TACTIC™

FPV-RM1

7" HD COLOR MONITOR WITH 5.8GHZ RECEIVERS INSTRUCTION MANUAL

Tactic's FPV-RM1 first person video monitor with integrated receivers is intended for receiving video signals from a 5.8GHz FPV transmitter (available separately) when mounted inside an R/C hobby model. Three bands with a total of 22 frequencies in the 5.8GHz spectrum are available. For optimum results operate the system away from other 5.8GHz transmitters and in areas having as few obstructions as possible to the Tx.

STOP **It is strongly recommended to completely read this manual before use! Damage resulting from misuse or modification will void your warranty.**

CONTENTS

(1) FPV-RM1 monitor
(1) 7.4 volt 1800mAh lithium-polymer battery
(1) Sun shield
(2) RP-SMA mast antennas
(2) A/V cables
(1) External battery cable with adapter
(1) Micro-fiber cloth

ANTENNA INSTALLATION

Carefully thread the included antennas onto the RP-SMA receptacles on the monitor. Do not cross-thread or overtighten! Mount the antennas before applying power to the monitor.

INPUT POWER OPTIONS

Power can be supplied by the included 7.4V 1800mAh (milli-amp hour) lithium-polymer (LiPo) battery module which is located in the rear of the monitor, or from an external 12V DC power source.

CHARGING THE BATTERY: This monitor includes a built-in circuit to recharge the included battery. It's not necessary to remove the battery from the monitor for the purpose of recharging. Connecting an external DC power source to the monitor's DC IN jack will automatically start the charge process, as indicated by the glowing red LED which will turn off when charge is complete. Acceptable power sources include an AC/DC wall adapter, tabletop DC power supply, external battery, etc., rated to deliver 7.0 – 22.2V DC and 600-750mA (0.6-0.75A) of current. Tactic items TACZ5553 (110VAC / 12VDC Power Adapter) for N. America, and TACZ5554 (220V AC/12V DC Power Adapter) for the EU are available separately through local hobby retailers.

WARNING! Charging lithium-polymer batteries poses a risk of FIRE! Follow all care and handling instructions in this manual to avoid severe and permanent damage to the batteries and all surroundings which could result quickly from improper use and function.

The center pin of the DC IN jack is positive (+) polarity and 2.5mm in diameter. The outer diameter of the DC IN jack is 5.5mm, having a negative (-) polarity. Optional cables such as Tactic's TACP0101 can connect the monitor to a DC power source having banana jacks.

A cable is included to connect an external power source to the DC IN jack. A separate adapter is also included to mate the DC IN jack to cables having smaller connectors.

To remove the battery module, press down on the thumb-lock below the battery and gently remove the lower end of the battery from the monitor. To re-install, carefully align the module inside the top of the battery compartment, then press into place until the thumb-lock clicks. Do NOT force the battery if installation seems difficult! Contact your local recycler for proper disposal of the battery when at the end of its life cycle. Do not dispose in the public waste system.

- Do not connect an external battery charger to the monitor's DC IN jack.
- Do not attempt to charge the battery when removed from the monitor.
- Do not leave the monitor unattended while being charged!
- Immediately disconnect the DC power source if the battery becomes hot (over 140°F, 60°C), begins to swell or emits smoke. Wear fire protective materials on your hands to move the monitor to a fireproof location as it may be hot! Leave the monitor until it cools.
- Always charge the monitor in a fireproof location. Monitor the area with a smoke alarm, and have a lithium approved fire extinguisher available at all times.
- Always provide adequate ventilation around the monitor during charge.
- Always keep LiPo batteries away from children.
- Do not allow the internal electrolyte from LiPo, Li-Ion or LiFe batteries to get in the eyes or on skin – wash affected areas immediately if they come in contact with the electrolyte and contact your physician!
- Do not place the charger or monitor on flammable surfaces or near combustible materials (carpet, paper, wood, plastic, vinyl, foam, etc.) while charging.

SCREEN AND CONTROLS

V1\2	Select input from A/V1, A/V2, or HD.
▼	Press repeatedly to manually scroll through bands A, B, and F as shown at the top of the screen.
S	Press to automatically scan all bands and channels for an A/V signal.
▲	Press repeatedly to manually scroll through all 8 channels within the current band.
—	Press repeatedly to decrease screen brightness. While inside the Main Menu, press to decrease the value of the highlighted icon.
M	Press twice to access the Main Menu and see the functions listed at right. Repeatedly press "M" to scroll through the list of options. Press "+" or "-" to adjust the highlighted setting.
✚	Press repeatedly to decrease the screen brightness. While inside the Main Menu, press to increase the value of the highlighted icon.
⏻	Power (On/Off)

Brightness
Contrast
Color
Volume
Rf Selection
Screen Mode
Rotation
Language
Reset
Exit

To manually select an Rf frequency, press "M" twice to access the Main Menu. Repeatedly press "M" to highlight the "Rf Selection" icon. Press "+" or "-" to change the band/frequency according to the chart shown here.

	CH1	CH2	CH3	CH4	CH5	CH6	CH7	CH8
BAND A	5.865G	5.845G	5.825G	5.805G	5.785G	5.765G	5.745G	5.745G
BAND B	5.733G	5.725G	5.771G	5.790G	5.809G	5.828G	5.847G	5.866G
BAND F	5.740G	5.760G	5.780G	5.800G	5.820G	5.840G	5.860G	5.860G

INPUTS/OUTPUTS

Various connections are available along both sides of the monitor.

HDMI 1.3 (HIGH-DEFINITION MULTIMEDIA INTERFACE):
for connecting an external high definition video source to playback video.

RF1 AV OUT: a 3.5mm jack for sending audio/video signals from receiver 1.

RF2 AV OUT: a 3.5mm jack for sending audio/video signals from receiver 2.

DC IN: a 5.50mm x 2.50mm power jack is for connecting an external 12V DC power source to charge the monitor's battery, or to power the monitor.

HEADPHONES: a 3.5mm jack for connecting external headphones.

USB: a Mini-B jack for connecting to a personal computer to download firmware upgrades. See www.tacticrc/fpv.com for details.

DIV AV OUT: a 3.5mm jack for sending audio/video signals from both receivers simultaneously.

AV IN: a 3.5mm jack for receiving an audio/video signal from an external device.

5

MOUNTING THE MONITOR

A threaded tripod mount is located on the bottom of the monitor. Make sure the monitor is fully threaded onto the tripod (not included). Alternate methods can be used to mount the monitor to other surfaces/items. Make sure the mounting method is secure and will not damage the monitor physically or electronically. Damage to the monitor resulting from poor installation will not be protected under warranty. Do not block the ventilation holes on the rear of the monitor, as otherwise excess heat could shorten the life of the monitor.

SCREEN CARE AND HANDLING

- Do not allow water, moisture or foreign objects into the monitor.
- Do not block the ventilation holes on the rear of the monitor.
- Do not apply cleaning fluid to the monitor such as alcohol, ammonia-based cleaners such as window cleaning fluid, etc.
- Do not clean the monitor with paper towels, facial tissue, or materials which include abrasives such as nylon, polyester, etc. as it could scratch the screen.
- With the monitor off and the screen cool, lightly dust the screen with compressed air from a distance of at least 12 inches away. Then lightly wipe the screen with a micro-fiber cloth (included). Wipe the screen slowly and in horizontal or vertical straight lines (not circular patterns).

A detachable sunscreen is included to help shield the display from sunlight for optimum viewing. Unfold the sunscreen and align the tabs along the top and side edges with the holes around the perimeter of the monitor. Carefully press the tabs into place to affix the shield to the monitor.

FCC STATEMENT

This device complies with Part 15 of the FCC rules. Changes or modifications not expressly approved by Tactic will void the user's authority to operate this Tx. Operation is subject to the following two conditions.

(1) This device may not cause harmful interference.
(2) This device must accept any interference received, including interference that may cause undesired operation.

CE COMPLIANCE INFORMATION FOR THE EUROPEAN UNION

Instructions for Disposal of Waste Equipment by Private Users in the European Union:
This symbol on the product or its packaging indicates this product must not be disposed of with other household waste. Instead, it is the user's responsibility to dispose of their waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment.
The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or location where you purchased the product.

Declaration of Conformity:
Product: Tactic FPV-RM1 7 Inch Monitor with 5.8GHz Receivers
Item number: TACZ5150

The object of the declaration described here is in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE Directive 1995/5/EC:

EN 300 440-1 V1.6.1(2010-08)
EN 300 440-2 V1.4.1(2010-08)
EN 301 489-1 V1.9.2(2011-09)
EN 301 489-3 V1.6.1(2013-08)

SPECIFICATIONS

Input power: 7.0 – 22.2 volts
Channels: 22
Frequencies: 5.733 – 5.866GHz
A/V jacks: 3.5mm diameter
Headphone jack: 3.5mm diameter
HD input jack: HDMI 1.3
Charge jack: 5.5 x 2.5mm, center polarity positive (+)
USB jack: Mini-B
Dimensions with case: 183 x 128 x 26mm (7.2 x 5.0 x 1.0 in)
Weight w/o antennas: 483g (17.0 oz)

OPTIONAL ACCESSORY ITEMS

TACZ5000 FPV-T1 5.8GHz 25mW Transmitter
TACZ5005 FPV-T2 5.8GHz 200mW Transmitter
TACZ5010 FPV-T6 5.8GHz 600mW Transmitter
TACZ5300 FPV SMA Tx Antenna Short
TACZ5301 FPV SMA Rx Antenna Long
TACZ5305 FPV Cloverleaf Antenna
TACZ5450 FPV-RM1 LiPo 7.4V 1800mAh Module
TACZ5550 FPV Monitor A/V Cable Male 3.5mm Stereo Plug to (3) RCA Females
TACZ5552 FPV Monitor Sun Shield
TACZ5553 FPV Monitor 110VAC/12V DC Power Adapter
TACZ5554 FPV Monitor 220VAC/12V DC Power Adapter
TACZ5560 FPV Monitor 12V DC Power Adapter Cable BEC to Power Plug

1-YEAR WARRANTY

Tactic warrants this product to be free from defects in materials and workmanship for a period of one (1) year from the date of purchase.

For service on your Tactic product if purchased in the U.S.A. or Canada, send it postpaid and insured to:

HOBBY SERVICES
3002 N. Apollo Dr., Suite 1
Champaign, IL 61822
Tel: (217) 398-0007 (9:00am - 5:00pm CST, M-F)
E-mail: hobbyservices@hobbico.com

If purchased in the European Union, send it postpaid and insured to:

Service Abteilung Revell GmbH
Henschelstrasse 20-30
32257 Bünde Germany
Tel: 01805 110111 (nur für Deutschland)
Email: Hobbico-Service@Revell.de

- This product is suitable only for people of 14 years and older. This is not a toy!
- WARNING: CHOKING HAZARD - May contain small parts. Keep away from children under 3 years. Please retain packaging for future reference.
- No part of this manual may be reproduced in any form without prior permission.
- The contents of this manual are subject to change without prior notice.
- Tactic is not responsible for the use of this product.

TACTIC DRONEVIEW WI-FI® FPV MINI CAMERA (TACZ1000)
Small and lightweight first person view video camera, easy to attach to any R/C model. Download the free DroneView smart app for Wi-Fi connectivity and view with Android™ and iOS devices. Shoot and view real-time action from anywhere!

Shoot 720p HD video or still photos
Audio recording capability
On-board battery with receiver charge leads
4GB Micro Memory Card (expandable to 32GB)
USB Charger and Cable

Android is a trademark of Google Inc. iOS is a trademark or registered trademark of Cisco in the U.S. and other countries. All trademarks are the property of their respective owners.

TACTIC FPV-T1 5.8GHZ 25mW TRANSMITTER (TACZ5000)

25mW first person view transmitter, with RP-SMA antenna, power and video Y-cable, camera adapter with USB Mini-B plug, battery adapter, and plastic case.

Bands: A, B, F
Frequencies: 22 total, 5.733 – 5.866GHz
Output power: 25mW
Input power: 7.4 – 22.2V (2-6S LiPo)
Dimensions: 37 x 24 x 11mm (1.5 x 1.0 x 0.4 in) w/o antenna
Weight: 11.2g (0.4 oz)

TACTIC FPV-T2 5.8GHZ 200mW TRANSMITTER (TACZ5005)

200mW first person view transmitter, with RP-SMA antenna, power and video Y-cable, camera adapter with USB Mini-B plug, battery adapter, and heat sink.
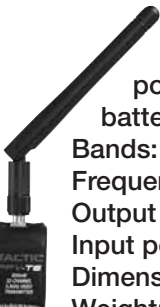
Bands: A, B, E, F
Frequencies: 32 total, 5.645 – 5.945GHz
Output power: 200mW
Input power: 7.4 – 18V (2-4S LiPo)
Dimensions: 27 x 21 x 8mm (1.1 x 0.8 x 0.3 in) w/o antenna or heat sink
Weight: 7.7g (0.3 oz)

TACTIC FPV-T6 5.8GHZ 600mW TRANSMITTER (TACZ5010)

600mW first person view transmitter, with RP-SMA antenna, power and video Y-cable, camera adapter with USB Mini-B plug, battery adapter, and heat sink.

Bands: A, B, E, F
Frequencies: 32 total, 5.645 – 5.945GHz
Output power: 600mW
Input power: 7.4 – 22.2V (2-6S LiPo)
Dimensions: 35 x 22 x 8mm (1.4 x 0.9 x 0.3 in) w/o antenna or heat sink
Weight: 9.5g (0.3 oz)

tacticrc.com/fpv