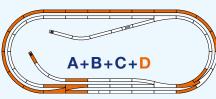
Track set C consists of:

- 2 straight tracks G1 (42510)
- 1 manual uncoupler track G1/2 1 curved track R10 (42528)
- 2 curved tracks R2 (42522)
- 1 manual curved turnout right BWr2/3 (42559) 1 manual turnout right Wr15 (42539)

1 straight track G1/2 (42512)



42012 Track set D

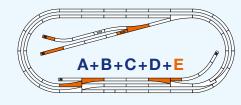


Track set D consists of:

- 9 straight tracks G1 (42510)
- 1 straight track G1/2 (42512)
- 1 curved track R2 (42522)
- 10 curved tracks R3 (42523)
- 2 manual tournouts left WI15 (42538)
- 1 manual curved tounout left BWI2/3 (42558)
- 1 buffer stop kit (42608)
- 1 track end piece (42651)
- 1 substitute embankment slopes (42650)

42013

Track set E



Track set E expands the operating possibilities in a realistic manner by additional track connections and more sidings. Track set E consists of:

- 2 straight tracks G1/2 (42512)
- 1 straight track G1 (42510)
- 2 manual tournouts left WI15 (42538)
- 2 buffer stop kits (42608)

1 manual uncoupler track G1/2

- 2 manual tournouts right Wr15 (42539)
- 2 track end pieces (42651)

Flexible tracks

Even though the ROCO LINE track system offers a large choice of straight and curved track sections, prototype-oriented track planning and assembly require individually fitted track curvatures, whether for "exhibition" track sections, stations built into wide curves with 5 meter or larger radius, or combination of turnouts with tricky connections. The solution in these situations is "flex track".



No track system for model railway application can be complete without flexible tracks. They do not conform to any specific geometry other than the length of the flexible track being exactly 4x the standard length; they may be bent as tightly as radius R2 (358 mm). For tram lines even up to 220 mm.

42400

Flex track F4 with wooden sleepers

Length 920 mm.



42401

Flex track F4 with concrete sleepers

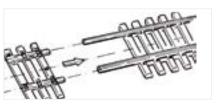
Length 920 mm.



Use of flex track:

Flex track may be bent to any curve as tightly as radius R2 = 358 mm. Since the rails will move relative to each other while bending, it is necessary to cut one rail to match.

The ROCO hobby saw 10900 (see page 31) is recommended for this purpose. When using flex track, track fixing pins, fishplates and sleeper end pieces must be used.



42600



42601



Sleeper end piece. To match flex track with wooden sleepers (42400). 12 units/pack.

Sleeper end piece. To match flex track with concrete sleepers. 12 units/pack.

Each flex track requires a track and end piece on only **one** side.

Track bed

42660

Track bed

suitable for 1 flex track with wooden sleepers (42400).

42661

Track bed

suitable for 1 flex track with concrete sleepers (42401).



Straight tracks

42406

Straight track G4

Length 920 mm (4x standard length).



42410

Straight track G1

Length 230 mm (standard length).



42412

Straight track G1/2

Length 115 mm (half standard length).



42413

Straight track G1/4

Length 57.5 mm (quarter standard length).



42411

Straight track DG1

Length 119 mm. Diagonal straight element.



Uncoupler track

42419

Electric uncoupler track (G½)

Length 115 mm.



Feeder track

42421

Feeder track (G½)

with EMC interference suppression unit. Not suitable for digital operation! Length 115 mm.





	-	42428	42412
	42411		92.4 mm
42440	42412	42410	42412
230 mm	115 mm	—— 230 mm —	115 mm

DG1: The diagonal straight track makes the extension of the distance between the parallel tracks possible but the rail siding still remains on the grid line.



Curved tracks

42422

Curved track R2 Radius 358 mm, 30°

42423

Curved track R3 Radius 419.6 mm, 30°

42424

Curved track R4 Radius 481.2 mm, 30°

42425

Curved track R5 Radius 542.8 mm, 30°

42426

Curved track R6 Radius 604.4 mm, 30°

42427

Curved track R9 Radius 826.4 mm, 15°

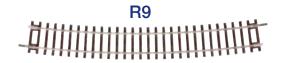












12 pieces of radii R2-R6 are needed for each full circle.

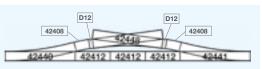
42408

Curved track R2 1/4

Radius 358 mm, 7.5°



R2 1/4



42409

Curved track R3 1/4

Radius 419.6 mm, 7.5°

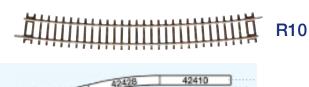


R3 1/4

42428

Curved track R10

Radius 888 mm, 15° - Opposite curve for 15° turnouts and crossings.





42430

Curved track R20

Radius 1962 mm, 5°.

Two piece constitute complementary curve for 10° turnouts and crossings.



R20



Turnouts 15° / Crossings

42440

Turnout left WI15

Length 230 mm (= standard length G1), branch angle 15°, branch radius 873.5 mm. An 8-mm spacer element (D8) is included for diagonal installation.

Suitable motor:

40295, 40297, 10030

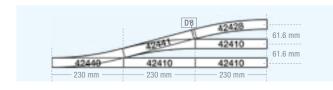






Turnout right Wr15

Built as 42440



42448

Single slip turnout EKW15, Standard design with internal switch rails. Length 230 mm, branch angle 15°, branch radius 531 mm. For diagonal installation two D4 and one D12 are included.

Suitable motor:

2x 40295/40297 or 2x 10030



42497



Crossing K15, Length 230 mm, branch angle 15°. By using a 10019 relay it is possible to polarize the frogs and incoporate the crossing like a normal solenoid accessory in a route locking. The railroad lines that cross each other are not electrically isolated. Two D4 and one D12 are included for diagonal installation.

15° Crossing

42451

Double slip turnout DKW15, Design "Baeseler" with closure blades located at the outside. Length 230 mm. Branch angle 15°, effective branch radius 1050 mm.

For diagonal installation two D4 and one D 12 are included.

Suitable motor:

2x 40295/40296, 2x 40297/40298 or 2x 10030



Owing to the geometrical characteristics of this type of double slip turnout it is necessary to always use it polarized.

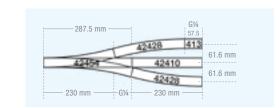
42454

Three-way turnout DWW15, Length 287.5 mm (= $G1 + G\frac{1}{4}$), branch angle 15° each, branch radius 873.5 mm. To adapt the length a 57.5 mm $G\frac{1}{4}$ straight track element and spacers D12 and D4 are included.

Suitable motor:

2x 40296 or 2x 10030







Turnouts 10° / Crossings

42488

Turnout left WI10

Length 345 mm (G1 + G½), branch angle 10°, branch radius 1946 mm. A 5-mm spacer element (D5) is included for diagonal installation.

Suitable motor:

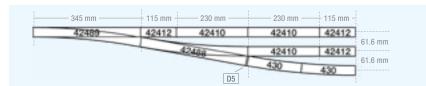
40295, 40297, 10030





Turnout right Wr10

Suitable motor: 40296, 40298, 10030



42493

Single slip turnout EKW10. Length 345 mm, crossing angle 10°, branch radius 959 mm.

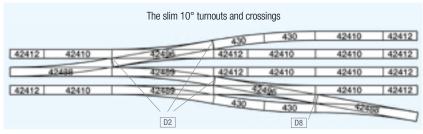
For installation crossing from left or right two 2.5 mm spacers (D2) are included. An 8 mm spacer element (D8) is included.

(D2) are included. An 8 mm spacer element (D8) is included for combining with diagonally installed 10° turnouts.

Suitable motor:

2x 40295/40297 or 2x 10030





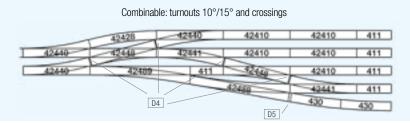
42496

Double slip turnout DKW10, standard design with internal switch rails, Length 345 mm. Crossing angle 10°, branch radius 959 mm. For installation crossing from left or right two 2.5 mm spacers (D2) are included. An 8 mm spacer element (D8) is included for combining with diagonally installed 10° turnouts.

Suitable motor:

2x 40295, 2x 40297 or 2x 10030





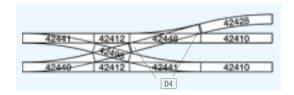
42498

 $\label{eq:crossing K30} \textbf{Crossing K30}, \text{Length of tracks 119 mm (= DG1)}. \text{ Crossing angle } 30^{\circ}.$

The railroad lines that cross each other are not electrically isolated. Among other things they are suitable for forming double track connections with the 15° turnouts or double slip turnouts.



30° Crossing

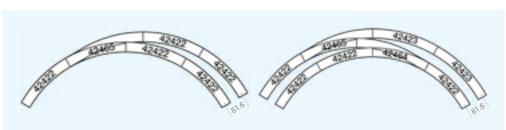


Curved turnouts

R2/R3: The use of the curved turnout R2/R3 for long ,to-scale' express train coaches (length over buffers more than 300 mm) is inconvenient.

R2/R3







42464

Curved turnout left BWI2/3

Radius of main track and branch track 358 mm (R2), arc angle 30°. Suitable motor: 40295/40296, 40297/40298 or 10030.

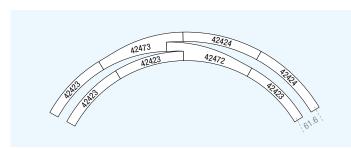
42465

Curved turnout right BWr2/3

Radius of main track and branch track 358 mm (R2), arc angle 30°. Suitable motor: 40296/40295, 40297/40298 or 10030.

R3/R4





neu konstruktion

42472

Curved turnout left BWI3/4

Radius of main track and branch track 419.6 mm (R3), arc angle 30°. Suitable motor: 40295/40296, 40297/40298 or 10030.

- ▶ Newly designed frog pieces ensure a smooth crossing
- ➤ Switch opening/width in the frog piece area according to NEM standards

42473

Curved turnout right BWr3/4

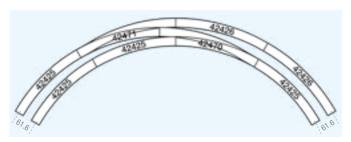
Radius of main track and branch track 419.6 mm (R3), arc angle 30° . Suitable motor: 40295/40296, 40297/40298 or 10030.

50 www.roco.cc



R5/R6







42470

Curved turnout left BWI5/6

Radius of main track and branch track 542.8 mm (R5), arc angle 30°. Suitable motor: 40295/40296, 40297/40298 or 10030.

42471

Curved turnout right BWr5/6

Radius of main track and branch track 542.8 mm (R5), arc angle 30°. Suitable motor: 40295/40296, 40297/40298 or 10030.

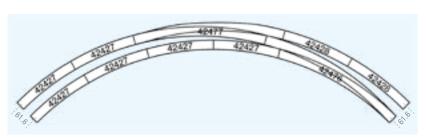
R9/R10

42476

Curved turnout left BWI9/10

Radius of main track and branch track 826.4 mm (R9), arc angle 30° .

Suitable motor: 40295/40296, 40297/40298 or 10030.



42477

Curved turnout right BWr9/10

Radius of main track and branch track 826.4 mm (R9), arc angle 30° .

Suitable motor: 40295/40296, 40297/40298 or 10030.





ROCO LINE turntable with electric below-baseboard propulsion mechanism and control unit

42615

Suitable for all NEM (European model railway standard) compatible two-rail DC and three-rail AC model railways. Bridge length: 253 mm; this is equivalent to 22 m on an original railway. The minimum angle between two track connections is 9 degrees. Spacers for 1°, 3°, 6° and 9° divisions are supplied with the turntable. This means that any division from 9° upwards in 1° stages between the track connections is feasible. The maximum number of track connections that can be made is 40.

Four track connections for two-rail DC operation are supplied with the turntable. Further track connections are available as accessories (42616). If the turntable is to be used with a three-rail AC model railway, your specialist dealer will exchange the enclosed original DC pack to a pack of three-rail AC track connections (42617).

The turntable bridge drive is powered by 14 V AC. Depending on the system used, traction power supply will either be DC or AC. The turntable is equipped with a control unit for preselecting the direction of rotation and starting the turntable rotation. When you let go of the turntable switch, the turntable halts exactly at the next track connection.

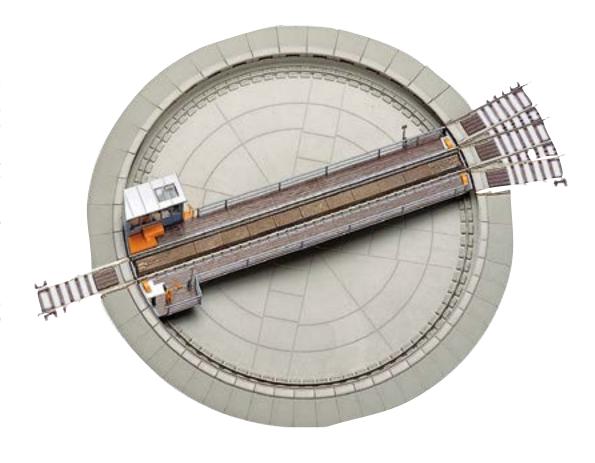
Just like on a real-life turntable, it is also possible to choose between two rotation directions. Traction power is fed in via the turntable. The traction voltage of the track connections can be assigned via the control unit. This prevents a locomotive that is currently parked from inadvertently moving off if two track connections are located directly opposite to one another.*

One 1-meter 5-pole cable (connection between transformer and control unit) and one 2-meter 8-pole cable (connection between control unit with the turntable) are enclosed.

Installation dimensions:

Required installation opening: 280 mm. Installation depth measured from table top edge: 50 mm. External diameter of the turntable without track connections: 307 mm. Turntable bridge length: 253 mm.

Suitable for all locomotives up to a total wheel base of 250 mm.



42616

DC track connections

Content: 4 units 2L = track connections, for turntable 42615.



42617

AC track connections

Content: 3 units 3L ~ track connections, for turntable 42615.



52 www.roco.cc

^{*} The terminal loop module is required when using the turntable in DCC mode (digital)



Universal bedding turnout drive

42620

Universal bedding turnout drive Low switching current consumption, limit switch.



Note please: Like all ROCO turnout drives, this drive of course features a limit turnout. However, as the adjuster of the drive is held in its end position by the tongue adjustment mechanism of the turnout itself (and only then will the limit switch function reliably), please do not try out the turnout drive unless it is clip-connected to a turnout.

42624

Digital turnout drive

Suitable for all ROCO LINE bedding turnouts.



The digital turnout drive is simply plugged into the recess on the underside of the turnouts. The electrical connection is made with two cables directly to the rail profiles. The digital turnout drive already includes a DCC decoder (this new version is Rail-Com* compatible) and can be programmed after installation.

Track ballast

42652



Matches roadbed track in terms of colour and grain. Genuine stone ballast.

Substitute embankment slopes

42650



Length 360 mm each. 6 pc./pack.

Ballast board

42653



Ballast board to fill in the spaces between the tracks in the train station area. Colour and grain size match the bedding track. Size: 345x93 mm. 3 pc./pack.

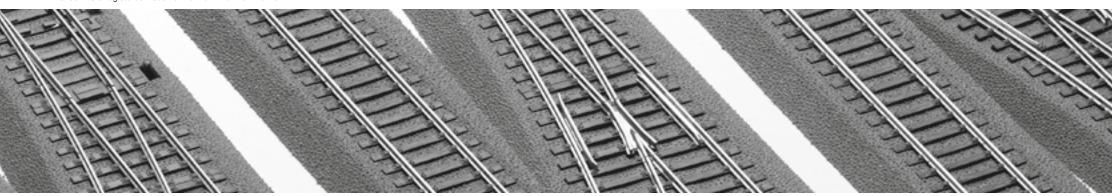
Embankment end piece

42651



These end pieces provide a neat closure of the bedding at buffer stops, display cases etc. 6 pc./pack.

^{*} RailCom is a registered trademark of Lenz Elektronik GmbH





40295



40296



40297



40298



Electric turnout mechanism left

for ROCO LINE turnouts without bedding.

Electric turnout mechanism right for ROCO LINE turnouts without bedding.

Manual turnout mechanism left for ROCO LINE turnouts without bedding.

Manual turnout mechanism right

for ROCO LINE turnouts without bedding.

10030



40293



40292



Below baseboard turnout mechanism can be used for all ROCO rail systems. Low energy consumption, shut off mechanism, 4 single-pole double-throw switches. Can also be installed horizontally.

Dimensions approx. 60 x 27 x 45 mm

Below baseboard set of lanterns to match general purpose below baseboard propulsion mechanism 10030 (optionally DB or SBB) and coupled 90° rotation. Use only for turnouts without bedding.

General purpose beneath board uncoupler

Suitable for later mounting for all two-rail DC track systems. Size of the propulsion unit: approx. 80 x 40 x 15 mm

42605



42256



42613

10000



Sleeper ROCO LINE. With built-in reed switch, to be actuated by means of a 42256 magnet. This potential-free switching contact can be installed at any point of a track layout.

Magnets to trigger the 42605 and 61193 sleeper. Very small construction, therefore can easily be mounted beneath any vehicle.
6 pc./pack.

2-pole connecting cable. With mounted rail clips for ROCO LINE tracks. This cable has no interference suppressor units (EMC) and may only be used for halting sections in front of signals etc. Please use 42421/42521 as the feeder track.

42610

Rail ioiners

24 pc./pack.



42611



42612



10001

-

Plastic insulating rail joiners

24 pc./pack.



Adapter rail clips

Adapter rail clips for rail systems with a 2.5-mm rail profile on the ROCO LINE track. 24 pc./pack.

Track fixing pins, short

For fastening tracks without roadbed, approx. 400 pc./pack.

Track fixing pins, long

For fastening GEOLINE and ROCO LINE tracks with roadbed, approx. 500 pc./pack.



98019

RP-25 frog inserts for ROCO LINE turnouts of the 10° system and ROCO LINE curved turnouts R5/R6.



98020

RP-25 frog inserts for ROCO LINE turnouts with branch angle of 15°.

RP-25: Uses for ROCO LINE tracks: While most NEM wheels have a flange height of about 1 mm, RP-25 wheels have a flange height of only 0.64 mm. If you run models with RP-25 wheels over the core pieces of standard turnouts, the jolts make the height difference noticeable. Inserts made of etched brass sheets allow rolling stock with RP-25 wheels to run smoothly.

40020

Main aspect signal



Triplicated aspect signal of the SNCF

40021

The signal is factory-equipped with the third, orange LED in conformity with the SNCF signal manual. Owing to the major difference in the meaning of the signal illustrations, please pay heed to the information in the operating instructions.



42267



Optionally with wood plank or bumpers. For all gauge H0 track systems. Content: 1 piece



Buffer stop (construction kit)

42608

Prototypical stable construction for all gauge H0 track systems. Including 2 brake shoes to clip onto the rail. Content: 1 piece



42606

Rerailer

Rerailer makes it easier to place the vehicles on tracks. For all gauge H0 track systems.



42609

Wheel retracker set

Places derailed wheels back on track.

For GEOLINE and ROCO LINE tracks.

(Construction kit without track.)



10002

ROCO rubber

Track cleaning rubber; this special rubber is excellent for cleaning the rails of dirt and oil residue; suitable for all gauges.



10915

ROCO rubber, large package

Track cleaning rubbers 10002 in large packages containing 10 rubbers each.

40019

ROCO clean replacement wiper

ROCO clean replacement wiper for the H0 "ROCO clean" track cleaning wagon 46400.





56



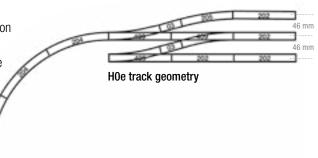


H0e tracks

Advantages:

Simple and robust constructionDoesn't require much space

 Visual appearance true to the original



After being scaled down, the ROCO H0e narrow-gauge tracks are in the same gauge as the N-tracks (9 mm). Arrangement, design and dimensions of the sleepers correspond exactly to the ones of the narrow gauge railway 750-/760-mm prototype. The light railway tracks also have a gauge of 9 mm. True to the original, the distances between the sleepers are even bigger here. The design of the individual sleepers corresponds to the roughly worked wooden planks that are often used with light railways.

For the operation of your light or narrow-gauge railway we would like to recommend our ROCO switching accessories.

Narrow-gauge tracks

32200

Flexible track

Length 730 mm. Gauge: 9 mm.



32210

Sleeper end piece

matches H0e track 32200.



32409

Turnout left. without turnout mechanism.

Length of the straight track 134.4 mm (standard length),

branch angle 15°. Gauge: 9 mm. Suitable motor: 32418 or 10030.

Turnout frog can be polarised if used with below baseboard mechanism.



32411

Turnout right, without turnout mechanism.

Length of the straight track 134.4 mm (standard length),

branch angle 15°. Gauge: 9 mm. Suitable motor: 32419 or 10030.

Turnout frog can be polarised if used with below baseboard mechanism.



Accessories





32418

H0e/TT left turnout mechanism

H0e/TT right turnout mechanism

32419

Turnout mechanisms, suitable for all H0e turnouts double spool motor with shut-off mechanism. Can be used as replacement as well as for later upgrading of manual/under-baseboard turnouts.



32202

Straight track

Length 134.4 mm (standard length). Gauge: 9 mm.



32203

Straight track

Length 47.9 mm. Gauge: 9 mm.



32204

Curved track

Radius 261.8 mm (standard radius), arc angle 30°. Gauge: 9 mm.



32205

Curved track

Radius 493 mm, arc angle 13.1°. Gauge: 9 mm. Opposite curve for narrow gauge turnouts.



Light railway tracks

32201

Flexible light railway track

Length 730 mm. Gauge: 9 mm.



32211

Sleeper end piece

matches light railway flex track 32201.



32401

Light railway turnout, left, with electric motor. Length of the straight track 104.2 mm. Branch angle 24°. Radius of the branch track 194.6 mm. Gauge: 9 mm.



32403

Light railway turnout, right, with electric motor. Length of the straight track 104.2 mm. Branch angle 24°. Radius of the branch track 194.6 mm. Gauge: 9 mm.



Accessories



32417

H0e track connecting cable without radio suppression.



40390

H0e stirrup coupling 2 pc./pack.



32413

H0e metal rail joiners (fishplate) approx. 50 pc./pack.



32414

H0e isolating rail joiners (fishplate) approx. 24 pc./pack.

Electric turntable for track gauge TT.

With turntable switch.

35900

Comes with 6 ascent-descent tracks.

The maximum possible 24 ascent and descent tracks stand at an angle of 15 degrees to each other.

Installation dimensions:

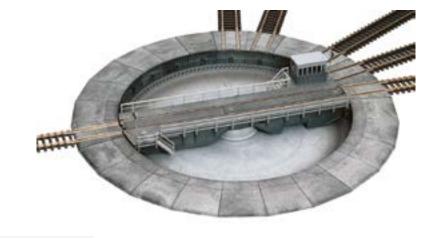
Required installation opening: 203 mm.

Installation depth: 25 mm.

External diameter of the turntable without track connections: 257 mm.

Revolving platform length: 183 mm (locomotives with a wheel base length up to a 170 mm)





35901

Complementary set for the TT turntable

The set consists of 3 ascent/descent tracks. A maximum of 24 tracks can be connected to the turntable.



30390

TT close-coupling

for NEM 358 standard socket. 2 pc./pack.



30391

TT close-coupling

for NEM 358 standard socket.

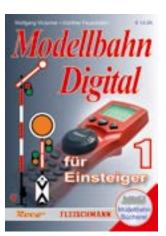






Digital for beginners, Part 1 - German

81395



What is a digital model railway and how can it be used best? This manual, edited by experts, answers the most important questions on the topic "How to digitize your own model railway layout". It provides both beginners and advanced users with valuable tips and tricks.

Digital for beginners, Part 2 - German

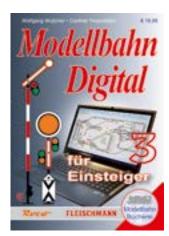
81396



If you are driving and controlling digitally with the Z21 multiMAUS, you already know the advances of the ROCO/FLEISCHMANN digital system. But how to enlarge your Starter Set, activate the wireless Z21 WLANMAUS, use tablet or smartphone for control or how to update your control units etc.

Digital for beginners, Part 3 - German

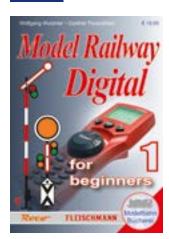
81393



In the digital age, the computer can reduce all manual work. If you still are operating your trains manually and set your points by mouse click then this book is just the right thing for you. We will help you to set up the interlocking systems and to create the connection with your layout.

Digital for beginners, Part 1 - English

81391



This manual in English language, edited by experts, answers the most important questions on the topic "How to digitize your own model railway layout". Layout construction, programming and other functions are shown and explained here step by step.

ROCO LINE track plans H0 - German

81394



This manual, edited by experts, depicts a large number of track plans that perfectly match the ROCO LINE track system. It provides the user with clear and comprehensive information about how to easily build challenging track aspects and railway layouts using the matching part lists.

GEOLINE track plans H0 - German

81397

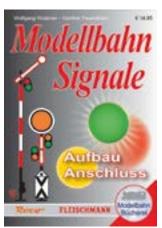


This manual offers various options and gives tips how to easily build and plan a model railway. This starts with finding a suitable motive, practical ideas for the step by step structure and leads to the creation of a matching track plan.



Signals - Setup and connection - German

81392



This brochure explains the main electrically-powered model signals, shows you the prototypical installation location and gives specific tips on how to set them up for analog or digital switching, from block diagrams to the switching signals and rail crossings.

Building and maintenance for beginners - German

81388

Q3/2020

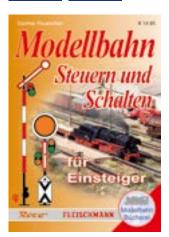


There is neither a patent recipe, nor a quick solution when you want to build your model railway layout at the weekend. We are happy to support you with many practical examples and tricks and hints, so you can easily build your individual layout. We are proud to help you to understand the technical conditions and how to cope with the maintenance of your vehicles and putting them into operation.

Operate and switch for beginners - German

81389

Q1/2020



This brochure will help you to operate and connect your model railway layout. Locomotives, trains, switches, signals, gates and all sorts of accessories – everything is kept moving, everything is put into operation by electricity.

Step by step and almost playfully you will learn how to face the electrical challenges of your layout and to solve all your problems.

Track plans for ROCO LINE - German

81390



ROCO's pioneering ROCO LINE track system has lost none of its topicality and importance since the time it was first developed — almost 30 years ago. For the EJ-editors, this is an opportunity to "dig out" their old notes and knowledge about this timeless and innovative track system and to add something new, in short: to explain what can be done with this track system and how the track geometry works. A comprehensive selection of interesting track planning programmes and, of course, a wide variety of track plans and track layout ideas can be found in the manual. The range spans from simple oval/compact systems to medium-sized prototype implementations and ROCO LINE adaptations of track layouts from the professional workshop of Josef Brandl.



Roco Where do I find what?

Inhalt		10723	21	10905	31	40025	32	40199	29	40501	31
6516	26	10726	21	10906	31	40026	32	40243	26	42010	44
6560	28	10753	11	10908	31	40066	29	40244	26	42011	44
6561	28	10754	11	10915	56	40067	29	40264	29	42012	44
6562	28	10756	11	15011	32	40068	29	40266	29	42013	44
6563	28	10757	11	15012	32	40069	29	40267	29	42256	55
10000	55	10758	11	15013	32	40070	29	40270	25	42267	56
10001	55	10764	11	30390	60	40071	29	40271	25	42400	45
10002	56	10765	11	30391	60	40072	29	40281	25	42401	45
10003	31	10775	10	32200	58	40073	29	40286	25	42406	46
10019	23	10788	21	32201	59	40074	29	40287	25	42408	47
10030	55	10789	10	32202	59	40075	29	40292	55	42409	47
10520	22	10797	9	32203	59	40076	29	40293	55	42410	46
10521	22	10804	9	32204	59	40077	29	40295	55	42411	46
10522	23	10805	9	32205	59	40080	32	40296	55	42412	46
10524	22	10806	9	32210	58	40081	32	40297	55	42413	46
10525	22	10807	9	32211	59	40082	32	40298	55	42419	46
10526	23	10808	9	32401	59	40160	31	40314	25	42421	46
10602	21	10810	7	32403	59	40179	28	40317	25	42422	47
10603	21	10813	7	32409	58	40181	28	40321	24	42423	47
10605	21	10814	8	32411	58	40182	28	40322	24	42424	47
10608	21	10818	8	32413	59	40183	28	40326	26	42425	47
10616	21	10819	9	32414	59	40184	28	40343	25	42426	47
10619	23	10820	7	32417	59	40186	28	40344	25	42427	47
10623	21	10822	7	32418	58	40187	28	40345	26	42428	47
10625	21	10851	10	32419	58	40188	28	40360	24	42430	47
10628	21	10857	10	35900	60	40189	28	40361	24	42440	48
10630	21	10889	18	35901	60	40190	28	40375	26	42441	48
10631	21	10890	18	40000	31	40191	29	40376	26	42448	48
10632	21	10891	18	40001	31	40192	29	40390	26/59	42451	48
10633	21	10892	18	40004	31	40193	29	40395	25	42454	48
10634	21	10893	19	40005	31	40194	29	40396	25	42464	50
10635	21	10894	19	40014	31	40195	29	40397	25	42465	50
10636	21	10895	19	40019	56	40196	29	40411	26	42470	51
10637	21	10896	19	40020	56	40197	29	40420	24	42471	51
10638	21	10900	31	40021	56	40198	29	40500	31	42472	50

64 www.roco.cc

42473	50	42557	42
42476	51	42558	42
42477	51	42559	42
42488	49	42568	43
42489	49	42569	43
42493	49	42570	43
42496	49	42571	43
42497	48	42572	42
42498	49	42573	42
42506	38	42580	41
42508	39	42581	41
42509	39	42591	41
42510	38	42594	40
42511	38	42597	41
42512	38	42598	41
42513	38	42600	45
42517	38	42601	45
42518	38	42605	55
42519	38	42606	56
42521	38	42608	56
42522	39	42609	56
42523	39	42610	55
42524	39	42611	55
42525	39	42612	55
42526	39	42613	55
42527	39	42615	52
42528	39	42616	52
42530	39	42617	52
42532	40	42620	54
42533	40	42624	54
42538	40	42650	54
42539	40	42651	54
42543	40	42652	54
42546	40	42653	54
42549	41	42660	45
42556	42	42661	45

46807	31
81388	63
81389	63
81390	63
81391	62
81392	63
81393	62
81394	62
81395	62
81396	62
81397	62
82111	31
85600	29
85603	29
93517	24
93518	24
93728	24
93733	24
96308	10
98019	56
98020	56
101365	24
101366	24
109088	24
136100	11
386516	26
670601	21





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66 www.roco.cc



