# PR®PEL

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# FCC Part 15 C Notice

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 experienced radio/TV technician for help.

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.

#### INDUSTRY CANADA NOTICE: CANADA ONLY.

This device complies with Industry Canada licence-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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter dout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

CAN ICES-3 (B)/NMB-3(B)

This product meets the applicable Innovation, Science and Economic Development Canada technical specifications. Ce produit répond aux spédifications techniques pertinentes d'Innovation, Science et Développement économique applicables.



19





Requires Speed Class 6 or higher microSD or microSDHC card (not included)

microSDHC Logo is a trademark of SD-3C, LLC.

Conforms to safety requirements of FCC and RSS210. ©2017 Rooftop Brands™ All rights reserved Tel: + (1) 949-566-9573 • www.propelrc.com

Made in China V2.0

# TILT™+WiFi

Hybrid Stunt Drone with Live Video Streaming and Altitude Stabilization Technology



# INSTRUCTION BOOKLET

WARNING: Never leave product charging unattended for extended periods of time. Always disconnect the battery from charger immediately after the battery is fully charged. Please refer to enclosed safety instructions.

PACKAGE CONTAINS:



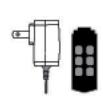


2.4G Wireless

Controller



Spare Parts



AC Charger

& Li-Poly

Rechargeable Battery







**USB Card Reader** 

Instruction

Manual

Colors and styles may vary slightly.

PROPEL

DDADEL							
C05-ADS-Tilt+WiFi IM	114×174mm	Cassie	Johnny	2017/6/28			
ARTWORK NO.	DESCRIPTION	MDSER	DESIGNER	DATE			

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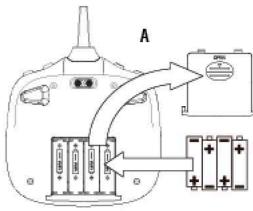
Thank you for purchasing the Tilt™ 2.4 Ghz Quadrocopter. Please read this instruction booklet as it contains valuable information on how to properly fly and care for your Tilt™.

### **FEATURES**

- Wide range digital radio allows flight range up to 400 feet!
- · Six axis gyro for extremely stable flight and maneuverability
- Switch-blade technology allows you to operate in 3ch or 4ch Modes from beginner to advanced pilots
- Push button 360° aerial stunts
- On-board camera records high-definition videos and still photos(1280x720 pixel, 30 frames per second)
- · Streams video to your mobile device
- · Air pressure sensors lock flight altitude for stable video footage
- · Automatically lands with the push of a button

# REMOTE CONTROL BATTERY INSTALLATION

- 1. Slide off the battery cover from the back of the controller.
- Install 4 fresh "AA" alkaline batteries into the controller as shown in diagram A.Replace the battery cover.
- Turn over the controller and turn the on/off switch to the on position. If the power indicator turns on you have installed your batteries properly.



4 1.5 volt "AA" Alkaline Batteries

# CHARGING THE TILT™ LI-POLY BATTERY

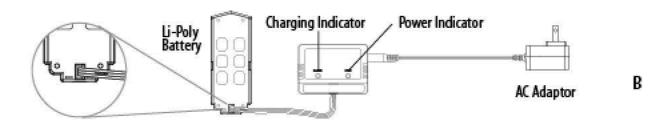
- 1. Connect the battery to the battery charger as shown (see diagram B).
- 2. Next, Plug the AC adaptor into a standard wall socket.

CAUTION: improper connection may damage the battery.

Note: The battery charger has a RED LED indicator light which will light up while charging. And also there is a GREEN LED indicator light which will light up and stay on all the time once the power is on.

- 3. When the battery is fully charged the red charging indicator light will turn off.
- Average charging time is approximately 80-100 minutes. A fully charged drone can fly for approximately 10 minutes depending on environment and user input.

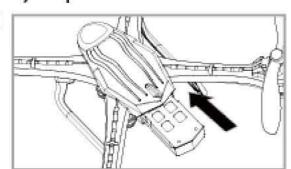
NOTE: You may purchase additional batteries and chargers at www.propelrc.com

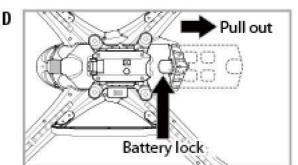


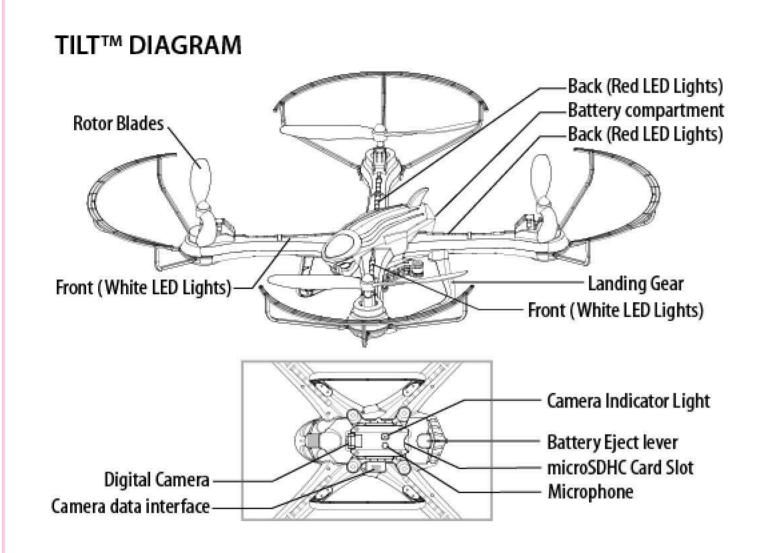
#### IMPORTANT: ALWAYS REMEMBER TO DISCONNECT YOUR BATTERY CHARGER WHEN NOT IN USE!

# TILT™ BATTERY INSTALLATION

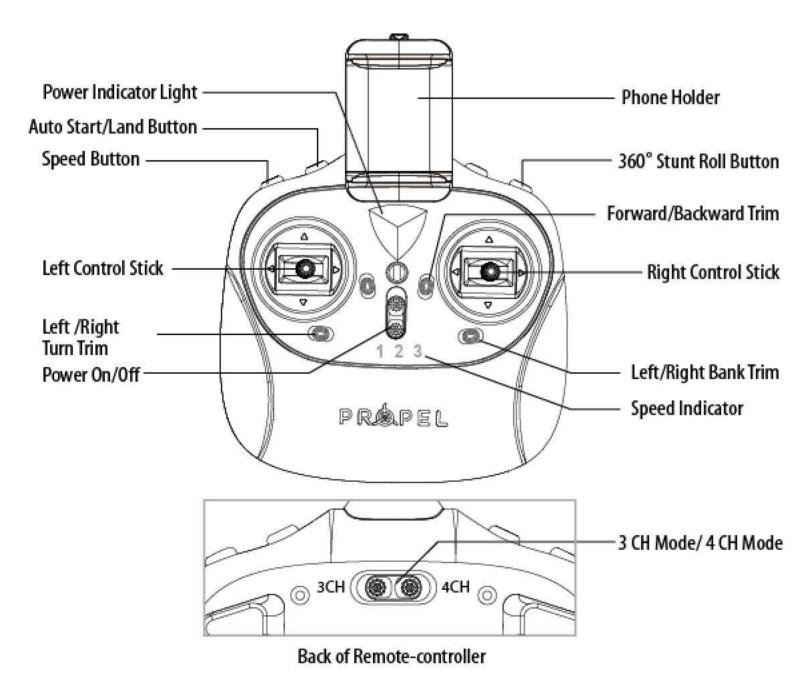
- Slide the fully charged battery into the Tilt<sup>TM</sup>'s battery compartment (see diagram C).
   The battery is designed to only fit in the compartment one-way, with the guide rail on the bottom of battery facing downward.
- Push the battery all the way in and you will hear a click, the drone's LED lights will light up and begin flashing when you have installed the battery correctly.
  - NOTE: The Tilt™ has no On/Off switch. The drone automatically turns on when the battery is installed.
- Removing the battery: Pull up the battery lock on the battery and then pull the battery out from the battery compartment.







### CONTROLLER DIAGRAM



# WARNING

# DO NOT FLY YOUR TILT™ IN FOUL WEATHER!









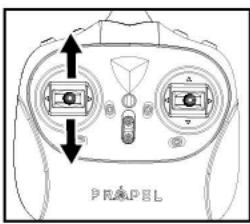
#### FLIGHT PREPARATION

- Verify that there are 4"AA" batteries inside the remote control unit and the Tilt™ has been fully charged.
- Make sure to be in a large open space preferably a field or a park with an open radius of at least 200 feet.
- Make sure to start your drone on a clean flat level surface before take-off.
- IMPORTANT! Until you have experience in flying your Tilt™, it is not advised to use in any rate of wind.
   Wait until a zero wind day or extremely light wind when learning how to fly.

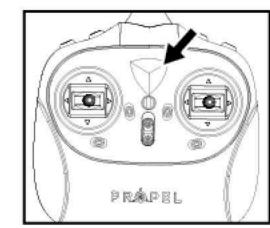
#### SYNCING YOUR TILT™

Important! When syncing your Tilt™ with the controller always make sure that the drone is on a flat level surface and that your digital trim settings are in the center position. This insures that the 6 Axis gyro is properly programmed to respond to your trim settings. Your Tilt™ utilizes an automatic 2.4G channel selection system that allows up to 8 people to fly side by side in the same wireless range with no interference.

- Before starting, make sure that the power switch on your controller is off and the battery is removed from the Tilt™. Make sure that there are no other 2.4G devices in the area.
- 2.Insert the battery into the Tilt™ and set it down on a flat level surface. The red and white LED lights on top of the drone should begin running. And the blue lights on the top center and the white lights in the eyes will start flashing quickly.
- 3. Quickly turn ON the remote and you will notice that the top red LED light on the face of the controller should also be flashing. The blue lights on the back and white lights in the eyes of your Tilt™ will start flashing slower.
- 4. Push the left control stick all the way up until it stops and then pull it back all the way down to the bottom(see illustration below). When pushing the stick up or pulling the stick down you should hear a high-pitched beep both ways. The blue lights on the back and white lights in the eyes will turn solid. You have successfully synced your Tilt™ and are ready to fly. If these don't happen repeat steps 1-4 again.
- TIP 1: Try not to leave too much time between putting your battery into the drone and turning on the controller or your syncing window will time-out.
- TIP 2: Syncing your drone indoors or in the shade will make it easier to see the LED light indicators on both the controller and the drone.



Move the control stick all the way up and all the way down, you should hear a beep both ways



The flashing red LED light will become solid when you are synced

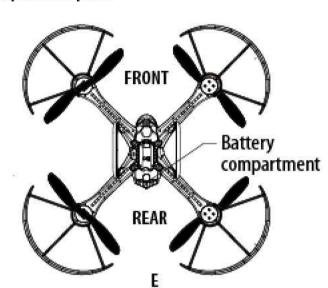
# **NOW YOU ARE READY TO FLY!**

If you have successfully synced your Tilt<sup>™</sup> to your controller as explained on page 4 you are now ready to fly. Before beginning to fly your drone you should familiarize yourself with how to start and stop the rotors, how to use your auto land feature and how the controls work so please carefully read and familiarize yourself with various control features explained in the next few pages. Once again as a beginner pilot you should learn how to control your drone in a large open field or park on a day with zero or very light wind. Do not try to fly your Tilt<sup>™</sup> too high until you become a more experience pilot.

# RECOGNIZING THE FRONT & REAR OF THE TILT™

Even though the Tilt™ has four rotors there is still a front or "forward" facing direction and "rear" or backwards facing direction. The front and forward facing direction of the Tilt™ is the side with two EYES (see diagram E). The rear and backward facing direction of the Quadrocopter is the side with battery compartment (see diagram E).

NOTE: The front of the Quadrocopter also displays running WHITE LED light and the back of the Quadrocopter displays running RED LED lights.



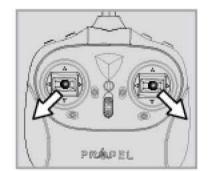
# STARTING/STOPPING THE ROTORS

Note:You can start/stop your Tilt™ manually or automatically.

Please follow one of the steps below to operate accordingly. Make sure you have properly synced the Tilt<sup> $\mathsf{TM}$ </sup> and the power stays on.

# MANUAL START/STOP

- To start the rotors simply move the two control sticks both down and out (see diagram), hold until the rotors start spinning. Now release both sticks to the neutral position and push the throttle up to take off.
- To stop the rotors, after starting them you can simply wait about 10 seconds, and they will stop automatically. Or move both sticks down and out again to stop immediately. After take off, you can simply pull the throttle all the way down and land.



### AUTO START/LAND

The Tilt<sup>™</sup> has an auto start/land feature which allows you to start/land automatically. Simply press the **AUTO START / LAND** button on the top of the controller and your Tilt<sup>™</sup> will begin taking off/landing(see diagram below).

**NOTE:** You can still control the direction while auto starting/landing to avoid obstacles.

#### UNDERSTANDING THE ALTITUDE LOCK SENSOR

The Tilt™ has a unique Altitude Lock function, air pressure sensor that allows for easier flight control and stability. A beginner's friend, it allows the user to ease into piloting the copter. The sensor locks in the altitude of the copter while allowing the user to adjust the directional controls without having to hold the throttle.

After starting the copter, fly it upwards to a safe height. Once at a safe height, release the throttle to the neutral position. Now your Tilt™ should be locked in the altitude and you can focus on getting used to the directional controls of the Tilt™. The copter will always tend to self correct and go back to the last locked height after moved up or down by outside forces.

Note: The altitude sensor does have some tolerance based on atmospheric conditions and could have a slight variation in altitude.

# SPEED SELECT BUTTON

The Tilt™ has 3 speed settings; 1 (SLOW), 2 (MEDIUM) and 3 (HIGH). The Default setting when you first turn on your Tilt™ is the 1 (SLOW) speed mode. To increase the speed simply trigger the speed setting button (see remote diagram on pg 3) you will hear a beep and the speed setting indicator on the face of the controller will show you what speed setting you are on. Speed settings can be set before flight or during the flight.

# 3 CHANNEL VS 4 CHANNEL FLYING

Propels unique "switch-blade" technology allows you to choose between 3ch or 4ch flight control modes. Most people with no experience in flying multi copters may find 3ch easier to learn at first as controls are set up to simply move forward, back, turn left and turn right. 4channel flying gives the operator ultimate control by adding two more dimensions of flight, banking left and banking right.

#### To change to 3 Channel mode:

Switch the 3/4 CH button to left side on the back of controller (see remote diagram on pg 3), you will hear 3 "beeps" indicating the Tilt™ now is set to 3 CH mode.

#### To change to 4 Channel mode:

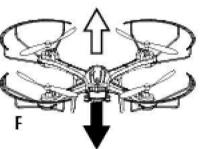
Switch the 3/4 CH button to right side on the back of controller (see remote diagram on pg 3), you will hear 4"beeps" indicating the Tilt<sup>TM</sup> now is set to 4 CH mode.

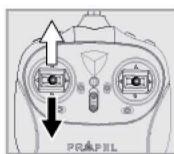
# 3 CHANNEL FLIGHT CONTROL

Below is a list of basic flight functions for your long-range remote to control the Tilt<sup>TM</sup>. While learning to fly your Tilt<sup>TM</sup> it is best to start in a large space with the drone facing away from you until you get used to the basic controls. As you master flying your Tilt<sup>TM</sup> you can move to more advanced maneuvering techniques. Practice makes perfect! When you have these basic steps down you can move to the next level.

Move the left Throttle stick up to increase the propeller speed and the Tilt™ will accelerate and ascend.

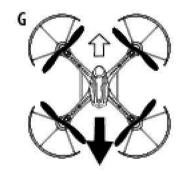
Move the left Throttle stick down to decrease the propeller speed and the Tilt™ will decelerate and descend (see diagram F).

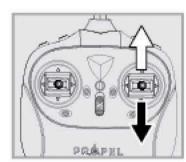




While in the air, move the right Direction Stick up and the Tilt™ will move forward.

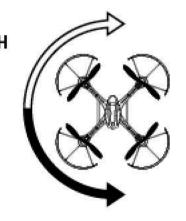
Move the right Direction Control down and the Tilt™ will move backward (see diagram G).

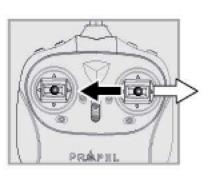




While in the air, move the right Direction Control left and the Tilt™ will spin to the left.

Move the right Direction Control right and the Tilt ™ will spin to the right (see diagram H).





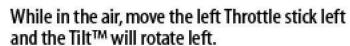
5

# 4 CHANNEL FLIGHT CONTROL

Below is a list of basic flight functions for your long-range remote to control the Tilt™. While learning to fly your Tilt™ it is best to start in a large space with the drone facing away from you until you get used to the basic controls. As you master flying your Tilt™ you can move to more advanced maneuvering techniques. Practice makes perfect!

Move the left Throttle stick up to increase the propeller speed and the Tilt™ will accelerate and ascend.

Move the left Throttle stick down to decrease the propeller speed and the Tilt™ will decelerate and descend (see diagram I).



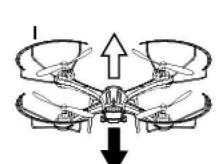
Move the left Throttle stick right and the Tilt™ will rotate right (see diagram J).

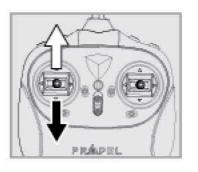
While in the air, move the right Direction Stick up and the Tilt™ will move forward.

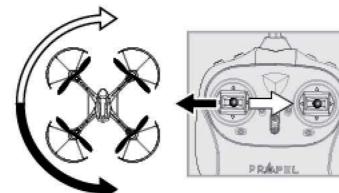
Move the right Direction Control down and the Tilt ™ will move backward (see diagram K).

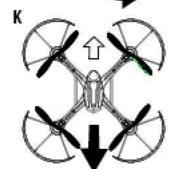
While in the air, move the right Direction Control left and the Tilt™ will bank to the left.

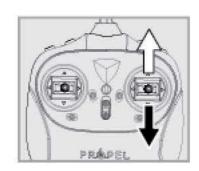
Move the right Direction Control right and the Tilt ™ will bank to the right (see diagram L).

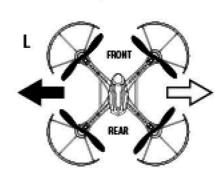


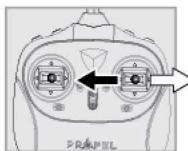






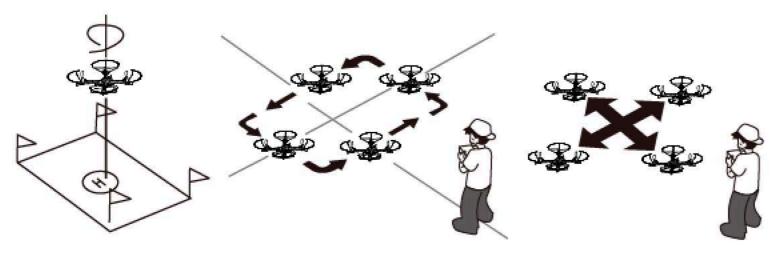






# FLIGHT PRACTICE

To master flying your aircraft try practicing the excersizes shown below. Start with simple vertical takeoffs, landings, and left/right turning and rotating. Once those are mastered move on to square and cross maneuvers. Good luck and have fun!



Fixed-point landing

Square Pattern Maneuver

**Cross Pattern Maneuver** 

### ADJUSTING THE TRIM

NOTE:The Tilt™ is already properly trimmed and calibrated right out of the box and should not require any trim adjustments before flying. Some more experienced pilots may want to adjust trim settings for their style of flying. After several crashes you may need to adjust trim settings for the Tilt™'s restabilization.

#### Forward/Backward Trim

- If your Tilt™ drifts forward while in the air, push and release the FORWARD/BACKWARD TRIM button backward repeatedly until the motion stops and proper flight is maintained (see diagram M).
- If your Tilt™ drifts backwards, push and release the FORWARD/BACKWARD TRIM button forward in the same manner until the problem is resolved.



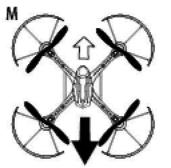
- If your Tilt™ drifts / banks left while in the air, push and release the BANKS TRIM button to the rightside repeatedly until the motion stops and proper flight is maintained (see diagram N).
- If your Tilt™ drifts right, push and release the BANKS TRIM button to leftside in the same manner until the problem is resolved.

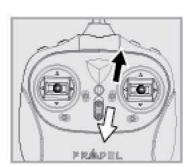
#### Spin Left Trim

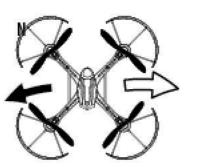
 If your Tilt™ spins left while in the air, push and release the LEFT/RIGHT TURN TRIM button to the rightside repeatedly until the motion stops and proper flight is maintained (see diagram 0).

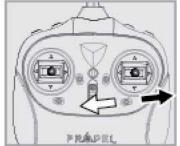
#### Spin Right Trim

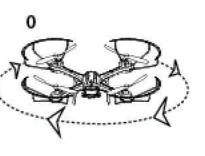
 If your Tilt™ spins right while in the air, push and release the LEFT/RIGHT TURN TRIM button to the leftside until the problem is resolved (see diagram P).

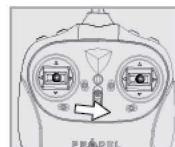


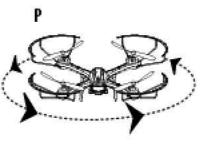


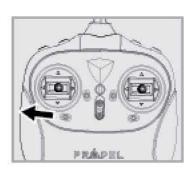












NOTE: The use of the Trim buttons utilizes sounds. A single long Beep indicates the product is center trimmed. If there is no beep sound after press the trim buton, it indicates the maximum on a particular side.

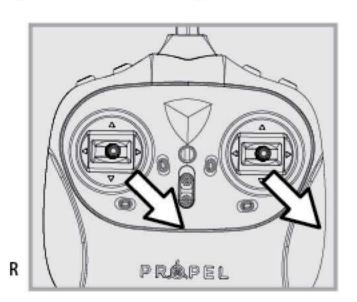
# CALIBRATING THE TILT™

NOTE: Your Tilt™ comes pre-calibrated out of the box so you are ready to fly.

After crash you may notice that your drone is drifting and not holding its center position as well as it used to. This most likely means that you need to recalibrate the 6 axis gyro. Please follow the simple instructions below.

- 1. Place the TILT™ on a level surface
- 2. Make sure the Tilt™ is on and that the controller is synced (refer to syncing pg 4.). Do not start the blades. Instead move both the throttle and control stick down and to the right corner and hold them there for about 5 seconds (See Diagram R). You will see the blue lights on the top center of the drone rapidly flash for a few seconds and then stay solid. Once the lights stop flashing you have completed your calibration and are ready to fly!

TROUBLE SHOOTING: If you do not see the lights flash, first remove the battery from the drone then turn off your controller and start again. Always make sure to put your battery in the TILT™ first, then turn on your controller. Push the left throttle stick up all the way and then pull back down again. When you hear the beep, the flashing blue lights(on the top center) and white lights(in the eyes) will turn solid. The TILT™ is synced to the controller. Now you can try to calibrate the TILT™ again.

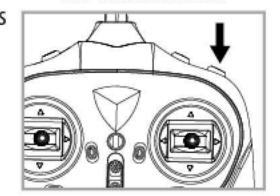


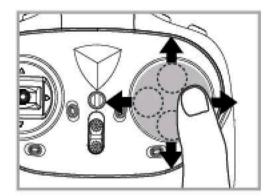
# **HOW TO PERFORM 360° STUNT ROLLS**

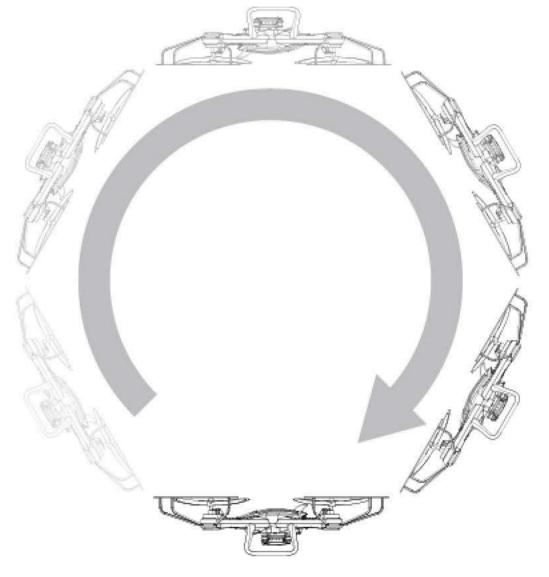
Performing 360° stunt rolls with the Tilt™ is as easy as 1-2-3:

- Hover the Tilt™ in still position making sure that you have at least 5 feet of clearance above and below the quadrocopter.
- Press the 360 stunt button down and you will enter the stunt roll mode which is indicated by a continuous beeping (see diagram S).
- Determine which direction you want it to flip and quickly push the right control stick in the direction you want to flip your Tilt™ (see diagram T).
   You have 4 choices a) Forward roll, b) Backwards roll, c) Right side roll, d) Left side roll.
   Note: Stunt roll is disabled in mode 1.

#### 360°Stunt Roll Button







Note:To exit the stunt roll mode without filp, You can press the button again. The beeping sound will stop.

#### PROPEL TILT WIFI APP INSTALLATION

- Make sure you are using a compatible Android™ or Apple® iOS device.
- 2. Make sure your device has access to the Internet.
- 3. For Apple® iOS devices, within the App Store, search and select "Propel Tilt WiFi." Hit the Install button and the "Propel Tilt WiFi" App should download and install automatically.
- 4. For Android™ OS devices, visit the Google Play store and search for "Propel Tilt WiFi". Selecting the "Propel Tilt WiFi" App will download the App and automatically install it on your device.
- 5. After the "Propel Tilt WiFi" App is installed, it should create an icon on your screen. Click the "Propel Tilt WiFi" icon to run the App to make sure that it has installed correctly on your device. If not, please delete and repeat the process again.

#### PAIRING TILT TO YOUR COMPATIBLE DEVICE

- After completely charging your Tilt™ battery, install the battery to your Tilt™. (refer to the user manual).
- 2. In the Settings menu of your device, locate the Wi-Fi option.
- 3.Turn ON the Wi-Fi option.
- 4. Select "Propel Tilt" from the Wi-Fi list. Wait for your Tilt™ to be connected. Return to the Main Menu.



Settings







HELP PAGE 3

- PR&PEL

  PR&PEL

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  PR&PEL

  PR&PEL

  PR&PEL
- 4. If you're still encountering difficulties please contact our customer service department at +1.949.566.9573.

# **OUICK START**

- 1. After you install the App correctly and have paired to the drone successfully, you can open the "Propel Tilt WiFi" App icon. Tap "START" on the bottom right hand side of the screen. You should see the real-time video streaming from your Tilt's camera.
- 2. This App also allows you to control your Tilt™ by your mobile device. To activate the control sticks, tap the "ON" button at the top right hand side of the screen. This will switch the control from your traditional controller to your compatible device. Now click" (to start the motors. The control sticks will show up in the screen for your fly control and you can now use your device as a traditional controller. Or you can click
- "  $\square$ " to auto launch your Tilt in the air and then use your device as a traditional controller. Click this button again, your Tilt will automatically land on the floor.

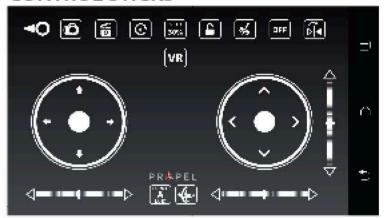
# DETAILED APP OVERVIEW

 Please see images below for a detailed App overview. This overview is also available under the "HELP" icon in the home screen of the App.

#### **HOME PAGE**



#### CONTROL STICKS



# **HELP PAGE 1**



# HELP PAGE 2



Note: Apple® devices require the use of iOS 7.0 or higher.

ANDROID \*\*M\* devices require the use of OS 4.2.2 or higher.

11

### USING YOUR ON-BOARD CAMERA AND VIDEO RECORDER

Your Tilt™ comes equipped with an onboard digital camera (1280x720 pixel, 30 frames per second) that takes both video and still photographs. You can have hours of fun creating aerial photography and videos for family and friends.

#### WHAT YOU WILL NEED TO GET STARTED USING YOUR CAMERA

- One microSD card (not included).
- One microSD card reader (included).
- 3. A Computer with a USB port and Windows Media Player or other Media player that can play AVI files(not included).

#### FORMATTING YOUR microSD CARD

Before you can begin to take videos or digital photographs you must first format your microSD card. To format your microSD card simply place the microSD card into the included USB SD card reader and plug it into your computers USB port (see diagram U1 and U2 below). After a few moments an icon will appear on your Desktop. Right click on the Icon and follow instructions to format your microSD card.

#### INSTALLING THE microSD CARD IN YOUR X15

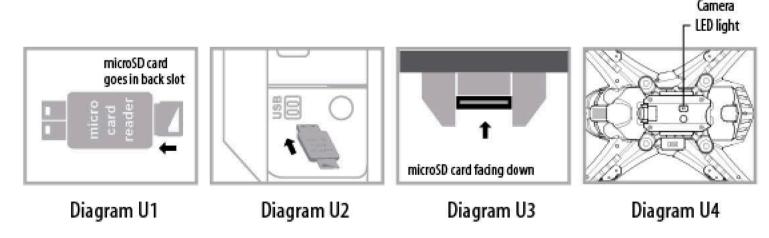
- Place the formatted microSD card into the back of the X15 digital camera port (see diagram U3 below). Push gently
  until you hear and feel the microSD card "click" into the digital camera slot.
- Turn the X15 on and make sure that it is both fully charged and properly synced to the controller (see HOW TO SYNC YOUR QUADROCOPTER on page 4).
- When you have successfully installed your microSD card and your X15's battery, you will see a solid red LED light on the camera unit underside (see camera indicator light diagram U4 below).
- NOTE: If you see a red LED light flashing this indicates you have not installed your microSD card correctly or there is a problem with your SD card. If this happens please reformat and try again. If you continue to encounter problems call our customers service line at (949) 566-9573 Ext 1 for assistance.

#### TAKING DIGITAL PHOTOS

To take photographs quickly press and release the CAMERA button on the top right side of the controller (refer to CONTROLLER DIAGRAM on pg. 3), when you push the button you will hear a "beep" and the green led light on the camera will flash 3 times indicating that a picture has been taken.

#### RECORDING VIDEOS

To begin recording a video depress and hold down CAMERA button for 2 seconds. You will hear two "beeps" and the green LED light on the camera start flashing to indicate that you are in video mode and the camera is recording. To stop the video recording, press and hold the CAMERA button a second time, you will hear two "beeps" to indicating that the video recording has stopped and the Camera is in ready mode again.



IMPORTANT NOTICE: You can not take photos and videos at the same time. When you are in video mode your camera/photo button is disabled. If you want to take photos you must first exit video mode.

#### TESTING/TROUBLE SHOOTING THE CAMERA BEFORE FLIGHT

It's a good idea to test that your camera is working before beginning flight.

Start by making sure that you X15 is properly synced to the controller (see How to Sync pg 4).

Note: There is no need to start the rotors as the camera function is a separate system. You only need to be synced.

- 1.Turn the drone upside down (it is recommended to just hold in your hand) and insert a microSD card. The microSD card can only fit in one way so do not force it. When the SD card is installed all the way you will hear a "Click" sound and a flashing Red LED light should stay solid on the belly of the camera (see Camera Diagram W4). The solid red light indicates that you have properly installed the microSD card and are ready for taking pictures and videos. If you don't see the solid red LED indicator light then start again. Remember to make sure that the drone and controller are properly synced and that the microSD card is inserted until you hear a "click".
- 2.Testing the Still Photo Feature: Keeping the drone upside down, quickly depress and release the CAMERA button on the top right hand side of the controller. A green LED should appear and flash 3x. Congratulations you just took a picture and tested your camera. If you did not see 3 green lights flash then you must start again from the beginning.
- 3.Testing the Video Recording Feature: Keeping the drone upside down, depress and hold down the CAMERA button for 2 seconds. A green LED light on the camera belly will appear and begin to flash continuously. This means that you are recording video. To stop recording video simply press and release the Camera button one more time and the Green LED light should off, indicating that the camera is once again in ready mode.

#### REMOVING YOUR microSD CARD

To remove your microSD Card push in gently on the back of the SD card with your thumb or forefinger until you hear and feel a "clicking sound". The microSD card will "pop-out" slightly and is ready for removal. Simply grab and pull gently away from the X15's camera port to remove the card. Always store your microSD card in a clean, safe and cool environment.

#### DOWNLOADING AND CLEARING SPACE ON YOUR microSD CARD

Plug your microSD card into the microSD card reader and connect to your computer. It is best to always download all your videos and pictures on to your computer and not store this data on your microSD card. After downloading your photos and videos, follow your computers instructions to "delete" files on your microSD card.

IMPORTANT NOTICE: When your microSD card is full the indicator light on the bottom of your X15 will not flash when you press the photo or video record buttons. This indicates that its time to put a new SD card in your X15 or download files and clear space for future photos and videos.

FCC RF exposure statements

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

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body or nearby persons.

IC Radiation Exposure Statement:

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

Déclaration d'exposition aux radiations:

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

# TROUBLESHOOTING YOUR TILT™

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
No Power	Power switched off     Polarity is reversed     Batteries may be low or in need of charging	1. Switch the ON/OFF switch to ON 2. Make sure all batteries are installed correctly (see diagram A) 3. Replace batteries
Aircraft Not Responding	1. Remote is switched off 2. Battery power in remote is too weak 3. The remote is not properly synced 4. Out of control range	1. Switch the ON/OFF switch to ON 2. Connect the battery to Tilt™ 3. Re-sync the remote 4. Do not fly beyond 400 feet
Aircraft Won't lift off	Rotor speed too slow     Aircraft not fully charged     Obstruction of rotors	1. Push throttle lever forward 2. Recharge your Tilt™ 3. Check rotors for hair or other obstructions
Aircraft Descends Too Fast	1. Moving the throttle down too quickly 2. Rying in high wind or bad weather	1. Control the throttle slower/use auto land feature 2.Do not fly in bad weather

If you continue to encounter problems call our customers service line at (949) 566-9573 Ext 1 for assistance.

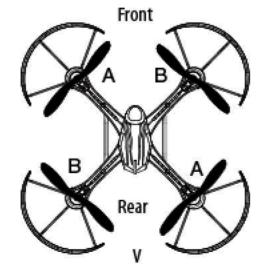
### REPLACING THE PROPELLER BLADES

Your Tilt™s propeller system is a precision instrument that may need repair or replacement from time to time for optimal flight function. Crash landing at high-speed may cause damage to your Tilt™'s propellers.

- 1. The TILT™ has 4 blades, each of them marked with "A" or "B".
- 2.To replace the damaged blade please follow the diagram V as below.

Blade Front Left = A Blade Front Right = B

Blade Back Left = B Blade Back Right = A



# TILT™ WARNING:

The Tilt™ is designed for OUTDOOR use. The Tilt™'s blades revolve at high speeds and can cause damage to the user, spectators and animals. Stand away from the Tilt™ to reduce the risk of getting into the flight path. Warn spectators that you will be flying your Tilt™ so that they are aware of its position. Before flight, inspect the rotor blades to make certain that the blades are securely fastened to the Tilt™.

#### WARNING!

- Choking/Cutting Hazard.Small Parts/Sharp Rotor Blades.
- · Keep hands, hair and loose dothing away from the propeller when the battery is plugged into the drone.
- Turn off the transmitter and Tilt™ power switches when not in use.
- The included charger is built specifically for the Tilt™ Li-Poly battery. Do not use it to charge any other battery.
- New alkaline batteries are recommended for maximum performance.
- Parental supervision recommended when flying Tilt™.

# **BATTERY WARNINGS**

#### RECHARGEABLE BATTERY:

This Tilt™ uses a Li-Poly rechargeable battery. If battery can no longer be charged, dispose battery properly according to local low.

#### CONTROLLER BATTERIES:

Remote control requires 4"AA" batteries (not included).

Please read the important battery safety warning below.

- Do not mix alkaline, standard (carbon-zinc) and rechargeable batteries (Nickel Metal Hydride).
- Do not mix old and new batteries.
- · Non-rechargeable batteries are not to be recharged.
- Rechargeable batteries are to be removed from the item before being charged (if removable).
- Rechargeable batteries are only to be charged under adult supervision.
- Exhausted batteries should be removed immediately and must be recycled or disposed of properly
  according to state or local government ordinances and regulations.
- The supply terminals are not to be short-circuited.
- Only batteries of the same or equivalent type as recommended are to be used.
- Batteries are to be inserted with the correct polarity (see inside booklet for diagram).
- Do not dispose batteries in a fire batteries may leak or explode.

# CARE AND MAINTENANCE

- Always remove the batteries from the wireless remote control when it is not being used for an
  extended period of time.
- To clean, gently wipe the remote control and Tilt™ with a clean damp cloth.
- Keep the toy away from direct heat or sunlight.
- Do not submerge the toy into water. This can damage the unit beyond repair.
- Parental guidance recommended when installing or replacing the batteries.

#### IMPORTANT! REGISTER YOU DRONE

The U.S. Department of Transportation's Federal Aviation Administration (FAA) announced a streamlined and user-friendly web-based aircraft registration process for owners of small unmanned aircraft (UAS) weighing more than 0.55 pounds (250 grams) and less than 55 pounds (approx. 25 kilograms) including payloads such as on-board cameras.

Owners can get more info and may register through a web-based system at www.faa.gov/uas/registration

Flying for fun? New rules for recreational drone users It's now the law! If you fly your drone for fun and it weighs more than 250 g and up to 35 kg, follow these new rules.

# Do not fly your drone in below circumstances:

- · higher than 90 m above the ground
- closer than 75 m from buildings, vehicles, vessels, animals, people/crowds, etc.
- closer than 9 km from the centre of an aerodrome (any airport, heliport, seaplane base or anywhere that aircraft take-off and land)
- within controlled or restricted airspace
- · within 9 km of a forest fire

- where you could interfere with police or first responders
- at night or in clouds
- · if you can't keep it in sight at all times
- if you are not within 500 m of your drone
- if your name, address and telephone number are not clearly marked on your drone.

If you do not follow these rules, you could put lives, aircraft, and property at risk, and face fines of up to \$3,000.

Consult the safety measure for the full list of rules.

Canada.ca/drone-safety

#### IMPORTANT! INSCRIVEZ VOTRE DRONE

Le U.S. Department of Transportation's Federal Aviation Administration (FAA) a annoncé un processus simplifié et convivial d'inscription d'aéronefs sur le Web pour utilisateurs de petits aéronefs sans pilote (UAS) qui pèsent plus de 0,55 livre (250 grammes) et moins de 55 livres (environ 25 kilogrammes) y compris les charges utiles comme des caméras à bord. Les utilisateurs peuvent obtenir plus de renseignements et ils peuvent s'inscrire par l'entremise d'un système sur le Web à www.faa.gov/uas/registration

# Vous exécutez des vols pour vos loisirs? Nouveaux règlements pour utilisateurs de drones dans un but récréatif.

C'est maintenant la Loi! Si vous exécutez des vols avec votre drone pour vos loisirs et que celui-ci pèse plus de 250 g et juste qu'à 35 kg, veuillez suivre ces nouveaux règlements.

#### N'exécutez aucun vol avec votre drone dans les circonstances ci-dessous :

- plus haut que 90 m au-dessus du sol
- une approche à moins de 75 m des bâtiments, des véhicules, des vaisseaux, des animaux, des personnes, des foules, etc.
- une approche à moins de 9 km du centre d'un aérodrome (tout aéroport, héliport, hydrobase ou bien de n'importe où un aéronef décolle et atterrit)
- à l'intérieur d'un espace aérien contrôlé ou réglementé
- · dans un rayon de 9 km d'un feu de forêt

- là où vous pourriez interférer avec la police ou des premiers intervenants
- · la nuit ou dans des nuages
- s'il vous est impossible de le garder en vue en tout temps
- si vous n'êtes pas situé à moins de 500 m de votre drone
- si vos nom, adresse et numéro de téléphone ne sont pas marqués clairement sur votre drone.

Si vous ne suivez pas ces règlements, vous pouvez mettre en danger, des vies, des aéronefs, des propriétés et vous exposer à des amendes allant jusqu'à 3 000 \$. Veuillez consulter la mesure de sécurité pour obtenir la liste complète des règles.

Canada.ca/sécurité—drone