NEEBRC NB-7D

NEEBRC 7-Channel RC Transmitter and Receiver with 12-LED Light Set User Manual

Model: NB-7D

Brand: NEEBRC

1. Introduction and Overview

This manual provides detailed instructions for the operation, setup, and maintenance of your NEEBRC 7-Channel RC Transmitter (NB-7D) and its accompanying Receiver with built-in Light Control System and 12-LED Light Set. This 2.4GHz radio remote control system is designed for a wide range of RC models, including cars, crawlers, trucks, buggies, off-road and on-road vehicles, boats, and tanks. It features 2.4GHz FHSS transmission for interference-free operation, proportional trigger limit setting for beginners, multi-channel mixing control, and a low voltage indication system.

Figure 1.1: NEEBRC 7-Channel RC Transmitter, Receiver, and 12-LED Light Set components.

2. What's in the Box

Upon opening the package, please verify that all the following components are included:

- 1 x 7CH Transmitter (NB-7D)
- 1 x Receiver Built-in Light Control System (RX-G7X)
- 1 x 12LED Light Set (5MM Lamp Bead Diameter)

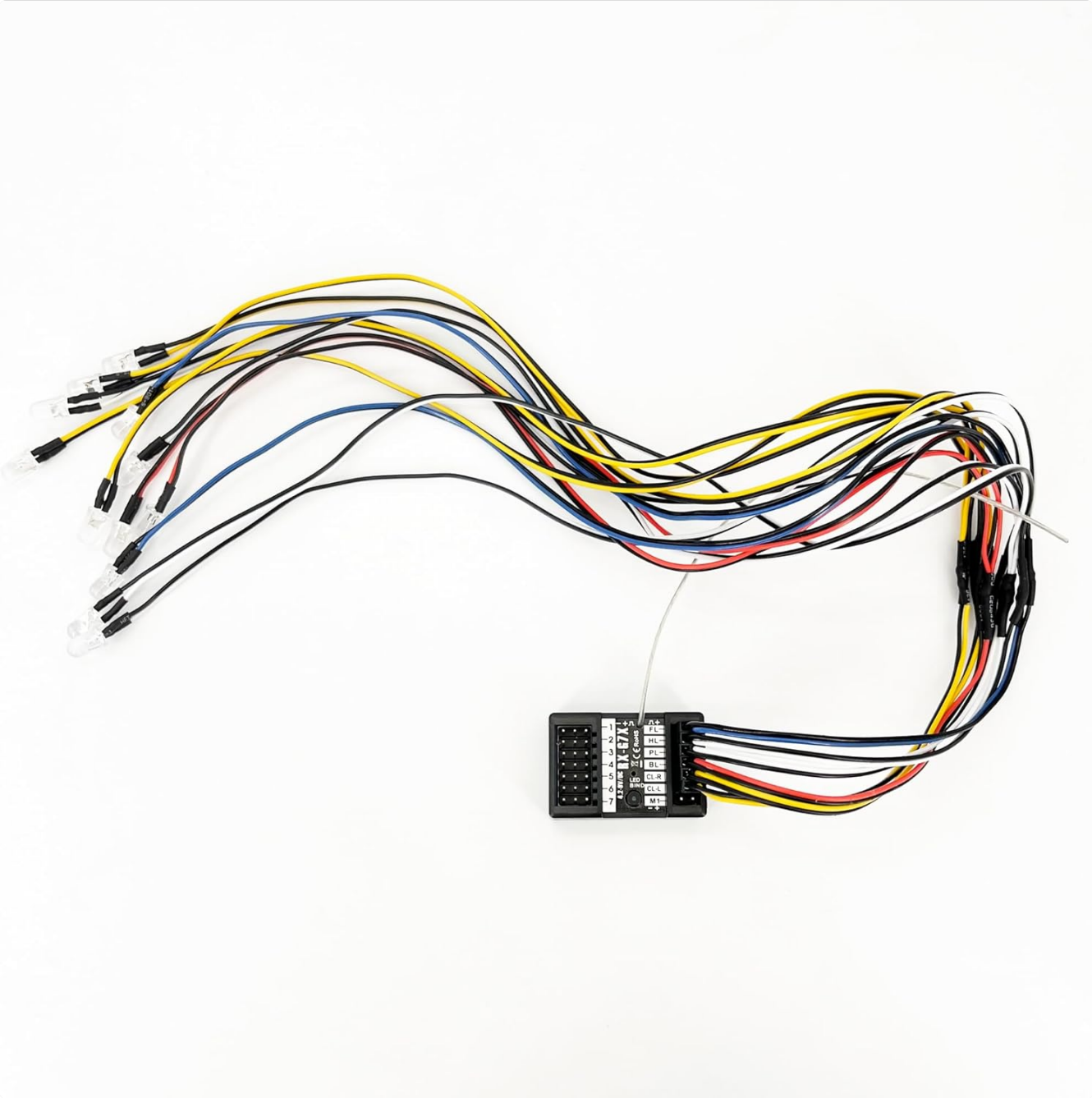

Figure 2.1: Packaging and included components.

3. Product Features

The NEEBRC NB-7D system is equipped with several advanced features to enhance your RC experience:

- **2.4GHz FHSS Transmission:** Enables simultaneous operation of multiple vehicles without signal interference.
- **Proportional Trigger Limit Setting:** Allows beginners to practice with controlled throttle limits.
- **High Performance Receiver:** The RX-G7X receiver features high-voltage protection and strong signal capability, compatible with high voltage servos (4.2V-10V).
- **Multi-Channel Mixing Control:** Bind multiple receiver channels to a single transmitter channel for complex operations.
- **Integrated Light and Winch Slots:** The receiver includes dedicated slots for easy remote control of LED lights and winches on your RC model.
- **Battery Low Voltage Indication:** An LED on the transmitter flashes slowly when battery voltage drops below 4.2V, preventing unexpected power loss.

- **12-LED Light Set:** Realistic smart simulation lights (5mm diameter) for various scene effects.

Figure 3.1: Key features of the NB-7D Transmitter, including anti-slip foam, anti-slip trigger, 4xAA battery compartment, unique control key layout, lanyard hole, and ergonomic grip.

Figure 3.2: The RX-G7X Light Group Receiver, highlighting its support for high voltage servos and multifunctional light/winch slots.

Figure 3.3: Close-up view of the transmitter's control key layout.

Figure 3.4: Detail of the anti-slip trigger for precise control.

Figure 3.5: Detail of the anti-slip foam on the steering wheel for improved grip.

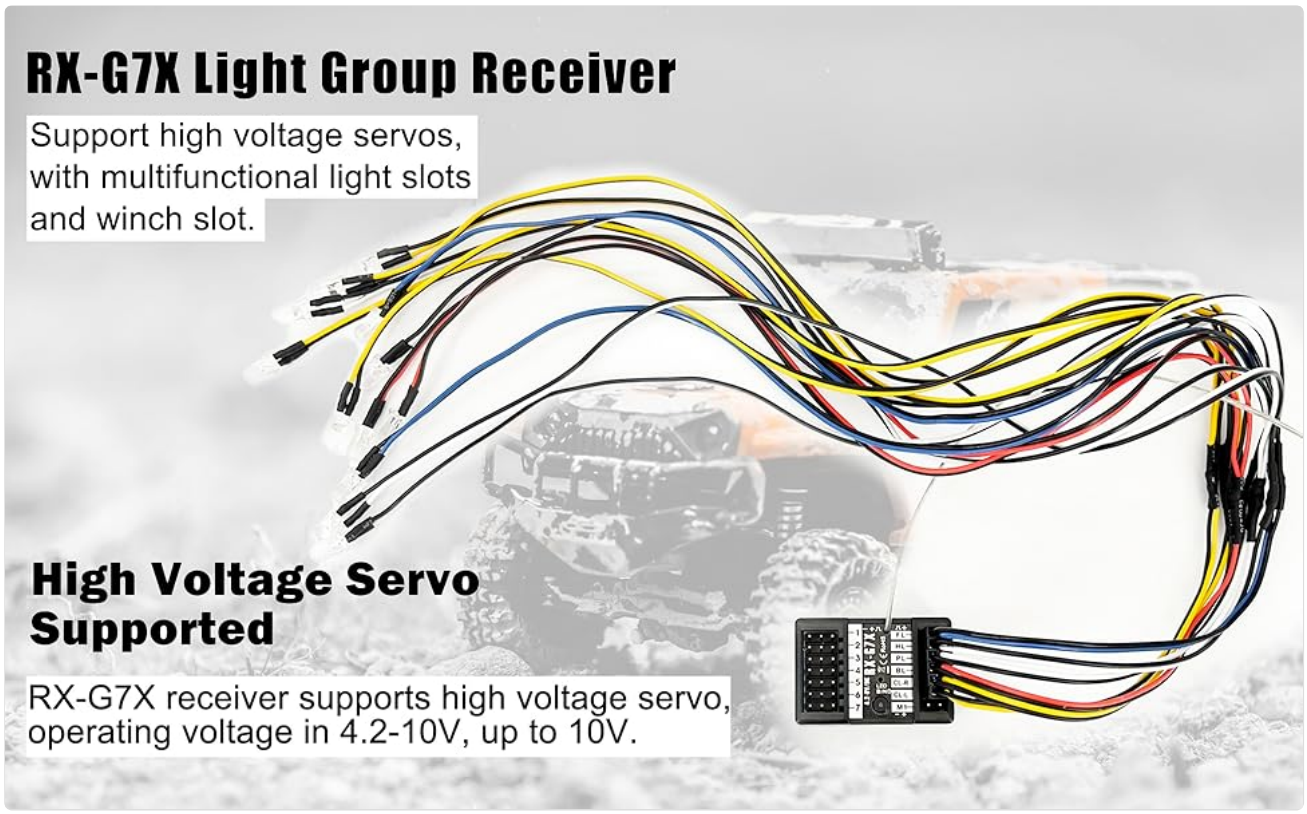

Figure 3.6: The RX-G7X receiver supports high voltage servos, operating voltage from 4.2V to 10V.

4. Setup Guide

4.1. Transmitter Battery Installation

The NB-7D transmitter requires 4x AA batteries (not included). To install:

1. Locate the battery compartment on the base of the transmitter.
2. Slide open the battery cover.
3. Insert 4 AA batteries, ensuring correct polarity (+/-).
4. Close the battery cover securely.

4.2. Receiver and Component Connection

Connect your RC model's components to the RX-G7X receiver as follows. Refer to Figure 4.1 for port identification:

- **Channel 1 (CH1):** Steering Servo
- **Channel 2 (CH2):** Electronic Speed Controller (ESC) / Throttle
- **Channels 3-7 (CH3-CH7):** Auxiliary functions (e.g., additional servos, gear shifts).
- **Light Slots (HL, PL, BL, RL, CLR, CLL):** Connect the 12-LED light set or other compatible LED lights.
- **Winch Slot (M1):** Connect your RC winch.

Figure 4.1: Transmitter controls and Receiver port assignments.

4.3. Binding the Transmitter and Receiver

To establish communication between the transmitter and receiver:

1. Ensure the transmitter is powered off.
2. Connect the receiver to power (e.g., via ESC or a separate battery). The receiver's LED will flash rapidly.
3. Press and hold the "BIND" button on the receiver (refer to Figure 4.2).
4. While holding the BIND button, turn on the transmitter.
5. The receiver's LED should turn solid, indicating a successful bind. Release the BIND button.
6. Turn off both the transmitter and receiver, then turn them back on in sequence (transmitter first, then receiver) to confirm the bind.

Figure 4.2: Location of the BIND button on the RX-G7X receiver.

5. Operating Instructions

5.1. Basic Controls

- **Steering Wheel (CH1):** Rotate left or right to control the steering of your RC model.
- **Throttle Trigger (CH2):** Pull to accelerate forward, push to brake or reverse.
- **Power Switch:** Located on the front of the transmitter, turns the unit on/off.

5.2. Advanced Control Functions

The NB-7D transmitter offers several adjustable settings for fine-tuning control:

- **ST.TRIM (Steering Trim):** Adjusts the neutral position of the steering. Use if the vehicle pulls to one side when the steering wheel is centered.
- **TH.TRIM (Throttle Trim):** Adjusts the neutral position of the throttle. Use if the vehicle moves slightly forward or backward when the throttle trigger is at neutral.
- **ST D/R (Steering Dual Rate):** Adjusts the maximum steering angle. Lowering this value reduces the steering sensitivity, useful for high-speed driving.
- **TH D/R (Throttle Dual Rate):** Adjusts the maximum throttle output. Lowering this value reduces the maximum speed, useful for beginners or confined spaces.
- **Steering Reverse Switch (ST.REV):** Reverses the steering direction.
- **Throttle Reverse (TH.REV):** Reverses the throttle direction.

- **CH5, CH6, CH7 Knobs:** Control auxiliary channels 5, 6, and 7 respectively. These can be assigned to various functions on your RC model.
- **MIX/LED Button:** Toggles between General Mode and Mixed Mode, and also controls the LED light system.
- **SET Button:** Used for various settings and programming functions.

5.3. Light Control System

The integrated light control system allows for realistic lighting effects:

- Connect the 12-LED light set to the corresponding light slots on the RX-G7X receiver (HL: Headlights, PL: Park lights, BL: Backup lights, RL: Right Cornering Light, CLR: Clear, CLL: Clear).
- Use the MIX/LED button on the transmitter to cycle through different light modes or turn lights on/off.

5.4. Mixed Control Function

The multi-channel mixing control function allows you to link multiple channels on the receiver to be controlled by a single channel on the transmitter. This is useful for complex setups requiring synchronized movements.

Figure 5.1: Transmitter in General Mode (factory default setting).

Figure 5.2: Transmitter in Mixed Mode (supports mix control of channel 1 and channel 2).

5.5. Winch Control

Connect your RC winch to the M1 slot on the receiver. Control of the winch will typically be assigned to one of the auxiliary channels (CH5, CH6, or CH7) on the transmitter, depending on your setup and model's requirements.

Figure 5.3: Winch connection to the RX-G7X receiver.

5.6. Low Voltage Indication

The LED indicator on the transmitter will flash slowly when the battery voltage drops below 4.2V. This serves as a warning to replace the batteries to prevent loss of control.

6. Maintenance

- **Cleaning:** Use a soft, dry cloth to clean the transmitter and receiver. Avoid using solvents or harsh chemicals.
- **Battery Care:** Remove batteries from the transmitter if it will not be used for an extended period to prevent leakage.
- **Storage:** Store the transmitter and receiver in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Inspection:** Periodically check all wires and connectors for signs of wear or damage.

7. Troubleshooting

Problem	Possible Cause	Solution
Transmitter does not power on.	Low or dead batteries; incorrect battery polarity.	Replace batteries with fresh ones; ensure correct +/- orientation.
No control over RC model.	Transmitter and receiver not bound; receiver not powered; loose connections.	Perform binding procedure (Section 4.3); ensure receiver is powered; check all cable connections.
Intermittent control or signal loss.	Interference from other 2.4GHz devices; low transmitter battery.	Move to an area with less interference; replace transmitter batteries.
Steering or throttle is reversed.	Reverse switch is engaged.	Adjust the ST.REV or TH.REV switch on the transmitter (Section 5.2).
Vehicle drifts or moves when controls are neutral.	Trim settings are off.	Adjust ST.TRIM or TH.TRIM until the vehicle remains still (Section 5.2).
Lights or winch not responding.	Incorrect connection to receiver; auxiliary channel not activated/assigned.	Verify connections to light/winch slots; ensure corresponding auxiliary channel knob is adjusted.

8. Specifications

Feature	Detail
Model Number	NB-7D
Channels	7 Channels
Frequency	2.4GHz FHSS
Transmitter Power Supply	4 x AA Batteries (not included)
Receiver Model	RX-G7X
Receiver Operating Voltage	4.2V - 10V (High Voltage Servo Compatible)
Light Set	12PCS 5MM Lamp Bead Diameter LED Lights
Product Dimensions (Transmitter)	5.7 x 2.36 x 7.79 inches (143mm x 90mm x 192mm)
Product Dimensions (Receiver)	36.6mm x 23.8mm x 13.4mm
Item Weight	11.2 ounces (Transmitter and Receiver)
Recommended Age	6 years and up

Figure 8.1: Dimensions of the Transmitter and Receiver.

9. Safety Information

- Always operate your RC model in a safe and open area, away from people, pets, and obstacles.
- Never operate your RC model near public roads or in areas with vehicle traffic.
- Keep fingers, hair, and loose clothing away from moving parts of the RC model.
- Do not operate the RC model in wet conditions or near water unless it is specifically designed for such environments.
- Ensure batteries are charged and installed correctly before each use.
- Adult supervision is recommended for users under the age of 14.
- If the product is damaged, discontinue use immediately to prevent injury.