

MX-6 3-CHANNEL 2.4GHZ RADIO SYSTEM USER'S GUIDE

TROUBLESHOOTING GUIDE

This troubleshooting guide can help you diagnose and solve some of the more common problems that you may encounter with your MX-6 3-Channel 2.4GHz FHSS-E radio control system. If you cannot solve the problem using this troubleshooting guide, please contact Customer Service using the information in the *Service*

PROBLEM	CAUSE	SOLUTION
Transmitter does not turn ON	Batteries not installed correctly	Reinstall batteries, observing correct polarity
	Batteries are dead	Replace batteries
	There's an internal problem	Contact Customer Service
Transmitter will not bind to receiver	Modulation Type incorrect	Change Modulation Type to match receiver
	Too much time elapsed after pressing receiver Bind Button	Quickly press the transmitter Bind Button after releasing the receiver Bind Button
	Attempting to bind incompatible receiver	Use only SANWA 2.4GHz FHSS-E surface receivers
	Using electronic speed control	Disconnect ESC and use dry cell battery for binding procedure, then reconnect ESC after binding
Receiver won't power ON	Batteries not installed correctly	Reinstall batteries, observing correct polarity
	Batteries dead	Replace or recharge batteries
	Loose switch connection	Double-check all connections including switch
Audible alarm beeps continuously	Low transmitter battery voltage	Replace transmitter batteries
Servo movement is slow	Low receiver battery voltage	Replace or recharge receiver batteries
	Control linkages binding	Adjust control linkages to operate smoothly
Servo does not move when using Trim Switch	Trim is outside of operational range	Reset trim to zero and center the servo horn and control linkages
Inadequate transmitting range	Low transmitter battery voltage	Replace transmitter batteries
	Low receiver battery voltage	Replace or recharge receiver batteries
	Receiver antenna not mounted correctly in your model	Mount receiver antenna as recommended
Servo(s) move the wrong direction	Incorrect Servo Reversing setting	Change Servo Reversing setting
Servo Horn(s) not centered	Servo horn not installed correctly	Turn servo horn 180° and reinstall
	Servo Sub-Trim out of adjustment	Adjust Servo Sub-Trim to center servo horn
Control linkage(s) bind	To much servo travel	Decrease servo travel using EPA function
LCD appears dark or hard to read	Transmitter left in direct sunlight too long	Place transmitter in shade.
Throttle servo pulsates	ABS function is ON	This is normal under braking with ABS function ON
Model veers right or left without control input	Steering out of trim	Use Steering Trim Switch to adjust Steering Trim so model drives straight
Throttle servo or ESC moves to programmed position without input	Throttle out of trim	Use Throttle Trim Switch to adjust Throttle Neutral point
Cannot select characters when naming model	Not using steering wheel	Turn steering wheel right or left to highlight desired characters

GLOSSARY OF TERMS

Activate: To turn a particular function ON.

Antenna: Transmits the signal from the transmitter to the receiver in the model. The antenna is mounted internally and is located in the front portion of the transmitter. Do NOT cover the front of the transmitter in any way during use! Doing so can block the RF signal, resulting in the loss of control of your model.

Antenna Wire: Receives the transmitter signal. The antenna wire should be installed through a nylon tube (antenna tube) in the vertical position for the best reception. Do not alter the length of the antenna or the operation of the receiver will be compromised.

Auxiliary Lever: Controls Auxiliary channel 3 High and Low servo travel.

Anti-Lock Braking: Makes it possible to achieve stable braking even on slippery surfaces. With stable braking, your model is better able to trace an exact line under braking.

Battery Compartment: Houses the four 'AA' Alkaline cells that power the transmitter. Alternatively, the transmitter can be powered using four 'AA' Ni-Cd or Ni-MH rechargeable batteries or a 2S Li-Po or 2S Li-Fe battery pack.

Battery Eliminator Circuitry (BEC): A circuit typically found in an electronic speed control that eliminates the need for a separate receiver battery by using the battery pack that powers the model to also power the receiver and the servos.

GLOSSARY OF TERMS

Binding: The act of pairing the transmitter and receiver to prevent interference from transmitters operated by other users. The transmitter and receiver must be paired so that the two can 'talk' to each other. Once the binding procedure is complete, the setting is remembered even when the transmitter and receiver are turned OFF.

Bind Button: Used in the process of binding the transmitter and receiver.

Bind LED: Displays the current status of the receiver.

Brake Side: Refers to the throttle trigger stroke that engages the brakes on your model (pushing the throttle trigger).

Decrease Key: Decreases Programming Values and used to select models. Press the INCREASE and DECREASE keys at the same time to reset Programming Values to default.

Digital Trim Memory: Allows the transmitter to store Trim values in its memory. Any amount of Trim that you set during use using the Trim Switches is automatically stored in memory for that specific channel and for that specific model. The Trim values for each model will automatically be loaded when the transmitter is turned ON.

Dual Rate: Used to change the control authority of your model's steering by changing the amount of servo travel relative to control input.

End Point Adjustment: Used to adjust the desired amount of servo travel in both directions independently. This makes it possible to balance servo travel in both directions.

Exponential: Allows you to vary the amount of servo travel in relation to the movement of the steering wheel and throttle trigger near the Neutral positions to change the way those functions react to control movement.

Fail Safe: Automatically moves the throttle servo to a predetermined position in the event that the signal between the transmitter and the receiver is interrupted, whether due to signal degradation or low transmitter battery. This helps prevent the chance of a runaway model, should the transmitter lose power or the signal between the transmitter and receiver be lost.

FH-E Modulation: Frequency Hopping 2.5th generation FHSS technology. FH-E modulation is not compatible FH2 modulation.

FHSS: Frequency Hopping Spread Spectrum. FHSS is a Modulation Type which transmits data across the entire frequency spectrum by transmitting data on different channels at an extremely fast interval.

Forward Side: Refers to the throttle trigger stroke that opens the throttle and powers your model (pulling the throttle trigger).

Grip: The grip is molded in an ergonomic shape for increased comfort, control and feel. It's moulded with a textured surface to help prevent slipping.

High Side: Refers to the position of Auxiliary channel 3 servo movement (pushing the Auxiliary Lever up).

Increase Key: Increases Programming Values and used to select models. Press the INCREASE and DECREASE keys at the same time to reset Programming Values to default.

Low Side: Refers to the position of Auxiliary channel 3 servo movement (pushing the Auxiliary Lever down).

Low Voltage Alarm: Warns you when the transmitter batteries need to be replaced or recharged (if using rechargeable batteries). The Low Voltage Alarm will sound when the transmitter batteries reach 4.6 volts. If the Low Voltage Alarm sounds while you are driving, you should stop as soon as it's safe, then replace or recharge the transmitter batteries.

LCD Screen: The heart of the programming and display features of the transmitter. All programming and transmitter display functions are shown on the LCD screen.

Menu Selections: Displays the available Programming Menus. The currently Active menu will flash. The information displayed in the Programming Window will vary based on the menu selected.

Menu Down Key: Cycles down through the list of menus and sub-menu functions you would like to make programming changes to. Press the MENU UP and MENU DOWN keys at the same time to display the Voltage Monitor.

Menu Up Key: Cycles up through the list of menus and sub-menu functions you would like to make programming changes to. Press the MENU UP and MENU DOWN keys at the same time to display the Voltage Monitor.

Model Naming: Used to name the different models you have saved in the transmitter. This makes it easy to keep track of multiple models. The Model Name can consist of up to 3 letters, numbers or symbols.

Model Number: Displays the model that is currently loaded into memory. Up to 10 different models can be stored.

Model Select: Used to store and retrieve Programming Data for any model 1 through 10. If you have Programming Data stored for more than one model, use the Model Select function to load the Programming Data for the particular model that you wish to drive. The currently selected Model Number is displayed next to the Voltage Monitor.

Operating Voltage: The safe voltage that the transmitter can operate within. Exceeding the minimum operating voltage can result in loss of power to the device. Exceeding the maximum operating voltage can result in damage to the device.

Output Power: The power (in Milliwatts) that your transmitter transmits a signal. Output power is defined by government guidelines and differs by region.

Power Indicator: Illuminates red, indicating the transmitter is turned ON.

GLOSSARY OF TERMS

Power Switch: Turns the transmitter ON and OFF.

Programming Keys: The programming keys are used to program the functions of your transmitter, select saved models and change the Modulation Type.

Programming Window: Displays transmitter programming information. When the transmitter is turned ON, the BATT menu will be selected, the current model number will be shown and the Voltage Monitor will display the transmitter's current voltage.

Servo Reversing: Used to electronically switch the direction of servo travel. For example, if you move the steering wheel to the right and your model turns left, you can use the Servo Reversing function to make your model turn right.

Servo Sub-Trim: Used to correct the Neutral trim setting for the servos, making it possible to center the Trim Switches while ensuring the servo horns remain centered.

Steering Trim Switch: Used to adjust the Steering Trim quickly and easily while you're driving.

Steering Wheel: Proportionally operates the model's right and left steering control. The steering wheel features a foam grip for increased comfort, control and feel.

Suppression Capacitor: Primarily used on brushed electric motors, a suppression capacitor helps eliminate electrical noise that could interfere with the operation of your radio control system.

Temperature Range: The range in temperature of the outside air that the transmitter can safely and reliably operate in.

Throttle Trigger: Controls the speed of the model, both forward and backward, or the model's brake.

Throttle Trim Switch: Used to adjust Throttle Trim quickly and easily while you're driving.

Voltage Monitor: Displays the current voltage of the transmitter batteries. When the transmitter batteries reach 4.6 volts, the Low Voltage Alarm will sound.

Z-Connector: The type of servo and battery connector used by SANWA. The Z-Connector is a universal connector which is electronically compatible with the components of other radio control system manufacturers.

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