# *Hover*Shot

Radio Controlled
**Quadcopter**
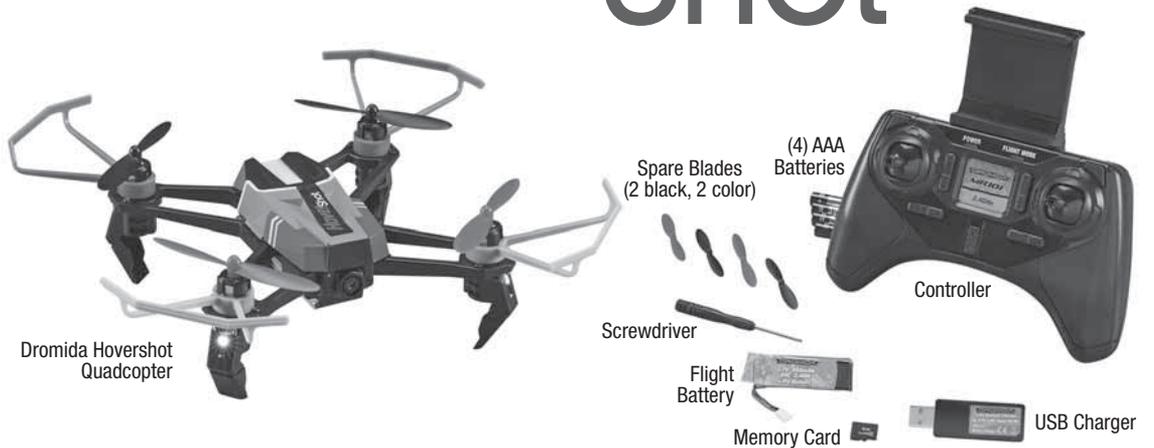
Spare Blades
(2 black, 2 color)

(4) AAA
Batteries

Controller

Screwdriver

Dromida Hovershot
Quadcopter

Flight
Battery

Memory Card

USB Charger

⚠ **TO PREVENT MOTOR DAMAGE ALWAYS BE SURE THE THROTTLE IS OFF WHEN THE BLADES ARE OBSTRUCTED OR CONTROL IS LOST.**

# QUICK START FLYING GUIDE

**①**

On

**②**
**Connect charged battery.**
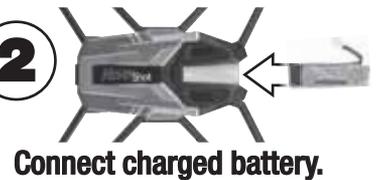
**③** **Do not move until LEDs stop flashing.**

**④** POWER
**Use the left stick to arm the transmitter.**

**CLIMB**
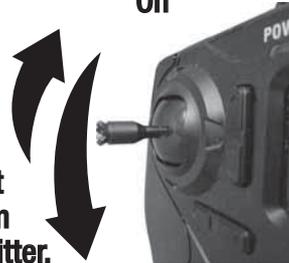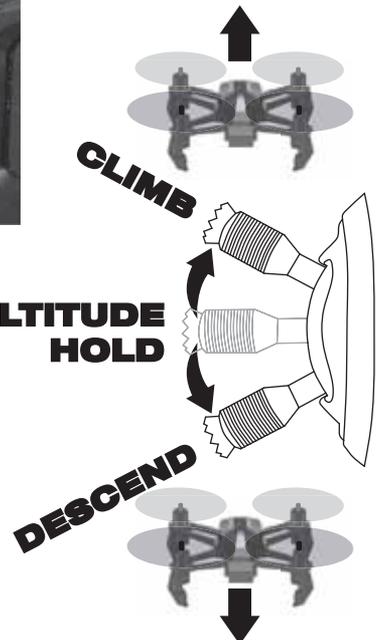
**⑤** **Hold for 1.5 seconds to start or stop motors.**

**⑦** **ALTITUDE HOLD**

**⑥** **Press to Auto Takeoff or Auto Land**

**DESCEND**

DROMIDA

## INSTALL BATTERIES IN THE CONTROLLER
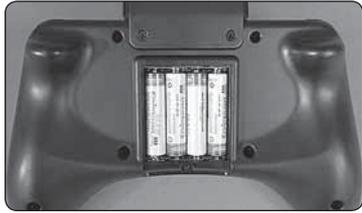
Remove the screw and slide the cover down to insert the included 4 AAA batteries.

## CHARGING

Plug charger into USB port or AC adapter (DIDP1125 not included) as shown and connect the battery. The red LED will flash slowly while the battery is charging. The LED will be steady when the battery is fully charged.
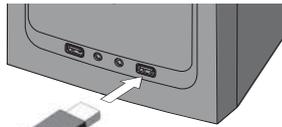
- **NEVER** leave the battery unattended while charging.
- **DO NOT** allow the USB port to power down while the charger is connected to the battery.
- **ALWAYS** unplug the charger from the USB port and the battery when charging is complete.
- The battery connector will only fit in one way.

## CONTROLLER

Phone Holder

Auto Takeoff/Land

Throttle Trim

Video Button

Motor Start/Stop

Elevator Trim

Picture Button

POWER    FLIGHT MODE

MR101
2.4Ghz

On/Off

Rudder Trim    Aileron Trim

Throttle/Rudder Stick    Aileron/Elevator Stick

## LINKING

The controller must be linked to the Hovershot and armed each time it is turned on. The Hovershot will NOT link with the controller until the quad is level and has been stationary for 3 seconds.

1. Turn on the controller and connect the battery to the Hovershot.

2. Place the Hovershot on a level surface and do not move it until the controller is armed. The LEDs on the quadcopter will flash rapidly while the sensors are initializing. The LEDs will flash slowly when the Hovershot is linked to the controller.

3. To arm the controller, move the throttle stick up to 100% and back down to 0%. Release the stick when the controller beeps. The LEDs on the Hovershot will stop flashing when it detects that the controller is armed.

The Hovershot is now ready to fly.

## HOW to FLY

### Basic Flight

**NOTE:** If you see that the Hovershot is going to crash, hold the Motor Stop/Start button to turn off the motors.

**NOTE:** Before making the first flight with the Hovershot, please perform the sensor calibration procedure described in the Maintenance and Repair Section.

Place the Hovershot on a level surface without any nearby obstacles, spectators, or pets. The quad should face away from you.

Hold down the Motor Stop/Start button until the motors start to spin.

Press the Auto Takeoff/Land button and the Hovershot will climb to about 3 feet. As long as the throttle stick is not moved, the quad will try to stay at this height. The Hovershot will also take off when the throttle stick is moved up. When the quad is at the desired height, release the stick. The Altitude Hold function will keep the Hovershot at that height until the throttle stick is moved again.

Pressing the Auto Takeoff/Land button while the Hovershot is flying will make the quad descend. When the quad reaches the ground, the motors will stop.

**Ground Effect** When the Hovershot is landing slowly and is very close to a flat surface, it will often bounce up and down or slide away from the landing point because some air is bouncing up off the landing surface. The Altitude Hold function will turn off the motors when the Hovershot is just above any solid object and the throttle stick is held below midpoint to make the landing smoother. Unless the Hovershot is landing, keep the quad several inches above the ground or other flat surfaces to avoid the ground effect.

**WARNING:** *To prevent damage to the motors, press the motor stop/start button whenever control is lost or the props cannot spin.*

### DUAL RATES

Push in on the right stick to change the control sensitivity. The default setting is low rates with a blue Flight Mode Indicator. The indicator will change to orange when the controller is in high rates.

The sensitivity of the high and low rate settings can also be adjusted manually.

1. Select the setting to be adjusted.
2. Hold the throttle stick at the desired sensitivity (midstick is 50% of the maximum sensitivity).
3. Push down on the right stick until it beeps and release both sticks.

*Please keep in mind that the low rate setting will be 50% less sensitive than high rates for the same throttle stick position.*

## FLIPS

To flip the Hovershot

1. Press down on the left stick until the controller beeps once.

2. Move the right stick in the desired flip direction.

3. **Immediately** release both sticks so the controller will be ready when the flip is completed.

## LOW VOLTAGE INDICATORS

The LEDs on the Hovershot will flash when the battery voltage is getting low. After 30 seconds, the quadcopter will automatically start to Autoland. **Always remove the battery and recharge it before storing the Hovershot.**

The controller will make 5 rapid beeps when AAA batteries need to be changed.

## MOTOR OVERLOAD PROTECTION

The Dromida Hovershot is equipped with motor overload protection circuitry that shuts down the motors in the event the propellers become blocked by an obstruction and throttle is applied. In order to reset the overload protection you will need to free the Hovershot from the obstruction and cycle the power to the transmitter and the quad. If the overload protection is triggered repeatedly or late into a flight, then it may prematurely cause the low battery indicator to flash the LEDs. Disconnect the battery and wait several seconds before reconnecting it. If the LEDs continue to flash, then you must recharge the battery.

## CAMERA

The camera on the Hovershot can record still photos and video onto a memory card. The camera lens angle can be adjusted from level with the quadcopter to down at a 45° angle.
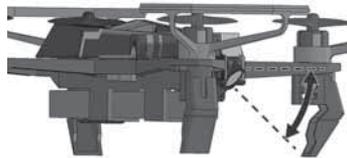
The memory card slot is on the left side of the Hovershot's body. Always insert and remove the card when the battery is NOT connected to the quadcopter.
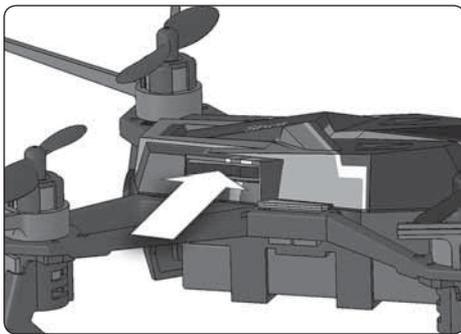
- The camera needs 30 seconds to set up before it can be used. Wait at least 30 seconds for a video to be saved before unplugging the Hovershot's battery.

- To avoid losing video files, the camera will save and start a new video every 5 minutes.

- The camera can capture a still photo while recording a video.

- The camera can use the Droneview APP to stream live video and control the camera with an Android or IOS device

## USING THE DRONEVIEW APP

The DroneView app is free software for your WiFi-capable Apple or Android device that allows you to connect to the DroneView camera to use the FPV (First Person View) function as well as to take videos and pictures and upload and view them directly to your device.

1. Install the "DroneView" app from Google Play (Android) or the App Store (Apple).'

2. Insert the memory card into the camera and connect a charged LiPo battery to the Hovershot.

3. **iOS Only** - Go to the WiFi setting options in your device and select the DroneView network. The actual name of the DroneView network will vary from the photo shown here. It may take several seconds for the DroneView network to appear in the available network list in proximity to your device. No password is needed to connect to the DroneView network. **NOTE:** Android devices will automatically connect to the DroneView WiFi network when the DroneView app is opened.
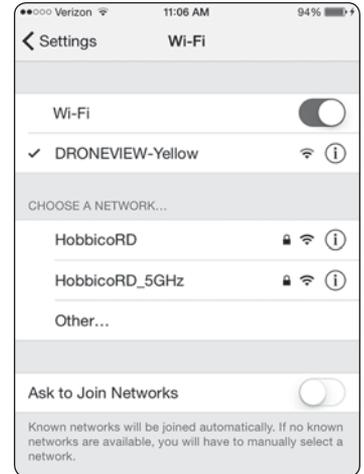
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Wi-Fi® are Wi-Fi Alliance® are registered trademarks of the Wi-Fi Alliance.

Pull tabs on phone holder to expand and insert phone.

4. Grasp your device as shown and attach it to the phone mount on the controller by pushing up on your phone against the spring loaded top clip until you can fit the other side into the bottom clip.

Searching for DroneView Wi-Fi
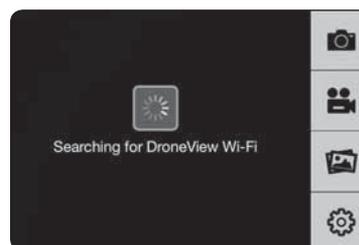
5. With your device connected to the DroneView WiFi network, open up the DroneView app. It may take several seconds for the app to locate and connect to the DroneView WiFi network.

**NOTE:** If you're in a populated WiFi environment, it may take longer.

6. Once connected you will see on your device the image seen by the camera (referred to in this manual as the FPV feed). Press anywhere on the screen to pull up the main options.

**Picture Button -** Press to take a still image. Note: pictures cannot be taken with the app while recording is in progress.

**Video Button –** Press to start recording (red stop button appears on right when recording).

**File Gallery Button –** Opens gallery to display contents of memory card for viewing, exporting and deleting.

**Settings Button –** Opens the setting menu.

**NOTE:** The FPV feed is for the purposes of displaying what the camera is recording to improve the quality and accuracy of videos and pictures with respect to the pilot's intended field of view. We do not recommend attempting to fly the Hovershot relying solely on the FPV feed. Delays in the FPV feed can cause the image shown in the app to not represent the exact current position of the Hovershot. Any interruption of the FPV feed will not be present in the recorded video files. *Flying without maintaining line of sight of the quad is unsafe.*

### FILE GALLERY





Opening the file gallery displays the contents of the memory card in the camera. Each thumbnail represents a picture or video. Videos have a small camera icon and the length of the videos on the thumbnails.
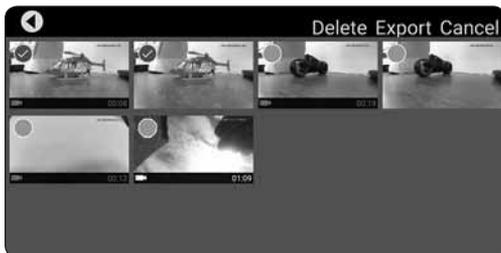
Pictures can be viewed by clicking on the picture thumbnails. In order to view videos, you must first export them by pressing

**Select** and then pressing each thumbnail that you wish to export. Press **Export** to upload the files to your device. Pictures and videos will be copied to your device's camera roll. They can also be viewed in the DroneView app after the exporting is complete by pressing the thumbnail you wish to view.

**NOTE:** We do not recommend exporting videos that exceed 3 minutes in length because of the amount of time it will take to export the files. For longer videos or a larger quantity of videos, we recommend removing the memory card from the camera and transferring the contents directly to a PC using a card reader.

When you have confirmed that the files have been successfully transferred to your device's camera roll, press **Select** and choose the files you wish to delete if you no longer want them in the file gallery.



### SETTINGS
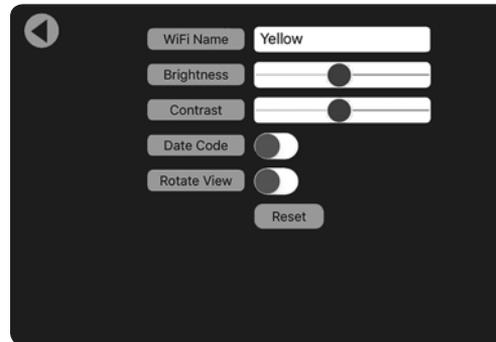


The settings menu allows you to change the WiFi name, adjust brightness and contrast, date code, resolution mode, and rotate camera view.

Changing the WiFi Name will change how the Camera is identified in the WiFi network list.

The **Brightness and Contrast** will adjust the FPV feed display qualities. Video and picture files will have the same display qualities as the feed. You may wish to experiment with these settings depending on lighting conditions and personal preferences. Press reset to return the brightness and contrast to the default values.

The **Date Code** will display the current date on the FPV feed when the Date Code is turned ON. The date will also be seen in video recordings and pictures in the same format as seen on the FPV feed. The Date Code is automatically updated to match the date of your device when connected via WiFi network.

**Rotate View** will rotate the FPV feed and recorded videos and pictures 180°. This feature is needed when the DroneView camera is used independently of the Hovershot with a separate R/C receiver and is mounted on top of a surface rather than underneath like on the Hovershot.

If you made any changes in the settings menu, then you will be prompted to save when exiting the settings menu. If you select NO when prompted to save then the changes will be discarded. **iOS Only** - If you change the WiFi name then you will need to exit the DroneView app and select the newly named network in the WiFi setting options of your device.

### USING TWO DEVICES SIMULTANEOUSLY

The DroneView camera can be connected with up to two devices simultaneously. Two devices will have the ability to connect to the DroneView WiFi network and share the FPV feed from the camera. Both devices will also be able to take pictures and start/stop video recording.

**NOTE:** Exporting can only be done with one device at a time. Attempting to export files simultaneously from a DroneView camera to two devices may cause the transfer to freeze.

## TROUBLESHOOTING

### FLYING PROBLEMS

**PROBLEM:** The Hovershot will not respond to the controller.
**SOLUTION:** (1) Charge or change the battery in the Hovershot. (2) Turn off the controller and disconnect the battery for the Hovershot. Re-link the Hovershot and controller.

**PROBLEM:** Red controller LED light flashing after linking.
**SOLUTION:** Replace with new AAA batteries.

**PROBLEM:** Unable to flip.
**SOLUTION:** Battery voltage too low.

**PROBLEM:** Stabilization not working properly.
**SOLUTION:** (1) Battery voltage low. (2) Re-link. (3) Recalibrate the sensors.

**PROBLEM:** Will not take off.
**SOLUTION:** Rotor blades incorrectly installed. See Blade Replacement section.

**PROBLEM:** Hovershot is shaking.
**SOLUTION:** Check the canopy, chassis, motors and rotor blades for damage.

**PROBLEM:** The Hovershot does not maintain altitude when the throttle stick is in the center position.
**SOLUTION:** Recalibrate the sensors.

### *VIDEO PROBLEMS*

**PROBLEM:** There are missing or corrupt files on the memory card.
**SOLUTION:** Refer to RECORDING VIDEO AND PICTURES WITHOUT THE APP for information regarding camera initialization and closing of files.
**SOLUTION:** Allow 2-3 seconds between taking pictures.

**PROBLEM:** The video button on the controller does not work or works intermittently.
**SOLUTION:** The video button must be pressed and quickly released. The controller will beep when the button works properly.
**SOLUTION:** The video button on the controller toggles between start/stop video. If using both the app and the video button to control video recording, you may need to press the video button a second time in some instances to get the correct start or stop command.

**PROBLEM:** The WiFi connection is lost during flight.
**SOLUTION:** There may be interference in the area. Try flying in a different location.
**SOLUTION:** You are exceeding the WiFi range of the DroneView camera. Maintain a closer proximity to your device during flight.

**PROBLEM:** The app does not re-establish connection after the connection has been lost.
**SOLUTION:** Close the DroneView app and remove it from the background tasks. Restart the DroneView app.

**PROBLEM:** Exporting files was interrupted and the export function cannot be restarted.
**SOLUTION:** Close the DroneView app and remove it from the background tasks. Restart the DroneView app. Run the export function again.

**PROBLEM:** You recorded videos/pictures but there are no files on the memory card.
**SOLUTION:** The memory card was incorrectly inserted into the camera. Refer to RECORDING VIDEO AND PICTURES WITHOUT THE APP for instructions on the proper installation of the memory card.

**PROBLEM:** Horizontal scrolling lines appear in video or pictures.
**SOLUTION:** Avoid aiming the camera directly into the sun or reflected sunlight.

## BLADE REPLACEMENT

Each arm and rotor blade on the Hovershot is marked with the letter "A" or "B". The blade must be installed on an arm with the same letter or the quadcopter will not be able to fly.

Carefully pry the blade off of the motor with a flat blade screwdriver.

Colored blades are on the front motors. Black blades are on the rear.

## CALIBRATION

If the quadcopter is constantly drifting in the same direction or the quad is not maintaining altitude, or any time a new flight control board has been installed, the sensors on the Hovershot should be calibrated.

1. **Calibrate the sensors before the first flight.** Center all the trim adjustments. To center the trim settings, hold down one side of the trim button until you hear a long beep. If the controller stops beeping, release the trim button and hold down the other side.

2. Place your Hovershot on a level surface and link the quadcopter with the controller and arm the transmitter.

3. Press and hold the right stick in its lower right corner.

4. Move the left stick down and to the right. When the quad LEDs start to flash, release both sticks. The LEDs will stop flashing when the calibration is complete.

## MOTOR REPLACEMENT

1. Remove the rotor blade and prop guard.

2. Remove the two screws next to the motor.

3. Turn the Hovershot over and carefully remove the motor cover.

4. Unplug the motor from the frame and remove the motor.

5. Replace the motor with a new motor that has the same color wires.

6. Use a small flat blade screwdriver to push the wires inside the arm.
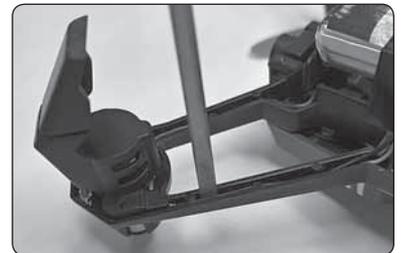
## CONTROL BOARD REPLACEMENT

1. Remove the 5 screws that secure the body and camera.

2. Unplug the camera cable.

3. Unplug the 4 motor wires.

4. Remove the 4 motor covers. Please refer to the Motor Replacement section for details.

5. Remove the LED boards from the motor covers and carefully pull the wires out of the arms.

6. Push the 4 control board dampeners out of the frame and remove the control board.

Reverse these steps to install the new control board.
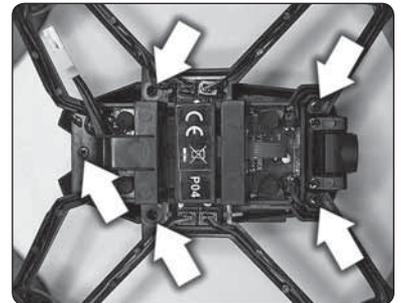
## CAMERA REPLACEMENT

1. Remove the Hovershot body. Please refer to the Control Board Replacement section for details.

2. Unplug the camera cable.

3. Remove the 2 screws that secure the lens assembly to the body.

4. Remove the 4 screws that secure the camera board to the body.

Reverse these steps to install the new camera assembly.

## BATTERY PRECAUTIONS

**The Hovershot uses a lithium polymer (LiPo) battery. Follow these precautions to ensure safe and trouble-free operation.**

- ALWAYS disconnect the battery from the quadcopter when not in use.

- Do not attempt to use this charger with NiCd or NiMH battery packs.

- Do not attempt to use a damaged battery.

- This product contains a LiPo battery that must be recycled or disposed of properly.

- Do not leave the charger unattended while charging. Disconnect the battery and unplug the charger immediately if either becomes hot! However, it is normal for the charger to get warm.

- Disconnect the battery from the charger and carefully move the battery to a fireproof location if the battery begins to swell or smoke!

- Never allow the battery temperature to exceed 140° F [60° C].

- Do not attempt to charge a battery if it is swollen or hot.

- Do not place the charger or any battery on a flammable surface or near combustible materials while in use.

- Never disassemble or modify pack wiring in any way or puncture cells.

- Never charge inside a vehicle.

- Always disconnect the battery and unplug the charger when not in use.

- Land your model immediately when the LEDs flash to indicate that the battery power is low. Recharge the battery before attempting another flight. A dangerous situation can occur when attempting to recharge an over-discharged battery!

- ALWAYS keep a supply of sand accessible when charging. Dumping sand on the battery will extinguish a LiPo chemical fire.

- ALWAYS KEEP OUT OF REACH OF CHILDREN

## SAFETY PRECAUTIONS

**Follow these safety precautions when operating this or any model quadcopter.**

- Adult supervision required.

- Before flying, go to www.knowbeforeyoufly.org.

- Do not touch the spinning blades or fly over another person's head.

- Keep your face and body as well as all spectators away from the rotors whenever the battery is connected.

- Stay clear of buildings, trees and power lines. **AVOID** flying in or near crowded areas. **DO NOT** fly close to people, children or pets.

- Maintain a safe pilot-to-quadcopter distance while flying.

- Your Hovershot quadcopter should not be considered a toy, but rather a small, working model. If not operated correctly, the model could possibly cause injury to you or spectators and damage to property.

- You must check the operation of the model before every flight to ensure that the model has remained structurally sound.

- Do not alter or modify the model, as doing so may result in an unsafe or unflyable model.

- Do your part in preserving the integrity of the FPV hobby. Know the boundaries of your flying area and **ALWAYS** respect the privacy of others.

## 90-DAY LIMITED WARRANTY

**PLEASE DO NOT RETURN YOUR PRODUCT TO THE STORE.** Dromida will repair or replace factory defects for 90 days from the date of purchase. This warranty specifically does not cover crash damage, misuse or abuse. To make a warranty claim, please contact our product support team at **1-217-398-8970 option 6** or e-mail us at **helihotline@greatplanes.com**. If requested by Product Support, please send defective product to:

**Hobby Services**
3002 N Apollo Dr., Suite #1
Champaign, IL 61822

In the European Union, send it postpaid and insured to:

**Service Abteilung Revell GmbH**      Tel: 01805-110111
Henschelstrasse 20-30      (nur für Deutschland)
32257 Bünde Germany

E-mail: Hobbico-Service@Revell.de

Please include a note about the problem, your contact information, and a copy of the receipt.

This warranty applies only if the product is operated in compliance with the instructions and warnings provided with each model. Dromida assumes no liability except for the exclusive remedy or repair of parts as specified above. Dromida shall not be liable for consequential or incidental damages. Some states do not allow the exclusion of consequential or incidental damages so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

## FCC IC PRECAUTIONS

### IC RSS WARNING

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

### IC RADIATION EXPOSURE STATEMENT

This equipment complies with IC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

### FCC RADIATION EXPOSURE STATEMENT

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20 cm between the radiator and your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

## 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: Dromida 2.4GHz 4-Channel Tx Rx     FCC ID: IYFMR101
Item number: DIDJ1106 MR101
Equipment class: 1

MR101 transmitter: The objects of the declaration described here are in conformity with the requirements of the specifications listed below, following the provisions of the European 2006/95/EC Low Voltage Directive:

**EN 60950-1:2013 Safety**

The objects of the declaration described here are in conformity with the requirements of the specifications listed below, following the provisions of the European R&TTE directive 1999/5/EC:

**EN300 328 V1.9.1.**

Technical requirements for radio equipment

**ETSI EN 301 489-1 V1.9.1, 301 489-17 V2.2.1 General EMC requirements for radio equipment**

**Hobbico, Inc.**
2904 Research Road
Champaign, IL USA 61826

Distributed in Europe by Revell GmbH
D-32257 Bünde Germany

The associated regulatory agencies of the following countries recognize the noted certifications to this product as authorized for sale and use.

| UK | DE | DK | BG | SE | FI | GR |
|----|----|----|----|----|----|----|
| EE | LV | LT | PL | CZ | SK | HU |
| RO | SI | AT | IT | ES | PT | IE |
| NL | LU | MT | CY |  |  |  |

FCC ID: IYFMR101
DROMIDA™
IC:11104A-DRONEVIEW
MADE IN CHINA

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

**STATEMENTS:** This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired changes or modifications not expressly approved by the party responsible for compliance and could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

● Reorient or relocate the receiving antenna.

● Increase the separation between the equipment and receiver.

● Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

● Consult the dealer or an experienced radio/TV technician for help.

⚠ **TO PREVENT MOTOR DAMAGE ALWAYS BE SURE THE THROTTLE IS OFF WHEN THE BLADES ARE OBSTRUCTED OR CONTROL IS LOST. PRESS AND HOLD THE MOTOR OFF PANIC BUTTON!**

## REPLACEMENT PARTS

| | | |
|---|---|---|
| 1 | DIDE1276 | Canopy |
| 2 | DIDE1277 | Prop Set |
| 2 | DIDE1502 | Prop Set Black/White |
| 2 | DIDE1552 | Prop Set Black/Yellow |
| 3 | DIDE1278 | 720p Camera Assembly |
| 4 | DIDE1279 | Prop Guards |
| 5 | DIDE1280 | E-Board |
| 6 | DIDE1281 | Main Frame |
| 7 | DIDE1283 | Main Motor CCW R/F, L/R |
| 8 | DIDE1282 | Main Motor CW L/F, R/R |
| 9 | DIDE1284 | Landing Feet Motor Covers |
| 10 | DIDE1275 | LiPo 1S 3.7v 650mAh |
| 11 | DIDE1285 | Screw Set |
| 12 | TACZ1010 | 4G C10 Micro Memory Card |
| | DIDE1511 | USB Charger 1S LiPo ZH Plug |
| | | |
| | DIDJ1106 | MR101 TX with Altitude Hold |
| | DIDE1215 | TX Mobile Phone Holder |



HOBBICO          dromida.com          DIDE0008