

## DCC Booster RB 1200 and RB 1210





## Content

DCC Booster RB 1200 and RB 1210	1
Introduction	1
Main functions:	
Technical parameters:	
Connection	
Connecting DCC Booster to the track	2
Connecting accessory decoders to DCC Booster	3
Connection via LocoNet®-B bus	4
DCC Booster RB 1210 firmware undate using Command station RB1110 or RB1110-Mini	Δ

## Introduction

RB 1200 and RB 1210 DCC Booster is designed to control railroad models that are equipped with DCC decoders and accessory decoders. RB 1200 AND RB 1210 is a DCC Booster that supports Railcom® protocol and LocoNet® protocol as well (version with LocoNet® connectors). No other protocols (for example Märklin® Mfx®) are supported.

<u>Important:</u> RailBOX DCC Booster must not be used in systems that operate in a common ground principle; otherwise, it can lead to the damage of the Booster and/or the Command Station.

## www.railbox.pl

\*All trademarks and registered trademarks, product names and photos used in this documentation are the property of their owners.





## Main functions:

- Active Railcom® with option to disable
- Short circuit detection on tracks
- Possibility independently enable / disable (Start / Stop) by Button and synchronize with the status of the Command Station
- DCC could be signal taken from the output of the DCC Command station or directly from the tracks
- 3 LocoNet® outputs (version with LocoNet® connectors) that could be used for connecting Booster to the Command station via LocoNet® bus as well as for connecting manipulators (for example Fredi or PIKO) or following Boosters.
- Possibility to update firmware of a Booster via RailBOX: Railroad control mobile app

## Technical parameters:

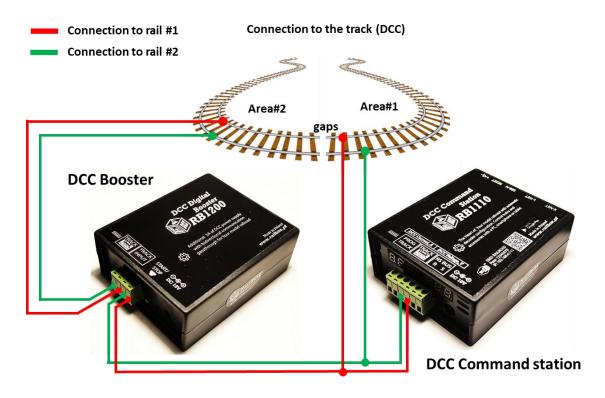
Dimensions

RB1200: 90 x 110 x 45 mm RB1210: 100 x 104 x 22mm

- Power supply voltage: 12-24V DC / 3A (Power supply 19V is included)
- The DCC output 17V max 3A

#### Connection

# Connecting DCC Booster to the track



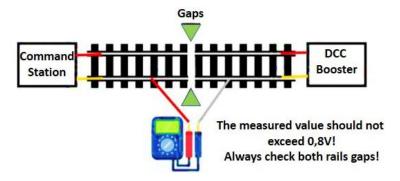
## www.railbox.pl

\*All trademarks and registered trademarks, product names and photos used in this documentation are the property of their owners.



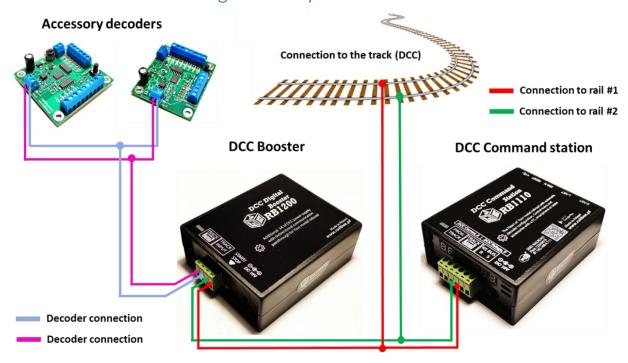


Note: DCC Booster RB 1200 and RB 1210 can be used for controlling locomotives on the separate independent track area; this way each rail should be connected parallely (wire from left pin output to left rail; right to the right) to the Booster and to the Command Station to avoid a short cut and/or any kind of damage of accessory decoders, during the moment when locomotive will be at both track areas at the same time when passing the gaps.



<u>Important</u>: The transition voltage between the Booster ranges should be less than 0.8 V. This can easily be checked with a multimeter (setting the measuring range to AC alternating voltage). Both rail gaps should always be checked. If the value of 0.8 Volt exceeded, then input voltage of the booster or the voltage setting of the Command Station must be adjusted.

# Connecting accessory decoders to DCC Booster



<u>Note:</u> The connection of the RB1210 booster is carried out in a similar way according to the marking of the connectors on the top sticker. DCC Booster RB 1200 and RB 1210 can also be used as supplying source for any of your accessory decoders.

#### www.railbox.pl

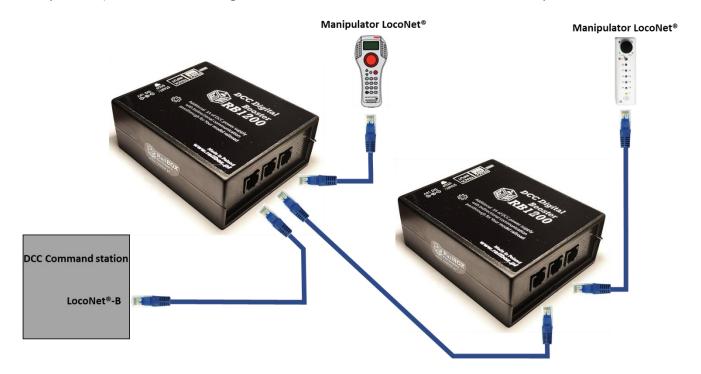
\*All trademarks and registered trademarks, product names and photos used in this documentation are the property of their owners.





## Connection via LocoNet®-B bus

The RB 1200 Booster version with LocoNet <sup>®</sup> connectors and RB 1210 Booster allow it to be connected to the Command station via the LocoNet <sup>®</sup> -B bus, and also external devices (e.g. LocoNet <sup>®</sup> manipulators) as well as following boosters could be connected as shown on the picture below.



# DCC Booster RB 1210 firmware update using Command station RB1110 or RB1110-Mini

The RB1210 Booster software can be updated via RailBOX: Railroad control app using the RB1110 or RB1110-Mini command station via LocoNet bus.

## www.railbox.pl

