jDrones WFLY09 RC Radio

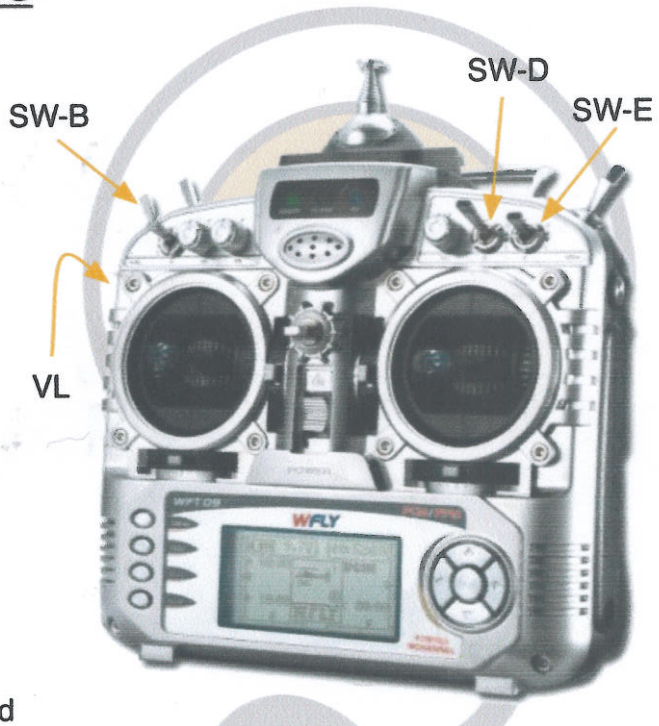
Button/Switch/Dialer setup

Dear Customer,

In your hands you have our custom RC Radio that has been pre-programmed for your ArduCopter/ArduPlane use

Please take a look at switches/dialers and learn their functionalities.

Two of the switches are working together for flying modes. They are SW-B and SW-D



Functionalities:

SW-B Ch5, Modes (SW-D=0) 1,2,3
(SW-D=2) 4,5,6

SW-D Mode multiplier switch for lower and upper 3 modes (look above).

SW-E Ch7, Write WP, RTL, None (depends on your Mission Planner setup)

VL Ch6, Camera pitch, parameter dialing (depends on MP setup)

***Please note!** When using higher flying modes (4,5,6) RED Alarm LED is blinking as a remainder for user.*

Switches not in USE as default:

SW-A	SW-C	SW-F	TRN
VA	VB	VC	

These switches/dialers/knobs can be used freely for extra functionalities like Enable/Disable Dual-Rates/Expo .

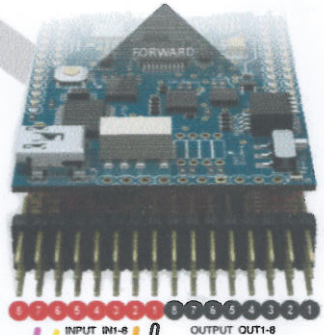
Connecting your RC Receiver:

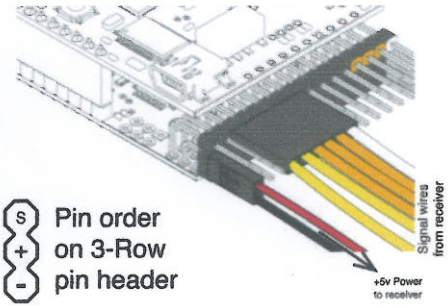
Connect your RC Receiver cables as shown on pictures below. Ch5 is unconnected (NC) intentionally.

If you want, You can use Ch5 for extra features such as remote switch or similar. In this case, connect your device directly to receiver.

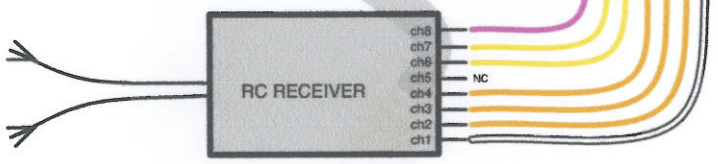
Remember to connect Red/Black power cable on your receiver.

ArduPilot Mega v1.4 and v1.4a





Pin order on 3-Row pin header



NOTE! On multicopters, never connect Ch8 on APM electronics as it is only used on Airplanes.

Check for updates & additional information at http://www.jdrones.com/jDoc

jDrones R/C UAV's and aerial robotics easy & affordable http://jdrones.com

PACKING SLIP

Date: 09/11/2012 **Order#:** 3638

Additional Information:

By checking this box I hereby agree to the jDrones Terms of Service located here -> Y

Bill To: (Customer ID#2575)

Ericsson
Dimitri Mazmanov
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dimitri.mazmanov@ericsson.com

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+46722441215

Payment Method:

PayPal

Shipping Method:

DHL Express

Code	Description	Qty	Price	Total
acq11arf	**ArduCopter Quad v1.1 Assembled and Ready to Fly** [Motor type:AC2836-358, 880Kv (x4)] [Propeller size:12x45" SET Black (x2)] [Arm type:Arm Set, 28cm full holes] [Size of ESC:jDrones 30 Amp ESC's] [Radio option:9Ch Radio set]	1	N/A	N/A
led01white	**LED Strip, white color, 12V (1 segment)**	2	N/A	N/A
led01green	**LED Strip, green color, 12V (1 segment)**	2	N/A	N/A
led01blue	**LED Strip, blue color, 12V (1 segment)**	2	N/A	N/A
led01red	**LED Strip, Red color, 12V (1 segment)**	2	N/A	N/A
ac1245bl	**Propeller set, 12x45 EPP Style, Black**	10	N/A	N/A
ac2836358	**Motor AC2836-358, 880Kv**	4	N/A	N/A
jdapm256cpu	**ArduPilot Mega CPU board, 2560 CPU, v1.4a**	1	N/A	N/A
apmconn01set	**OilPan/APM Connectors Set**	1	N/A	N/A
quadpdpcb1	**Quad Power Distribution PCB**	1	N/A	N/A
cbl6p1p6	**Radio cable, 10 cm, 6pin -> 6 x 1pin**	1	N/A	N/A
batalrm01	**Battery Alarm, for 3 Cell LiPo**	2	N/A	N/A
tlbalm01	**LiPo Battery Alarm**	2	N/A	N/A
accrash1	**ArduCopter Crash set - Quad**	1	N/A	N/A

mntmx12pc01	**Maxbotix Sonar Arm mount for ArduCopter, v1.2**	**2**	N/A	N/A

jDrones
http://store.jdrones.com

Flight report & Settings form

SW Ver: V. 2.7.3 **Date:** 09/17/12

Serial: 15101 **Software:** ArduCopter

Test date: 09/14/12 **Model:** Quad

Test Pilot: _____ **Order Nr:** 3638

Notes: _____

These settings are the settings that we have tested your UAV on our factory. Settings may not be optimal for your Geolocical location but they are good for general flight. If you change weight or do other modifications, you may need to finetune your settings. Keep in mind that settings might vary a lot depending on software version you have in your UAV.

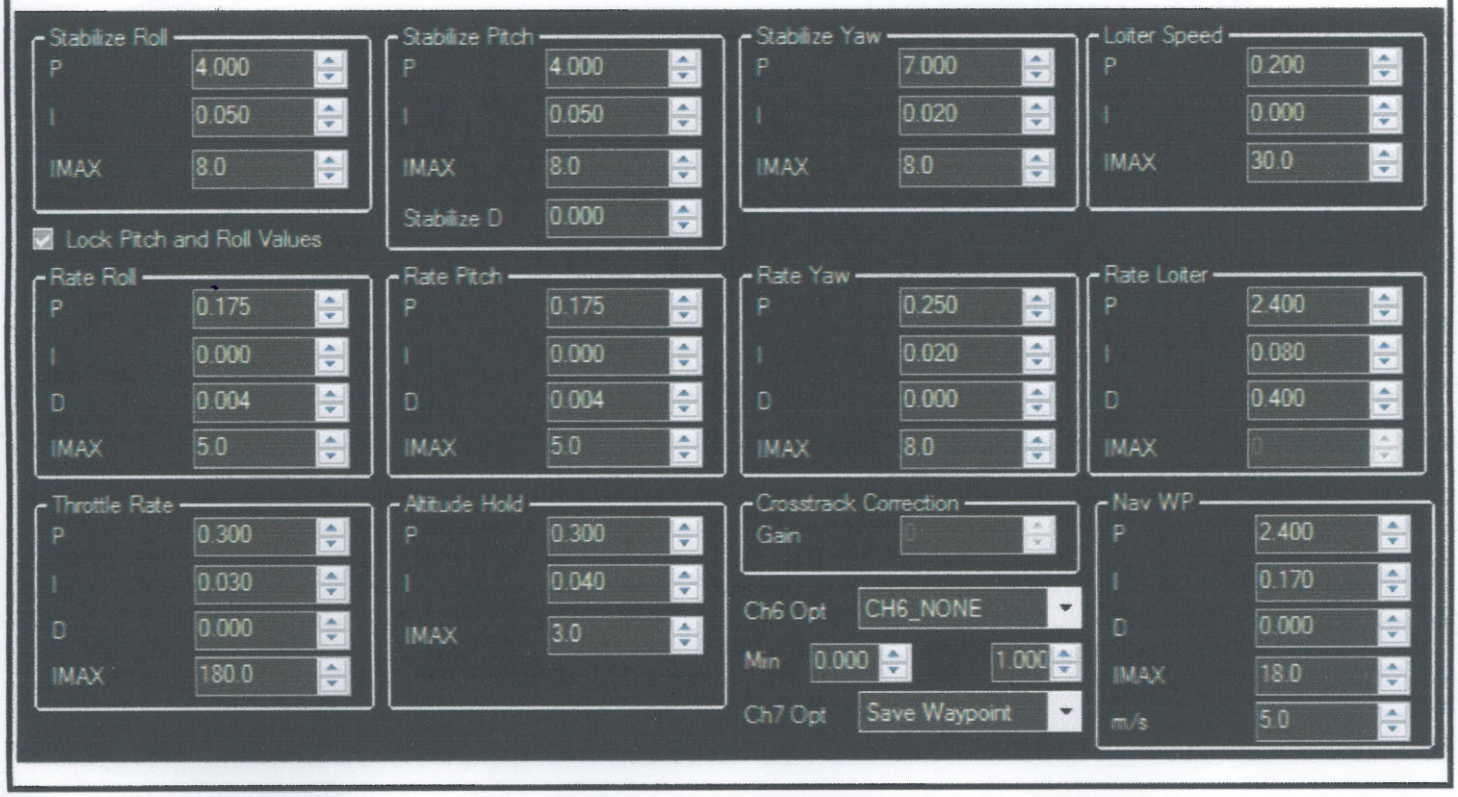
!! Always check latest software reports & updates from ArduCopter / ArduPilot Wiki !!

http://code.google.com/p/arducopter/wiki/ArduCopter
http://code.google.com/p/arducopter/wiki/ardupilot-mega

Tested softwares and their settings can be found too from jDoc document site at: http://www.jdrones.com/jDoc

Happy flying,
jDrones / Jani & Staff

UAV settings:



jDrones

ArduCopter

Arduino compatible quadrotor UAV

Dear customer,

Congratulations! You are now holding in your hands a product which is the result of our DIY community working at its best. We all enjoyed creating and making this exciting multi-rotor available to you and we hope that you will enjoy it as much as we do.

Main distributors & Manufacturers:

Asia & Europe

jDrones www.jdrones.com

We wish you the best time and happy flying with your new ArduCopter.

Best regards,
ArduCopter development team

Manuals and other documentation can be found from following website address:

http://code.google.com/p/arducopter/

Please go and check latest information from our wiki pages. You should check often download area to see if new software version is available.

NOTE! Nylon / Plastic screws needs only minimal force when tightening them. Using unnecessary force can damage them permanently. Holding nut's between your fingertips while gently using screwdriver is enough on most cases.

Help us to make it even better. All feedback should be sent to following address:

arducopter.feedback@jdrones.com

Assembled ArduCopter

This ArduCopter is ready build for you. It has been test flown and everything on it has been tested before we shipped it out from our factory so we know that it works.

There are still few things you need to do before start flying it:

1) Unfold frame, lock arms and mount DomeCenter to it's place

2) Connect your receiver to receiver cables included with your kit

3) Run quick setup process from CLI

After these steps you are ready to make your first hand test and flying test!

As this is an evolving project, please check now and then if there are newer software for your ArduCopter.

Your ArduCopter has pre-installed software

☑ ArduCopter Quad

☐ ArduCopter Hexa

Version: V. 2.7.3

This kit is assembled on 09/12/12

by GAP Serial: 15/01

Test flied by JP at 09/14/12

Check tightness of mounting screws now and then and tighten if needed!!

jDrones

ArduCopter

Arduino compatible quadrotor UAV

Preparing your ArduCopter:

1) Unfolding

Your ArduCopter is delivered to you on it's arms in folder position.

a) To unfold it you need to unscrew 4 screws, 1 on each corner. These screws have 10mm long hexagonal spacer as a lock nut for easy unscrewing.

One screw on each corner, unmount screw and unfold arm, mount screw back and lock it with long spacer.

b) Take out rubber bands that holds DomeCenter on top of the carrier boards. Place DomeCenter on it's place on top of the DomeArches and lock with two nuts.

Your DomeCenter should look this after it's been replaced back to the end of Arches

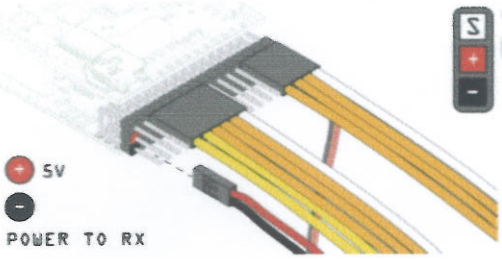
2) Connecting Receiver

Please check latest information from out Wiki pages too at:

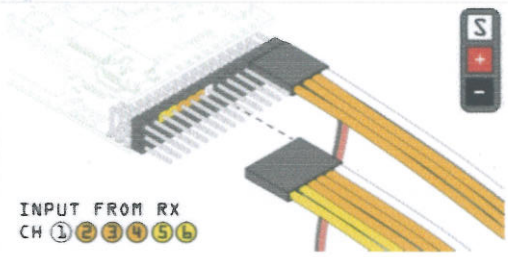
http://code.google.com/p/arducopter/wiki/Quad_Radio

There are two main cable sets that you need to connect to your receiver.

- Receiver power cable, Red/Black

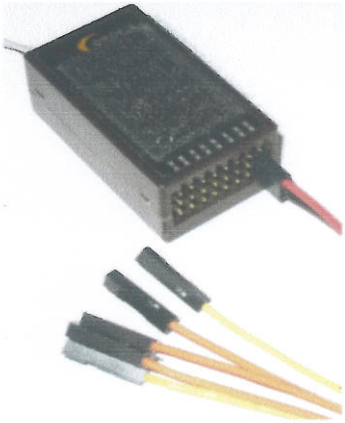


- Receiver channel cables, W/O/O/O/Y/Y/P

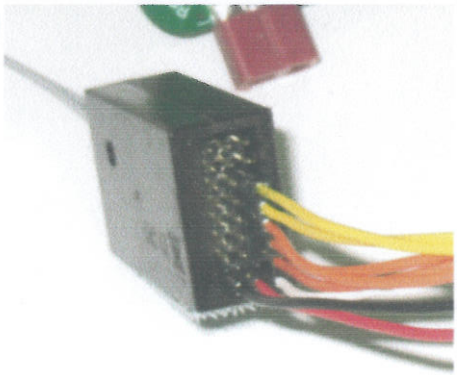


Power cable should be connected sideways to your receiver like illustrated on Power to RX picture. Channel cable goes along the pins and in above picture. (these pictures are from ArduPilotMega end of the cables).

Receiver end and power cable connected:



Receiver end and all cables connected:



NOTE! Be careful when connecting power cable, mounting it wrong way will harm your electronics.

Also check http://www.jdrones.com/jDoc for latest information/updates.

2) Connecting receiver, cont.

Channel order per cable color as follows:

W = Aileron
O = Elevator
O = Throttle
O = Rudder
Y = AUX1
Y = AUX2
P = AUX3

In generally WOOO cables goes to channels 1,2,3 and 4 but please do check your receiver manual for correct order. Yellow/Purple cables are used for Flight Modes, Tuning/ Camera and extra commands.

Purple cable has extra features for ArduCopter software and these features can be activated from Mission Planner software.

3) Setup from CLI

NOTE! All configurations/calibrations are best to make with Mission Planner software. CLI is for expert people only.

Even thou your ArduCopter is already tested, calibrated and test flown. It is good to check that everything is ok.

Your ArduCopter is calibrated already but due forces of nature, calibration only works properly on our assembly area. **Earth is a big magnet** and it magnetic field changes from location to location!!.

Start up your Arduino IDE or other Terminal program. Set baud rate of your com-port as 115200 Baud and use carriage return.

Check your com-port port number from list of ports (In Arduino IDE under Tools/Serial port)

Screen shot from Arduino IDE Serial Monitor

You should get following message on your screen after proper connection is established:

Init ArduCopter V2.5.4

Free RAM: 3030
FW Ver: 118
---

load_all took 1004us
MTEK 1.6 ok
Press ENTER 3 times for CLI

*GUñEU"d"`è8E!GUJrU"d"`èlÕ!GU*U"d"`èm!G*

ArduCopter V2.5.4]

After you start to receive "random" characters hit ENTER three (3) times and ArduCopter prompt will be visible.

In CLI mode you have two main command subsets with their special commands. You can either use ***test*** or ***setup***. ***Help*** command will give list of extra commands under menu system.

Mission Planner

Please download latest MP from ArduCopter wiki and follow First time user guide at:

http://code.google.com/p/arducopter/wiki/AC2_First

Mission Planner download:

http://code.google.com/p/ardupilot-mega/downloads/list

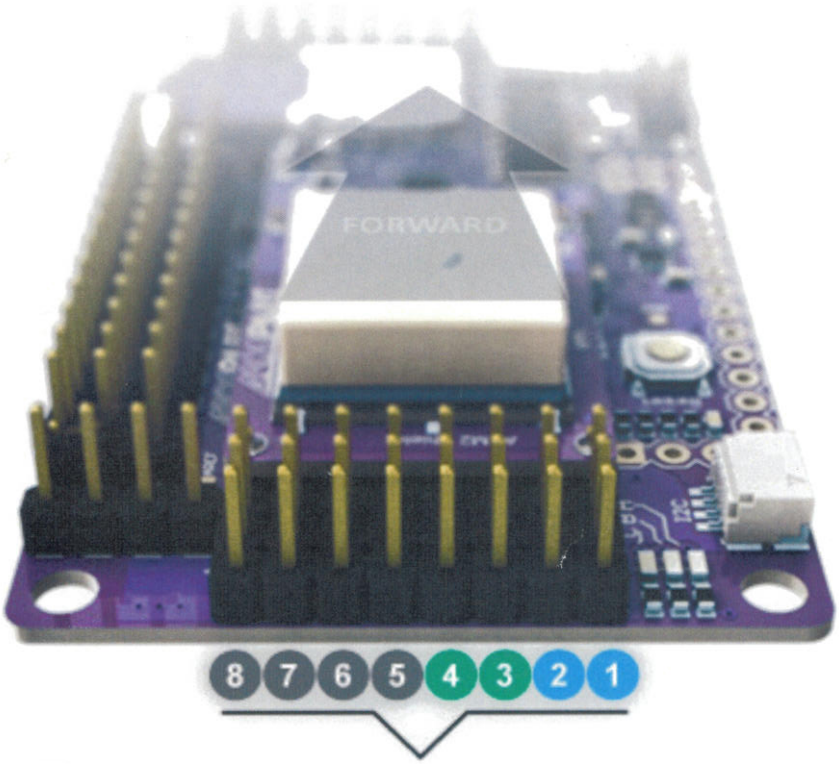
More information can be found from ArduCopter wiki pages at:

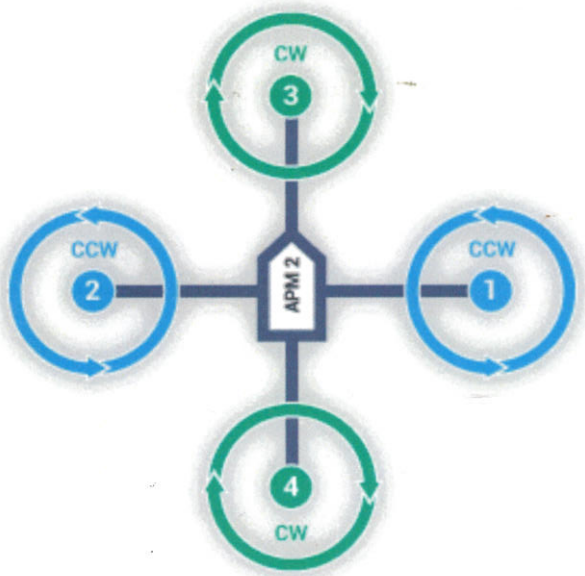
http://code.google.com/p/arducopter

and also

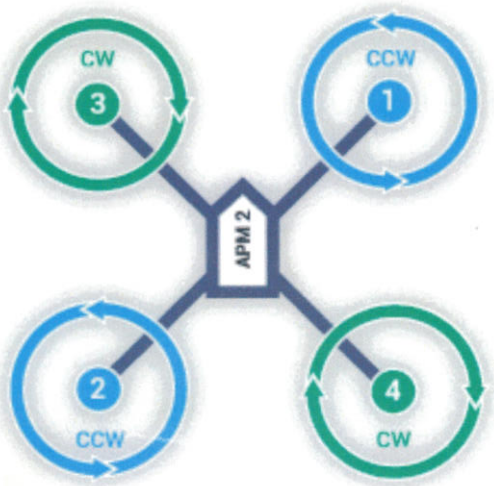
http://www.jdrones.com/jDoc

Happy Flying....





QUAD +



QUAD X

CLOCKWISE ROTATION
USE PUSHER PROPELLER

COUNTER-CLOCKWISE ROTATION
USE NORMAL PROPELLER