## Introduction

Thank you for purchasing FrSky 2.4GHz ACCST Taranis X-Lite digital telemetry radio system. As a compact and convenient transmitter, it has a multi-functional joystick and it is ergonomic and compact designed. In order to make the most of our system and to fly safely, please read this manual carefully. If you have any difficulties while using your system, please consult the manual, your hobby dealer, or FrSky technical support.

Due to unforeseen changes in production, the information contained in this manual is subject to change without notice. Pay special attention to safety where indicated by the following marks:

Meanings of Special Markings

🚫 **DANGER** - procedures which may lead to dangerous conditions and cause death/serious injury if not carried out properly.

⚠ **WARNING** - Procedures which may lead to a dangerous condition or cause serious injury and even death to the user if not carried out properly or procedures where the probability of superficial injury or physical damage is high.

❗ **CAUTION** - Procedures where the possibility of serious injury to the user is small, but there is a danger of injury or physical damage, if not carried out properly.

ℹ **NOTE** – Steps, Tips or information

⚠ **WARNING** - Always keep electrical components away from children.
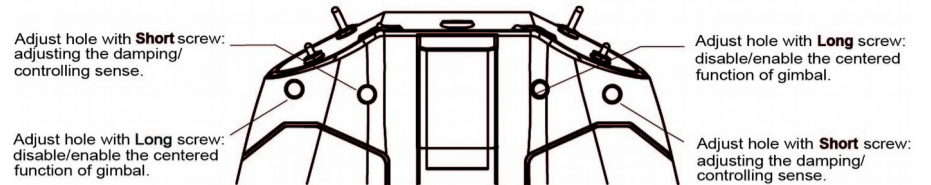
Layout
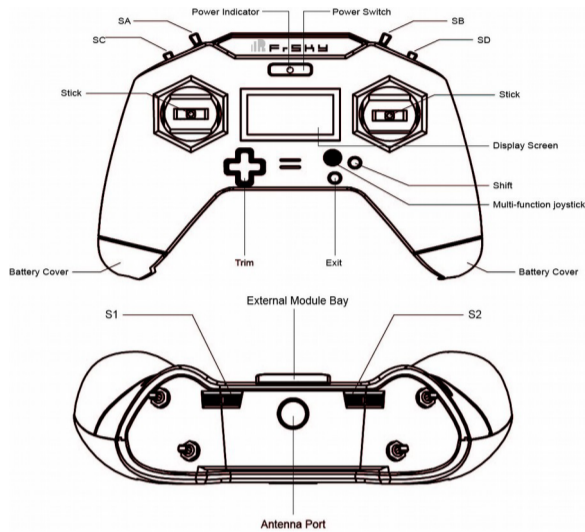
Switch
SA: 3 positions; Long level
SB: 3 positions; Long level
SC: 2 positions; Short level
SD: 2 positions; Short level
You can choose the Switch and define its position in the Mixer menu.

Adjust sticks of Taranis X-Lite
Taranis X-Lite has 4 CNC machined pedestal and centered stick, which can be self-defined and adjusted.

Please check how to change the stick mode and damping/controlling sense on FrSky website.

Adjust hole with **Short** screw: adjusting the damping/controlling sense.

Adjust hole with **Long** screw: disable/enable the centered function of gimbal.

Adjust hole with **Long** screw: disable/enable the centered function of gimbal.

Adjust hole with **Short** screw: adjusting the damping/controlling sense.

⚠ **Warning:** Please distinguish between long screws and short screws when switching the throttle mode. Make sure the adjust hole is correct, or the device is likely to be broken.

Battery Installation

• Hold the battery covers and rotate them to the left
• Put the batteries with the positive pole as head into the transmitter
• Make sure the battery covers match with the battery compartments perfectly and rotate them to right until locked.

❗ **Caution**: Ensure that the battery polarity is correct when connecting batteries into the battery compartment, otherwise Taranis X-Lite might not be powered on.

Specifications

Model name: Taranis X-Lite	Number of channels: 16 channels
Weight: 308g/376g(with battery)	Operating Voltage Range: 6.0~8.4V
Operating Current: 190mA@7.4V	Operating Temperature: -20℃~60℃
Backlight LCD resolution: 128*64	Model Memories: 60 models (extenable by MicroSD (TF) card)

Features

• Ergonomic and compact design
• M12 Lite Gimbal
  * Hall effect high accuracy gimbal
  * Mode conversion adjustments accessible without disassembly
  * CNC machined gimbal pedestal
• Smart Port, Headset jack, Micro SD card slot and Micro USB Port (*Charging function unsupported)
• 128*64 outdoor readable backlight LCD
• Internal antenna and external antenna connectors
• Easily accessible battery compartment, adaptive with (*Batteries Not Included) replaceable 18500 Li-ion batteries
  (*Battery Information: Flat Top / Height: 50mm / Diameter: 18mm)
• Wireless function (Optional)
  * Compatible with FrSky Free Link APP
  * wireless trainer system supported
  (*Additional parts needed or specific model ordered)
• High-speed internal and external module digital interfaces
  * Internal: 450K, External: 420K
  * Super low latency (Total latency < 20ms, lowest to 12ms)

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* Compatible with new Lite-typed external modules (R9M Lite, MPM Lite, etc.)
• Installed open source operating system- OpenTX
• Haptic vibration alerts and voice speech outputs
  (Headset jack and inbulit speaker)

Navigate the Menu

To navigate the menus, Taranis X-Lite has the following elements:

• Multi-function joystick
• Exit Button
• Shift Button

Multi-function Joystick

To navigate menus or widgets, move the Multi-function joystick to four directions as navigation.

To go to the [System] menu, move the multi-function joystick to the left and hold for one second.

To go to the [Model] menu, move the multi-function joystick to the right and hold for one second.

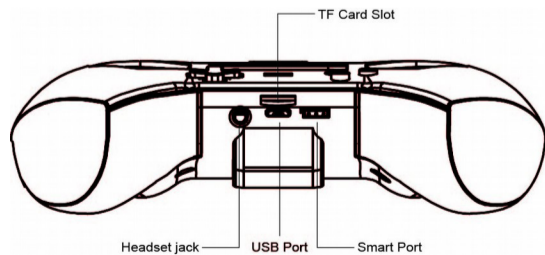To go to the [Telemetry] menu, move the Multi-function down and hold for one second.

To check the information, move the Multi-function joystick up and hold for one second.

Shift Button

Shift button pressed with Trim buttons together, Trim1~Trim 2 will shift to Trim 3 ~ Trim 4.
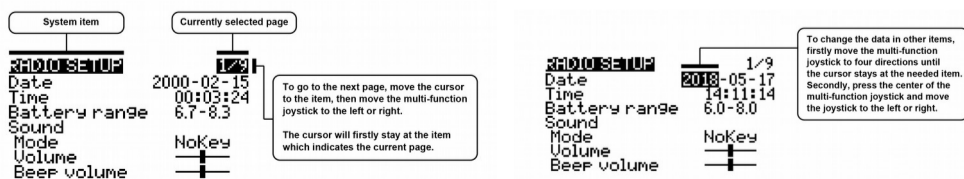
Exit Button

To exit current page or operation widgets.

1. TF card is not provided with shipment.
2. USB port is for upgrading and reading / writing MicroSD cards and internal memory of radio contents.
3. Headset jack is for audio output and Smart Port is for firmware upgrade and telemetry feedback.
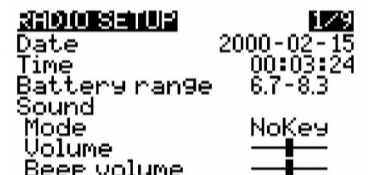
Where am I in the menu tree
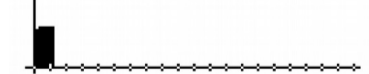

Overview of the menu tree

MODELSEL free 30084 1/13
* 01 MODEL01
  02
  03
  04
  05
  06
  07

Move the Multi-function Joystick to the right and hold for one second

RADIO SETUP   1/9
Date   2000-02-15
Time   00:03:24
Battery range   6.7-8.3
Sound
Mode   NoKey
Volume
Beep volume

Move the Multi-function Joystick to the left and hold for one second

MODEL01   7.8V

No Telemetry Screens

NO DATA

Move the Multi-function Joystick down and hold for one second

STATS THR01:14 TM100:00
SES01:14 TH%00:36 TM200:00
TOT 04h50   TM300:00

Move the Multi-function Joystick up and hold for one second

Quick select options

MODEL01
Reset...
Statistics
About

MODEL01
Reset flight
Reset timer1
Reset timer2
Reset timer3
Reset telemetry
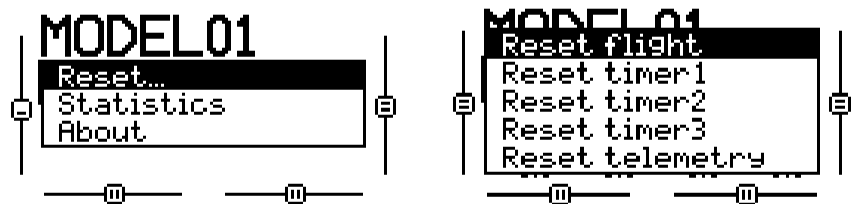
Long press the center of Multi-function joystick: there will generate a pop-up where the user can reset timer, reset telemetry values, reset all above, jump to the tele setup page.

⚠ **Warnings for Battery**

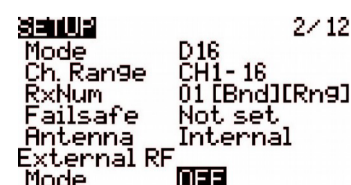Please connect a battery in the battery compartment before use (18500 Li-ion batteries).

The voltage range should be DC 6.0~8.4V

Be careful not to drop the battery.

Do not remove the battery from the X-Lite transmitter while the voltage warning is blinking as this could cause internal settings and memories to be destroyed.

Do not use the transmitter if a "Backup Error" warning occurs.

Model Setup for Taranis X-Lite Internal RF Module

SETUP   2/12
Mode   D16
Ch. Range   CH1- 16
RxNum   01 [Bnd][Rng]
Failsafe   Not set
Antenna   Internal
External RF
Mode   OFF

Enter the MODEL SETUP menu.
Step 1: Set the Mode for Taranis X-Lite Internal RF.
Refer to the table below and set the Taranis X-Lite to the mode corresponding to your receiver (D8, D16 or LR12).

Mode of Taranis X-Lite	Compatible Receivers
)6	V8-Ⅱ series in D mode (V8FR-Ⅱ, V8R7-Ⅱ, V8R4-Ⅱ, VD5M, etc.) D series (D8R- Ⅱ plus, D8R-XP, D6FR, D4R-Ⅱ, etc.)
)12	X series (X8R, etc.)
LR12	L series (L9R, etc.)

Mode of Taranis X-Lite EU version	Compatible Receivers
D16-EU	X series-EU version receivers
LR12	L series (L9R, etc.)

ⓘ Note:
Older V8 series receivers are not supported by the internal module of X-Lite
X-Lite EU version only has D16-EU and LR12 mode.

Step 2: Set the Channel Range
The Internal RF module of X-Lite supports up to 16 channels. The channel range is configurable, and needs double check before use.

Step 3: Set the Receiver Number
When you create a new model, the system will assign you a receiver number automatically, but this can be easily changed. The range of the receiver number is 00-63, with the default number being 01 (use 00 is not recommended). Once the receiver is set to desired number and is bound to the X-Lite, the bind procedure will not need to be repeated unless the receiver number is changed. In this case, either set the receiver number to the previous one or repeat the bind procedure.

Step 4: Bind
Bind refers to X-Lite binding mode. Move the cursor to "Bind", press the center of Multi-function joystick, the cursor will flash and the speaker will beep to remind you that the RF module has entered the bind mode. Then put your receiver into binding mode and finish the bind procedure (refer to the receiver's manual for details). Press the center if the Multi-function Joystick or EXIT to exit.

Step 5: Set Failsafe mode
There are 4 failsafe modes: No pulse, Hold, Custom and receiver (this mode only used above OpenTX V2.0.0 firmware).
No Pulse: on loss of signal the receiver produces no pulses on any channel. To use this type, select it in the menu and wait 9 seconds for the failsafe to take effect.

Hold: the receiver continues to output the last positions before signal was lost. To use this type, select it in the menu and wait 9 seconds for the failsafe to take effect.

Custom: pre-set to required positions on lost signal. Move the cursor to "Set" and press the center of Multi-function joystick, and you can see FAILSAFE SETTING screen below. Move the cursor to the channel you want to set failsafe on, and press the center of Multi-function joystick. When moving the corresponding sticks or switches, you will see the channel bar moving. Move the channel bar to the place you want for failsafe and long press the center of Multi-function joystick to finish the setting. Wait 9 seconds before failsafe takes effect.

Receiver: set the failsafe on the receiver (see receiver instructions) in D16 or LR12 mode, select it in the menu and wait 9 seconds for the failsafe to take effect.

Notice:
The above instructions do not apply to D-series receivers, which require the internal RF module of X-Lite to be in D8 mode. For these receivers, failsafe must be set on the receiver side (see receiver instructions).

SBUS port always outputs, No Pulse could not perform properly on it. Set "Hold" or "Custom" for SBUS port.

Step 6: Range
Range refers to X-Lite range check mode. A pre-flight range check should be done before each flying session. Move the cursor to "Range" and press the center of Multi-function Joystick. In range check mode, the effective distance will be decreased to 1/30. Press the center of Multi-function joystick or EXIT to exit.
Model Setup for Taranis X-Lite external RF Module – R9M Lite

```
SETUP               2/12
 Mode        D16
 Ch. Range   CH1-16
 RxNum       01 [Bnd][Rng]
 Failsafe    Not set
 Antenna     Internal
External RF
 Mode        OFF
```

The external RF module can be powered on or off by software. The setup process is the same as that for the Internal RF module.
If you use other brand RF module than FrSky, please choose the corresponding mode.

FCC Statement
§ 15.19 Labelling requirements.
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.
§ 15.21 Information to user.
Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
§ 15.105 Information to the user.

ⓘ 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 dose 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.
*RF warning for Portable device:
The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

CE
The product may be used freely in these countries: Germany, UK, Italy, Spain, Belgium, Netherlands, Portugal, Greece, Ireland, Denmark, Luxembourg, Austria, Finland, Sweden, Norway, France and Iceland.

FLYING SAFETY
⚠ **Warning:**
To ensure the safety of yourself and others, please observe the following precautions.
Have regular maintenance performed. Although your X-Lite protects the model memories with non-volatile EEPROM memory (which does not require periodic replacement) and of a battery, it still should have regular check-ups for wear and tear. We recommend sending your system to your FrSky Service Center annually during your non-flying-season for a complete check-up and service.
Battery
Using a fully charged battery (DC 6.0~8.4V). A low battery will soon die, causing loss of control and a crash. When you begin your flying session, reset your transmitter's built-in timer, and during the session pay attention to the duration of usage. Also, if your model used a separate receiver battery, make sure it is fully charged before each flying session.
Stop flying long before your batteries become over discharged. Do not rely on your radio's low battery warning systems, intended only as a precaution, to tell you when to recharge. Always check your transmitter and receiver batteries prior to each flight.

Where to Fly
we recommend that you fly at a recognized model airplane flying field. You can find model clubs and fields by asking your nearest hobby dealer.
Always pay particular attention to the flying field's rules, as well as the presence and location of spectators, the wind direction, and any obstacles on the field. Be very careful flying in areas near power lines, tall buildings, or communication facilities as there may be radio interference in their vicinity.

At the flying field
To prevent possible damage to your radio gear, turn the power switches on and off in the proper sequence.
1.Pull throttle stick to idle position, or otherwise disarm your motor/engine.
2.Turn on the transmitter power and allow your transmitter to reach its home screen.
3.Confirm the proper model memory has been selected
4.Turn on your receiver power.
5. Test all controls. If a servo operates abnormally, don't attempt to fly until you determine the cause of the problem. (For PCM systems only: Test to ensure that the Failsafe settings are correct by waiting at least 2 minutes after adjusting then, turning the transmitter off and confirming the proper surface/throttle movements. Turn the transmitter back on.)
6. Start your engine.
7. Complete a full range check.
8. After flying, bring the throttle stick to idle position, engage any kill switches or otherwise disarm your motor/engine.

If you do not turn your system on and off in this order, you may damage your servos or control surfaces, flood your engine, or in the case of electric-powered or gasoline-powered models, the engine may unexpectedly turn on and cause a severe injury.

Make sure your transmitter can't tip it over. If it is knocked over, the throttle stick may be accidentally moved, causing the engine to speed up. Also, damage to your transmitter may occur.

In order to maintain complete control of your aircraft it is important that it remains visible at all times. Flying behind large objects such as buildings, grain bins, etc. must be avoided. Doing so may interrupt the radio frequency link to the model, resulting in loss of control.

Do not grasp the transmitter's antenna during flight. Doing so may degrade the quality of the radio frequency transmission and could result in loss of control.

As with all radio frequency transmissions, the strongest area of signal transmission is from sides of the transmitter's antenna. As such, the antenna should not be pointed directly at the model. If your flying style creates this situation, easily move the antenna to correct this situation.

Before taxiing, be sure to extend the transmitter antenna to its full length.
A collapsed antenna will reduce your flying range and cause loss of control. It is a good idea to avoid pointing the transmitter antenna directly at the model, since the signal is weakest in that direction.

Don't fly in the rain! Water or moisture may enter the transmitter through the antenna or stick openings and cause erratic operation or loss of control. If you must fly in wet weather during a contest, be sure to cover your transmitter with a plastic bag or waterproof barrier. Never fly if lightning is expected.

Secure Digital (SD) Memory Card Handling Instructions
The MicroSD card (not provided with X-Lite) can store various files, such as model data, music, sound files, pictures and text. The card is locked when it is pushed in all the way in. To remove the card, push in on the card again, it will pop out allowing you to remove it.

⚠ **Warning**
Be sure to power off the transmitter before inserting or removing a MicroSD card.
As the MicroSD card is a precision device, do not use excessive force when inserting.
If model data generated by a transmitter with a new software version is copied to one with the older software, the transmitter may not operate correctly. Before copying the model data, update the destination transmitter to the new software version.
Do not expose the MicroSD card to dirt, moisture, water or fluids of any kind.
Never remove the MicroSD card or turn off power while entering data.

Never store the MicroSD card where it may be subject to strong static electricity or magnetic fields.
Do not expose the MicroSD card to direct sunlight, excessive humidity or corrosive environments.
Be certain to insert the MicroSD card in the correct direction.

Read data from a PC
Music and image files edited by a PC can be transferred onto the MicroSD card and used on your X-Lite transmitter. Equipment for reading and writing MicroSD card is available at most electronics stores.

Stored data
The life of the MicroSD card is limited due to the use of Flash memory. If you have a problem saving or reading data after a long period of use you may need to purchase a new MicroSD card.
•   We are not responsible for, and cannot compensate for any failure to the data stored in the memory card for any reason. Be sure to keep a backup of your models and data on your MicroSD card.
•   Taranis X-Lite and MicroSD cards use non-volatile memory devices so that the data stored is retained, even without a backup battery. Nevertheless, it is good practice to backup the data in the transmitter to the MicroSD card.
•   The clock for the transmitter does depend on the internal battery, which may need to be replaced occasionally.

Updates
FrSky is continuously adding features and improvements to our radio systems. Updating (via USB Port or the MicroSD card) is easy and free. To get the most from your new transmitter, please check the download section of the FrSky website for the latest update firmware and guide for adjusting your sticks. (www.frsky-rc.com9

More information about OpenTX can be found on: http://www.open-tx.org.