



viessmann

Model train accessories



2005/2006

**Technik und Preis
- einfach genial!**

Welcome to the **viessmann** world of model trains!

Dear Readers,

Being one step ahead through innovation – that is the vision **viessmann** has been following for the last 18 years. From a small firm quite a substantial company developed and established its place in the model train industry. 9 patents are the proof for the devotion to design and construction and thus to detail. And you, dear model train enthusiasts, contribute enormously to our success. Whoever knows **viessmann**, also knows, that we will not rest on our laurels. We will focus on the development of new products and upgrading older models in the years ahead.

Model trains are more topical than ever: no matter if you build a large layout or just a small track oval from time to time, we have the appropriate accessories. Light up your miniature world with our luminaires and you will see that young and old are fascinated. Increasing numbers of visitors to fairs and model train exhibitions show the fascination shared by many enthusiasts. And once the model train bug has bitten you there is no turning back

Take your time and enter our world of model railways. Welcome to our new catalogue!

Your **viessmann** Team



"Nothing is as old as yesterday's newspaper" – **viessmann** on the Internet

in our fast moving world printed media only have a certain "life span". The latest information cannot really be delivered e.g. in a catalogue. For this we use the worldwide web. For some the internet is global "playground" for others a source of the latest information.

viessmann has used the internet as a platform for model train enthusiasts from the early days. Thus you not only find the complete product range on our web pages but also hints to wiring and installation, animation, a list for dealers, date for exhibitions and much more.

On our constantly maintained and updated web pages you also find a direct order service for the catalogue, advertising give-aways and many other things.

We have started a new forum, where you can direct your questions to us or to other model train enthusiasts. The forum is headed by Mr. Brinken, whom many of you may know from fairs and seminars.

Welcome to our home page: www.viessmann-modell.de

The **Viessmann** Story

Founder Wieland Viessmann had the right vision. When searching for a market niche where he could start his own business, he chose model train accessories – his own experience as a kid contributed to his decision. But before he founded a company he became a toolmaker. After a couple of years of professional experience and another two years at a Technical College he passed his exam as mechanical engineer. From 1982 to 1987 he worked as designer for production equipment and was in charge of the warehouse and the logistics at Viessmann heating systems. This career was a good foundation for his next steps – and still today he leaves his office from time to time and is slipping back into the role as constructional engineer.

- 1987** That is when his success story began. A small shed in Reddighausen, a small suburb of Hatzfeld, and a few machines.
- 1988** Production started with 7 employees. The first H0-models were manufactured – the classic park lantern, curved post top lanterns and curved pole lanterns were introduced.
- 1989** the production capacity was expanded due to high demand.
- 1991** the first TT products came onto the market. It was a brave but successful attempt to enter this market since nobody had experience with TT gauge mainly used in the former German federal republic (DDR).
- 1992** **Viessmann** employed 27 people.
- 1993** a modern production facility was opened in Hungary – long before the collapse of the Iron Curtain.
- 2000** a new warehouse with over 300 square metres was opened in Hatzfeld while another production hall with over 1,500 square metres was opened in Hungary.
- 2004** the number of employees has increased to 220 people working at Hatzfeld and in Hungary.
- 2005** will see new facilities for seminars in Hatzfeld-Reddighausen. Users and dealers will then have the opportunity to learn everything about **Viessmann** products e.g. how to install tracks with catenary or how to operate digital systems.

You see, the **Viessmann** story goes on and on and you are part of it!



The **Viessmann** works in Hungary



Good quality through modern production methods – and an excellent customer service

Modern production methods, good working conditions and highly motivated employees assure the renowned quality of our products. And should you not be satisfied with one of our products – we are here to help you. You can either

- mail the product directly to us. Our reliable and well trained service team will solve your problem fast and without hassles for you:

Viessmann Modellspielwaren GmbH, Kundendienst, Am Bahnhof 1, D-35116 Hatzfeld

- take it to your dealer. He assures that we will get your product quickly in order to repair or exchange it. Speed and good will is part of our understanding of quality when dealing with complaints.

Our sales team – more than just a sales force

Our sales team is available for any of your questions.



Evi Gramsch



Birgit Merle



Andrea Schnatz



Claudia Schneider



Heidi Schlabach



Marcus Bettelhäuser



Astrid Feisel



Wolfgang Brinken

Our hotline – the best service for you

We not only want to serve you when you have a complaint. We have also established a hotline where our trained specialists deal with your queries, suggestions, hints, and provide the repair- and spare part service for you.

Our hotline is open from:

- Monday: 6 pm – 8 pm
- Thursday: 10 am – 12 noon
- Hotline number: +49 (0) 6452 8634

Email

You can also reach us by email at: info@viessmann-modell.de

Our Products

H0 Gauge

- Semaphore signals
- Daylight signals
- Catenary
- Luminaires
- Railway crossings / Cars / H0-accessories

TT Gauge

- Semaphore signals
- Daylight signals
- Luminaires
- Catenary

N Gauge

- Semaphore signals
- Daylight signals
- Luminaires
- Cars
- Railway crossings
- Catenary

Z Gauge

- Semaphore signals
- Daylight signals
- Luminaires

G Gauge

- Luminaires

Electronic equipment

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Accessories

- Installation materials 132
- Tools 134
- Spare parts 136
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- Power packs 140

- viessmann natural trees** 142

You find the complete list of contents sorted by article numbers from page 146 onwards.

A list of our European distributors is on page 147

To make our catalogue an easy read we used only two symbols:

 discontinued items

 a collection of items

Semaphore signals

Who doesn't know them, the red and white or amber semaphore arms noisily rattling into position? Those "methusalems" of signalling technique are still used today – even on lines with ICE traffic.

With these functional and finely detailed signals **viessmann** has established a standard not met by others.

The highlights:

- arms move at prototypical speed;
- brass masts produced in photo etching technique, painted as the original;
- under-baseboard compact drive fixed to signal;
- integral train control

Of course, we have not limited ourselves to a few basic types: besides the DR and DB types you will find Bavarian, Austrian and Swiss signals.

Next to all these finer points we have not forgotten about the price. You will be surprised about the value you get for your money.

viessmann semaphore signals – the originals!



viessmann

Formsignale





prototypical slow movement of the signal arms

finely detailed metal masts

under-baseboard compact drive

integrated train control

suitable for all conventional and digital systems

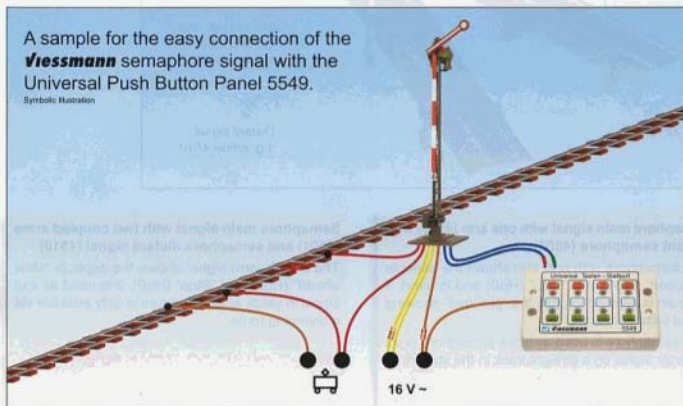
easy mounting, easy connection

no special transfo or relays for normal connection necessary

"End-off" switch controlled by DC current

A sample for the easy connection of the **viessmann** semaphore signal with the Universal Push Button Panel 5549.

Symbolic illustration



DB Semaphore main signals

- signal aspects and installation

One-arm semaphore main signals



"stop"
Hp0



"proceed"
Hp1



"stop"
Hp0

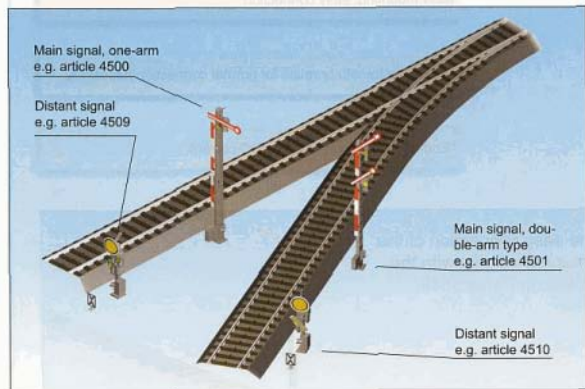


"proceed"
Hp1



"proceed slowly"
Hp2

Double-arm semaphore main signals, with coupled arms (Hp0 and Hp2) and separate arms (Hp0, Hp1 and Hp2)



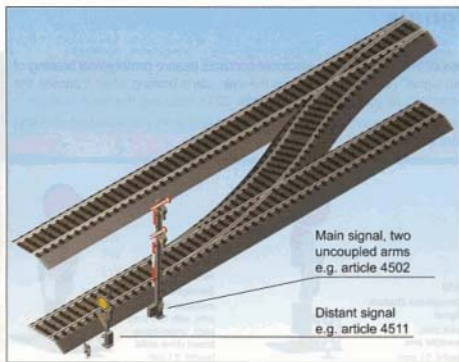
Semaphore main signal with one arm (4500) with distant semaphore (4509)

The semaphore with one arm shows the aspects "proceed" (Hp1) and "stop" (Hp0) and is used, if the train is allowed to pass the "proceed"-showing signal without braking.

This semaphore is used as block semaphore or as a starter signal on a straight track in the station.

Semaphore main signal with two coupled arms (4501) and semaphore distant signal (4510)

The double-arm signal shows the aspects "slow ahead" (Hp2) and "Stop" (Hp0). It is used as exit signal in yards when departure is only possible via a diverging route.



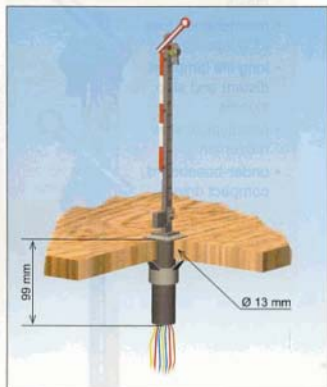
Main signal, two uncoupled arms e.g. article 4502

Distant signal e.g. article 4511

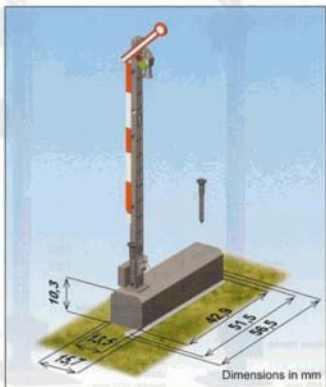
Semaphore main signal with two uncoupled arms (4502) with distant signal (4511)

This semaphore is able to show the aspects "proceed" (Hp1), "proceed slowly" (Hp2) and "stop" (Hp0). Mostly it is used as an entry semaphore in stations before a junction, where it is possible to proceed either straight ahead or onto a branch line.

Viesmann semaphore signals – easy installation



99 mm
Ø 13 mm



Dimensions in mm

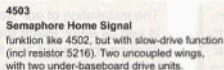
For mounting our semaphore signals with an under-baseboard compact drive you just have to drill a 13 mm diameter hole and insert the signal. Then fasten the signal underneath with the clamp provided. Thus installing these signals even on an existing layout is quite simple.

The installation of our "hobby" and digital signals is just as easy. Place the signal on the desired spot on the layout and fix it with the enclosed screws. No drilling and working under the layout is necessary!

Distant- and main signals

Our distant signals are like their prototypes of the real railways: electrical contacts assure prototypical braking of the train whenever the aspect "stop at main signal" (Vr0) is shown. Thus the train starts braking when it passes the distant signal. For realistic slow movement (Vr2) all you need is the resistor 5216 reducing the track voltage.

Of course, all semaphore signals have the appropriate symbols printed on disks and arms (no adhesive stickers) and prototypical slow moving arms, covers and disks.



All semaphore signals feature

- finely detailed metal masts
- maintenance free LED lighting
- long life lamps at distant and stop signals
- prototypical slow movement
- under-baseboard compact drive



Note:

Lattice mast signals can be used anywhere, also between tracks with a spacing of at least 58 mm (H0). If the spacing is less (down to 52 mm), you have to install a signal with a slim mast just like the prototype.



Construction types of stop signals

The prototype uses various forms of stop signals. While the stop signal # 4517 represents the version with a flange base, usually placed on its own next to the track, the stop signal # 4515 is the shorter, regular type.

The mini signal without mast # 4516 is used under for a track spacing of less than 4.5 m. You often find those stop signals in combination with a semaphore signal at exit tracks.



Bavarian signals



4505
Semaphore Home Signal
 lattice post
 with one arm,
 compact, under-base-
 board drive unit
 height: 103 mm



4507
Semaphore Home Signal
 metal rung post,
 with one arm,
 compact, under-baseboard
 drive unit
 height: 103 mm



DB signals with semaphore arms of the Bavarian State Railway – also without idle / stop aspect?

The Bavarian semaphore signals were taken over by the DB and only partly equipped with new signal arms. The Bavarian signal aspect "no train traffic on this track" ("HpRu" – arm points downwards, 1 blue light) has been cancelled. Therefore **Viessmann** signals don't have "idle / stop" functions. The signal aspect "stop for shunting movements" on these signals has to be replaced by separate stop signals (# 4515) that are placed in front of the main exit signals.

When using Bavarian signals as exit signals the aspect "proceed slowly" has to be indicated by appropriate stickers (Lf4) mounted on the signal mast.

Swiss signals

In the year 1886 semaphore signals were first described in the Swiss signal rulebook. Our signals are models of newer types, but, as you can see, they have a long tradition.

In Switzerland there has been an early standardisation of the signal regulations according to the signal standardisation of 1947 of the "Swiss Railways". The prototypes of our signals were used by the SBB and private railways and can be found until recent times.



4520
Semaphore SBB
 metal rung post,
 with one arm,
 compact, under-baseboard
 drive unit
 height: 103 mm



4521
Semaphore SBB
 metal rung post,
 two coupled arms,
 compact, under-baseboard
 drive unit
 height: 103 mm



Foto: Walter Scheiber

Semaphores modelled on the kkStB Austria.

These signals have been used by the Austrian kkStB since 1938. The instruction given by the aspects are on the German signals, but with the block semaphores are some difference.

The blue diamond when upright with a blue light means "stop". When the diamond is horizontal with a white light then the aspect is "proceed".

A speed restriction board on the signal post replaces the Austrian "proceed slowly max. 60 km/h" semaphore.

After 1940 Deutsche Reichsbahn Gesellschaft (DRG) signals were used in Austria. So on Austrian layouts epoch III you can use both types of signal.


 Vr0
Vr1

4512

Semaphore Distant Signal
movable grid and lit aspects

height: 51 mm


 Sh0
Sh1

4514

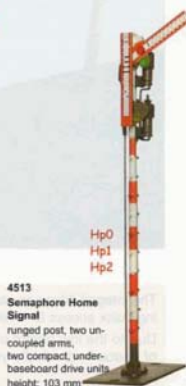
Semaphore Shunting Signal
movable diamond and lit aspect

height: 51 mm


 Hp0
Hp1

4506

Form-Hauptsignal
Zoresmast, einflügelig
Höhe: 103 mm


 Hp0
Hp1
Hp2

4513

Semaphore Home Signal
runged post, two coupled arms, two compact, under-baseboard drive units
height: 103 mm

- finely detailed metal construction
- "Zores" mast
- maintenance free LED lighting
- long life lamps for shunting and distant signal
- prototypical slow movement of arms
- under-baseboard compact motor


 Hp0
Hp2

4508

Semaphore Home Signal
runged post, two coupled arms
height: 103 mm

Hobby semaphore signals – easy, practical and good

With the **hobby signals** you can create realistic layouts without any trouble.

You just put the signals next to the track and they are an ideal addition for your model train starter sets and layouts that are only displayed on special occasions (e.g. Christmas).

They are also suitable for permanent layouts as shown in the picture on the right. Along tracks mounted e.g. above fiddle yards, signals with traditional drives are hardly suitable or can't be used at all due to the dimensions of the drive. In such cases the hobby signals are ideal: even though they have a 14 mm high compact drive they can easily be inserted into the baseboard. The signal masts have the same height as the **viessmann** standard semaphore signals and look alike, when installed.

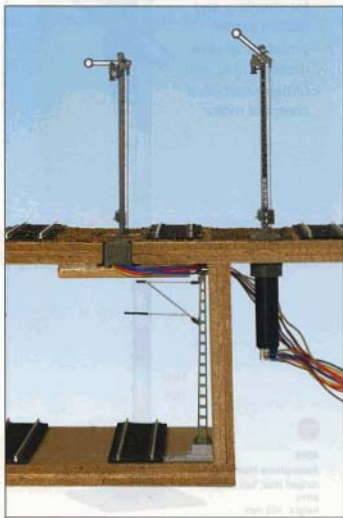
For **digital control** we have equipped the hobby signals with a decoder, which understands the following digital formats:

- Maerklin Motorola
- DCC (Lenz, ROCO, Fleischmann Twin-Center and many more)

Furthermore the connection to the digital track with just three wires is very easy.

DIGITAL 2

Of course, hobby signals offer you every advantage of a **viessmann** standard semaphore signal such as the prototypical slow movements of the arms and the finely detailed metal masts.



The integral drive can easily be hidden while allowing quick access for maintenance.

Due to the low height of the drive there is plenty of space in the fiddle yard below for a catenary system.

4609
Semaphore Distant Signal

movable disk,
 above baseboard compact
 drive
 signal height: 51 mm



Analogue (46xx) and digital (47xx) versions

- Ideal for the novice model train enthusiast
- Easy handling
- Mechanically equal to all other Viessmann signals
- All digital signals are suitable for


4709
Digital-Semaphore Distant Signal

like 4609, but digital decoder for Märklin/Motorola and DCC/NMRA integrated.

4617
Semaphore Stop Signal

movable banner arm and lil,
 above baseboard compact
 drive
 signal height: 65 mm


4717
Digital-Semaphore Stop Signal

like 4617, but digital decoder for Märklin/Motorola and DCC/NMRA integrated

4610
Semaphore Distant Signal

fixed disk,
 movable arm,
 above baseboard compact drive
 signal height: 51 mm


4710
Digital-Semaphore Distant Signal

like 4610, but digital decoder for Märklin/Motorola and DCC/NMRA integrated

6837
Metal Fixing Plate

Suitable for all **Viessmann** Hobby signals (H0, TT, N). With the aid of this bracket you can mount your signals at the appropriate spacing from the track and fixed to the track.

5 pieces


4600
Semaphore Home Signal

with one arm, above baseboard compact drive, maintenance-free LED
 signal height: 103 mm


4700
Digital-Semaphore Home Signal

like 4600, but digital decoder Märklin/Motorola and DCC/NMRA integrated

4601
Semaphore Home Signal

with two coupled arms, above baseboard compact drive, maintenance-free LEDs
 signal height: 103 mm


4701
Digital-Semaphore Home Signal

like 4601, but digital decoder for Märklin/Motorola and DCC/NMRA integrated

Track signs and accessories for semaphore signals

Track signs

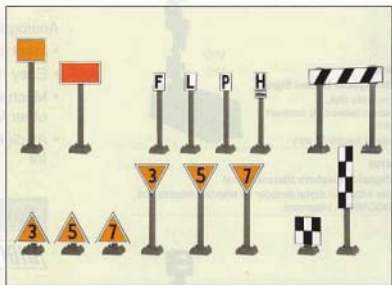
No layout is complete without the finely detailed **viessmann** track signs since the use of such details is the domain of the expert modeller. You will find important signs for activating the bell and whistles ("LP"), low speed signals ("LF") and other secondary signals ("Ne").

SET

3650

Track Signs

photo etched sheet brass, printed
patent mounting sockets
fine metal posts



Spare lamps

viessmann semaphore signals are generally equipped with maintenance free LEDs. For technical reasons some of them are equipped with long life quality incandescent lamps.

Lamp change is very easy and is described in detail in the appropriate manuals.

6200

Spare Bulb

For distant and stop signals



Metal arms for main signals

For those amongst you who prefer even finer detail we recommend to convert our H0 main signals with very fine metal arms.

68381

Fine Metal Wing, 1 piece

Finely detailed metal arm, 1 piece, stamped brass sheet, printed



68382

Fine Metal Wing, 2 pieces

Finely detailed metal arm, 2 pieces, stamped brass sheet, printed



Daylight signals

Due to their signal aspects daylight signals are fascinating accessories for any model train layout. Even a few of them can bring a layout to life.

viessmann offers you a wide range of signal types. The prototypes are the standard types used on most main and branch lines as well as the compact signals introduced in 1986.

Even the smallest details have been recreated. Thus all our daylight signals have

- LEDs for trouble free operation
- photo etched brass masts, painted in the original finish
- finely detailed maintenance platforms and signs;

Our compact signals are completely made of metal!

It goes without saying that the signals have prototypical signal aspects, are easy to install and can be used for train control with the aid of our control modules.



viessmann

Lichtsignale

DB daylight signals – signal aspects and placing of signals

Colour Light Distant Signals



"prepare to stop"
Vr0



"prepare to proceed"
Vr1



"prepare to proceed slowly"
Vr2

Colour Light Block Signals



"stop (shunting)"
Sh0



"proceed (shunting)"
Sh1

Colour Light Main Signals



"stop"
Hp0



"proceed"
Hp1



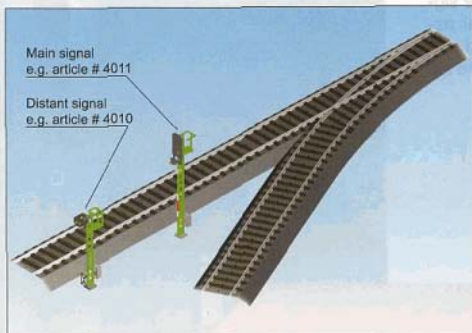
"proceed slowly"
Hp2



"stop (shunting)"
Hp0



"stop (shunting)"
Hp0/Sh1



Note

If you want to know more about signals we recommend the following books:

- MIBA-Report Nr. 17 from Stefan Carstens,
- ALBA-Modellbahn-Praxis no. 8.

Train movements

The rules regarding the location of daylight signals are hardly different to the ones for semaphore signals. A red aspect indicates "stop" (Hp0), a green aspect indicates "proceed" (Hp1) while green and amber at the same time indicate "proceed slowly" (Hp2).

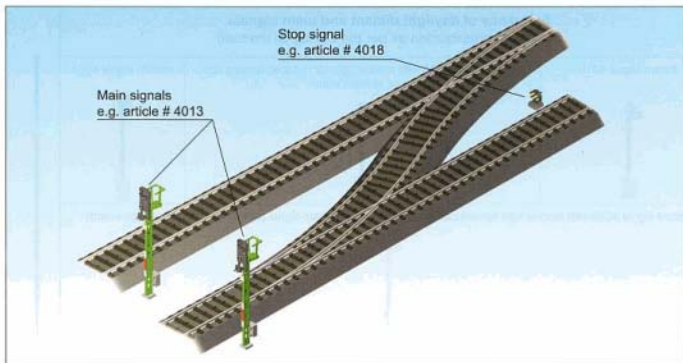
Distant signals are switched accordingly:

- Hp0 › Vr0 (two amber lights);
- Hp1 › Vr1 (two green lights);
- Hp2 › Vr2 (upper green light and lower amber light).

The signal aspect "No train or shunting movement" (Hp00) is now also valid for main signals with two red lights next to each other as Hp0. With the aspect "Sh1" only one red light may be turned on.

Shunting Signals

If the shunting signal is close in front of a running signal then both signals are combined on one large signal head. In this case "train and shunting stop" (Hp00) is also shown by two red horizontal lights. The "shunting proceed" aspect is two white lights on the upper right side and a red light to the left. The running signal aspects for "proceed" and "proceed slowly" are shown in the conventional way.



Obscured Aspects

If the distant signal is mounted on the same post as the main signal (e.g. entry signal with distant signal), it is switched off or obscured when the main signal shows stop.








The distant signal aspect is only shown if the running signal on the same post shows "Hp1" or "Hp2" obscured.

Placing and wiring *viessmann* Daylight signals

The following overview shows a simplified sequence of signals along a main line. The direction of travel is from top to bottom starting with the distant signals.

For your information we have added a column listing the appropriate *viessmann* control modules for each signal type. Further information regarding the use of these modules can be found in the relevant chapter "Electronics" for analogue operation and digital systems.

Sequence of daylight distant and main signals (simplified presentation as per the DB signal manual)

distant signal 4010 	distant signal 4030 with marker light for reduced braking distance to main signal 	distant signal 4003 
distant signal 4030 with marker light for reduced braking distance to main signal (without distant signal sign board) 		
block signals 4002, 4011, 4014 	entry signals 4001, 4004, 4012, 4015 	Route ↓
exit signals 4005, 4013, 4016 		

Hobby daylight signals

The *viessmann* Hobby series of daylight signals generally do not require any control modules. The electronics needed are located in the base of the signal. You can activate these signals directly with the push button panels 5546 (for three-aspect-signals) and 5547 (for two-aspect-signals), via track contacts (e. g. *viessmann* 6840) or with a digital decoder 5211 (Motorola format) respectively 5212 (DCC) or 5260 (SELECTRIX).

Digital daylight signals with multiplex technology

The new **viessmann** signals with multiplex technology require special control signals that are only supplied by the corresponding control modules.

4040 – 4046 (Ks signals): control module 5227

4720 – 4728: control module 5229

These modules can be activated in analogue and digital mode. For automatic train control the train control relay 5228 is also required.

Standard daylight signals

The **viessmann** standard daylight signal series do not have any integral control and therefore are available at a lower price. We offer a comprehensive range of control modules and control panels for these signals – you will be able to find the most suitable module for any application.

The schematic clearly shows which module is best suited for your application.

How do you want to use your signals?

analog ▼		digital ▼					
		SELECTRIX®		NMRA-DCC or Märklin-Motorola			
Do you want to switch by hand or by train control (via track switches etc.)?		Do you want to have an automatic train control (the train stops before a „stop“-showing signal)?					
only by hand ▼	with train control ▼			no* ▼	yes ▼	no* ▼	
Universal On-Off-Toggle Switch 5550	Do you want to have an automatic train control (the train stops before a „stop“-showing signal)?			yes ▼	5260 + 5210	5224 + 5228	5224
	no ▼	yes ▼	5210				

HO	TT	N	Z	Modul
4001				5222
4002				5221
4003				5220
4004				5220 + 5222
4005				5223
4010	4910	4410	4810	5220
4011	4911	4411	4811	5221
4012	4912	4412	4812	5222
4013	4913	4413	4813	5223
4014	4914	4414		5220 + 5221
4015	4915	4415		5220 + 5222
4016	4916	4416		5220 + 5223
4017	4917	4417	4817	5221
4018		4418	4818	5221

Automatic train control via the signals is not required if for instance the layout is operated with a PC (e.g. WIN-DIGIPET). In that case trains will automatically be slowed down ahead of a red signal and stopped in front of the signal by the computer sending the appropriate command to the specific locomotive address.

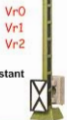
Standard signals – the standard for all lines

H0

They are based on the identical types introduced in 1951 and 1958 and have been in use since 1969. They are the most commonly used signal types on all lines of the former DB.

- finely detailed metal masts
- patented base and socket
- maintenance free LED lighting
- good value for money
- 4011, 4014, 4015 and 4018 are also available as kits (please refer to page 139)

4010
Colour Light Distant Signal
with 4 LEDs
height: 60 mm



4011
Colour Light Stop Signal
with 2 LEDs
height: 79 mm



- distant signal with marker light
- marker light = reduced (braking) distance to main signal or as repeater
- ideal for tight spaces on the layout

4030
Colour Light Distant Signal with recognizing light
with 4 LEDs and 1 bulb, spare bulb: 6209
height: 60 mm



4014
Colour Light Stop Signal with Distant Signal
with 6 LEDs
height: 79 mm



4016
Colour Light Departure Signal with Distant Signal
with 10 LEDs
height: 79 mm

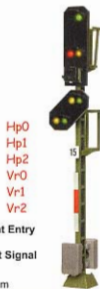
Hp0
Hp0/Sh1
Hp1
Hp2
Vr0
Vr1
Vr2



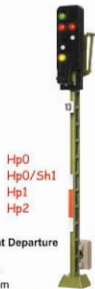
4012
Colour Light Entry Signal
with 3 LEDs
height: 79 mm



4015
Colour Light Entry Signal with Distant Signal
with 7 LEDs
height: 79 mm



4013
Colour Light Departure Signal
with 6 LEDs
height: 79 mm



4018
Colour Light Stop Signal, lower type
with 4 LEDs
height: 7 mm



4017
Colour Light Stop Signal, upper type
with 4 LEDs
height: 44 mm



Compact signals – all metal construction

The DB introduced these signal in 1986. Thus they are typical for era IV. In the meantime they have been superseded by the Ks-signals on new main lines (high speed lines).

They are still being installed on all other lines, mainly as replacements for older semaphore or daylight signals.

Note:

Compact signals are often installed mixed with other construction types (daylight signals) on main and branch lines. The corresponding main signal to the distant signal repeater shown below is of the 1951 type.



- finely detailed metal construction – the only compact signals in metal for H0 gauge
- patented base and socket
- maintenance free LED lighting



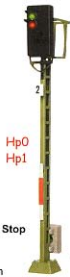
4

Hp0
Hp1
Hp2
Vr0
Vr1
Vr2
Not-rot

Vr0
Vr1
Vr2

4003
Colour Light Distant Signal
with 4 LEDs
height: 73 mm

4004
Colour Light Entry Signal
with Distant Signal
with 8 LEDs
height: 73 mm



Hp0
Hp1

4002
Colour Light Stop Signal
with 2 LEDs
height: 73 mm



Hp0
Hp1
Hp2
Not-rot

4001
Colour Light Entry Signal
with 4 LEDs
height: 73 mm



Hp0
Hp0/Sh1
Hp1
Hp2

4005
Colour Light Departure Signal
with 6 LEDs
height: 73 mm

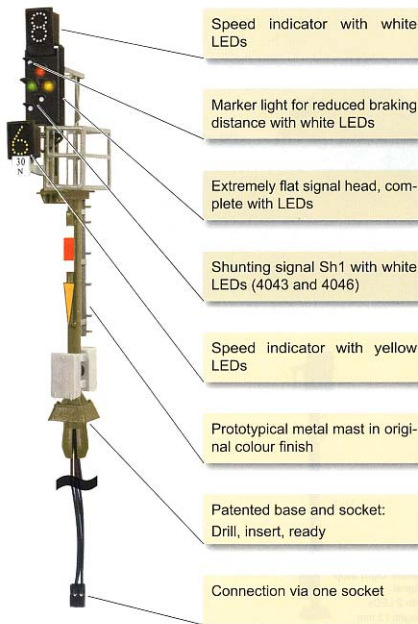
Ks signals – the signals of reunification

After the merger of the Deutsche Bundesbahnen (DB) and the Deutsche Reichsbahn (DR) the introduction of a standardised signal system for the whole country became essential. The existing types were combined to the new combination signals that were installed on new and upgraded main lines since 1993.

A new signal system became necessary, because:

- the same signal aspect had in some cases different meanings at DB and DR
- the introduction of new turnout types allowed high speeds on the diverging route
- the DB lines were divided into smaller sectors (blocks). That led to a large number of main signals and distant signals on the same mast.

In terms of construction the Ks signals were developed further from the recently introduced compact signals. One important difference to the previous signal types is the clear separation of train sequence and speed indication. Thus the permission to proceed and the indication of the following signal is only shown by one colour signal with the appropriate colour while a perhaps required speed restriction was indicated by numbers. Thus errors in interpretation of the signal aspect due to confusing combinations of lights are mostly eliminated.



Speed indicator with white LEDs

Marker light for reduced braking distance with white LEDs

Extremely flat signal head, complete with LEDs

Shunting signal Sh1 with white LEDs (4043 and 4046)

Speed indicator with yellow LEDs

Prototypical metal mast in original colour finish

Patented base and socket: Drill, insert, ready

Connection via one socket

- finely detailed metal construction
- completely equipped with LEDs
- white LEDs for extra light, speed indicator and shunting signal
- easy connection with one socket
- required control module 5227 for analogue and digital model train layouts



Ks1


 Ks1bl
Zs3v


Ks2



4040
Ks distant signal
with speed distant indicator
(Zs3v) and marker light for
reduced braking distance
4 LEDs
height: 68 mm



Hp0


 Zs3
Ks1

 Zs3
Ks1bl
Zs3v

 Ks2
Zs3


Sh1

4046
KS multi sector signal as exit signal
with speed distant indicator (Zs3v), distant signal sign
board and marker light for reduced braking distance
8 LEDs
height: 78 mm



Hp0


 Zs3
Ks1


4042
Ks main signal as home
signal
with speed distant indicator
(Zs3v)
3 LEDs
height: 78 mm



Hp0


 Zs3
Ks1


Sh1



4043
Ks main signal as exit
signal
with speed distant indicator
(Zs3v),
5 LEDs
height: 78 mm



Hp0


 Zs3
Ks1

 Zs3
Ks1bl
Zs3v

 Ks2
Zs3


4045
KS multi sector signal as
home signal
with speed distant indica-
tor (Zs3v), distant signal
function and marker light for
reduced braking distance
6 LEDs
height: 78 mm



Daylight signals for all operating modes

H0

The new multiplex technology

With conventional wiring of daylight signals many individual wires from the signal head to the base are required. Depending on the type of signals this could be up to 11 wires (e.g. exit signal with distant signal). It is difficult to hide so many wires in the signal mast. Thus these wires are often visible through the cut-outs on the sides of the signal mast.

Due to the new multiplex technology a maximum of four wires is required. They can easily be hidden within the mast – and you can enjoy an even finer signal.

The simple wiring represents second advantage! While you had to wire many individual cables to relays or electronic control modules previously you now only have to insert one small plug into the control module – the so-called multiplexer.

The third advantage is, that the daylight signals with multiplex technology remain as competitively priced as ever – just as you would expect it from **viessmann!**

To operate the signals shown here you need the multiplexer 5229. It is the **only** device that can generate the appropriate control signals. It can be activated by push buttons, track contacts or directly by a digital system. A digital decoder suitable for DCC and Maerklin Motorola is already integrated! You will find more information on the multiplexer – and to its ingenious signal bus – as from page 120 in this catalogue.

By the way, the new **viessmann** Ks signals are already equipped with multiplex technology!



Sh0
Sh1



4728
Daylight stop signal
with multiplex technology,
with 4 LEDs and plug,
height: 7 mm

Sh0
Sh1



4727
Daylight stop signal
with multiplex technology,
with 4 LEDs and plug,
height: 44 mm

- New finely detailed metal mast without visible wires
- Comfortable and secure connection with one plug
- As competitively priced as our standard signals
- Required control module 5229 (description as from page 115 in the electronic section)



prototypical metal mast,
original colour finish

no visible wires

patented base and socket:
drill, insert, done

connection with only one plug

Multiplex daylight signals – finely detailed and good value for money

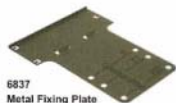


H0



Hobby signals

Please note the hints for hobby signals on page 14.



6837
Metal Fixing Plate
Suitable for all **Vötsch** Hobby
signals (H0, TT, N). With the aid
of this bracket you can mount your
signals at the appropriate spacing
from the track and fixed to the
track.
5 pieces



Special purpose signals

The departure signal commonly used in most stations of the former DB belongs to the group of signals for the train staff (Zp).



4518
Departure Signal
It, fine metal post,
spare bulb: 6229
height: 65 mm

Remark

The perfect addition to the departure signal is the dispatcher with a moving arm – for more life in your station.



5023
Guard with a movable arm
with drive unit and train control

Control signals for level crossings with blinking lights



5061
Route Indicator Signal
with electronics for connecting
to the indicating electronic 5065, with one LED and
longlife quality bulb
spare bulb: 6209
height: 50 mm



5062
Indicator Observation Signal, modern
with electronics for connecting to the
indicating electronic 5065.
spare bulb: 6209
height: 56 mm

Note

We also offer the matching St. Andrews crosses with and without blinking lights. Please refer to the chapter "Level crossings" on pages 62 and 63.

SET

5835
Warning Lights,
4 pieces
with blinking electronics for max. 4 blinking lights
14 – 16 V AC
For automatic use you will need the electronic relay 5552
and switching-tracks resp. the reed contact 6840.
height: 36 mm



5060
Warning Lights, 2 pieces (without pic)
as set 5835, but with 2 crosses

Catenary

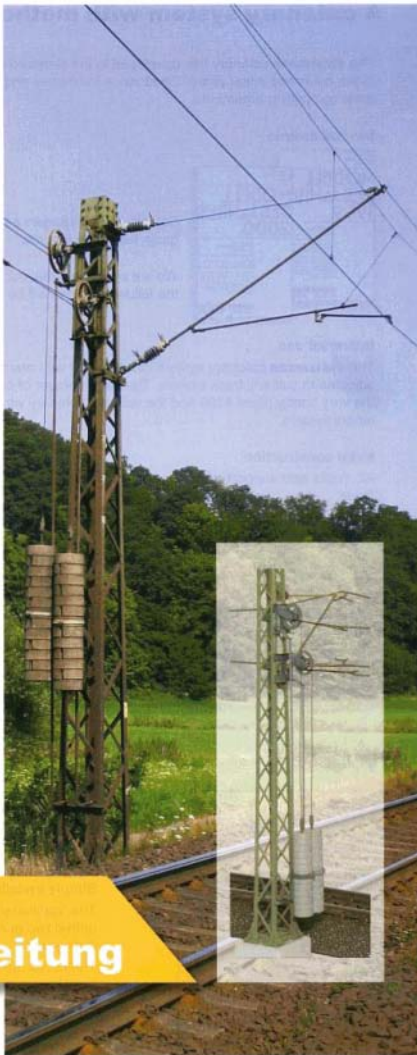
Anyone who is not a strong proponent of the early steam days will eventually arrive at the point where a catenary system is required on the layout.

Viessmann makes it as easy as possible for you. Later installation on a finished layout is possible without any problems! Even the soldering iron could remain cold.

Our system with several awards is not only easy to install but is available as a complete range.

- finely detailed metal construction for all masts and support arms;
- painted as the original (you only have to apply the patina)
- universal use with all track systems
- comprehensive documentation of prototype and model
- mast types for eras II to V

The catenary system is absolutely reliable for operation. That it is also good value for money you have come to expect from **Viessmann**.



Oberleitung

A catenary system with method – simple as never before!

H0

The **viessmann** catenary has developed to the standard system for the sophisticated model train enthusiast in the course of a few years. Good value for money and easy installation even for existing layouts are the most compelling arguments.

Several awards



Selected by the readers as model of the year of the renowned Eisenbahn-Magazin two years in a row.

We are convinced, that our new professional catenary system that is shown on the following pages will be accepted by many train enthusiasts.

Universal use

The **viessmann** catenary system can be used with any track system. The length of the mast base can be adjusted to suit any track system. The large number of catenary wires on offer – with or without eyes – and the very handy pliers 4198 and the variable catenary wires you can match any track geometry with our catenary system.

Metal construction

All masts and support arms are made off metal. The entire construction is finely detailed and fully functional.



Roco-Line with ballast

Märklin C track

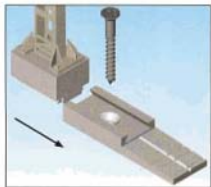
Märklin M track

Fleischmann Profi track

Roco-Line without ballast, Märklin Ktrack, Fleischmann model track, Tillig

For all track systems

The mast base has a simple template to establish the correct spacing to the track.



Simple installation from above

The traditional method of installing a catenary system often required two people. With the **viessmann** catenary system that is not necessary!

The masts are connected to the mast base via a guide. The mast base is screwed to the baseboard from above at the desired position. The mast is then simply slid onto the mast base. Thus it becomes easy to change a mast, should this become necessary.



Fixing of catenary wires without soldering

The catenary wires are simply clipped onto the support arms. Thus a quick and easy installation without soldering is guaranteed. For alterations or in emergencies the wire in question can simply be unhooked.



Interchangeable support arms

The support arms are interchangeable due to the fixing technique. For your individual setting up the required types and numbers of support arms we offer a wide range of different types.



Stamped rivet imitations

All tower and tensioning masts have stamped rivet imitations. Together with the prototypical paint finish this results in a realistic effect never seen before.



Assembled and painted components ready for installation

For easy and quick installation we offer various sub assemblies ready for installation such as head spans, tubular brackets or tensioning assemblies. Of course all these components can be individually adapted to any track arrangement.



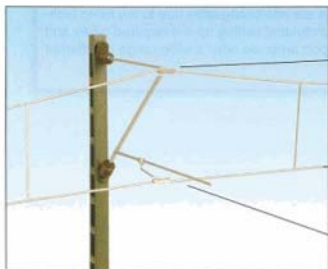
The Profi - catenary system

H0

The already outstanding detailing of the **viessmann** catenary system has been improved even further. The new Profi-catenary system sets new standards in detailing. Nevertheless it is fully functional and as easy to install as our standard product range.

For the first time catenary wire with 0.4 mm diameter is available as a mass-produced item! Also new are the adjustable wire holders on the support arms and a fully functional wheel tensioning assembly. This system can be maintained under tension and is electrically operational.

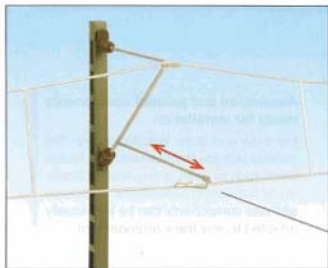
Due to the high factory loads in our works the Profi-catenary system will only be available as from mid 2005. More information regarding this highlight in model train accessories can be found in our leaflet "Profi-Catenary System". This leaflet will be readily available before the launch of the new system, or from our homepage at "www.viessmann-modell.de".



Fine catenary wire holder: visually far better and yet strong.

Catenary wire with 0.4 mm diameter in comparison to the already fine wire with 0.6 mm diameter!

The wire holders can be used for long or short support arms.



The Profi-catenary system is also suitable for all track systems.

You may combine both systems on your layout.

Movable wire holder for even more flexibility in installing the catenary wire.

Folder with catenary information

You are not sure yet if you want to install a catenary?
You have made a decision but want to build everything
correct and prototypical?

Our folder contains everything about catenaries in pro-
type and model! You find historical background infor-
mation, many detailed examples for spanning catenary
across tracks, switches and crossings and of course
hints and information for easy installation of the **viess-**
mann catenary system.

4190

Folder with catenary information

120 pages, expandable. Also available at the Viessmann Internet shop!



Our starter sets



SET

112 cm x 76 cm

4100

Catenary starter set

for one track oval. Set contains:
14 masts 4110
12 catenary wires 190 mm
2 catenary wires 360 mm



SET

184 cm x 84 cm

4101

Catenary starter set

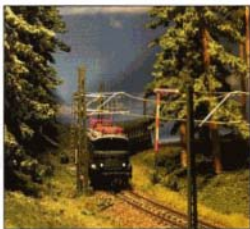
for use with Märklin ICE-Startset
29785, consisting of:
24 masts 4110
9 catenary wires 360 mm
7 catenary wires 172,5 mm
16 catenary wires 142 mm
2 variable catenary wires 4139

Starter sets for beginners

Just try it and see for yourself the
quality of the **viessmann** catenary
system.

The starter sets contain all you
need for an initial installation. The
sets are compatible with all our
catenary parts and thus you can
extend the system anytime.

Furthermore these two sets are
excellent value for money. In the
worst case you may lose the value
of a dinner for two. But we are
convinced you will not have any
such thoughts ...



Catenary masts for the Railway as from era III

With the start of the new electrification after 1945, the DB developed a new mast for main lines. This mast looks almost like the light construction type developed before the war. This construction type 1950 is generally used as the regular type for 160 km/h, is called Re 160 since 1960. For these speeds the catenary suspension must allow for some movement. For freight tracks and other secondary tracks there is a simple model Re 100 and Re 75 for the speeds allowed on those tracks. The suitable tensioning assembly for the catenary wire is article # 4164.

4110 (1 piece)
41103 (10 pieces)
Standard Mast
with support arm,
metal type
height: 99 mm



4111
Connecting Mast
with support arm,
metal type,
matching accessory:
fuse holder 4186
Y-Link 4170
height: 99 mm



4113
Standard Mast with Twin Support Arms
metal type,
electrically insulated
height: 99 mm



4112
Middle Mast
with support arm,
metal type,
electrically insulated
height: 99 mm



4129
Mast for bridges
for universal installation on all
bridges, masts with special
Maerklin mounting brackets
and support arm, metal con-
struction
height: 99 mm



H-profile masts are used in narrow spaces. These masts but with different support arms are also used by other European railway companies.

4123
H-Profil Standard Mast
 with support arm,
 metal type
 height: 100 mm



4124
H-Profil Middle Mast
 with support arm,
 metal type,
 electrically insulated
 height: 100 mm



DRG masts era II

From 1926 on various types were standardized for the new electrification of DRG lines and specified in the catenary regulations of 1931. Today this type is called the "1928 standard catenary". Even today you can find these mast types along lines, e.g. between Rosenheim and Freilassing.

The typical feature of this design was the riveted lattice mast with the rigid support bracket made off two angle profiles bent above track centre.

The article number for the suitable tensioning assembly is 4165.

4120
"Reichsbahn" Mast
 with support arm,
 metal type
 height: 106,5 mm



4121
"Reichsbahn" Mast
 with Twin Support
 Arms
 metal type,
 electrically insulated
 height: 106,5 mm



4127
Middle Mast
"Reichsbahn"
 with support arm,
 electrically insulated,
 metal type
 height: 106,5 mm



Concrete poles for eras IV and V

40

Today the DB frequently uses concrete poles; they are the only type used on high-speed lines.

Mechanised installation is achieved by setting the pole on top of a tube inserted into the ground.

When used in conjunction with aluminium tubes for the support arms and mounting brackets made off cast aluminium they are fully corrosion proof, for all practical purposes maintenance free and approved for high speed lines up to 300 km/h.



4118

Concrete Mast
with support arm,
metal type
height: 98,5 mm



4119

Concrete Mast for newly-built tracks
with support arm,
metal type
height: 105 mm



New

41191

Concrete Mast for new high speed lines
metal type
height: 105 mm



Modern poles for the OeBB

In the course of modernising their equipment the Austrian Federal Railways upgrade all lines and install concrete poles.

The OeBB certainly benefits from the practical advantages of concrete poles while railway fans do not appreciate the aesthetics of that design.

4125

Standard Mast OeBB
with support arm,
metal type
height: 98 mm



4126

Standard Mast OeBB with Twin Support Arms
metal type,
electrically insulated
height: 98 mm



Curved pull-off

The method of holding catenary wires in the correct position above the track in tight curves has been established with the refurbishment of catenary systems in 1928. It is used wherever the pantograph would otherwise slip past the catenary wire. This is most likely in tight curves, very much like on many model train layouts.

The tensioning wire keeps the catenary wire roughly above the centre of the track. It is thus a very useful method for the model train enthusiast.

What it looks like can be seen in the layout section shown.



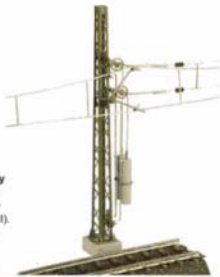
Tensioning assemblies

These assemblies are used to keep the catenary wire under tension – even at different temperatures – to avoid sagging of the wire and to assure good contact between the pantograph and the wire at all times.

Viessmann tensioning assemblies are true representations of the prototype, both in detailing and function. The catenary wire is kept under tension like the real thing.

For the prototypical modelling of catenary tensioning you will need masts with double supporting arms. Details regarding this and any other topic related to catenary systems are described in our separate folder Catenary Systems, article # 4190.

4164
Tensioning assembly
pulley type used with
the 1950 DB catenary
system (as from era III).
Incl. anchor mast and
support arm
metal construction
Mast height: 115 mm



4165
Tensioning assembly
lever type, used with the
1928 DR catenary system
(as from era II). Incl.
anchor mast and support
arm,
metal construction
Mast height: 115 mm



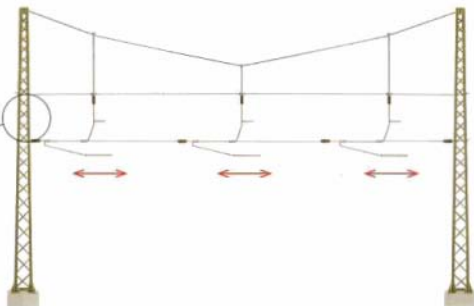
Head spans

Head spans were used as early as 1928 as part of the regular catenary system developed by the DR and were installed until the mid seventies by the DB. They can still be found in yards and on main lines with more than 2 tracks.

In principle the design remained unchanged during the entire period of use. Thus our finely detailed models are also suitable for era II layouts.



All lattice masts are finely modelled complete with the imitation of the rivets. Together with the prototypical paint finish this results in a never achieved realism until today.



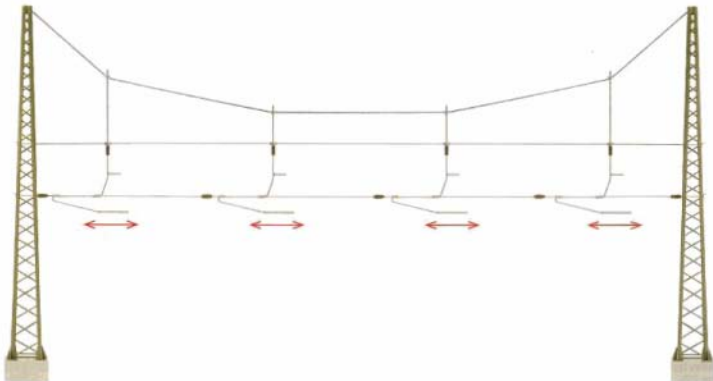
4162 (for spanning up 3 tracks)

Head span

electrically insulated, track spacings to your own choice.

Metal type, ready assembled and painted.

Mast height 150 mm, max. distance centre to centre of each mast 235 mm



4363 (for spanning up 4 tracks)

Head span

electrically insulated, track spacings to your own choice. Metal type, ready assembled and painted.

Mast height 170 mm, max. distance centre to centre of each mast 312.5 mm

Tubular brackets

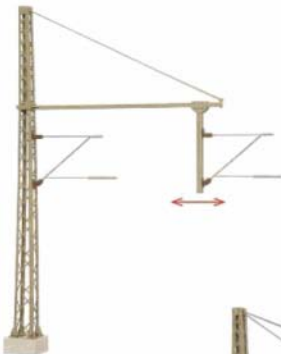


H0

Tubular brackets were developed during the 1970s from the custom-built support arms used as early as in the 1950s.

They are generally used where a regular mast is not sufficient and a head span cannot be used due to space limitations. The partial removal of yard tracks makes head spans superfluous in many cases and simple tubular support arms are fully adequate for the remaining tracks.

On new and upgraded high-speed lines tubular support arms are used more and more often in order to establish a mechanical separation from other parts of the system. Thus any break down causes little disturbance for traffic on other tracks.



4160 (for spanning 2 tracks – pic above)

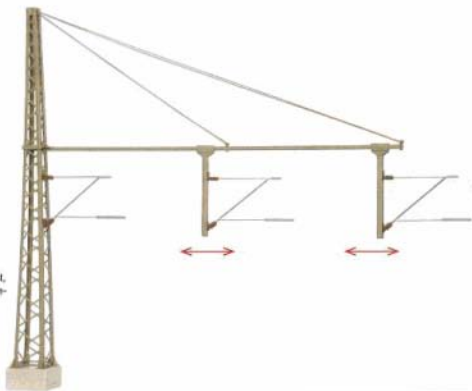
4161 (for spanning 3 tracks – pic right)

Suspended Box-Girder

electrically insulated, complete with tall mast, adjustable support arms. Metal type, completely assembled and painted.

Technical data 4160:
mast height 150 mm,
maximum span width 117,5 mm

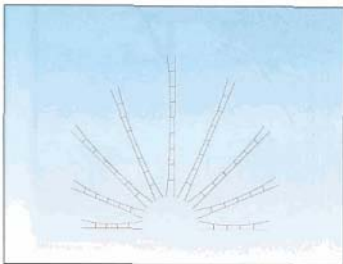
Technical data 4161:
mast height 170 mm,
maximum span width 195 mm



Fine catenary wire – 0.6 mm diameter only

Universal catenary wire

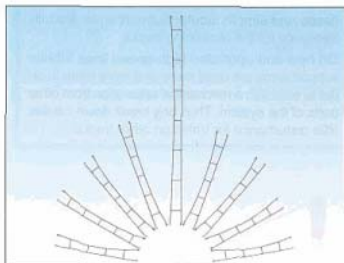
The universal catenary wire can easily be trimmed and adjusted with the pliers 4198.



Catenary wire

Fully configured catenary wire with eyes for easy clipping to support arms.

The various lengths match the length of sectional track of the most popular model train suppliers.



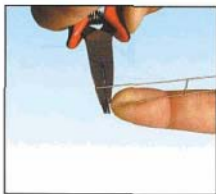
article	minst distance	Pack/Unit
4150	140 – 160 mm	5 pieces
4151	160 – 190 mm	5 pieces
4152	190 – 210 mm	5 pieces
4153	210 – 240 mm	3 pieces
4154	240 – 270 mm	3 pieces
4155	270 – 300 mm	3 pieces
4156	300 – 330 mm	3 pieces
4157	330 – 360 mm	3 pieces
4158	360 – 400 mm	3 pieces
4159	400 – 500 mm	3 pieces



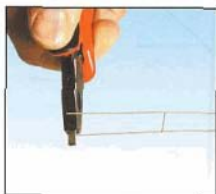
article	Cat. Wire length	P.U.	suitable for	system	radius
4134	140.0 mm	5 pieces	Fleischmann Roco-Line	Model track Profil track	357.0 mm 356.5 mm 358.0 mm
4133	142.0 mm	5 pieces	Märklin Märklin Märklin	C track K track M track	360.0 mm 360.0 mm 360.0 mm
4136	144 mm	5 pieces	Tilig	HO-Elite	366.0 mm
4137	163.5 mm	5 pieces	Fleischmann	Model track	415.0 mm
4138	165.5 mm	5 pieces	Fleischmann Roco-Line	Profil track	420.0 mm 419.5 mm
4140	167.5 mm	5 pieces	Märklin Tilig	K track HO-Elite	424.6 mm 425.0 mm
4132	172.5 mm	5 pieces	Märklin Märklin	C track M track	437.5 mm 437.4 mm
4142	190.0 mm	5 pieces	Fleischmann Roco-Line	Profil track	483.5 mm 481.2 mm
4143	360.0 mm	3 pieces	all systems		

Universal catenary wire

Bending the wire with our Eyehook Bending Pliers 4198 is easy:



Grip wire



Bend



Done!

Special catenary wire configurations



H0



4170
Y-Link
for optimum electrical continuity if you are using the catenary system to provide power to your locos
10 pieces



4175
Insulating Section
For the functional electrical insulation of the contact wires when in use for supplying power to your locos. Power at the isolated section is provided by the contact clip.
2 pieces



4139
Variable Catenary Wire
for universal installation of catenary eg. over point and crossing work.



4144
Catenary Wire for Spanning
Special catenary wire with parallel ends for spanning.
length: 400 mm,
3 pieces



4145
Catenary wire for crossings
Specially adapted catenary wire for easy installation at crossings.



4146
Catenary wire for double slip turnouts
Specially adapted catenary wire for easy installation at double slip turnouts.

Do-it-yourself catenary system

201211

110

4171

Bracket
5 pieces,
medium outlay: 34 mm,
for all masts



Neu

41711
Bracket, short
5 pieces,
medium outlay: 26 mm,
for all masts



Neu

41712
Bracket, long
5 pieces,
medium outlay: 44 mm,
for all masts



4172

Twin Bracket
5 pieces,
for all masts



4186

Yoke with bracket
5 pieces,
for suspended box-girders 4160 and 4161



Neu

41861

Yoke with bracket
5 pieces,
for suspended box-girders 4160 and 4161



4185

Support Arm DRG
5 pieces,
only for the "Reichsbahn" masts 4120
and 4121



4187

Insulators
25 pieces



4191

Wires for Catenary System
Ø 0,6 mm,
length: 250 mm,
5 pieces



4173

Ground Socket for Standard Masts
10 pieces



4178

Recessed Head Screws
for universal
fixing of the overhead-
masts, electronic-
boxes
and many more
50 pieces



4189

Mast Socket
10 pieces,
for using with Märklin C-Gleis



4174

Tensioning assemble, lever type
for mounting on anchor
and tall masts,
metal type



4173

Tensioning assemble, puller type
for mounting on anchor
and tall masts,
metal type



4188

Fuse Holder
Necessary if you are using the catenary system to
provide power to your locos. You need one fuse for
each transformer.
contents: 1 fuse holder,
2 fuses T 3,15 A



Masts and accessories



H0

We offer you the right bits and pieces for constructing your own custom designed head spans or tensioning devices.

There are two sets for head spans with all necessary parts such as ropes, insulators and brackets to hold the catenary wire.



4114
Anchor Mast
suitable for the tensioning assemblies 4173 and 4174, metal type
height: 115 mm

Headspan Mast
4115: height 150 mm
4116: height 170 mm
4117: height 195 mm
metal type



SET

4176
Support Span and Cross Span Wires with Insulators
for the universal assembly of headspans with a maximum distance of 50 cm, centre to centre of each mast.



SET

4177
Holding Unit for Span Bridges
for the universal mounting of a headspan assembly.
5 pieces



4180
Top Lamp
for headspan masts



4184
Universal Fixing Unit
for mounting brackets on tall masts
5 pieces



SET

4192
Ground-Anchor
With the ground-anchor you can level out spanning-strength which are appearing for example on the Curved pull-off 4122.

Catenary for tunnels and fiddle yards

The **Viessmann** catenary system for tunnels provides the easy-to-install low cost solution for all parts of your layout, which are hidden from view – as in tunnels and or in the storage (fiddle) yard.

The catenary system offers some particular features:

- compatible to all commonly used catenary systems
- quick and easy installation
- reliable electrical functionality
- high mechanical stability
- also suitable for installation on a helix



SET

4195 Tunnel catenary set

contains: 10 masts and 3 m catenary wire for quick and easy installation on single track or on several track tunnel lines and fiddle yards with switches and crossings, or in a helix.

Compatible with most track systems
mast height: 100 mm



Tools for the perfect catenary installation

4197 Mastposition Gauge

For establishing the correct position for masts and catenary when used on curved track.



4196 Catenary Wire Mounting Gauge

For checking the correct position of the catenary wire.



4198 Eyehook Blending Pliers

For shortening the universal catenary and for easy bending of fixing eyehooks.



4199 Special Screwdriver

for safe and easy installation of the masts



Luminaires

An illuminated model layout is not only stunning for children. The correct illumination is a major factor for the whole impression of your layout.

A very good designed model layout luminaire, despite being reduced to model size, has to be constructed in such a way, that you still know the main features from a certain distance.

Model layout luminaire by **viessmann** are not only "Highlights", they also show off high quality workmanship although being so finely detailed.

Equipped with

patented base and socket

- patented lamp socket
- patented sandwich construction (exclusive series)
- brass masts
- long life incandescent lamps

The luminaires are easy to install and very durable.

The huge variety of luminaires of each era and for every application leaves nothing to desire.



viessmann

Leuchten

Viessmann luminaires – convincing technology

H0

ventilation slots for heat dissipation

heat-resistant, light conductive plastic

patent double-tube lamp socket

fine photo etching technology with double-tube construction

all **Viessmann** lamps have an original brass post

detailed reproduction of the lamp shades

longlife-quality bulbs, current consumption 30...50 mA

mark resistant special paint

patent mounting socket: drilled and ready for inserting

connection to 14 – 16 V AC or DC



Patent no. 3727514

Patented base and socket

All our luminaires are equipped with the proven Viessmann patented base and socket. This makes installation very easy. Advantages:

- the visual impact is not impaired by screws or nails;
- even if the hole is not straight, the mast is vertical!



Drill



insert



ready!



Straight – Even if the hole is not!

Patent no. 3727515



Patented lamp socket

Until now you had to use lamps with cables or solder miniature incandescent lamps without base onto miniature, prototypical lampshades.

With the double tube lamp socket (pig's snout) developed by **Viessmann** it is possible, to change very small, incandescent lamps without soldering. A perfectly simple method for lamp changing that considerably extends the life of your model luminaires.



insert



finished!

H0

Patent no. 4400321

Patented sandwich model construction

The patented sandwich construction allows you to change lamps even in very fine model luminaires without soldering.

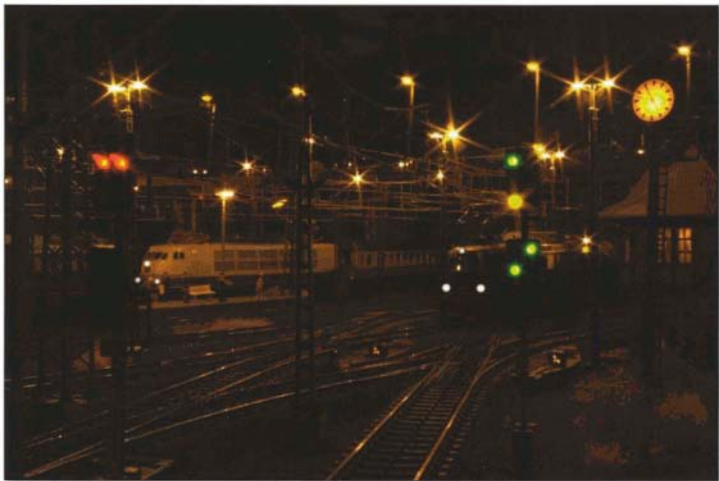
The sandwich style guarantees finely detailed prototypical luminaires without obtrusive cables or thick sleeves for the supply voltage to the lamp within the lampshade.

You will be fascinated by these fine luminaires and the simple method of lamp change.



Railway lighting

H0



Railway type luminaires are suitable for lighting any model train layout. As manifold as the applications are the model types. It could happen that in one area of a station more than one type is used. With the variety offered by **viessmann** you can equip every model layout perfectly, just as the prototype.

To avoid glare for the engineer, yard lights provide soft and even illumination. The brightness of **viessmann** luminaires has been adapted to the prototype.

6384
Railway Lamp
spare bulb: 6229
height: 124 mm



6363
Lattice Mast Lamp
spare bulb: 6200
height: 124 mm





6385
Lattice Mast Lamp
spare bulb: 6229
height: 140 mm



6388
Lattice Mast Lamp
"Boppard on the Rhine"
spare bulb: 6202
height: 140 mm



6062
Wooden Post Lamp
"Deutsche Reichsbahn"
spare bulb: 6202
height: 148 mm



6061
Station Lamp with
Wooden Post
spare bulb: 6200
height: 148 mm



6387
Lattice Mast Lamp
"Hof/Saale"
spare bulb: 6202
height: 150 mm



6389
Lattice Mast Lamp
spare bulb: 6200
height: 142 mm



6390
Lattice Mast Lamp,
double
spare bulb: 6200
height: 142 mm

Platform luminaires

HD



6365

Platform luminaire, suspended
for under-roof-installation
base and socket, for easy installation
spare bulb: 6200



6364

Platform luminaire
spare bulb: 6229
height: 70 mm



6041

Platform luminaire
double
spare bulb: 6202
height: 85 mm

How easy but effective the installation of a station luminaire is, show the following pictures of a station hall.



Drill hole, pull cable through hole, glue on socket.



insert luminaire, connect, ready!



Gas lanterns



H0

Standard gas lanterns

In the 1930s town planners started to think about standardizing lighting in cities, to save spare parts and therefore cost. From these plans the standardized gas lanterns are derived.

The glass envelope contains the glow fabric that burned continuously once gas was supplied. The amount of gas determines the brightness of the luminaire. The cover on top of the lantern allows heat to escape.

Even though most cities changed from gas to electricity there are still many gas lanterns to be seen in some cities – even today. The characteristic lantern style, however, was preserved in many modern lantern types.

The prototypes of the **viessmann** standardized gas lanterns that can still be found in some areas of Berlin are operated with gas as in the early days. With the usage of special bulbs and a special technique the model has the same effect of a diffuse gas lantern.



6011
Uniform Gas Lamp
spare bulb: 6204
height: 56 mm



6013
Gas Wall Lamp
spare bulb: 6204
height: 16 mm



6012
Swan Neck Gas Lamp
spare bulb: 6205
height: 80 mm



6014
Gas Lamp,
silver
spare bulb: 6204
height: 56 mm

Note:

With the "ignition module for gas lanterns" # 5066 (refer to page 60) you can simulate the daily ignition of the gas lantern as in the prototype.



6396
Gas Lamp
spare bulb 6222
height: 48 mm



6397
Gas Lamp double
spare bulb 6220
height: 55 mm



6398
Gas Lamp triple
spare bulb 6220
height: 60 mm

Wall lanterns

H0

Note

Many of older model building kits don't have the correct H0-scale of 1:87. They still have scales up to 1:100. If our truly scaled H0-lanterns would seem to be big, we recommend our N-scale lanterns.



6074
Wall Lamp
spare bulb: 6220

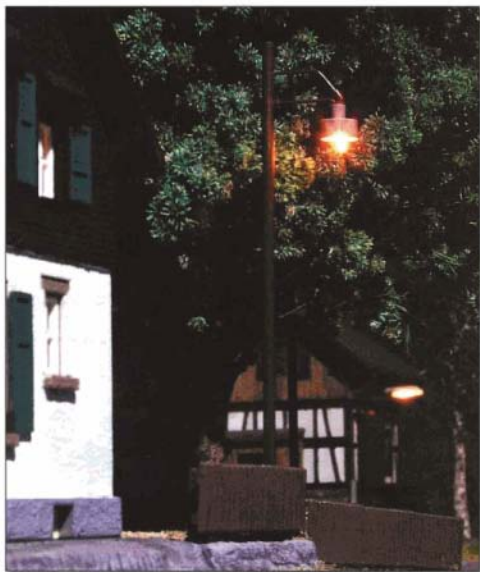


6076
Wall Lamp
spare bulb: 6220

Wooden post lanterns



6060
Woodmast Lamp
spare bulb: 6202
height: 103 mm



6065
Wooden Post Lamp
spare bulb: 6220
height: 90 mm



6020
Park Lamp
spare bulb: 6202
height: 62 mm



6010
Nostalgic Lamp
spare bulb: 6202
height: 73 mm



6015
Nostalgic Lamp
double
spare bulb: 6202
height: 73 mm



6030
Nostalgic Swan Neck Lamp
spare bulb: 6202
height: 103 mm



6320
Swan Neck Lamp
spare bulb: 6200
height: 94 mm



6325
Swan Neck Lamp
double
spare bulb: 6200
height: 94 mm

The world is round – curved poles and brackets

H0



6112
Swan Neck Lamp
spare bulb: 6202
height: 85 mm



6120
Swan Neck Lamp
spare bulb: 6202
height: 87 mm



6130
Swan Neck Lamp
spare bulb: 6202
height: 87 mm



6140
Swan Neck Lamp
spare bulb: 6202
height: 87 mm

All **Viessmann** luminaires

- are made of brass
- have a patented base and socket
- have long life incandescent lamps
- are finely detailed

Please refer to our accessories for the installation of your luminaires on page 132.



6123
Modern City Lamp
single, blue
spare bulb: 6202
height: 95 mm

6124
Modern City Lamp
double, blue
spare bulb: 6202
height: 95 mm



6300
Sphere Lamp
 spare bulb: 6202
 height: 57 mm



6305
Sphere Lamp, double
 spare bulb: 6202
 height: 57 mm



6310
Sphere Lamp, triple
 spare bulb: 6202
 height: 65 mm



SET

6160
Garden Lamps Set
 spare Bulbs: 6222
 3509



6152
Swan Neck Lamp
 green
 spare bulb: 6202
 height: 66 mm



6150
Swan Neck Lamp
 black
 spare bulb: 6202
 height: 66 mm



Modern street lighting lanterns

A must for all layouts as from era III
– lanterns with curved masts / brackets

Note:

With the aid of the fluorescent lamp simulator 5067 the typical flicker of a starting fluorescent lamp can be simulated. Please also refer to page 60.



6095
Whip Lamp double
spare bulb: 6204
height: 100 mm



- finely detailed metal masts
- patented base and socket
- long-life incandescent lamp
- good value for money
- 6090 and 6095 are also available as kits. Please also refer to page 138.
- Either with white and yellow lamps

6090
Whip Lamp
spare bulb: 6204
height: 100 mm

Our modern post top lantern – as seen in many towns



6092
Street Lamp Modern
spare bulb: 6229
height: 100 mm



6097
Street Lamp Modern, double
spare bulb: 6229
height: 100 mm



6089
Industrial Lamp
for wall mounting
spare bulb: 6222



6080
Street Lamp Modern
spare bulb: 6204
height: 49 mm

Street lighting lanterns with yellow light



Street lighting lanterns light on main streets within towns often emit yellow light. Thus strangers easily recognize main streets while yellow light reduces glare for motorists.

H0



6091
Whip Lamp
sodium yellow light
spare bulb: 6204
height: 100 mm



6096
Whip Lamp double
sodium yellow light
spare bulb: 6204
height: 100 mm



6093
Street Lamp Modern
sodium yellow light
spare bulb: 6208
height: 100 mm



6098
Street Lamp Modern, double
sodium yellow light
spare bulb: 6208
height: 100 mm

The exclusive Series – our Highlights

6070 black
6071 black with clear shade
6072 green
6082 Street Lamp "St. Pauli"
Park Lamp
spare bulb: 6204
height: 56 mm



6073 black
6081 black with clear shade
6075 green
Park Lamp double
spare bulb: 6202
height: 65 mm



6077 black
6078 black with clear shade
6079 green
Park Lamp triple
spare bulb: 6202
height: 65 mm





6380 black
Park Lamp quintuple
spare bulb: 6202
height: 78 mm



The benchmark for luminaires

These perfectly fine-detailed lamps are our highlights. Due to the patented sandwich construction it is possible to create model lanterns without obtrusive wires. Lamp change also becomes easier due to this technique.

The upper parts of the lamps are built from four photo-etched and three turned pieces. No less than fifteen soldered joints have to be made for us to put the tiny parts of this lamp together.



6393
Lamp "Charlottenburg"
spare bulb: 6200
height: 111 mm



6394
Lamp "Friedrichstraße"
spare bulb: 6200
height: 134 mm



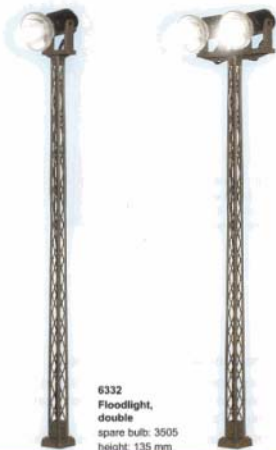
6395
Lamp "Brandenburger Tor"
spare bulb: 6200
height: 138 mm

Flood lights

Floodlights provide extremely high intensity. All floodlights can be aimed upwards, downwards or backwards and are equipped with the proven **viessmann** patented base and socket.



6330
Floodlight
for ground mounting
spare bulb: 3505
height: 16 mm



6331
Floodlight, single
spare bulb: 3505
height: 135 mm

6332
Floodlight,
double
spare bulb: 3505
height: 135 mm

Special modules for luminaire effects



5066
"Ignition module" for gas lanterns

This module is the ideal power supply for all **viessmann** gas lanterns of all scales (z. B. 6012, 6014, 6396, 6411 ...).

After switch-on with a Push-button panel (e. g. **viessmann** 5547) they appear to flicker like the prototype and slowly increase in brightness. After about 5 seconds the lanterns will reach full brightness. During operation the lanterns will flicker occasionally (to simulate variations of the gas pressure). When switched off, the lanterns will continue to glow with reduced brightness and fully extinguish after about 1.5 seconds.

5 separate outputs with different ignition patterns. Each output can drive up to 3 gas lanterns. However, we recommend to connect only one lantern per output since – in reality – no two lanterns will ever show exactly the same behaviour.



5067
Fluorescent lamp simulator

Electronic circuitry for realistic operation of **viessmann** models of fluorescent lighting in all scales (z. B. 6090, 6364, 6365, 6489). After switching on with a Push-button panel (e. g. **viessmann** 5547) the fluorescent tubes flicker individually for a short time – just like the real lamps – until they all reach full output and burn uniformly. Each lamp behave slightly different.

At one of the outputs a defect fluorescent lamp can be simulated. This tube will flicker in irregular intervals, sometimes lighting up quickly and other times very slowly.

5 separate outputs with different starting patterns. Each output can drive 3 lamps. However, we recommend connection only one lamp to each output, since no two lamps will ever behave exactly in the same way in reality.

Accessories

Admittedly, this heading is somewhat far fetched because we offer a wide range of products under this heading, all of which are designed to enhance your layout.

It starts with things such as illuminated cars, finely detailed street accessories, station clocks, moving figures and many different electronic modules.

All parts are:

- good value for money
- very detailed and prototypical
- and versatile.

Enjoy finding out what other surprises **viessmann** has on offer for your layout.



Zubehör

The classical railway crossing: the barrier

H0

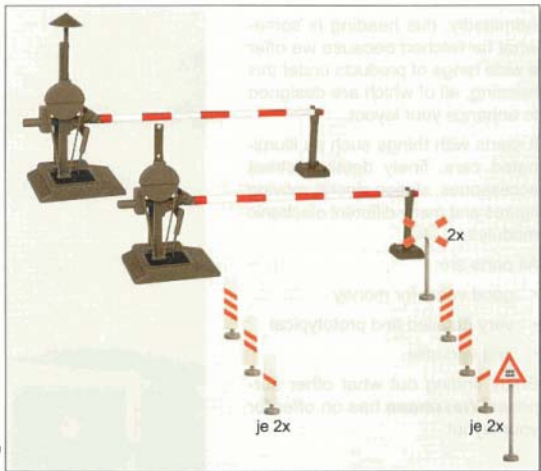
SET

5100

Automatic Crossing Barrier

Level crossing with two crossing barriers, powered by two separate drive units, slow opening and closing of the barrier. Track filling pieces, ramps and printed traffic signs are enclosed.

Can be expanded with set 5103. For automatic use you will also need the additional switching-tracks resp. **Vossmann** road contacts 6840. For a route with two tracks you also need an electronic relay 5552.



SET

5103

Extension Set Barrier

You can extend the boom gates of set 5100, with tree parts (red and white), in fill pieces and ramps.



5101

Infill Piece

Crossing Barrier H0 for two rail tracks



5102

Infill Piece

Crossing Barrier H0 for three rail tracks



Modern safety: the blinking light system



SET

5835

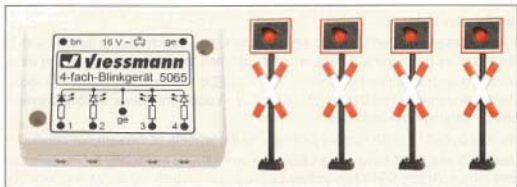
**Warning Lights,
4 pieces**

with blinking electronics
for max. 4 blinking lights

14 – 16 V AC

For automatic use you will need additionally the electronic relay 5552 and switching-tracks resp. the reed contact 6840.

height: 36 mm



5060

Warning Lights, 2 pieces (without pic)

Same as Set 5835 but only two cross signs.

Of course you get the suitable signals at **Viessmann**

Additional Cross signs

5061

Indicator

Observation Signal

with electronics for connecting to

blinking electronic 5065,

with one LED and longlife

quality bulb

spare bulb: 6209

height: 50 mm

Bu101



5062

Indicator

Observation Signal, modern

with electronics for connecting to

blinking electronic 5065,

longlife quality bulb

spare bulb: 6209

height: 56 mm

Bu1



5058

**Warning Lights,
2 pieces**

without blinking
electronics

height: 36 mm



5059

Warning Lights, 4 pieces (without pic)
like 5058, without blinking electronics



Railway specialities

Coach interior lighting

Now your passengers don't have to sit in the dark. Our coach interior lighting with LEDs does not need much power and does not generate heat, which could melt the roof of the car when using incandescent lamps.

The circuit boards equipped with either 7 or 14 LEDs are mounted under the roof. The circuit boards can be shortened anytime to suit the length of the car. A constant power supply prevents variations in brightness caused by varying track voltages.

Power is supplied through current pick-ups on the wheels or through our conductive coupling # 5048.

Articles 5046 and 5047 have white LEDs and are suitable especially for modern coaches, equipped with fluorescent lamps. Article 5049 has yellow LEDs and is suitable for older coaches equipped with incandescent lamps.



5046: 14 white LEDs

5047: 7 white LEDs

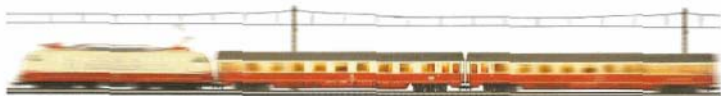
5049: 14 yellow LEDs

Interior lighting set

suitable for coaches by most manufacturers, which can be illuminated for DC-, AC- and digital motors, dimensions:

9 mm x 232 mm (kürz- und teilbar)

current pick up: max. 50 mA



Electrical couplers

These couplers can conduct a current of up to 1 A per contact. They also provide vertical centring which effectively prevents unwanted uncoupling – e. g. when starting a gradient. Normal coupling and uncoupling is possible.

With these couplers you can easily supply electricity to your entire train for interior lighting. That way not every coach needs its own current pick up and the locomotive needs less power.



5048

2 electrical couplers, double-pole
suitable for NEM 362-shafts,
complete with cables.



DB campaign "Moving the clock hand" * "



H0

Add some life to your station on the layout. And let your trains depart and arrive on time.

- With the campaign "Moving the clock hand" the DB wanted to increase punctuality of their trains end of the 1980's.

- working clocks!
- the clocks 5052 and 5053 can be purchased in the **Viessmann** Internet Shop
- dispatcher with moving arm and train control, exactly in scale 1:87



5053

Platform Clock, hanging
functioning, incl. battery



5052

Platform Clock
functioning, incl. battery
height: 56 mm



5023

Dispatcher with moving arm
Including drive and train control (without decoration)

Around the station

40



5080
Lit Platform Clock
spare bulb: 6229
height: 56 mm



5081
Lit Platform Clock,
lattice mast
spare bulb: 6229
height: 70 mm



5082
Lit Platform Clock,
lattice mast
spare bulb: 6229
height: 110 mm



Sparetime

At every larger station there was a restaurant and even today you will find one in most stations. In the southern regions you may also find a traditional and heavily frequented beer garden.

With our beer garden group of figures your beer garden will be complete. Our luminaires or LED chains listed on the following page provide suitable lighting.



5024
Seating Accomodation „Beer-Garden“ with movable arms
the men raise their glasses for a toast resp. in order to drink including drive
14 – 16 V AC

Calling time



5072
Telephone booth Telekom
lit, closed
spare bulb: 6206
height: 36 mm



5073
Telephone booth Telekom
lit, open
spare bulb: 6229
height: 30 mm

What for a quarter??



HO

Our contribution for the future

- "moving life"
- Rising generation at model railway ...



5054

Lovers in bed

incl. drive, teh woman actually moves (without the house and decoration). Please visit our home page.

Light chains, consisting of extremely small SMD-LEDs. They are flexible and particularly useful for lighting the roofs of houses or a fun fair. After all, our guys raising the beer glasses should not have to drink in the dark....

The matching control module

8-fold moving lights with adjustable speed. Two functions can be switched:

function A: the outputs will be powered in sequence, thus only one light is lit at a time.

Function B: the outputs are switched on in sequence and then switched off together. This function is particularly useful for advertising lights.

5043

with twelve LEDs, length 75 mm



5044

with six LEDs, length 37 mm



5045

with three LEDs, length 18 mm



5539

Eight-way Flashing Light

matching LEDs (inkl. resistor): 3550 (red), 3551 (yellow), 3552 (green),
matching bulbs: 3500 (blue), 3501 (yellow), 3502 (red)
14 – 16 V AC

Model cars with lights

Light conductor system with a robust bulb within the vehicle for bright illumination

The headlights are specially shaped to match each prototype

The aluminium heat sink assures long life of the incandescent lamp.



the working rear lights are lit by the light conductor

the light conductors to the rear lights are placed alongside the seats

Light conductors made off heat resistant plastic with excellent transmission

The electronic control module under the baseboard in conjunction with light conducting plastic enables you to enjoy the combination of illuminated front- and rear lights as well as working blue- or amber lights.

The models have to be wired anyway and thus you can also hide the electronic module under the baseboard rather than wasting precious space in the interior of the model. Instead of spending money on expensive micro-electronics the entire system is designed for a low budget and easy maintenance.



Vehicles from era III onwards



H10

Service vehicles with blinking lights



STOP
3039
Mercedes Benz 180 "Police"
spare bulb blue: 3506

The elegant station wagon of the 1950's



STOP
3212
Ford 17 M Kombi
spare bulb: 3505

The Bully – the "work horse" since the 1950's



STOP
3301
VW Bus "Post"
spare bulb: 3505

Hello taxi ...



STOP
3040
VW Käfer "Police"
spare bulb blue: 3506



5039
Taxi Sign
Lit with 2 LEDs. For latter mounting on existing car-models.



STOP
3303
VW Bus "Taxi"
spare bulb: 3505

Modern vehicles ...

... from Untertürkheim



3217
Mercedes Benz E-Klasse
spare bulb: 3505



3218
Mercedes Benz E-Klasse Kombi
spare bulb: 3505

... from Ingolstadt



3219
Audi TT
spare bulb: 3505



3220
Audi A4
spare bulb: 3505



3221
Audi A4 Kombi
spare bulb: 3505



3222
Audi A6
spare bulb: 3505



3223
Audi A6 Kombi
spare bulb: 3505

Taxis, not only for the station square



3224
Mercedes Benz E-Klasse "Taxi"
spare bulb: 3505



3225
Mercedes Benz E-Klasse "Taxi-Kombi"
spare bulb: 3505

Service



3229
Mercedes Benz E-Klasse Kombi
spare bulb: 3505



3233
Mercedes Benz Sprinter "Post"
spare bulb: 3505



3234
Mercedes Benz Sprinter
spare bulb: 3505

Service vehicles with blinking lights

Police



3226
Mercedes Benz E-Klasse "Police"
spare bulb blue: 3506

Fire brigade



3228
Mercedes Benz E-Klasse
"Fire brigade"
spare bulb blue: 3506

Red cross



3227
Mercedes Benz E-Klasse
„Notarzt“
spare bulb blue: 3506



3230
Mercedes Benz Sprinter "Police"
spare bulb blue: 3506



3231
Mercedes Benz Sprinter
"Fire brigade"
spare bulb: 3505



3232
Mercedes Benz Sprinter
„Rettungsdienst“
spare bulb: 3505

Variety of models

As per popular request we change the colour and the printing on our vehicles with every new production run, if possible. At the same time we don't ignore the design changes implemented by the manufacturers in order to update the model cars from time to time and provide lighting parts for updated models wherever possible.

Thus you have a comparatively wide choice of vehicles that can be equipped with lighting. Just have a look when you next visit your model train shop. We are certain that you will find an illuminated **Viessmann** car that is not yet part of your collection!



5025
Single Blinker Electronics
 with one blue light bulb
 with blinking electronics, for fitting in existing car-models, feed
 16 V AC
 spare bulb: 3500



5026
Single Blinker Electronics
 with one yellow light bulb
 with blinking electronics, for fitting in existing car-models, feed
 16 V AC
 spare bulb: 3501



5027
Double Blinker Electronic
 with two blue light bulbs
 with blinking electronics, for fitting in existing car-models, feed
 16 V AC
 spare bulb: 3500



5028
Double Blinker Electronic
 with two yellow light bulbs
 with blinking electronics, for fitting in existing car-models, feed
 16 V AC
 spare bulb: 3501



5029
Blue Light
 with blinking electronics, for fitting in existing car-models, feed
 16 V AC
 spare bulb: 3506



5033
Yellow Light
 with blinking electronics, for fitting in existing car-models, feed
 16 V AC
 spare bulbs: 3507



5032
Blue Light
 with blinking electronics, for fitting in existing car-models, feed
 16 V AC
 spare bulb: 3506



5034
Yellow Light
 with blinking electronics, for fitting in existing car-models, feed
 16 V AC
 spare bulb: 3507

For do-it-yourself-conversions

5030
Fourfold Blinker Electronic
 for connecting 4 blue or amber lamps, each with a different
 blinking frequency.
 14 – 16 V AC
 Matching lamps: 3500 (blue), 3501 (amber)



The ideal addition to blinking lights

5041
Ambulance Siren
 with a miniature loudspeaker and integrated interval switch. The
 interval can be activated by this switch.
 Matching switches: 5550 oder 6835
 For 14 – 16 V AC



Printed traffic signs made off fine brass

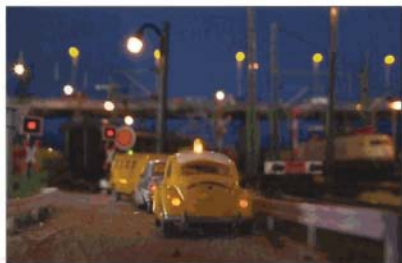


SET



3651
Traffic Signs, Set I
patent mounting sockets,
photo-etched sheet brass, printed

3652
Traffic Signs, Set II
patent mounting sockets,
photo-etched sheet brass, printed



Road works

For detailing your road works we recommend for instance our cable drums 7901 and 7902, the gas pipes 7905 and 7906. You will find these articles in our range of loads on pages 74 and 75.

SET

5040
Warning Boards
8 pieces,
with electronic blinker 5539
14 - 16 V AC



Ideal for our service cars



5041

Ambulance Siren

with a miniature loudspeaker and integrated interval switch. The interval can be activated by this switch.

Matching switches: 5550 oder 6835

For 14 – 16 V AC

Not only for your garage



5020

Electronic Welding Light

Includes a blue bulb with electronics for realistic flashing effects. A very bright and irregular flashing of the bulb produces the perfect illusion of a welding arc. Ideal for garages, factories etc. The electronic welding light can be used for all scales.

Spare bulb: 3500

Campfire

5022

Campfire

useable with the electronic fire 5021, creates a very realistic effect. Useable with up to eight bulbs.

spare bulb yellow: 3501

spare bulb red: 3502

diameter: 28 mm



The matching control module

This module provides power to simulate the flicker of a campfire. The fire is made up by up to seven red and amber miniature incandescent lamps flickering in different rhythms. Thus the observer has the impression to watch a real campfire.

Some applications for this unit:

- houses on fire
- campfires (in the forest, at the lake, etc.)
- stoves and furnaces (furnace in steel plant) and many more. There is no set limit to your imagination.



5021

Flickering fire

consists of: 2 amber, 1 red lamp

suitable for up to 7 lamps

spare lamps: 3501 (amber), 3503 (clear)

14 – 16 V AC

Freight / loads

H0 These loads are made in the renowned **viessmann** quality and are made off finely detailed real wood or metal.

Such loads are ideal on open cars in freight trains, in the loading areas in yards, saw mills and construction sites and contribute greatly to the realistic impression of a layout.

7901

Drum-wheel

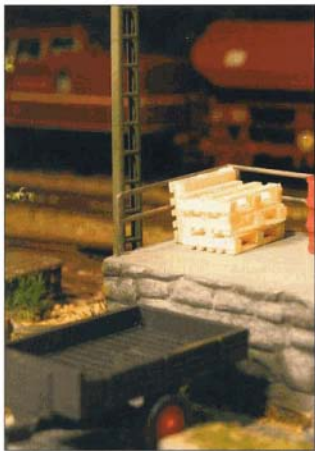
with black cable, from natural wood,
dimension (mm): $\varnothing 30 \times 20$



7902

Kabeltrommel

from natural wood
dimension (mm): $\varnothing 30 \times 20$



7900

Europalett

5 pieces, from natural wood
dimension (mm): $13 \times 9 \times 2,5$



7903

Roof bar

5 pieces, with transport binding, from natural wood



7912

Quarter-timbers

bundled, from natural wood
dimension (mm): $148 \times 28 \times 22$



7907

Wooden timbers

2 x 21 pieces, bundled, from
natural wood
length: je 57 mm



7908

Wooden timbers

21 pieces, bundled, from natural wood
length: 112 mm



7913

Wooden plates

batched and bundled, from natural wood
dimension (mm): $130 \times 28 \times 16$



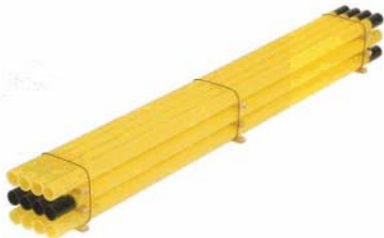
7909
Bundled planks
 bundled, from natural wood
 dimension (mm): 96 x 27 x 25



7910
Bundled planks
 bundled, from natural wood
 dimension (mm): 70 x 25 x 23



7911
Quarter-timbers
 bundled, from natural wood
 dimension (mm): 95 x 28 x 21



7905
Gas Pipes
 12 Stück, gebündelt
 length: 190 mm



7906
Gas Pipes
 8 pieces, bundled
 length: 190 mm



7914
Steel Tube
 black
 length: 145 mm



7904
Transport case
 from natural wood
 dimension (mm): 62 x 28 x 27

N Gauge

This small gauge has a history of over 40 years (N gauge; scale 1:160). Whoever puts preference to large yards and long trains travelling through wide curves cannot do without N gauge. The detailing of N gauge models is almost matching the level of HO models.

Viessmann offers you a large range of true scale accessories for your N gauge layout.

The advantages are:

- prototypical details
- functional
- a complete, functional and easy to install catenary system
- *very good value for money*

Also have a look at the pages with digital modules etc.: our tiny decoders for DCC and SELECTRIX fit into the smallest engines, even in N gauge! And of course, **Viessmann** natural trees are the icing on any N gauge layout.



Baugröße N



Semaphore signals

4406

Semaphore Distant Signal
moveable disk,
maintenance-free LEDs,
height: 32 mm



- finely detailed, photo etched metal masts
- maintenance free LED lighting
- prototypical slow movement
- under baseboard compact drive
- train control due to integral contact, even in distant signals and stop signals

4408

Semaphore Distant Signal
moveable disk and arm,
two under-baseboard drive
units, maintenance-free
LEDs,
height: 32 mm



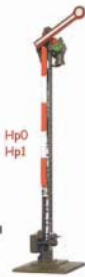
4407

Semaphore Distant Signal
fixed disk, moveable arm,
maintenance-free LEDs
height: 32 mm



4400

Semaphore Home Signal
with one arm,
maintenance-free LED,
height: 66 mm



4401

Semaphore Home Signal
two coupled arms,
maintenance-free LEDs,
height: 66 mm



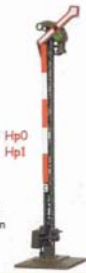
4402

Semaphore Home Signal
two uncoupled arms,
two under-baseboard
drive units, maintenance-
free LEDs,
height: 66 mm



4405

Bavarian Semaphore Home Signal,
without the aspect "HpRu" (please note the remarks
on page 13 regarding this special feature of Bavarian
signals),
with one arm, maintenance-free LEDs,
height: 66 mm



4409

Banner, station/yard Signal
moveable banner and backlit,
maintenance-free LED,
height: 35 mm



Light Signals of the German Railway – with LEDs



Our daylight signals for N gauge leave nothing to be desired. They are true replicas of their prototypes. With our control modules you can simulate any signal aspect and control your trains.

Many other hints and bits of information can be found in the H0 section of the catalogue.

- finely detailed metal masts
- patent base and socket
- maintenance-free LEDs
- very good value for money

4410
Colour Light
Distant Signal
with 4 LEDs,
height: 31 mm



4411
Colour Light
Home Signal
with 2 LEDs,
height: 44 mm



4416
Colour Light Departure
Signal with Distant Signal
with 10 LEDs,
height: 44 mm

Hp0
Hp0/Sh1
Hp1
Hp2
Vr0
Vr1
Vr2



4414
Colour Light
Home Signal with
Distant Signal
with 6 LEDs,
height: 44 mm



4412
Colour Light
Entry Signal
with 3 LEDs,
height: 44 mm



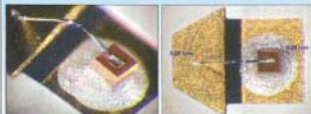
4415
Colour Light
Entry Signal
with Distant
Signal
with 7 LEDs,
height: 44 mm



4413
Colour Light
Departure Signal
with 6 LEDs,
height: 44 mm



COB-LEDs: Chip-On-Board Bonding technologie



The world's smallest functional model of a daylight signal!

That's how it is manufactured.

4418
Colour Light
Ground Signal
with 4 LEDs,
height: 5 mm



4417
Colour Light Home
Signal, platform type
with 4 LEDs,
height: 23 mm



Hobby series daylight signals – easy, practical and good

Please note the hints regarding the location of signals on page 14.

- ideal for newcomers starting their first layout
- easy to install, even for non-permanent layouts
- easy wiring
- mechanically as standard day-light signals series 44xx
- integral electronic control for signal aspects and train control

N

STOP

4440
Colour Light Distant Signal
with electronics and train control
with 4 LEDs,
signal height: 31 mm



STOP

4441
Colour Light Home Signal
with electronics and train control,
with 2 LEDs,
signal height: 44 mm



6837

Metal Fixing Plate

Suitable for all **viessmann** Hobby Signals (H0, TT and N).
With this plate you can place the signals at the correct location
and fix them to the track.
5 pieces



STOP

4442
Colour Light Entry Signal
with electronics and train control,
with 3 LEDs,
signal height: 44 mm



STOP

4448
Colour Light Ground Signal
with electronics and train control,
with 4 LEDs,
signal height: 5 mm



STOP

4447
Colour Light Home Signal, platform type
with electronics and train control,
with 4 LEDs,
signal height: 23 mm



Railway lighting



All **Viessmann** luminaires are made of brass and have the patented base and socket. Our railway lights even have a photo-etched metal lattice mast. The incandescent lamps are of high quality with long life.

6464
Platform Lamp
spare bulb: 6222
height: 36 mm



6463
Lattice Mast Lamp
spare bulb: 6220
height: 68 mm



6587
Lattice Mast Lamp
"Hof/Saale"
spare bulb: 6221
height: 80 mm



6585
Railway Lamp
spare bulb: 6221
height: 80 mm



Modern street lighting lanterns

Note:

With the aid of the fluorescent lamp simulator 5067 the typical flicker of a starting fluorescent lamp can be simulated. Please also refer to page 60.

6490
Whip Lamp
spare bulb: 6222
height: 54 mm



6495
Whip Lamp double
spare bulb: 6222
height: 54 mm



6489
Industrial Lamp
for wall mounting
spare bulb: 6222



6497
Street Lamp modern
spare bulb: 6222
height: 55 mm



6498
Street Lamp modern double
spare bulb: 6222
height: 55 mm



6480
Street Lamp modern
spare bulb: 6222
height: 33 mm



Classical lanterns

6410
Nostalgic Lamp
spare bulb: 6220
height: 48 mm



6415
Nostalgic Lamp
with two bulbs,
spare bulb: 6220
height: 48 mm



6460
Woodmast Lamp
spare bulb: 6222
height: 56 mm



6442
Wall Lamp
spare bulb: 6222

6411
Uniform Gas Lamp
spare bulb: 6220
matching igniter module
5066 (see page 60)
height: 35 mm



6440
Swan Neck Lamp
spare bulb: 6222
height: 46 mm



6447
Modern City Lamp
simple, blue
spare bulb: 6222
height: 48 mm



6448
Modern City Lamp
double, blue
spare bulb: 6222
height: 46 mm



Our highlights

Due to the patented sandwich construction it is possible to create model lanterns without obtrusive wires. Lamp change also becomes easier due to this technique.

Our artistic masterpieces for your layout.

- photo etched brass masts
- patented base and socket
- long life incandescent lamps

6493
Lamp "Charlottenburg"
spare bulb: 6221
height: 56 mm



6494
Lamp "Friedrichstraße"
spare bulb: 6221
height: 67 mm



6496
Lamp "Brandenburger Tor"
spare bulb: 6221
height: 69 mm



Pedestrian lighting – not just for parks



6422
Park Lamp
spare bulb: 6222
height: 48 mm



6470 black
6472 green
Park Lamp
spare bulb: 6222
height: 33 mm



6471
Wall Lamp
spare bulb: 6220



6473 black
6475 green
Park Lamp double
spare bulb: 6220
height: 37 mm



6477
Park Lamp triple
spare bulb: 6220
height: 37 mm



Timeless design – spheres

6500

Sphere Lamp
spare bulb: 6220
height: 33 mm



6502

Sphere Lamp
with two bulbs
spare bulb: 6220
height: 37 mm



6504

Sphere Lamp
with three bulbs
spare bulb: 6220
height: 40 mm



6501

Wall Lamp
spare bulb: 6220

Floodlights

Floodlights provide extremely high intensity. All floodlights can be aimed upwards, downwards or backwards and are equipped with a proven **viessmann** patented base and socket.



6530

Floodlight
for mounting on base board
spare bulb: 6222
height: 10 mm

6531

Floodlight,
simple
spare bulb: 6222
height: 78 mm



6532

Floodlight,
double
spare bulb: 6222
height: 78 mm



Illuminated model cars



STOP

Note: All vehicles are discontinued items and available in small quantities only.

STOP

2100
VW Bus T2
with front and rear lights
spare bulb: 3515



STOP

2101
Mercedes Benz 300 E
with front and rear lights
spare bulb: 3515



STOP

2105
Opel Rekord C Coupe
with front and rear lights
spare bulb: 3515



STOP

2106
Chevrolet Malibu
with front and rear lights
spare bulb: 3515



Service vehicles for the police, ambulance, fire brigade

STOP

2001
VW Beetle „Polizei“
spare bulb blue light: 3506



STOP

2003
VW Beetle „Notarzt“
spare bulb blue light: 3506



STOP

2041
Mercedes Benz „Polizei“
with front and rear lights
spare bulb: 3515
spare bulb blue light: 3506



STOP

2032
VW Bus „Krankenwagen“
with front and rear lights
spare bulb: 3515
spare bulb blue light: 3506



2043
Fire Brigade LF 16 (Magirus Deutz)
with front and rear lights
spare bulb: 3515
spare bulb blue light: 3506

Electronic module for blinking lights

Blinking module for N gauge cars

Simply install lights in your models! Our single and double blinking modules complete with colour lamps are suitable for 14 – 16 Volt AC supply.



One-way Flashing Unit N
5035 with one blue light bulb
5036 with one yellow light bulb



Double Flashing Unit N
5037 with two blue light bulbs
5038 with two yellow light bulbs



5042
Four-way Flashing Unit N
Maximum 4 incandescent lamps, each of which blinks at its own frequency
Matching lamp for blue light: 3506
Matching lamp for yellow light: 3507

N

Intersection between railway and road: the level crossing

SET

5900

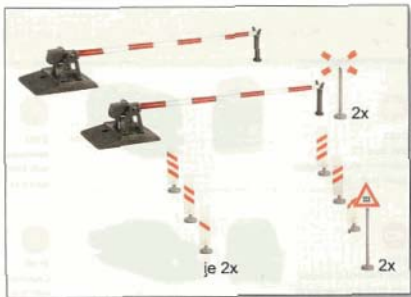
Automatic Crossing Barrier

Level crossing with two barriers, powered by two separate drive units which slowly open and close the barriers.

Track filling pieces, ramps and printed traffic signs are also included.

The crossing can be automated in which case you will need the reed contact of your track-producer.

If you have two tracks then you will also need the electronic relay 5552.



SET

5800

Warning Signs,

4 pieces

with blink electronics for 14 – 16 V AC.

Prototypical dimming of lights.

For automatic use you will need the electronic relay 5552 and switching tracks or reed switches of your track-producer.

height of the Warning Signs: 19 mm



5801

Warning Signs,

2 pieces (no picture)

Same as Set 5800 but only 2 cross signs, can be expanded with 5803

Additional Warning Signs

5803

Warning Signs,

2 pieces

without electronic module, for continuous light (when wired to 14 – 16 Volt AC) or in addition to 5801 or 5065,

height: 19 mm



Flashing Unit for LEDs

TOP

5802

Warning Signs,

4 pieces

without blink electronics, without blink electronics, height: 19 mm



5065

Flashing Unit

For up to 4 blinking lights, suitable for 5802, 5803 and for all LED lights. Prototypical dimming of lights

Catenary – easy installation even in N gauge



The description of our catenary system you will find on page 29.

4390

Information Folder Catenary System

Expandable folder contains a lot of pages with a lot of information on **Viessmann** catenary system, helpful hints on installing the catenary, a lot of examples for spanning tracks, turnouts and crossings also as background informations about the history of the catenary.

We don't recommend this folder for professionals only, but for those who want to get comprehensive information before they start building their layout.



Catenary starter set

This is an inexpensive possibility to equip a line with catenary. This starter set contains everything you need for a line or a track oval. You can start immediately without looking for every single module.

SET

4300

Catenary System Start Set

for one oval of track, consisting of:

- 22 standard masts 4310,
- 16 catenary wires 89 mm,
- 6 catenary wires 222 mm,
- Catenary Wire Mounting Gauge 4396

The catenary wire eyes are already bent; the special pliers 4398 are not needed for this set.



4310 (1 piece)
43103 (10 pieces)

Standard Mast

with support arm,
metal type
height: 45,5 mm



4311
Connecting Mast

with support arm,
metal type,
recommended accessories:
Fuse Holder 4388
Y-Link 4370
height: 45,5 mm



4313
Strandard Mast
with Twin Support Arms

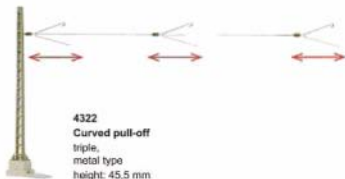
metal type,
electrically insulated
height: 45,5 mm



4312
Middle Mast
with support arm,
metal type,
electrically insulated
height: 45,5 mm



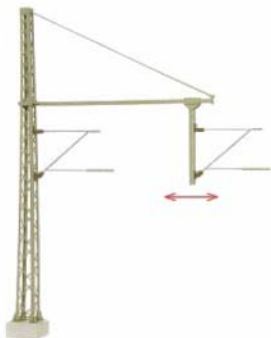
Tensioning assemblies and tubular brackets



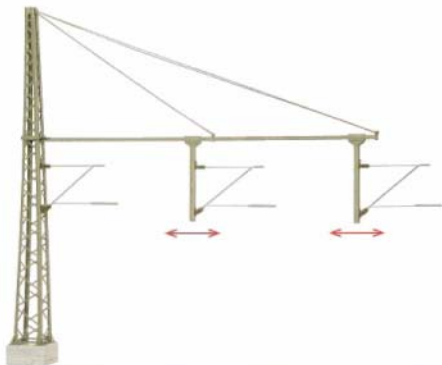
4322
Curved pull-off
triple,
metal type
height: 45,5 mm



4364
Tensioning assembly, pulley
type
incl. anchor mast and support
arm, metal type
height of the mast: 67 mm



Tubular brackets were developed in the 70's. Due to the removal of tracks e.g. in yards, head spans are not needed anymore, and the tubular brackets are sufficient for the remaining tracks. They experience fewer failures due to their construction that means, if one catenary wire of one line is damaged, there is a chance that the other wires stay intact and traffic can continue.



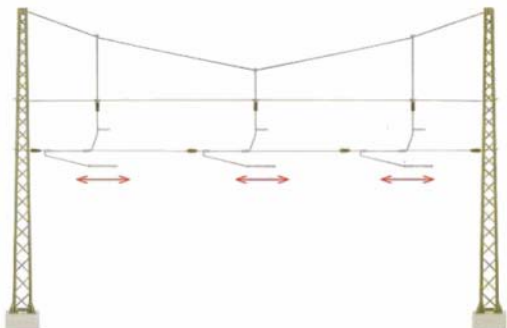
4360 (over 2 tracks – see picture above)
4361 (over 3 tracks – see picture on the right)
Suspended Box-Girder
electrically insulated, painted, complete with tall mast
and under slung, adjustable support arms, metal type.
Technical data **4360**:
height of the mast 85 mm, max. span width 57 mm
Technical data **4361**:
height of the mast 96 mm, max. span width 91 mm

Head spans



Head spans were used in 1928 with the standardized catenary wire at the "Deutsche Reichsbahn" and were still put up at the "Deutsche Bundesbahnen" until the middle of the 70's. You can still find them on lines and stations with several tracks.

The construction style has not changed during the whole time, so that our fine models can even be installed on era II layouts.



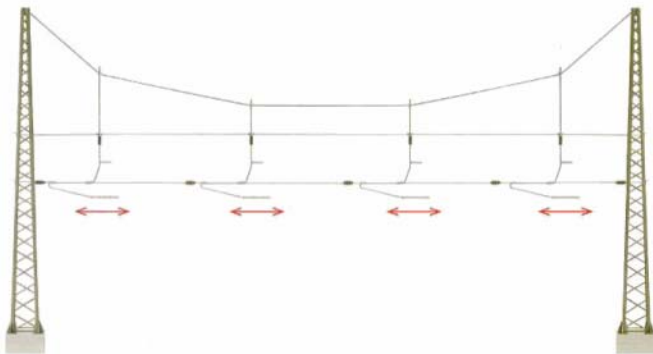
4362 (over 3 tracks)

Headspan

electrically insulated, track spacings to your own choice, metal type, ready assembled and painted.

Technical data:

height of the mast 85 mm, max. distance of 117 mm, centre to centre of each mast



4363 (over 4 tracks)

Headspan

electrically insulated, track spacings to your own choice, metal type, ready assembled and painted.

Technical data:

height of the mast 96 mm, max. distance of 151 mm, centre to centre of each mast

Catenary for tunnels and fiddle yards

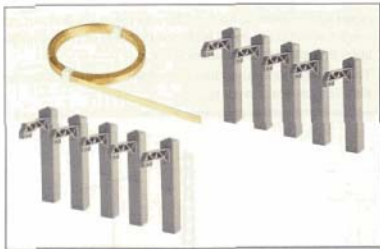
SET

4395

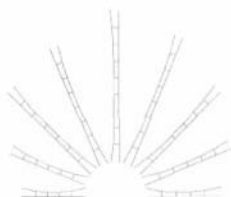
Set Tunnel Overhead System

consisting of 10 masts and 3 m catenary wire, for an fast and simple using in tunnels or fiddle yards with one or more tracks, universal using, also useable with cross-overs and turnouts, incl. fixing-screws.

For all popular track-systems, height of the masts: 67.5 mm



Catenary wires and accessories



Article	distance of the masts	Pack.Unit
4350	76 – 87 mm	5 pieces
4351	87 – 103 mm	5 pieces
4352	103 – 114 mm	5 pieces
4353	114 – 130 mm	5 pieces
4354	130 – 147 mm	5 pieces
4355	147 – 163 mm	5 pieces
4356	163 – 179 mm	5 pieces
4357	179 – 196 mm	5 pieces
4358	196 – 218 mm	5 pieces

Universal Catenary Wire

Together with eyehook bending pliers 4398 for use with any catenary length from 76 up to 218 mm.

4339

Variable Catenary Wire

for universal installation of catenary e. g. over turnouts and crossing works.



4331

Catenary wire 222 mm

with eyehooks for easy mounting on the support arms.

Packaging Unit: 3 pieces

Hersteller		Gleismitenradius	geeignete Fahrdrahlänge	Viesmann Artikel
Arnold	R1	192,0 mm	61,0 mm	4332
Arnold	R2	222,0 mm	70,0 mm	4333
Arnold	R3	400,0 mm	126,0 mm	4338
Arnold	R4	430,0 mm	135,5 mm	4340
Fleischmann	R1	192,0 mm	61,0 mm	4332
Fleischmann	R2	225,6 mm	71,5 mm	4334
Fleischmann	R3	396,4 mm	125,0 mm	4337
Fleischmann	R4	430,0 mm	135,5 mm	4340
Kato	R2	282,0 mm	89,0 mm	4330
ROCO	R1	194,6 mm	61,0 mm	4332
ROCO	R2	228,2 mm	71,5 mm	4334
ROCO	R4	329,0 mm	103,5 mm	4335
ROCO	R5	362,6 mm	114,0 mm	4336
Trix	R1	194,6 mm	61,0 mm	4332
Trix	R2	228,2 mm	71,5 mm	4334
Trix	R3	329,0 mm	103,5 mm	4335
Trix	R4	362,6 mm	114,0 mm	4336

Catenary Wire

with eyehooks for easy mounting on the support arms.

Packaging Unit: 5 pieces

4370

Y-Link

10 pieces,

for optimum electrical continuity if you are using the overhead system to provide power for your locos.



Modules for extensions and for hobby builders



4371
Bracket
5 pieces,
for all masts



4372
Twin Bracket
5 pieces,
for all masts



4388
Fuse Holder
with spare fuse
Necessary if you are using the catenary system to provide power for your locos. You need one fuse for each transformer. Spare fuse: 1206 (3 pieces, see page 136)
Content: 1 fuse holder,
2 fuses M 1 A



4373
Tensioning assembly,
pulley type
for mounting an anchor
and tall masts,
metal type



4314
Anchor Mast
metal type
height: 67 mm



Headspan Mast
4315: height 85 mm
4316: height 96 mm
4317: height 111 mm
metal type



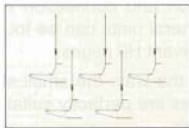
SET

4376
Support Span, Cross
Span Wire and Insulators
For the universal assembly
of headspans with a max.
distance of 250 mm,
centre to centre of each mast.



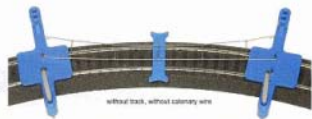
SET

4377
Holding Unit for Span
Bridge
For the universal mounting
of a headspan assembly,
5 pieces



Tools for the perfect catenary installation

4397
Mastposition Gauge
For establishing the correct
position for masts and
catenary when used on
curved tracks



4396
Catenary Wire Mounting
Gauge
For checking the correct
position of the catenary
wire.



4398
Eyehook Bending
Pliers
For shortening the
universal catenary wire
and for easy bending of
fixed eyehooks.



4199
Special Screwdriver
For safe and easy installation of
the masts.



Z Gauge

The smallest model railway of the world – who hasn't heard of it.

Even if the product range is somewhat limited – the number of Z modellers is just as limited – **viessmann** offers many luminaires and particularly signals.

It is fascinating to watch, how the arms of the 48 mm high semaphore signals move as slow as the prototype.

According to our motto "as small as possible, as big as necessary" we have included every detail and function in order to create realistic models.

After all, you want to operate your miniature railway.

Hints regarding the correct installation and connection as well as general hints can be found on the relevant H0 pages.

By the way: the small size model trees are perfectly suitable for this scale.



Baugröße Z



Small miracles – semaphore signals



- finely photo-etched posts
- lit by maintenance-free LEDs
- compact under-baseboard drive unit
- realistic slow movement of the signal arm and disk
- integrated train control for all semaphore running signals



Real LED – daylight signals – no dummies



The smallest functional daylight signal model in the world!



- finely photo-etched posts
- patent mounting socket
- lit by maintenance-free LEDs
- competively priced



Lighting for your railway yards



Brass construction and patented base and socket even for the smallest of scales

7164

Platform lamp
spare bulb: 6225
height: 27 mm



7163

Lattice Mast Lamp
spare bulb: 6226
height: 50 mm



7184

Lattice Mast Lamp
spare bulb: 6226
height: 50 mm

Street lighting lanterns – of course made of brass

7140

Swan Neck Lamp
spare bulb: 6225
height: 35 mm



7160

Wood Post Lamp
spare bulb: 6225
height: 41 mm



7170

Parklaterne
Ersatzgöhlampe: 6225
Höhe: 25 mm



7180

Street Lamp modern
spare bulb: 6225
height: 25 mm



7190

Whip Lamp
spare bulb: 6225
height: 40 mm



7195

Whip Lamp double
spare bulb: 6225
height: 40 mm



G Gauge

After the smallest gauge we present the largest, for which **viessmann** provides high quality accessories that are inexpensive.

G as in Garden railway, often makes you think of manufacturer of large scale model railways based in Nuremberg who supplies weatherproof railways best suited for the garden.

viessmann matches its product range for G gauge to meet these expectations.

Therefore our luminaires are weatherproof and equipped with a base and socket. You can screw the luminaires onto the baseboard, put them on the floor temporarily or install them in your garden with special earth spikes.

Useful accessories, like the play bases and earth spikes round off the small but fine range of products for this gauge.



Baugröße G



Lanterns made of brass – even in G gauge



G
7070
Park Lamp, black
incl. base-socket
spare bulb: 3510
height: 184 mm



7073
Park Lamp double, black
incl. base-socket
spare bulb: 3510
height: 205 mm



7071
Park Lamp, white
incl. base-socket
spare bulb: 3510
height: 184 mm



7074
Park Lamp double, white
incl. base-socket
spare bulb: 3510
height: 205 mm

Nostalgic streetlights made of brass

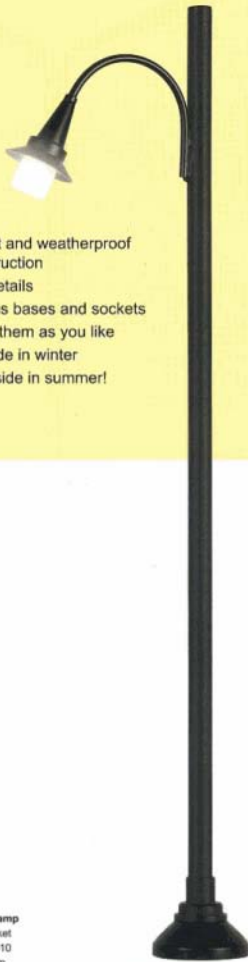


All G scale luminaires by **Viessmann** are weatherproof and have the interchangeable base system.

As a standard the matching colour base for fixing on the baseboard is supplied with the luminaire. If you do not want to install your streetlights permanently or if you want to use them on the floor we recommend the play bases 7000 and 7003. They are made of metal and provide stability even without using screws or bolts.



7040
Swan Neck Lamp
incl. base-socket
spare bulb: 3510
height: 295 mm



7060
Wood Post Lamp
incl. base-socket
spare bulb: 3510
height: 380 mm

- robust and weatherproof construction
- fine details
- various bases and sockets
- swap them as you like
 - inside in winter
 - outside in summer!

Street lighting lanterns on curved poles and accessories



7095
Whip Lamp double
incl. base-socket
spare bulb: 6231
height: 340 mm



7090
Whip Lamp
incl. base-socket
spare bulb: 6231
height: 340 mm

Useful accessories for your garden railway

The earth spikes 7001 and 7004 are intended for safe installation of your streetlights in the garden. They are shaped in order to allow trouble free insertion into the ground and to provide adequate stability. With the mounting aid 7006 mounting earth spikes becomes even easier.



6849
Garden Railway Wire

25 m coil,
weather resistant special wire for outside use and also in the ground. With two cores, 2 x 0.5 mm², core colours black and white, blue outer insulation, suitable for max. 24 V

7001
Garden Socket, black

7004
Garden Socket, white

This socket is pushed directly into the ground to give a secure base for a lamp in your garden layout.



7006
Driving-in Tool

For easy and safe installation of the garden socket (7001, 7004) into the ground.

7000
Play Socket, black

7003
Play Socket, white

This metal socket gives the lamp enough stability to do without the need for other fastenings (no screwing or drilling).



Electronic components and Accessories

Imagine you have built a layout with signals, lighting and many more features. Wouldn't it be the icing on the cake if all this would function like the prototype?

Therefore **Viessmann** not only offers signals and lighting equipment but also the necessary accessories to operate your layout.

The facts speak for themselves:

- extremely reliable
- contacts with silver coating for all relays and control panels for greater reliability and long life of the contacts
- compatible to electronic components of other manufacturers of electric and electronic accessories for model trains
- suitable for all gauges

For **Viessmann** it goes without saying that such accessories are excellent value for money.

Surely you would rather buy a few more signals... .



viessmann

Elektronik Zubehör

Switch it on ...



5547

Universal push button panel

with momentary action switches for 4 turnouts or two-aspect signals or up to 8 un-couplers. Particularly suitable for the Hobby semaphore signals, Hobby daylight block signals and stop signals, the signal control module 5210, the electronic relay 5552 as well as the control module for the daylight block signal 5221. In conventional mode it can also operate the control modules 5224, 5227 and 5529, if two-aspect signals are wired to it.

Several panels (the other panels on this page as well) can be put in sequence.

Maximum load per contact: 2 A



5549

Universal push button panel, with feedback capability

Feedback capable push button panel with momentary action switches for 4 two-aspect semaphore signals, turnouts or universal relays 5551. True status feedback of signals, turnouts or relays via 8 integral red and green LEDs.

Only for accessories with solenoid drives and end position contacts.

Several panels (the other panels on this page as well) can be put in sequence.

Maximum load per contact: 2 A



5546

Push button panel, three aspects

with momentary action switches for 2 three-aspect signals. Particularly suitable for the Hobby daylight home signals, the signal control module 5210 and the control module for daylight home signals 5222. In conventional mode it can also operate the control modules 5224, 5227 and 5529, if three-aspect-signals are wired to it.

Also suitable for three-way-turnouts in conjunction with the rectifier 6834.

Several panels (the other panels on this page as well) can be put in sequence.

Maximum load per contact: 2 A



5548

Universal push button panel, with feedback capability, three aspects

Feedback capable push button panel with momentary action switches for 2 three-aspect semaphore signals. True status feedback of signals via 6 integral red, green and yellow LEDs.

Only for accessories with solenoid drives and end position contacts.

Several panels (the other panels on this page as well) can be put in sequence.

Maximum load per contact: 2 A



5545

Push button panel for exit signals

with momentary action switches for 2 four-aspect signals ("stop", "proceed", "proceed slowly" and "shunting permitted"). Particularly suitable for the signal control module 5210 and the control module for daylight exit signals 5223. In conventional mode it can also operate the control modules 5224, 5227 and 5529, if four-aspect-signals are wired to it.

Several panels (the other panels on this page as well) can be put in sequence.

Maximum load per contact: 2 A



5550

Universal on-off-changer switch

4 change-over contacts for easy switching of lighting, signals etc. as well as for block control. All standards signals can be switched without any additional relays or control modules!

Can be modified into two double-pole-change-over contacts by means of tabs supplied for switch track sectors (train control).

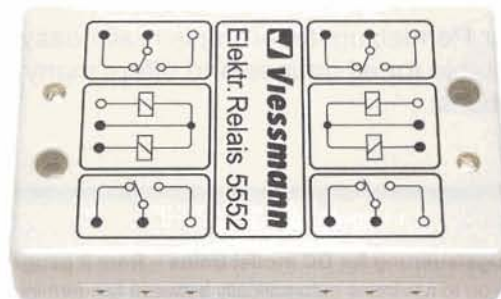
Maximum load per contact: 2 A



Relays for any purpose

A relay is a remotely controlled switch that opens or closes another circuit depending on a control current. A so called bi-stable relay (with two solenoids) remains in its status until it is activated again. Thus it converts short pulses (e.g. from push button panels, accessory decoders or track contacts triggered by a train) into a continuous current. Amongst others it can:

- switch daylight signals
- switch track voltage (on-off)
- switch lighting
- start up functional models



5552

Electronic relay

2 x 2 UM (change-over contacts)

Two independently operating bi-stable relays with 2 simultaneous change-over contacts.

No end position switches, yet suitable for continuous control current.

Can be operated with positive pulses respectively continuous or AC control current.

Current draw: 2 x 14 mA

Load per set of contacts: 2 A

5551

Universal relay

1 x 4 UM (change-over contacts)

Bi-stable relay with 4 simultaneous change-over contacts. For remote control of lighting, signals etc. as well as for automated block control systems.

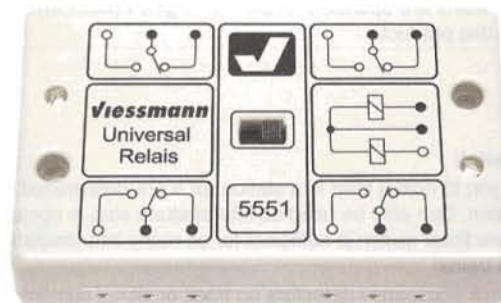
Can be operated with pulse or continuous control current due to its end position contacts.

True feedback in conjunction with push button panel 5549.

Manual switching by means of slide switch possible.

Current draw: 300 mA

Load per set of contacts: 2 A



5207

Timer relay

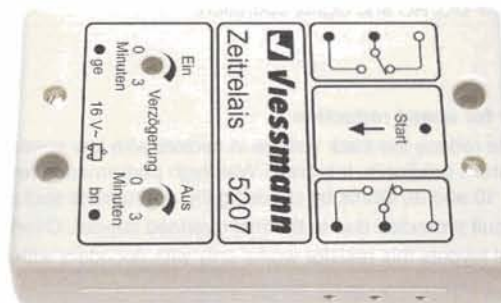
1 x 2 UM (change-over contacts)

For all time-controlled tasks (e.g. simulating the reaction time of the engineer after setting the signal from "stop" to "proceed", switching several rooms in a model building, operating functional models etc.).

Delay times for switch-on and switch-off can be adjusted separately between 0 and 3 minutes. Instructions with many examples.

Two outputs (change-over contacts).

Load per set of contacts: 2 A



Relays – but also semaphore signals and turn-outs as well as the control modules for daylight signals shown on the following pages – can be activated automatically by a train.

The track contacts 6840 will do this regardless of which track system you are using or whether you run your layout in conventional or digital mode.

These track contacts are simply installed be-

tween the two tracks. At least one car (or the engine) of each train that is supposed to trigger a switching function has to be equipped with a train magnet 6841.

If you only install magnets on some of your trains the automatic system can differentiate between trains with and without magnets.

6840

HO track contact

Reed contact (magnetic switch) for triggering switching by the moving train. Suitable for all HO track systems, also for tracks with centre contacts.

Maximum load per contact: 2 A



6841

Train magnets

6 pieces, extremely powerful, for under-floor-mounting on railway cars. Also suitable for engines with little clearance to the track.

Super-adhesive pads are supplied.

10 x 5 x 1.5 mm³



Run your trains automatically for a change!

Our Pendelzugsteuerung is really easy to install, suitable for all gauges and offers many operating options:

- soft acceleration and deceleration
- integral signal control
- no controller (transformer) required
- in between stops possible with 5208

5214

Pendelzugsteuerung for DC model trains – from II gauge (LGB) to Z

Enables you to run trains automatically between two terminal stations. Offers many technically interesting properties:

- simple wiring with just four wires to tracks
- no track contacts required – the position (location) of the train is monitored via track occupancy detectors
- current status is indicated by four LEDs
- slow acceleration and deceleration
- stop time in both terminal stations separately adjustable
- integral daylight signal control with soft change of aspect – just like the prototype
- choice between semi- and fully-automatic, in semi-automatic mode trains are dispatched manually by pressing a button
- no controller (transformer) required – 10–16 V DC or AC are supplied directly to the tracks

Since the trains are operated on DC AC engines (Märklin) or digital engines cannot be operated with this product.



5208

Timer switch

Enables you to hold a train in a station for a pre-determined time, with slow acceleration and deceleration. Can also be used as intermediate stop in conjunction with Pendelzugsteuerung 5214 – one timer switch is sufficient for as many intermediate stops as desired. Suitable for push-pull trains!

Due to track occupancy detectors no track or signal contacts required; works in both directions. Integral daylight signal control with soft change over – just like the prototype. Duration of stop, acceleration and deceleration separately adjustable.

Suitable for DC, AC and digital operation.



5216

Resistor for speed reduction

In order to reduce the track voltage in sectors with low speed limits e.g. in tight curves, at construction sites or in downhill gradients. Integral 5 Watt high performance resistors. The actual resistor value can be selected between 10 and 30 Ohms by choosing the appropriate sockets.

Short circuit protected due to thermal overload cut-out. Overload is indicated by a red LED.

On digital layouts this resistor works only with decoders with switched off load control.



5206

Track occupancy detector, 8 sectors

For monitoring 8 track sectors. The outputs can be directly wired to an isolated (single pole) track sector and detect every vehicle with current draw. Suitable for DC, AC and digital operation.

Loads can be switched directly via the relay outputs of the module (e.g. LEDs or lamps for status feedback on the control panel) or turnouts and signals with end position switches. Also suitable to activate the inputs of feedback decoder 5217 (s88) and 1202 (SWITCH-COM).

Maximum load per contact: 1 A



Special effects – impossible not to notice

Electronic modules to create special effects in functional models making them even more realistic. They are described in this catalogue under the relevant headings and gauges. Therefore we provide only an overview at this point:

- 5066 igniter module for gas lanterns
- 5067 fluorescent lamp simulation
- 5020 electronic welding light
- 5041 Martinshorn (European police siren) with interval switch
- 5021 flickering fire
- 5539 8-fold moving lights

- see page 60
- see page 60
- see page 73
- see page 71
- see page 73
- see page 67

Daylight signal controls – just like the prototype!



Control modules 5220 to 5223 – the clever and prototypical control system for your daylight signals:

- soft change of aspect
- prototypical signal aspects without complicated wiring or relays
- output for distant signal, compatible to signal control of Hobby signals
- automatic train control
- dark aspect of distant signal possible
- can be activated by many devices such as push button panels, push buttons, track contacts and digital decoders
- easy to wire
- extremely good value for money



5210 Signal control module

for 2 daylight signals, one of which can be a four-aspect exit signal while the other can be a distant signal. Soft change of aspect. Dark aspect of distant signal, if mounted on the same mast as the main signal.

The module 5210 does not have a relay for train control and thus is particularly well suited for computer controlled train control or if no train control is required.

Can be activated via push button panels 5545, 5546 or 5547, individual push buttons, track contacts or digital decoders.

5290 (without picture)

Kit for signal control module

Technically as type 5210. Some soldering required. Please note our warranty policy for electronic kits on page 122.



5220 Control module for distant signal

for all individual or on the mast of a main signal installed daylight distant signals from H0 to Z. Soft change of aspect. Dark aspect if mounted on the same mast as the main signal.

Can be activated by control modules for daylight main signals 5221, 5222 and 5223 or the Hobby daylight main signals.

Very simple wiring.



5221 Control module for daylight block signal

for all two-aspect daylight main signals (block signals) and daylight stop signals from H0 to Z. Soft change of aspect and automatic train control.

Can be activated via push button panel 5547, individual push buttons, track contacts or digital decoders. Very simple wiring.



5222 Control module for daylight home signal

for all three-aspect daylight main signals (home signals) from H0 to Z. Soft change of aspect and automatic train control.

Can be activated via push button panel 5546, individual push buttons, track contacts or digital decoders. Very simple wiring.



5223 Control module for daylight exit signal

for all four-aspect daylight main signals (exit signals) from H0 to Z. Soft change of aspect and automatic train control.

Can be activated via push button panel 5545, individual push buttons, track contacts or digital decoders. Very simple wiring.



Viessmann signal controls – the perfect system ...

The new **Viessmann** signal bus ...

– digital or not, that is NOT the question!

The **Viessmann** signal bus is an electrical connection between the newly developed control modules for daylight signals 5224 (for normal daylight signals), 5227 (for KS signals) and 5229 (for daylight signals with multiplex technology). The signal bus transmits the signal aspect and that track sector status to the previous signal (e.g. against the direction of travel), which in turn passes part of that information to the next previous signal.

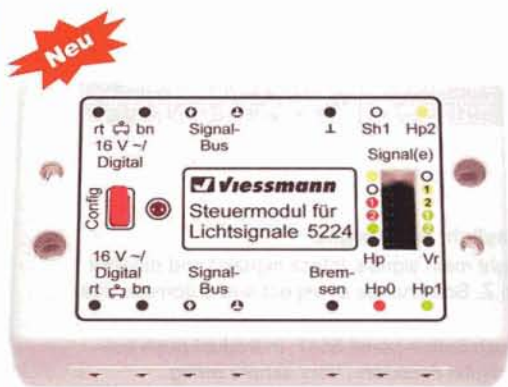
Thus you save much complex wiring particularly when using the modern multi-sector signals (e.g. DB Ks signals). Their interdependence is already implemented in the control module. Therefore no superior intelligence like a computer or a complex route control system is required.

The **Viessmann** signal bus has been developed for everyone, it is not designed for any specific system – digital or analogue. It works exactly the same way if you have a conventional AC or DC layout!

The **Viessmann** signal bus branches out according to the layout of the tracks. Thus it is possible to assign and control a distant signal to the corresponding main signal dependent on the setting of the turnouts - and vice versa. For this purpose a changer is wired parallel to the turnout (e.g. **Viessmann** 5228 or half of a 5552) that switches the signal bus according to the setting of the turnout. This method works in both directions of travel.

With the help of the signal bus the transfer between different signal types / systems can be realised just as in reality!

The signal bus also simplifies automatic operation. It conveys the track occupancy status in automatic block control mode e.g. in conjunction with our track occupancy detector 5206.



5224

Control module for daylight signals

The control module for 2 daylight signals – one main signal and one distant signal – with LEDs and a common plus pole or with incandescent lamps, provided they do not draw more than 200 mA in total. Therefore it is suitable for all **Viessmann** signals and also for signals from other manufacturers – except for the **Viessmann** signals with the new multiplex technology. It can be activated in conventional mode via the push button panels 5545, 5546 and 5547 or via a digital signal with Märklin Motorola or NMRA DCC – the decoder is part of the module. The control module 5224 is suitable for the new **Viessmann** signal bus and can be configured for the following applications:

- Daylight signal with two or several aspects

A two-aspect signal with the aspects "proceed" and "stop" need the push button panel 5547 (for 4 signals) or a digital address. A signal with three or four aspects with the additional aspects "proceed slowly" and "shunting permitted" need the push button panel 5546 (three aspects, two signals) or 5545 (four aspects, two signals) or a digital address.

- Yard signal or block signal



When configured as a block signal the module responds automatically to the status of the corresponding track sector. This works only in conjunction with track occupancy detectors with continuous output e.g. the isolated track of the Märklin M-track or with a track occupancy detector 5206 for two-conductor track sectors. Per signal sector up to two track sectors are required. In this mode the module changes automatically to "proceed" if the following sector is clear (un-occupied). If one of the two sectors is occupied, the module switches to "stop".

- Its own distant signal or distant signal on the same mast

The signal module controls the main signal and the corresponding distant signal or the distant signal of a following main signal mounted on the same mast. In that case the distant signal will show the "dark" aspect when the main signal shows "stop".

- Interrupt track supply or switch on brake generator when "stop" aspect is shown

With the relay for automatic train control 5228 the module can stop trains automatically either by interrupting the track voltage in front of the signal or – more prototypically – with the digital brake module 5232 (Märklin Motorola) or a brake generator (for NMRA DCC).

- Signal with aspects "stop" and "proceed slowly"

If required you can configure the module to permit these two aspects only. In that case the module can be activated via the push button panel 5547 or a digital address.

Regardless if the module is triggered by push buttons or track contacts the logic always assures that the "red" button has preference if two or more devices provide conflicting commands.

Soft change of signal aspects.

This new control module 5224 replaces the digital control modules 5224, 5225 and 5226 previously announced.

5227

Multiplexer for Ks signals

The control module for the most modern DB signals. Can be configured for the different types of Ks and multi-sector signals. The multiplexer for Ks signals is based on the new Viessmann multiplex technology (refer to page 26) and operates the integral signal bus (see left page). Can be activated via push button panels 5545, 5546 and 5547, track contacts and digital commands both in Märklin-Motorola and NMRA DCC format.

Four signal aspects can be activated in conventional mode, while others can be added by connecting several modules via the signal bus. In digital mode up to eight signal aspects can be set.

The signal is connected via a single plug. Rapid change of aspect like the prototype signals with LEDs (can also be set to soft change).

With the relay for automatic train control 5228 the module can stop trains automatically either by interrupting the track voltage in front of the signal or – more prototypically – with the digital brake module 5232 (Märklin Motorola) or a brake generator (for NMRA DCC).

Regardless if the module is triggered by push buttons or track contacts the logic always assures that the "red" button has preference if two or more devices provide conflicting commands.

Programming button for configuring and setting the digital address, LED status indicator.



DIGITAL 2



5229

Multiplexer for daylight signals with multiplex technology

This control module is designed for the new generation of Viessmann daylight signals with multiplex technology (refer to page 26). Can be configured for various signal types and tasks as 5224.

Equipped with the Viessmann signal bus (see left page).

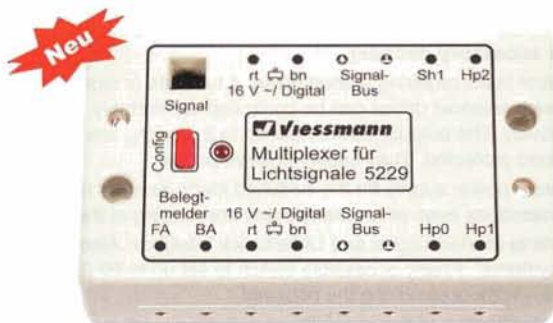
Can be activated via push button panels 5545, 5546 and 5547, track contacts and digital commands both in Märklin-Motorola and NMRA DCC format.

The signal is connected via a single plug. Soft change of signal aspects.

With the relay for automatic train control 5228 the module can stop trains automatically either by interrupting the track voltage in front of the signal or – more prototypically – with the digital brake module 5232 (Märklin Motorola) or a brake generator (for NMRA DCC).

Regardless if the module is triggered by push buttons or track contacts the logic always assures that the "red" button has preference if two or more devices provide conflicting commands.

Programming button for configuring and setting the digital address, LED status indicator.



DIGITAL 2



5228

Relay for automatic train control

1 x 2 UM (change-over contacts)

This relay can be plugged in directly and extends the control modules for daylight signals 5224, 5227 and 5229 by adding the possibility to stop the train. It can also be used independently.

The module stops the train by interrupting the track power (separate for track and catenary) in front of the signal or – more prototypically – with the digital brake module 5232 (Märklin Motorola) or a brake generator (for NMRA DCC). It has double pole change-over contacts.

Load per set of contacts: 2 A



6836

Resistors 1.5 kOhm, 10 pieces

Required for bridging isolated track sections (e.g. in front of signals) in digital mode with Märklin-Motorola. It prevents the decoder from losing its data during extended stops.



Digital components at such low prices?

... compatible to Märklin

Always one step ahead with **viessmann**:

- compatible to Märklin-Motorola
- freely accessible code switch
- up to 80 decoder addresses
- separate power supply
- extremely good value for money
- and also as a kit ...



5211

Motorola accessory decoder

for all control tasks requiring a short pulse. 4 turnouts or signals or 8 uncouplers with solenoid drives can be controlled comfortably, reliably and cost effectively. The outputs can handle up to 2 A each, are short circuit and overload protected. They supply positive pulses.

The separate power supply for the switched loads assures reliable function of accessories even when many trains are running at the same time. Compatible to Märklin-Digital and Uhlenbrock Intellibox. Also suitable for "Märklin systems". Freely accessible switch to set up to 80 (!) decoder addresses – without removing the housing!

For optimal utilisation of the capability of switching loads we recommend to use our power module 5215 (see page 124).

5213

Motorola switching decoder

4 x 1 UM (change-over contacts)

decoder for switching continuous outputs (on, off, change-over) for daylight signals, track voltage (e.g. in the fiddle yard), lighting, motors and accessories.

Compatible to Märklin-Digital and Uhlenbrock Intellibox. Also suitable for "Märklin systems".

Four potential-free, separate single-pole change-over contacts.

Each output for 2 A maximum.

Freely accessible switch to set up to 80 (!) decoder addresses – without removing the housing!



5293 (without picture)

Kit: Switching decoder

Technical features as 5213. Minimal solder skills required. Please also note our warranty policy below.

5291 (without picture)

Kit accessory decoder

Technically as 5211. Minimal solder skills required. Please also note our warranty policy below.

Compatible and more ...



The DIGITAL 2 logo was introduced to assist you when purchasing digital products. "Digital 2" is the open standard for digital systems and allows you an easier way of selecting digital modules and devices. All devices marked with "Digital 2" can be combined and operated in the same system – either with Märklin-Motorola or with NMRA DCC. All **viessmann** digital decoders comply with the "Digital 2" standard. "Digital 2" is a registered trademark by **viessmann** and Uhlenbrock but can be used by other manufacturers after their products have undergone the required compatibility check. In future, it really pays to look out for this logo, even when appraising products of other suppliers!

Guarantee of compatibility for decoders

Our digital decoders are 100% compatible to the digital systems mentioned. We fully guarantee trouble

free operation of our decoders with the other systems as stated. There are no mismatches between the different decoder brands, therefore the decoders can be mixed without any concern. The warranty obligation by the manufacturer of the digital system does not cease when using our decoders! Furthermore we have improved the features and performance of our digital components compared to the products of the suppliers of digital systems.

Guarantee for function of electronic kits

Should your module from a **viessmann** kit not work as desired after assembly we offer you to repair at our works at the price differential between the price of the kit and the finished product! Thus you are protected against financial loss should you ever have the misfortune not to arrive at the desired result when assembling the kit!

Do-it-yourself with **viessmann** electronic kits: Lots of fun without risk.

5231

Decoder for single turnout for C-track

Decoder for one turnout, shape and size matching the space available in the Märklin C-track turnout. Separate power supply for switching is available, assuring reliable switching even with many trains running.

The decoder is suitable for Märklin-Motorola and NMRA DCC data formats. Also suitable for Märklin systems.

Easy setting of decoder with push button.

For optimal utilisation of the capability of switching loads we recommend to use our power module 5215 (see below).



5212

DCC accessory decoder

For all control tasks requiring a short pulse. Can control up to 4 turnouts or signals, or up to 8 un-couplers. Comfortable and cost effective.

The outputs can handle up to 2 A each and are short circuit and over-load protected. They supply positive pulses.

The separate power supply for the switched loads assures reliable function of accessories even when many trains are running at the same time.

The decoder understands NMRA DCC and Märklin-Motorola data formats and is thus very flexible in its use. Suitable for Lenz, Arnold digital, DigiTrax, Roco, Fleischmann Twin-system, Märklin, Uhlenbrock etc. Also suitable for Märklin systems.

For optimal utilisation of the capability of switching loads we recommend to use our power module 5215 (see below).



5209

DCC accessory decoder

Decoder for switching continuous outputs (on, off, change-over) for daylight signals, track voltage (e.g. in the fiddle yard), lighting, motors and accessories.

The decoder understands NMRA DCC and Märklin-Motorola data formats and is thus very flexible in its use. Suitable for Lenz, Arnold digital, DigiTrax, Roco, Fleischmann Twin-system, Märklin, Uhlenbrock etc. Also suitable for Märklin systems.

Four potential-free, separate single-pole change-over contacts. Each output for 2 A maximum.

Easy setting of decoder with push button.



The name says it all – the Power module

Accessories with solenoid drives are always switched with a short but powerful current pulse. In order to prevent a digital system from interpreting this as a short circuit this current pulse is "buffered" by the decoder. If the storage (buffer) is empty then there is little power for switching loads.

Furthermore, digital current is expensive, since it has to be provided by a digital central unit or booster.

Viessmann decoders with separate power input for switching the load do not know such problems. The cost effective Power module 5215 – wired between transformer and decoder – provides the decoder with more than enough energy at the switching outputs. That is the best way to utilise the considerable switching power of **Viessmann** decoders!

5215

Power module

For maximum switching power of digital decoders via separate power input. Suitable for decoders 5211, 5212, 5213, 5260 and digital signals. Decoders with separate power input terminals by other suppliers can also be powered with the Power module. One Power module usually is sufficient to feed all decoders and digital signals.



Feedback – compatible to Interface and Intellibox

s88

5217

Feedback decoder

Compatible to s88.

This feedback decoder can be used with the Märklin Interface, Märklin Memory and the Uhlenbrock Intellibox. The 16 inputs of the decoder can be used for occupancy reporting via the Interface or to trigger Memory functions with track contacts (6840) or with Märklin K- and C-track contact track sections.

A 15 cm long flat cable with original s88 plug is supplied.



s88

5233

Feedback decoder with occupancy detector

This feedback decoder with occupancy detector can be used with the Märklin Interface, Märklin Memory, Uhlenbrock Intellibox and the Fleischmann Twin Center. The 8 inputs are to be directly wired to the isolated track sections (centre contact of Märklin or one rail of two-rail system).

All current drawing vehicles will be registered. No track contacts required. The booster voltage is monitored, thus the status information remains available even in the case of interrupted power!

A 15 cm long flat cable with original s88 plug is supplied.



s88

5230

Extension cable for s88-bus

1.5 m long; suitable for use with 5217, 5233, Märklin s88 and Uhlenbrock Intellibox. Can be connected to cable already available and thus provides a real extension.



DIGITAL 2

Mot.

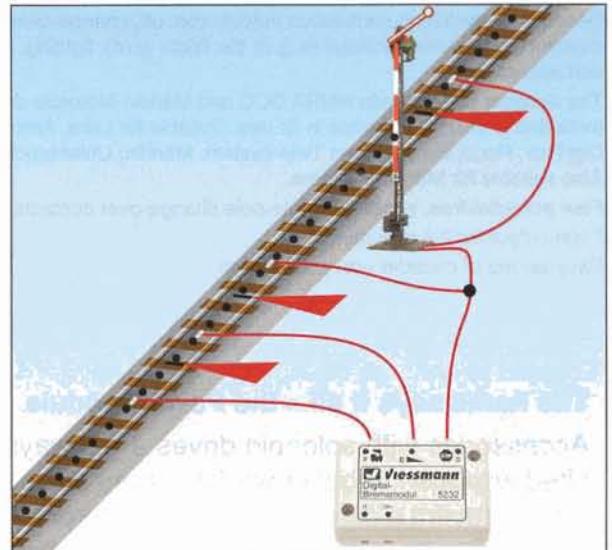
Neu

5232

Digital brake module

This module controls the prototypical slowing down and stopping of a train ahead of a signal showing "stop". Works with all mobile decoders that support the Märklin brake section (Viessmann 5246, many Märklin mobile decoders and many decoders by other manufacturers). Intelligent circuitry allows push-pull operation and works with the new Märklin daylight signals without any special circuitry! Easy wiring (see sketch on left).

Train headlights and interior lights continue to operate while the train is stopped in front of the signal!



SET

6819

Installation set for mobile decoders

Contains all materials required for trouble free installation of digital decoders into model engines from H0 to Z. Fine, highly flexible stranded wires (∅ 0.5 mm), shrink sleeves (different colours) as well as thin, special solder (∅ 0.5 mm) and different adhesive pads are supplied with the set. A must for modellers using digital.



Miniature jobs – employ our miniature engineers!



The highlights of **viessmann** mobile decoders:

- excellent value for money
- extremely small dimensions, very thin
- short circuit protected outputs
- up to 10,239 addresses
- automatic setting for analogue and digital mode
- special effects for lighting outputs
- optimal adjustment of running characteristics
- each decoder comes with a 5%-discount voucher to be credited when purchasing the WINiPRO programming and admin software



DIGITAL 2

Mot.

AC



5247 (without picture)

Load controlled decoder for universal motors

No mechanical modification to motor required! Simply remove the directional relay or Delta decoder, insert 5247, done!

Märklin-Motorola format (old, new and "systems"), separately adjustable acceleration and deceleration, adjustable load control, programming without opening the engine, shunting speed can be turned off. With SUSI interface.

Outputs:

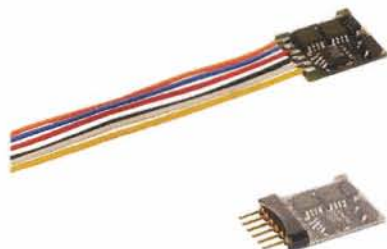
Motor 1,200 mA, lighting 2 x 150 mA, auxiliary functions 2 x 300 mA.

DCC

Mot.

DC

DIGITAL 2



5243

Load controlled miniature mobile decoder

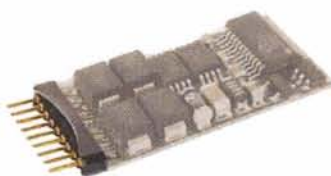
Decoder as 5242 but with 6-pole interface plug as per NEM 651 "S"; dimensions with plug 13.5 x 8.8 x 3.3 mm³

DCC

Sel.

DC

DIGITAL 2



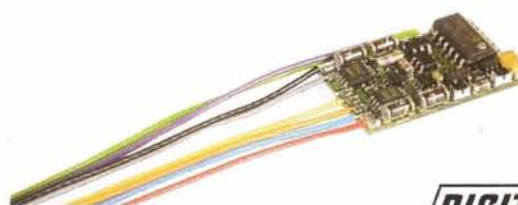
5252

Mobile decoder DHL 161 for DCC and SELECTRIX®

Dimensions 13.8 x 9.0 x 1.8 mm³!

The smallest multi protocol decoder in the world! Extremely shallow. Suitable for NMRA DCC and SELECTRIX®. Motor output for 1,000 mA with adjustable load control, 2 directional lighting outputs for 300 mA, one function output for 50 mA, short circuit and overload protected. Otherwise all general properties of our SELECTRIX® mobile decoders apply (see following page).

The decoder is equipped with a 6-pole flat cable for direct connection into a NEM 651 "S" socket.



Mot.

DCC

DC

DIGITAL 2

5246

Load controlled mobile decoder

Dimensions: 24.6 x 14.0 x 2.9 mm³

Extremely flat decoder, best suited for small engines in HO and TT.

Motor output

- high frequency motor control for very silent running
- adjustable load control of the latest generation
- short circuit protection, up to 1,100 mA current draw

2 Light outputs

- different lighting effects programmable
- dimmable (brightness of lamps can be varied)
- adjustable directional preference
- 150 mA each, short circuit protection

2 Function outputs

- 300 mA each

Operating modes

- multi protocol decoder for Märklin-Motorola (old, new and "systems") as well as NMRA DCC
- up to 10,239 addresses
- automatic change over to analogue mode (DC)

with 8-pole interface plug as per NEM 652. Software can be updated due to state-of-the-art flash technology.

◀ **5242**

Load controlled miniature mobile decoder

Dimensions: only 11.4 x 8.8 x 3.3 mm³, suitable for N, TT and due its high load capability also for many HO locomotives!

Motor output

- high frequency motor control for very silent running
- adjustable load control of the latest generation
- short circuit protection, up to 750 mA current draw

2 Light outputs

- different lighting effects programmable
- dimmable (brightness of lamps can be varied)
- adjustable directional preference
- 150 mA each, short circuit protection

Operating modes

- multi protocol decoder for Märklin-Motorola (old, new and "systems") as well as NMRA DCC
- up to 10,239 addresses
- automatic change over to analogue mode (DC)

with 6 colour coded wires. Software can be updated due to state-of-the-art flash technology.



5256

mobile decoder DHS 251 for DCC with SUSI

dimensions 24,2 x 15,4 x 3,9 mm³

Powerful locomotive decoder with SUSI-pin for the connection of sound modules from Dietz resp. Uhlenbrock or our additional decoder DHZ 401.

Outputs: Motor 2.000 mA, lighting 2 x 300 mA, function 50 mA. with 8-pole interface plug as per NEM 652.



SELECTRIX®-mobile decoder by D&H ...



Sel. DC

5250
Mobile decoder micro-DHL 050 for SELECTRIX®

Dimensions 13.2 x 6.8 x 1.8 mm
 The smallest mobile decoder in the world! Despite its tiny size it offers 500 mA on the motor output with the proven SELECTRIX load control as well as two directional lighting outputs for incandescent lamps (100 mA each). All other features of our SELECTRIX mobile decoders apply. Particularly for Z and N gauge engines!
 The decoder has 6 colour-coded wires as per NEM.

5251
Mobile decoder Micro-DHL 055 for SELECTRIX (without pic)

Dimensions 13.2 x 6.8 x 1.8 mm
 Technical properties as 5250, but for engines with LED lighting (anti parallel LEDs, as often used in Z engines).

5252
Mobile decoder Micro-DHL 161 for SELECTRIX (without pic)

Dimensions 13.2 x 9.0 x 1.8 mm
 You operate with SELECTRIX, your club or your neighbour runs DCC? You want to run your engines on both layouts? That is not a problem with our smallest multi-protocol decoder for SELECTRIX and DCC!
 Description and picture see page 125.



Sel. DC

5254
Mobile decoder Micro-DHL 101 for SELECTRIX

Dimensions 14.0 x 9.0 x 2.7 mm
 This small mobile decoder has a motor output for 1 A with the proven SELECTRIX load control. Besides two directional lighting outputs for 300 mA each it has one output for an auxiliary function (e.g. horn) for up to 50 mA. All other features of our SELECTRIX mobile decoders apply. Particularly for N gauge engines!
 The decoder is equipped with a 6-pole flat cable for direct connection to a NEM 651 "S" socket.



Sel. DC

5257
Mobile decoder Micro-DHL 212 for SELECTRIX

Dimensions 25.0 x 12.5 x 3.3 mm
 Super strong mobile decoder for SELECTRIX, specially suited for HO. Motor output for up to 2,000 mA, lighting outputs for 2 x 300 mA, auxiliary function output (e.g. horn) 500 mA!
 The decoder has an 8-pole NEM 652 plug.



Sel.

5258
Function decoder DHF 201 for SELECTRIX

Dimensions 21.5 x 7.5 x 2.1 mm
 SELECTRIX function decoder with two function outputs for up to 1,000 mA each.

SELECTRIX – the original by D&H (Doehler & Haass) ... a class by itself

What makes this system so powerful?

SELECTRIX has by far the fastest data transmission protocol. It is 7 times faster than other digital systems – with 100 addresses and 31 speed steps a total of 1,460 commands per second are transmitted!

The running properties of SELECTRIX decoders by Doehler & Haass are exceptionally good. The Super-Soft-Drive (SSD) assures super smooth acceleration at speed step 1!

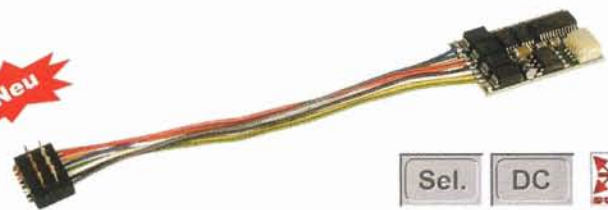
The SELECTRIX motor control represents premium High Tech! That is assured by the SELECTRIX –specific ASIC chip developed by D & H with over 28,000 parts fitted onto the unbelievably small area of 2.3 x 2.9 x 0.3 mm, without a match in the whole world.

SELECTRIX – developed by D & H – has been used successfully for over 20 years. Its hallmark has been its top quality, power, reliability and of course the easy handling!

The great know-how and potential for innovation of D & H and **Viessmann** assure that the technological leadership of SELECTRIX is continuously expanded due to updates and new developments.

Common properties of all SELECTRIX mobile decoders by D & H

- Super-Soft-Drive (SSD), e.g. particularly soft response to the throttle
- Load control through comparing target value and actual value
- Several control options for optimal adaptation to the motor
- 31 speed steps, internally 127
- block-sector operation with simple diodes
- short circuit protection of motor output
- overload protection for lighting and function outputs
- electronic assignment of motor and lighting outputs as well as current pick ups (for correcting incorrect wiring)
- feedback of decoder number (engine address) during operation
- suitable for any layout with SELECTRIX or analogue DC operation
- 111 addresses
- adjustable maximum speed
- adjustable acceleration and deceleration
- adjustable motor tact frequency
- mode of signal stop sections can be selected



Sel. DC

5255
Mobile decoder Micro-DHL 201 for SELECTRIX

Dimensions 24.2 x 15.4 x 3.9 mm
 Powerful SELECTRIX mobile decoder with SUSI-interface for connecting sound modules by DIETZ or Uhlenbrock or of our extension module DHZ 400. Suitable for HO.
 Performance: motor 2,000 mA; lighting 2 x 300 mA; function 50 mA.



5259
Extension module DHZ 401 for SUSI

Dimensions 18.5 x 7.5 x 2.1 mm
 Extension module to be wired to the standardised SUSI interface of any mobile decoder. Expands the mobile decoder by another four function outputs of 1,000 mA each.

Sel.

5260

Accessory decoder for SELECTRIX

This accessory decoder has 8 outputs for switching turnouts, semaphore signals, Hobby daylight signals or control modules for Viessmann daylight signals, relays or un-couplers. The decoder address and the operating mode (pulsed or continuous output) are programmed electronically. After turning on the SELECTRIX central unit the decoder reports the status of all output devices to the command station. Separate power input for high switching power. All outputs are short circuit protected. For the optimal utilisation of the switching power of the decoder we recommend to use the Power module 52165 (see at the bottom of page 123).



Sel.

5262

Feedback decoder for SELECTRIX

This feedback decoder monitors 8 track sectors with its integral occupancy detectors via the Sx bus to your SELECTRIX central unit. Suitable for e.g. TRIX devices Lok-Control 2000, Control-Handy or Interface. The occupancy detectors register any current drawing vehicle, e.g. engines, coaches with lighting or unlit coaches, if the wheel insulation has been bridged with some resistor lacquer (e.g. available from TRIX or Uhlenbrock).



Servo drives for model trains

Servo drive are very common in model cars, aeroplanes and boats and have been used for many years. You can now use the servo drives for your model train layout in combination with our new Servo decoder.

They are perfectly suitable for switching turnouts, signals or un-coupler, opening of the gates of an engine shed, turning of water cranes (spouts) and many other movements.

Servo drives are very quiet and provide high torque to the actuating wire.



SET

5263

Servo decoder for SELECTRIX – including 4 servo drives

Decoder for controlling 8 servo drives 4552 via separate push buttons or a SELECTRIX system with Sx bus. The speed and the angle of movement can be adjusted separately for each output.

4552

Servo drive

Dimensions 39 x 35 20 mm
Powerful and silent drive. 40 Ncm torque, maximum turn 180°. Complete with mounting accessories and several servo actuators (wires and disks).

5261 (without picture)

Sx-bus cable

Bus cable for the SELECTRIX Sx-bus with two 5-pole DIN plugs suitable for decoders 5260, 5262 and 5263. Length 1.5 m

4553 (without picture)

set of contacts for Servo drive

suitable for servo drive 4552, consisting of two 2-pole change-over-contacts, activated when the servo drive reaches its end position. For status feedback, polarising frogs and others

6820 (without picture)

Braking diodes for SELECTRIX, 10 pieces

If an engine runs on an isolated track section with power supply via a braking diode, the engine will slow down automatically, e.g. in front of a "stop" signal.

6814 (without picture)

diodes SA20CA, 5 pieces

diodes SA20CA are required for mobile decoders 5252 (DHL 161) and 5254 (DHL 101) in TT and Ho engines.