

# **35042**

## **R/C Loco Receiver, 6A, with Pocket Remote**

### **1. General information**

Thank you for purchasing the PIKO R/C system for radio operation of garden railway models.

Please read these operating instructions carefully in order to be able to use all the functions of this device. It is essential that you observe the following safety and warning instructions to ensure trouble-free and safe operation of your model.

35042 is designed specifically for our Mogul and Camelback locomotives. Of course, the system can also be installed in other, larger locomotives, with sufficient space inside. A built-in rectifier, facilitates installation and protects against reverse polarity.

### **2. Safety & warning information**

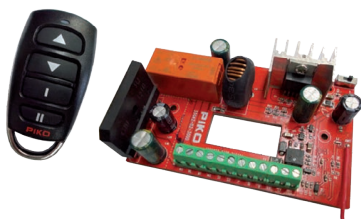
The remote control system has been designed and approved exclusively for the control of RC models. PIKO Modellbau assumes no liability in the event of any other use. Remote-controlled models are not toys and only suitable for model railroaders aged 14 and over. The construction and operation of such models requires special knowledge, technical care, technical understanding and careful, safety-conscious behaviour. Errors during assembly or operation can cause considerable damage to property and personal injury. As manufacturers and sellers, we are unable to monitor the operation of our products. Therefore we do not assume any liability. Technical defects of an electrical or mechanical nature can lead to the unexpected starting of a motor, which can seriously injure not only you! Even an operation of the receiver system without activated

transmitter can lead to this effect. Protect your remote control system from dust, dirt and moisture. Do not expose the devices to excessive heat, cold or vibration. The remote control operation may only be carried out in the specified temperature range from -15°C to +55°C. Avoid shock and pressure loads. Always check your remote control for damage to housings, cables and connections.

### 3. Content:

1x Transmitter (Pocket remote)

1x Receiver (main PCB)



#### 3.1 Technical data

##### Transmitter (Pocket Remote)

Number of channels:	8
Frequency range:	2.4 GHz
Range approx.:	30 m
Power supply:	1x 3 V CR2025
Dimensions approx.:	2.68" x 1.42" x 0.63" (68 x 36 x 16 mm)
Weight approx.:	30 g

##### Receiver (Main PCB)

Number of channels:	8
Speed steps:	28
Operating modes:	2 (for analog-sound / digital soundtraxx® - sound)
Frequency range:	2.4 GHz
Range approx.:	30 m
Power supply:	12-24V AC/DC/DCC
max. current:	6A
Dimensions approx.:	3.38" x 2.20" x 1.14" (86x56x29mm)
Weight approx.:	65 g

## 4. Control elements

vorwärts - ansteigend  
 (rückwärts - absteigend)  
*forwards - step up  
 (reverse - step down)*

rückwärts - ansteigend  
 (vorwärts - absteigend)  
*reverse - step up  
 (forwards - step down)*

Funktion 1  
*Function 1  
 Sound 1\**

Funktion 2  
*Function 2  
 Sound 2\**

Not-Stopp  
*Emergency stop*



\* entsprechendes Equipment (Decoder) erforderlich  
 special supporting equipment (Decoder) is required

## 5. First set-up

The transmitter requires a CR2025 battery for operation. There is a LED at the top of the remote that confirms each operation. If the brightness or range of the remote control decreases, the battery must be replaced.

Proceed as follows:

- To insert the cell, lever open the lid with a coin on the recess.
- Carefully insert the button cell into the holder with the plus pole facing up.
- Place the metal bracket back into the bottom of the housing and join the two halves of the housing together.

## 6. Connections on the receiver

A rectifier is built into the receiver. This enables connection with reverse polarity protection. The existing cables are connected via a screw terminal. In order for the receiver to receive the signals, it must be connected to the corresponding transmitter. the corresponding transmitter. This is done by a simple channel selection by means of a DIP rotary switch.

## 6.1 Installation

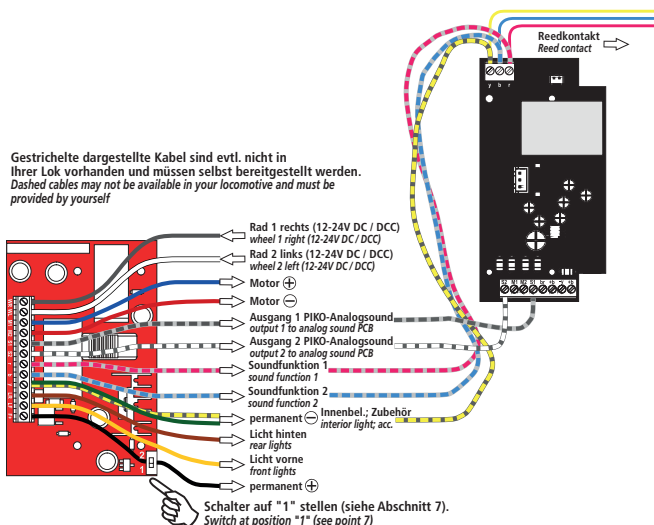
The installation of the receiver circuit board depends individually on the model and the equipment, as well as the available space. However, the design and function has been developed specifically for the PIKO Mogul, or Camelback-Lok. 4 screw holes allow mounting with suitable screws (M2 - M2.5; self-tapping screws D2.2 etc.)

Basically, there are many ways to install the RC receiver board in your loco. For battery powered locomotives it is recommended to install a switch to prevent the batteries from discharging when not in use. In the following under point 6.1.1 we show you 2 typical connection schemes.

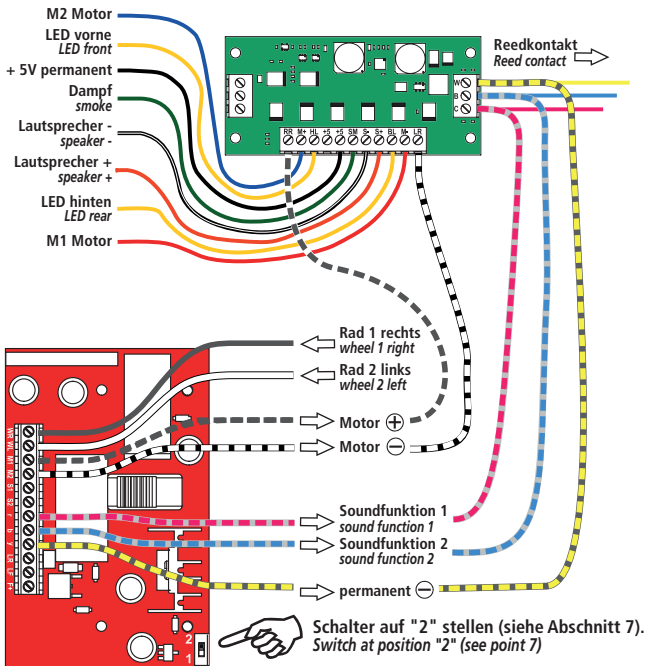
**Attention! Installation should only be carried out by experienced persons. Suitable tools and appropriate handling of electronic components are a basic requirement.**

### 6.1.1 Wiring diagram / assignment "PIKO analog sound"

Gestrichelte dargestellte Kabel sind evtl. nicht in Ihrer Lok vorhanden und müssen selbst bereitgestellt werden.  
Dashed cables may not be available in your locomotive and must be provided by yourself



## 6.1.2 Wiring Diagram / Assignment "PIKO G Sound Decoder #36220"

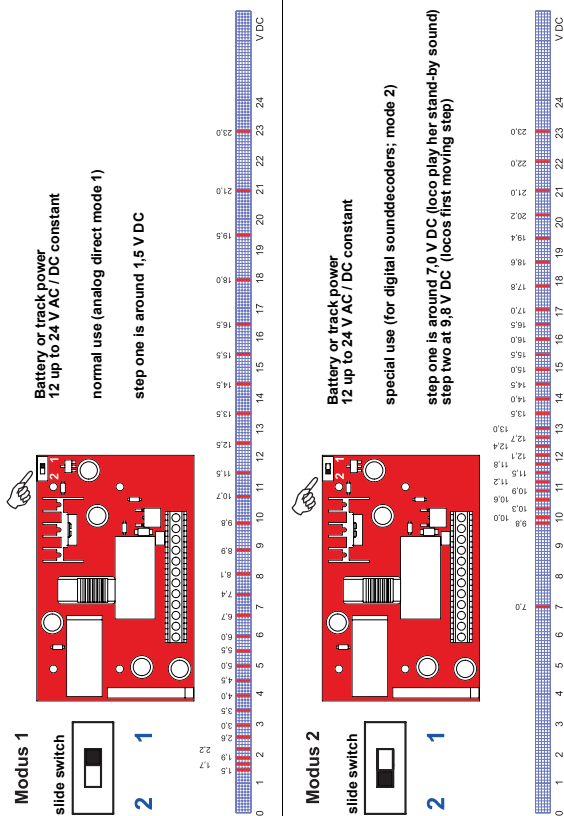


Gestrichelte dargestellte Kabel sind evtl. nicht in Ihrer Lok vorhanden und müssen selbst bereitgestellt werden.  
Dashed cables may not be available in your locomotive and must be provided by yourself.

## 7. Characteristics of the speed step range

In order to make a suitable response / start possible for both variants (analog or digital), we have installed a switch that allows you to select from 2 characteristic curves.

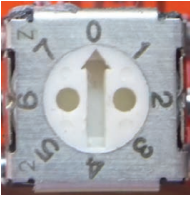
### 7.1. Overview of characteristics



Mode 1 is for locomotives that are analog equipped. Speed level 1 is at approx. 1.5V.  
Mode 2 is for locomotives that are digitally equipped (especially with PIKO G-Sound decoder #36220 etc.; like Mogul or Camelback). Speed step 1, or first reaction is at approx. 7V.

## 8. Channel selection / Synchronization

In order for the receiver to pick up the signals from the transmitter, it must be connected to the corresponding transmitter. This is done by simply selecting a channel using a DIP rotary switch.



The transmitter and receiver are factory-set to channel 0.

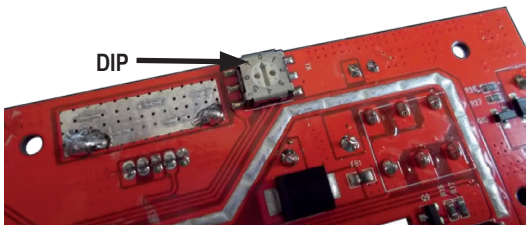
Transmitter:

1. Remove the small cover on the back of the transmitter.
2. You now have access to the DIP rotary switch.
3. The arrow direction indicates the set channel.
4. You can adjust the channel by turning it with a small flat screwdriver. Transmitter and receiver must be synchronized accordingly.

Receiver:

1. Depending on the installation position, you need access to the DIP turn switch on the main circuit board
2. The direction of the arrow indicates the channel that has been set.
3. As with the transmitter, use a small flat screwdriver to set the channel on the DIP turn switch.


Transmitter and receiver must therefore be synchronized accordingly.




## 9. Operation


First make sure that you have switched on the switch board!


The operation is simple. By pressing the buttons on the remote control, you can select the direction of travel/speed level and, depending on the range of functions/further accessories, even trigger 2 sound functions\*.


1 x  = Forward driving direction, speed level 1


2 x  = Forward driving direction, speed level 2

If you are already driving forwards with the locomotive, you can use the button  to increase the speed (speed levels).

By pressing , you can decrease the speed.



1 x  = Reverse driving direction, speed level 1

2 x  = Reverse driving direction, speed level 2


If you are already reversing with the locomotive, you can use the button  to increase the speed (speed steps).

Press the button  to reduce the speed.

You can press the buttons briefly, which only changes one speed step at a time, or you can keep the buttons pressed, which causes the speed to change continuously.

 } = Emergency stop  


 = Sound triggering 1, e.g. a bell\*

 = Sound triggering 2, e.g. a horn\*

\*Only in combination with appropriate accessories with Reed contact tripping.

## 10. Legal information

### Declaration of EU conformity

PIKO Spielwaren GmbH hereby declares that the product complies with the 2014/53/EU directive. The complete text of the EU Declaration of Conformity is available at the following Internet address: <https://www.piko.de/konform>

### radio frequencies and transmission power

- R/C 2.4 GHz
- Frequency range 2413 MHz - 2474 MHz
  - Maximum transmission power 7 mW

### REGULATORY INFORMATION

FCC ID: 2ATRN-35041

#### FCC Information (USA):

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

