

# 6.1.8 Transmitter Gimbals with Switch or Button Installation

If you want to operate the DC-24 II transmitter using the optional stick end switch or button functions, you must purchase one or more of these separately:

- Stick with 2-position switch
- Stick with 3-position switch
- Stick with push-button
- Stick with potenciometer

Advice: For installation of the optional gimbal stick ends with switches/buttons we recommend that you send your transmitter to one of the factory authorized service centers or to your authorized dealer.

**Note:** If you want to remove the back cover of the transmitter, proceed as follows:

- 1. Turn off the transmitter.
- 2. Use a T6 screwdriver to unscrew all the screws on the back cover of the transmitter and remove it.
- 3. Disconnect the main battery.
- 4. Do not connect the USB cable or charging adapter to the transmitter.
- 5. Adjust the sticks as you need.
- 6. Connect the main battery.
- 7. Replace the back cover and tighten all the screws.

Warning: Keep contact with transmitter PCB to a minimum. Risk of damage electrostatic charge!



To install the switch/button, it is necessary to remove the gimbal from the transmitter using the following procedure:

- Turn off the transmitter and unscrew the screws of the rear cover of the transmitter. Disconnect the battery connector.
- 2. Remove the control circuit board using the following steps: a) Loosen and unscrew the spacer column.
  - b) Loosen and unscrew the screws (the tool is included in the package).
  - c) Release the display connector and disconnect the display.







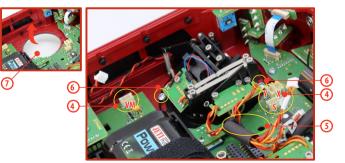




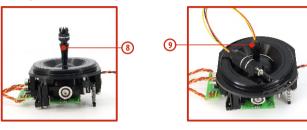
3. Remove the control circuit board (PCB) as shown in the pictures.



- 4. Disconnect the cable connectors leading from the gimbalr (3 connectors: X, Y, S and VM).
- Remove the gimbal cables from the mounting holders.
- 6. Loosen both mounting screws of the gimbal.
- 7. Pull the gimbal towards you (through the back of the transmitter). The following installation will be carried out outside of the transmitter.



- Unscrew the top part (with the knurling) of the stick (counterclockwise).
- Gradually thread the cables of the stick with the switch/button through the hole in the gimbal stick.

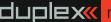


10. Adjust the height of the gimbal stick.

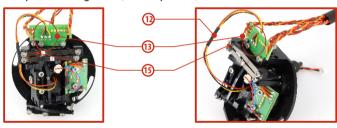




**Caution:** After installing the stick with the switch/button, it is only possible to adjust the height of the stick if you loosen the locking screw. Otherwise, the cables of the switch/button may get twisted.

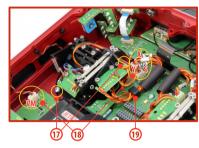


- 12. Slide the included heat shrink tubing over the cables and shrink it according to the picture.
- 13. Solder the cables to the marked solder pads according to the color coding (see the picture).
- 14. Move the gimbal to all extreme positions to define the length of the cables in the movable part of the gimbal, and gently pull the cable away from the gimbal. The cables should have sufficient slack in the movable part of the gimbal to avoid contact with moving parts and not be strained by bending.
- 15. Secure the cables in the heat shrink tubing at the designated point of the gimbal (see the picture).

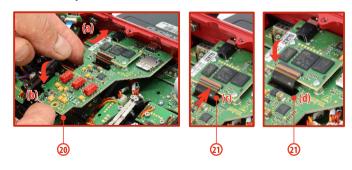


- 16. Reinsert the gimbal back into the transmitter.
- 17. Tighten both mounting screws of the gimbal.
- 18. Connect the cable connectors leading from the gimbal (4) connectors from one gimbal: X, Y, S and VM).
- 19. Secure the gimbal cables back in the holders.





- 20. Insert the control circuit board (PCB) back into the transmitter (a) and gently press it into the connector (b).
- 21. Insert the display strip into the connector (c) and secure it (d) (see the picture).



22. Tighten the screws (b) and the spacer column (a).



23. Connect the battery connector.



**24.** Reinstall the rear cover of the transmitter and screw in all the screws.

## Configuring the Switch in the gimbal stick

After installing the switch into the gimbal stick, it is necessary to configure the type of switch for proper functionality. You can do this in the transmitter menu under "Main Menu-> Advanced Settings-> Stick/Switch Settings."

# 6.2 Replaceable switches

One of the most important features of a JETI transmitter is the switch function assignment flexibility.

The DS-24 II transmitter automatically detects the type of switch and assigns the selected function. There are many switches available to suit different needs. See your JETI retailer for switch availability.

You may either swap the existing switches around or take advantage of the optional accessories and create your own custom configuration.

### Factory Switch Configurations for the DS-24 II Transmitter

- **Sa** 3 position short switch
- 2 position long switch
- 2 position short switch
- 2 position long switch
- 3 position long switch
- 2 position short switch
- 2 position spring-loaded long switch
- 2 position short switch
- **Sm** 2 position switch (non-replaceable back cover)
- 2 position switch (non-replaceable back cover)
- **Sm** 2 position switch (non-replaceable 2xbutton back cover)
- **Sn** 2 position switch (non-replaceable 2xbutton back cover)

#### 6.2.1 Switch disassembly and assembly procedure

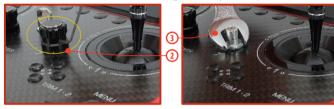
- 1. Switch off the transmitter and remove the radio back cover Be sure to disconnect the transmitter battery pack connector.
- 2. With the specialized wrench (not included) carefully loosen and remove the switch installation nut
- 3. Carefully hold the switch by its printed circuit board assembly and slowly pull it out. Use this method to also remove and exchange all of the other switches. After re-assembling and turning on your transmitter the software will sound a warning reminding you that you have executed a change. Always reinspect all assigned functions of the switches before attempting to fly.



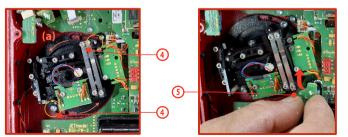


### 6.2.2 Procedure for Replacing Potentiometer "P7" and "P8" with a Switch

- 1. Turn off the transmitter and unscrew the screws of the rear cover of the transmitter. Disconnect the battery connector.
- 2. Loosen the locking allen screw 1.3 on the potentiometer knob and pull it upwards.
- 3. Unscrew the 10 mm nut holding the body of the potentiometer.



4. Loosen the screws of the gimbal using the included tool (Torx T9) and rotate it (a) to allow the potentiometer to be removed (see fig.).



- 5. Gently push the shaft of the potentiometer towards the transmitter and remove this potentiometer from the inside of the transmitter
- 6. Insert the new switch (b) and secure it from the front of the transmitter with the nut (c).

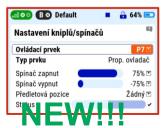
**Note:** - The replacement nut is not included in the package and can be purchased as an accessory.

- We recommend using the original mounting tool JMS-DC-SNS to tighten the switch nut.









- 7. Rotate the gimbal back to its original position and tighten the screws.
- 8. Connect the power battery and screw on the rear cover of the transmitter. In the "menu/system/configuration," set the current date and time.
- 9. Check and, if necessary, set the type of switch for the specified position ("menu/advanced settings/stick-switch settings").

# **6.3 Digital Trims**

Transmitter gimbals are used for controlling the basic flight functions like throttle, roll(aileron), pitch(elevator), and yaw(rudder). Immediately under the transmitter gimbal sticks you can see four push-buttons which are the programmable, digital trim buttons.



The digital trims are used for fine trimming of the flying model. When the transmitter is turned off, the trim values are stored in memory and are recalled when the system is turned back on.

Every model has its own trim setup. Also all flight modes may be configured to use different trim configurations. By pressing one of the buttons, the screen will automatically change to display the graphic position of that trim. The transmitter trims feature an acoustic step and centre beep alarm.

In the "Digital trim" menu it's possible to enable a special function used as automatic trimming. Digital trim steps and trim range setting is explained in "Main menu->Fine tuning/flight modes->Digital trim".

# **6.4 Transmitter Battery Pack**

The DS-24 II transmitter is powered by a Li-lon type battery pack and comes equipped with its own built-in advanced battery management and charging circuit. In switched-on position, the transmitter LCD display shows the status and condition of the battery pack. The Li-lon battery is factory installed.

# 6.4.1 Charging

The transmitter can be charged with the supplied mains adapter with a USB C cable. Charging time is approximately 3 hours. The transmitter can be on or off while charging. The charging status is indicated by the LED or if the transmitter is switched on, in the display.

## Charging procedure:

- 1. Plug the charging adapter into the mains.
- **2.** Plug the cable with the connector leading from the charging adapter into the USB C connector of the transmitter.

## The charging status is displayed by a circular LED:

- Green LED lights up transmitter is on, charger is not connected.
- **Blue LED** flashes the transmitter is charging; the frequency shows the state of charge. A more permanent glow means a higher state of charge in the accumulator.
- Purple LED lights up the transmitter is fully charged; the charger is still connected.

These colours can be changed by the user. Possible choices are

white, cyan, purple, yellow, blue, green or red.

The brightness of the LED corresponds to the backlight intensity setting of the display.

## **6.4.2 Battery Replacement**

Should you decide to replace the transmitter battery, please follow these steps:

- 1. Switch off the transmitter and remove the 10 screws that secure the radio back cover. Next, remove the radio back cover.
- 2. Disconnect the transmitter battery connector.
- 3. Loosen the battery fastening strap and remove the battery.



**Note:** If the transmitter battery has been disconnected for longer than 1 minute, the time, and date will be deleted.

**Warning:** DS-24 II transmitters should only be operated only with original or manufacturer approved battery packs. The use of other battery packs will void the warranty.