RADIO MASTER

Wireless Trainer Quick Start

64.1mm

49.6mm

34.1mm

68.5mm

41mm

21 mm
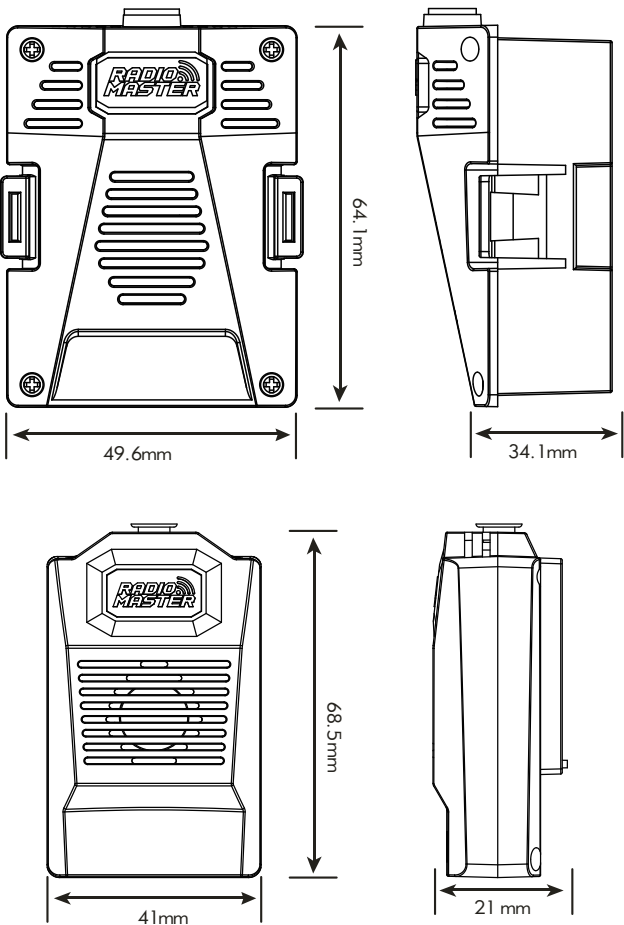
This manual provides step-by-step instructions for setting up and troubleshooting the RadioMaster Wireless Trainer Module. The module enables an instructor (master radio) to wirelessly connect with a student radio, allowing for shared control of a model.

The system is compatible with RadioMaster transmitters equipped with multi-protocol modules and receivers that support BUS output (e.g., SBUS, IBUS). This guide covers configuring both radios, establishing a wireless connection, binding receivers, and verifying proper functionality.

Note:
Please ensure your radio is running the latest version of EdgeTX and that your internal ExpressLRS or MPM module is updated to the latest firmware. During testing, we identified compatibility issues with older firmware versions. Keeping your firmware up to date will help ensure optimal performance and reliability.

SBUS Wireless trainer module for instructor/student radios

Compatibility
Any receiver that supports 5V and is capable of SBUS output, such as our RP1, RP2, and R81 V2 models, can be used. Receivers from other manufacturers can also be used, provided they meet the required voltage and SBUS specifications.

Applicable Models: [Micro] TX16S, BOXER / [Nano] GX12, Zorro, Pocket, MT12 (Not compatible with TX12MKII)

Setup
•Solder: SBUS receiver to module (Black: GND, Red: +, Yellow: Signal).
•Insert: Module into instructor radio (For the MicroModule: TX16S: SBUS_A, BOXER:SBUS_B).
•Bind: Student radio to module's receiver. Instructor radio to model's receiver.

Config
•Instructor: Trainer → Master/SBUS. Assign switch (e.g., SC) to toggle.
•Student: Trainer → OFF.

Check
•Test sticks in TRAINER menu. Toggle switch to verify control swap.

SPECIFICATIONS

•Working Voltage: DC 5.0 - 8.4V
•Receiver Interface Output Voltage: DC 5.0V
•Weight: Micro Module: 25.10g/Nano Module18.9g
•Dimensions: Micro: 33*48.7*68mm/Nano 26.3*71.2*42mm

INCLUDES

1x Wireless Trainer module Nano/Micro
1x Rx cable
* Please note receivers are not included

Full Instrucitons:

Setup on the Student (Slave) Radio
The student radio transmits control signals to the master radio via the Wireless Trainer Module.

Step 1: Bind the Receiver [**Receiver not included]
1.Bind the receiver to the student radio (slave) and ensure the receiver outputs an SBUSsignal.
2.Solder the receiver wires into the "Wireless Trainer Module":
•Black wire**: Ground (-)
•Red wire**: Positive (+)
•Yellow wire**: SBUS Signal
3.Insert the soldered receiver into the adapter interface: Note that the Micro Module has two connectors.

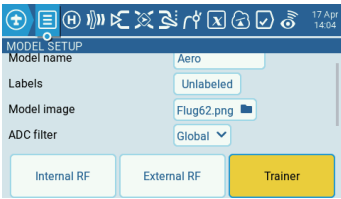SBUS_B   SBUS_A

•TX16S:** Use SBUS_A
•BOXER:** Use SBUS_B
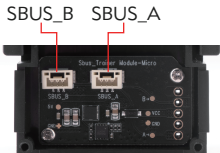
•GX12: ** Nano Module
•Zorro: ** Nano Module
•Pocket: **Nano Module
•MT12: ** Nano Module
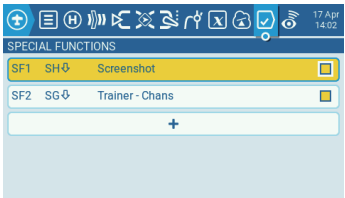
Step 2: Configure the Student Radio

•Press the MDL button to enter the SETUP menu.
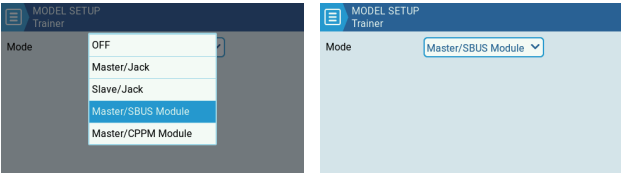•Set Trainer to OFF.

Setup on the Instructor (Master) Radio:

The instructor's radio is responsible for controlling the model and managing the trainer link.

Step 1: Enable Trainer Function

•Press the MDL button to open the SETUP menu.
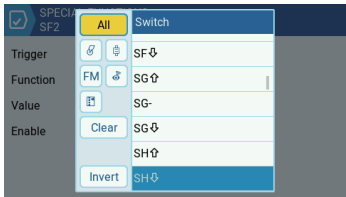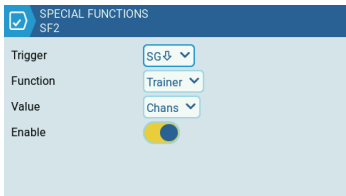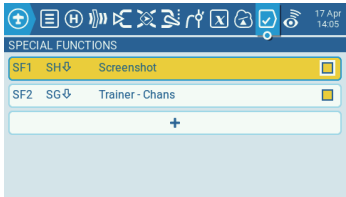•Set **Trainer** to Master/SBUS

Step 2: Assign a Trainer Switch

•Press the **MDL** button to enter the **SPECIAL FUNCTIONS** menu.
•Assign a switch to toggle trainer mode (e.g., SC switch).

Step 3: Verify the Trainer Link
•Press the SYS button to open the TRAINER menu.
•Move the sticks on the student radio and confirm corresponding channel movements on the master radio.

Troubleshooting Steps:

•Check Binding: Ensure both radios are bound to their receivers using the correct protocol. The Student radio should be bound to the receiver installed in the module. The teachers radio should be bound to the receiver in the model.
•Verify Wiring: Ensure proper soldering of receiver wires (Black: ground, Red: power, Yellow: signal).
•Confirm RF Compatibility: The teacher and student radios do not need to use the same protocol, but they must be compatible with the trainer setup. For example, the teacher could be using an ExpressLRS radio bound to an ER6 receiver, while the student is using a FlySky radio with an SBUS receiver inside the trainer module. Ensure the trainer system is correctly configured to pass control between the radios.
•Check Trainer Mode: Verify the student radio is set to **Trainer OFF** and the master radio is set to **Master/SBUS**.
•Firmware Updates: Update radios and receivers from RadioMaster's support page to the latest firmware.
•Module Connection: Ensure the Wireless Trainer Module is securely inserted into the external module bay or BUS port.

Additional Notes:

•Compatibility: Micro module Works with RadioMaster TX16S, BOXER, Nano Module works with GX12, Zorro, Pocket and MT12 and receivers with a 5v SBUS serial output
•Pre-Flight Testing: Always test trainer functionality on the ground before flying.
•Support: Visit [RadioMasterRC.com](https://www.radiomasterrc.com) for firmware updates and troubleshooting assistance.