



Excellence in Compliance Testing

Certification Exhibit

**FCC ID: ONTJETIR18US
IC: 10491A-JETIR18US**

**FCC Rule Part: 15.247
IC Radio Standards Specification: RSS-210**

ACS Project: 12-2163

Manufacturer: Esprit Model
Models: JETIR18US, JETIR14US

User Manual

The **JETI DUPLEX EX** series of receivers are designated to operate with the JETI **DUPLEX EX** transmitters using the 2.4GHz band. Thanks to the fully digital and bidirectional communication between the transmitter and receiver the Duplex EX system offers many new features and concepts for the remote control pilot.

The **DUPLEX EX** transmitters and receivers take advantage of the latest modern technologies, precise manufacturing and exhaustive test methods to provide a system that gives you maximum safety and reliability. The **DUPLEX EX** system provides extended capabilities by allowing the use of telemetry data transfer to give unparalleled insight into the actual condition of your model during flight. The **JETIBOX PROFI** allows you to view telemetry data either in parallel to the Jeti Transmitters or as a stand-alone system when used with a Jeti receiver. You can use the **FlightMonitor** program to view and analyze your recorded telemetry data.

An additional R5 auxiliary receiver can be used to complement the **R9**, **R11**, **R14** and **R18** receivers.

Power Supply:

You can supply power to Duplex EX receivers through the use of NiCd batteries, stabilized voltage supplied by the BEC from your motor controller or by using Li-xx cells and a voltage regulator like the MAX BEC. Make sure that your selected power supply can yield enough current to power all of the servos and the receiver in your aircraft. If all servo connectors in your receiver are being used, you can use a Y-cable to supply power to your receiver. You can supply power to your receiver through any receiver output EXCEPT the output marked "Ext". This output is used only for telemetry sensors or expanders. The **EPC** R11, R14 and R18 receivers are equipped with a separate Multiplex power supply connector. We recommend that you use this connector for the receiver and servo power supply because of its high current capability and reliability.

Operation:

Operation of the DUPLEX system is very similar to an FM system. We recommend that you switch on the transmitter first and then the receiver. The transmitter confirms the on state of the receiver sounding a short beep. When switching off the system we recommend that you switch off the receiver first and then the transmitter.

Installation:

Wrap the receiver with soft foam and position it as far as possible away from potential interference sources (servos, electric motors, ESCs). Orient the active ends of the antennas 90° from each other and as far away as possible from each other. The minimum bending radius of the antenna cables should not be smaller than 1 cm (.39"). The active antenna parts must remain straight and should be kept as far as possible away from metal or carbon fiber parts. If your model's fuselage contains large amounts of carbon fiber then the active antenna parts should be mounted through the fuselage observing the 90° orientation.

Binding:

Before you can use a new receiver with a transmitter or JetiBox Profi It must be bound to your transmitter or JetiBox Profi. Because the data stream between the receiver and your transmitter or JetiBox Profi is fully digital, the receiver's unique ID must be recorded into the device. To wirelessly bind a receiver to your transmitter simply insert the bind plug into the Ext slot, supply power to the receiver and then switch your transmitter on. Within a few seconds your transmitter will automatically "see" the new receiver and ask you to confirm its use. Once the receiver is bound remove the bind plug from the receiver and disconnect the power supply. Your transmitter will continue to beep as a warning if you forget to remove the bind plug. It is possible to bind any number of receivers to one transmitter. The receivers, however, can only be bound to one transmitter at a time.

Telemetry Data Transfer in Real Time:

All of the receivers will automatically transfer the actual on-board system voltage without any additional telemetry sensors. You can either connect a single telemetry sensor directly to the receiver's Ext port or you can connect several sensors by using one or more of the E4 EX expanders connected to the same Ext receiver port.

Bidirectional Signal Loss Alert:

An alarm will sound if you lose the bidirectional telemetry data communication between your transmitter and receiver. This alarm simply means that at the given instant there is no data available from the telemetry sensors or other equipment connected to the receiver input (Ext.). **Note:** In this situation you still have full control of your model.

For receivers we grant a warranty of 24 months from the day of purchase under the assumption that they have been operated in conformity with these instructions at recommended voltages and that they were not damaged mechanically. Warranty and post warranty service is provided by the manufacturer.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

Warning: Changes or modifications to this device not expressly approved by Esprit Model/Jeti USA 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 an experienced radio/TV technician for help."**

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

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 tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

**We wish you successful flying with the products of:
JETI model s.r.o. Příbor, www.jetimodel.com**