

Kyosho KT-631ST

Kyosho Syncro KT-631ST Transmitter/Receiver Set Instruction Manual

1. INTRODUCTION

This manual provides detailed instructions for the safe and effective use of your Kyosho Syncro KT-631ST 6-channel RC Transmitter and KR-631WT Receiver set. Please read this manual thoroughly before operating your equipment to ensure proper setup, operation, and maintenance. Retain this manual for future reference.

2. PRODUCT OVERVIEW

The Kyosho Syncro KT-631ST is an intermediate-class 6-channel transmitter designed for various radio-controlled models, including aircraft, yachts, cars, and drone racers. It features telemetry capabilities, displaying crucial information such as receiver voltage and communication status (error rate) directly on the transmitter's LCD screen. The included KR-631WT receiver is equipped with a SENS port for connecting optional voltage (No.82137-1) and temperature (No.82137-2) sensors.

Key features include:

- Thin, lightweight casing for extended use without fatigue.
- Mode-2 configuration for US customers (Mode-1 available in other regions).
- 20-model memory with functions for model naming, copying, and resetting.
- Slip-resistant sticks for precision control, adjustable up to 5mm in height.
- Selectable channels 5 and 6 from volume, toggle switch, and 3-position toggle switch.
- Support for airplane, glider, and helicopter modes (fixed pitch, variable pitch, and 90°/120°/140° swash mode).
- Aileron difference setting for aircraft with two aileron servos (e.g., Calmato α).
- Safety alarm for throttle stick position upon power-on.
- Dual antennas on both transmitter and receiver for reliable signal reception.

3. COMPONENTS

The Kyosho Syncro KT-631ST set typically includes the following components:

- Kyosho Syncro KT-631ST 6-Channel Transmitter
- Kyosho KR-631WT 6-Channel Receiver
- Battery holder for receiver power
- Binding plug
- On/Off switch harness



Figure 1: Front view of the Kyosho Syncro KT-631ST transmitter, showing the LCD screen, control sticks, switches, and buttons.



Figure 2: Rear view of the Kyosho Syncro KT-631ST transmitter, showing the battery compartment and trainer port.



Figure 3: The complete Kyosho Syncro KT-631ST transmitter and KR-631WT receiver set, including accessories like the battery holder and switch harness.



Figure 4: Close-up view of the KT-631ST transmitter's LCD screen, showing telemetry data such as temperature, external voltage, and error rate.



Figure 5: The Kyosho KR-631WT receiver with its dual antennas, binding plug, and battery holder, ready for installation.

4. SETUP

4.1 Transmitter Battery Installation

1. Open the battery compartment cover on the rear of the KT-631ST transmitter (refer to Figure 2).
2. Insert the required batteries (e.g., AA batteries) according to the polarity markings inside the compartment.
3. Close the battery compartment cover securely.

4.2 Receiver Installation and Connection

1. Mount the KR-631WT receiver securely within your model, ensuring its dual antennas are positioned for optimal signal reception, away from metal parts or other electronics.
2. Connect the model's servos and Electronic Speed Controller (ESC) to the corresponding channels on the receiver.
3. Connect the receiver battery pack (or BEC from ESC) to the receiver's power input.

4.3 Binding Procedure

To establish communication between the transmitter and receiver:

1. Ensure the transmitter is powered off.
2. Insert the binding plug into the BIND/DATA port on the KR-631WT receiver.
3. Power on the receiver. The receiver's LED should flash, indicating it is in binding mode.
4. While holding down the BIND button on the KT-631ST transmitter, power on the transmitter.
5. Release the BIND button once the transmitter's LCD screen indicates binding is complete or the receiver's LED turns solid.
6. Power off both the receiver and transmitter.
7. Remove the binding plug from the receiver.
8. Power on the transmitter first, then the receiver, to confirm successful binding.

4.4 Stick Adjustment

The control sticks can be adjusted up to 5mm in height for personalized comfort and precision. Refer to the transmitter's internal mechanism for adjustment screws, typically located beneath the stick gimbals.

4.5 Telemetry Sensor Connection

Optional voltage (No.82137-1) and temperature (No.82137-2) sensors can be connected to the SENS port on the KR-631WT receiver to expand telemetry data displayed on the transmitter.

5. OPERATING INSTRUCTIONS

5.1 Power On/Off Sequence

Always power on the transmitter first, then the receiver. When powering off, always power off the receiver first, then the transmitter. This sequence prevents unintended model operation.

5.2 Safety Alarm

The KT-631ST features a safety alarm that sounds if the throttle stick is not in the lowest position when the transmitter is powered on. Ensure the throttle stick is at its minimum setting before powering on to avoid this alarm and ensure safe operation.

5.3 Model Memory Functions

The transmitter can store settings for up to 20 different models. Use the menu system to:

- **Select Model:** Choose the appropriate model memory before operating a specific model.
- **Name Model:** Assign a descriptive name to each model memory for easy identification.
- **Copy Model:** Duplicate settings from one model memory to another.
- **Reset Model:** Clear all settings for a specific model memory to default values.

5.4 Channel Assignment and Modes

Channels 5 and 6 can be configured via the transmitter's menu to operate from a volume knob, a standard toggle switch, or a 3-position toggle switch, depending on your model's requirements. The transmitter also supports specific modes for:

- **Airplanes:** Including aileron difference settings for models with two aileron servos.
- **Gliders:** Optimized control settings for glider flight.
- **Helicopters:** Supports fixed pitch, variable pitch, and 90°/120°/140° swash plate configurations.

6. MAINTENANCE

6.1 Cleaning

Wipe the transmitter and receiver with a soft, dry cloth. For stubborn dirt, a slightly damp cloth can be used, followed by immediate drying. Avoid using solvents or harsh chemicals, as these can damage the plastic components and electronics.

6.2 Battery Care

Remove batteries from the transmitter if it will not be used for an extended period to prevent leakage. Always use fresh, high-quality batteries. For rechargeable batteries, follow the manufacturer's charging instructions.

6.3 Storage

Store the transmitter and receiver in a cool, dry place, away from direct sunlight, extreme temperatures, and high humidity. Protect the control sticks and switches from physical damage during storage.

7. TROUBLESHOOTING

- **No Power:** Check transmitter batteries for correct polarity and charge level. Ensure the receiver is properly connected to its power source.
- **No Control/Loss of Signal:** Re-check the binding procedure. Ensure both transmitter and receiver antennas are unobstructed and properly positioned. Verify that the transmitter and receiver are within operational range.
- **Telemetry Data Not Displaying:** Ensure optional sensors are correctly connected to the KR-631WT's SENS port. Check transmitter settings for telemetry display options.
- **Safety Alarm Sounds on Power-Up:** This indicates the throttle stick is not at its lowest position. Move the throttle stick to the minimum setting before powering on the transmitter.
- **Erratic Control:** Check for interference from other radio sources. Ensure all servo connections are secure. Verify that the correct model memory is selected on the transmitter.

8. SPECIFICATIONS

Feature	Specification
Model Number (Transmitter)	KT-631ST
Model Number (Receiver)	KR-631WT
Channels	6
Telemetry	Receiver voltage, communication status (error rate), optional external voltage/temperature sensors
Model Memory	20 models
Transmitter Dimensions	Approximately 22.86 x 21.08 x 10.67 cm
Transmitter Weight	Approximately 100 g
Material	Plastic
Recommended Age	14 years and up
Antennas	Dual (Transmitter and Receiver)

9. WARRANTY INFORMATION

The Kyosho Syncro KT-631ST Transmitter/Receiver Set is covered by a **90-day warranty** against manufacturer defects. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims. The warranty does not cover damage resulting from misuse, accidents, modifications, or unauthorized repairs.

10. SUPPORT

For further assistance, technical support, or inquiries regarding parts and service, please contact Kyosho customer support. Refer to the official Kyosho website or product packaging for the most current contact information.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question