

# Train controller RC-01 Instruction manual

Thank you for purchasing this Rokuhan product. Please read this instruction manual carefully before use.

#### **∕!\** Caution

- Turn off the power if trains derail.
- Turn off the power and disconnect AC adapter or remove batteries if you see smoke or feel heat coming from this unit or trains
- Turn off the power and disconnect AC adapter or remove batteries when not in use.
- Disassembling and modification could cause failure of this device.
- This product includes sharp parts. Handle with care.
- Choking Hazard. Keep out of reach of small children under 3 years old.
- To avoid short circuit, do not put any metallic product across the rails.
- Do not connect any products not recommended by Rokuhan to avoid any accident.
- Do not use this product in a wet location to avoid shock or electrocution.
- Store in dry dust free location to avoid failure of your unit.
- Handle the cord with care to avoid disconnection or short circuit.
- This product is not recommended for use by children under 8 years old unless supervised by
- Use only the AC adapter included to avoid any breakdown.

#### 1 Features of Train controller RC-01

- DC voltage controller with digital voltage control which generates less heat.
- The maximum output is 10V at 800mA. (If batteries are used, voltage will vary with condition of the batteries)
- Digital circuit breaker automatically turns the power off and trouble lamp will light in the case of short circuit or overload. (Only for track power)
- If trouble lamp is lit, eliminate the cause of trouble then turn off the main power switch, then turn it on again and circuit breaker is reset.
- With 2 switches to control turnouts.
- Works with 8 pcs of AA battery. Batteries enable portable use.
- With terminals for accessory output to power lighting in structures, etc. Main switch controls power feeding to accessory output for lighting structures, etc.

   With 2 terminals to connect "C002 Turnout switch"

   With a Circuit breaker which resets automatically for safety.

## Rated power

Maximum 500mA Track power DC 0V to 10V Accessories DC 10V (on Batteries 12V) Maximum 300mA Side sockets DC 10V (on Batteries 12V) Maximum 300mA

Maximum total 800mA ⚠ Caution

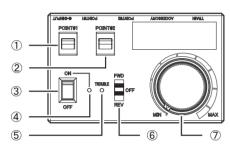
INPUT : AC 100V 50/60Hz 16VA OUTPUT: DC 10V 800mA

XDo not use at more that rated power to avoid heating.

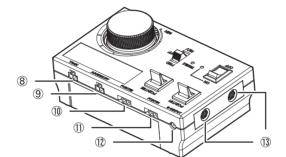
Feeder cable

#### 2 Parts list

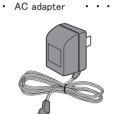
Train controller RC-01 • • • 1 pc Names of parts

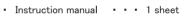


- 1 Turnout switch #1
- 2 Turnout switch #2
- 3 Main power switch
- 4 Main power lamp (green) ⑤ Trouble lamp (red)
- 6 Direction switch
- Speed control dial



- 8 Socket for track feeder cable (black)
- Socket for accessory (white)
- 10 Socket for turnout #2 (transparent)
- 1 Socket for turnout #1 (transparent) 12 Socket for AC adapter
- (13) Side sockets for C002 Turnout switch etc.







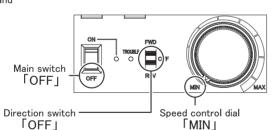
# 3 Set controller

# 3-1 Precaution for wiring

Before wiring, set the main switch and direction switch "OFF" Set the speed control dial "MIN"



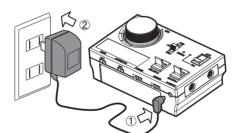
※ Trains may run right after wiring if the switches are not set as shown in the following pictures.



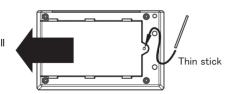
# 3-2 Power for controller

Power is supplied by either AC adapter or batteries.

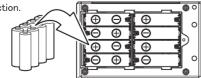
- How to use AC adapter
  - 1 Connect AC adapter to controller. 2 Plug in AC adapter.
  - X If batteries are set in controller, controller automatically chooses AC adapter as power source.



- How to set batteries
- X Disconnect AC adapter before setting.
- 1 Slide the bottom cover pushing the small hole on the cover with a thin stick



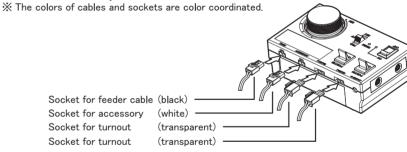
2 Set 8 pcs of AA batteries with correct direction. Close the cover tightly until you hear snap.



- X Alkaline batteries are recommended.
- X Do not mix new batteries, old batteries, and many kinds of batteries.

# 3-3 Connect cables to controller

Connect cables correctly before use.

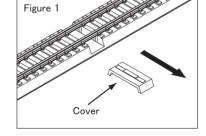


⚠ Caution

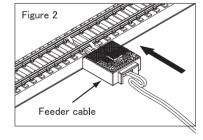
\* Do not connect track feeder cable to the socket for accessory. Trains become uncontrollable.

# 3-4 Feed power

- 1 Remove the cover from power feed point on track as shown in figure 1.
- X The cover is to maintain the appearance of track.



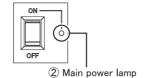
- 2 Place track on a flat surface Insert the other end of the feeder cable into the slot on the track.
- X When the feed point is not in use, remove the power plug.



### 4 How to use Train controller RC-01

#### 4-1 Power on

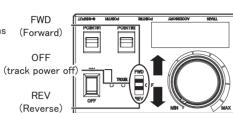
- ① Check cables are wired correctly and turn on the main switch.
- 2 Check the main power lamp is lighted.



#### 4-2 Direction switch

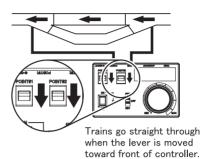
Set direction switch "OFF" to turn off. Set direction switch "FWD" to run trains forward, "REV" for reverse. Forward and reverse depend on which direction trains are heading.

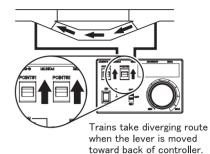
※ Set speed control dial "MIN" before moving the direction switch.



#### 4-4 Turnout switch

- $\ensuremath{\textcircled{1}}$  After switching turnout, wait one second to switch again to avoid failure. Switch few times if turnout is not changing direction.
- 2 Make sure turnout is switched correctly. Also check the direction of the lever and trains.

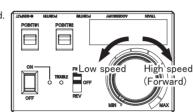




#### 4-3 Speed control dial

Turn speed control dial to right to increase speed. Turn speed control dial to left to slow down.

X Too high speed causes derail.

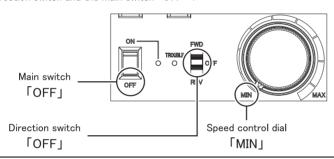


#### X Safety device

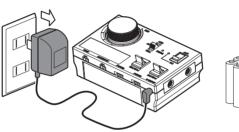
- Circuit breaker automatically turns off and lights the trouble lamp in case of short circuit or overload. (Only for track power) When the trouble lamp lights up, turn off the main switch and direction switch, and set speed control dial "MIN" Eliminate the cause of problem, then turn on the main switch again.
- Also another circuit breaker for accessory output and side sockets output will reset automatically for safety.

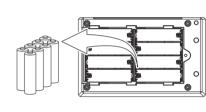
#### 5 After use

1 Turn the speed control dial to "MIN" and stop train. Set direction switch and the main switch "OFF"



2 Unplug AC adapter or remove batteries from controller.





Batteries use

AC adapter use

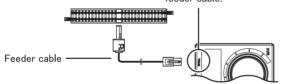


Feeder cable A cable to feed power from controller to track.

Length 27.6in

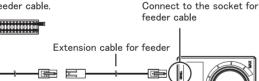
Connect to the socket for feeder cable.

Connect to either socket



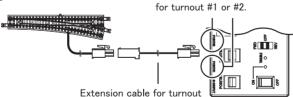
■ A003 Extension cable for feeder

A cable to extend the length of feeder cable. Length 59in

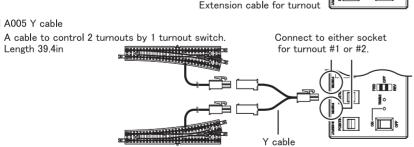


■ A004 Extension cable for turnout

A cable to extend the length of turnout cable.



■ A005 Y cable



# 7 Trouble shooting

| Problem                           | Cause  | Correction  |
|-----------------------------------|--|---|
| Trains do<br>not run<br>smoothly. | There is dirt on rails.  | Remove the dirt with cleaner and cloth.   |
|                                   | There is dirt on wheels.   | Remove the dirt.  |
|                                   | Trains are derailed.   | Set trains correctly with a rerailer.   |
| Trains do<br>not run at<br>all.   | AC adapter is not plugged in or not connected to the socket for AC adapter.                        | Turn off the main switch and direction switch and turn speed control dial "MIN". Then plug in AC adapter and connect to the socket again.                             |
|                                   | Feeder cable is not connected to power feed point or not connected to the socket for feeder cable. | Turn off the main switch and direction switch and turn speed control dial "MIN". Then connect feeder cable to power feed point and the socket for feeder cable again. |
|                                   | Trouble lamp is lighted.(red)  | Turn off the main switch and direction switch and turn speed control dial "MIN" .Eliminate the cause of trouble,and then turn on the main switch again.               |
|                                   | Track is disconnected.   | Connect each track correctly.   |
|                                   | Speed control dial is "MIN" .  | Turn speed control dial.  |
|                                   | Direction switch is "OFF".   | Set direction switch "FWD" or "REV"   |
|                                   | The main switch is "OFF" .   | Turn the main switch "ON" .   |
|                                   | Old batteries are used.  ※ In case of battery use  | Replace batteries with new batteries.   |
|                                   | Batteries are not set.  ※ In case of battery use   | Set batteries. (Alkaline batteries are recommended.)  |
|                                   | The directions of batteries are wrong.   in case of battery use                                    | Set batteries correctly again.  |
| Turnout<br>does not<br>work.      | The cable for turnout is not connected correctly.  | Connect the cable for turnout correctly in the socket for turnout.  |
|                                   | Turnout has been got dusty.  | Switch turnout by hand. Also remove dust from turnout.  |
| Work.                             | Old batteries are used.  ※ In case of battery use  | Replace batteries with new batteries.   |

# 8 Trouble and repair

- The user is responsible for any trouble, accident, or injury caused by misuse, disassembling, or modification to this product. Rokuhan does not repair a product which has been opened, taken apart or modified.
- Specification and appearance of our products are subject to change without prior
- Contact the following Rokuhn customer service if you have any query.

Rokuhan products are engineered model railroad products.

With proper care and treatment they will

last a long time.



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