

## HOW TO WORK WITH TELENAX VHF TRANSMITTERS FOR DARTS WITH A RECEPTACLE OF AT LEAST 8.5mm INTERNAL DIAMETER



Dear Customer,

Thank you for your purchase and we wish you a great success in your research.

Next we will detail the steps so you can successfully work with your transmitters for darts:

### 1.- TO PREPARE THE BATTERIES:

- Take 2 brand new "337" or "SR416SW" batteries. These batteries are very cheap and common as they are used for watches. We recommend batteries made by Renata. One new and fully-prepared set is included in your purchase.

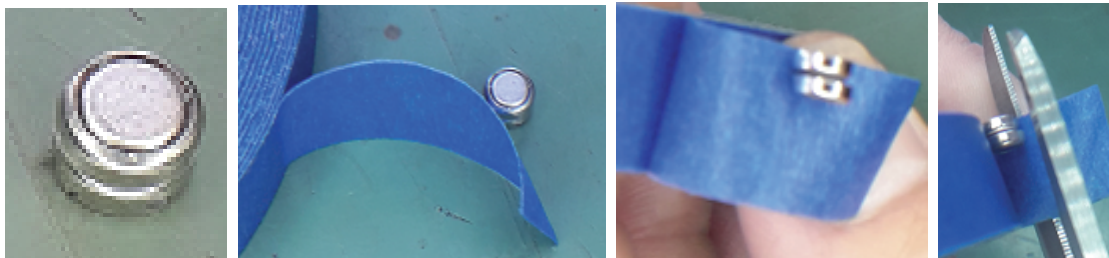


There are 2 extremely important considerations that you have to take care of when using the batteries...

- They go in "series" which means the Negative touches the Positive end of the other battery. In this model of batteries the negative is the small circle while the positive is the flat side and edges.

- You have to isolate the edges so they will not touch the metal walls of the Transmitter's battery receptacle.

A very easy and effective method of doing this is by using Masking tape, as follows:



Figures: A

B

C

D

- Stack the batteries as shown with the flat side facing down. Let them rest over a flat surface (Fig. A)

- Approximate the masking tape will keeping it resting on the flat surface and push forward, the batteries will stick to the tape right at the edge (Fig. B and C)

- Cut the excess so you will only have 2 or 3 mm from the batteries (Fig. D)



Figures: E

F

G

H

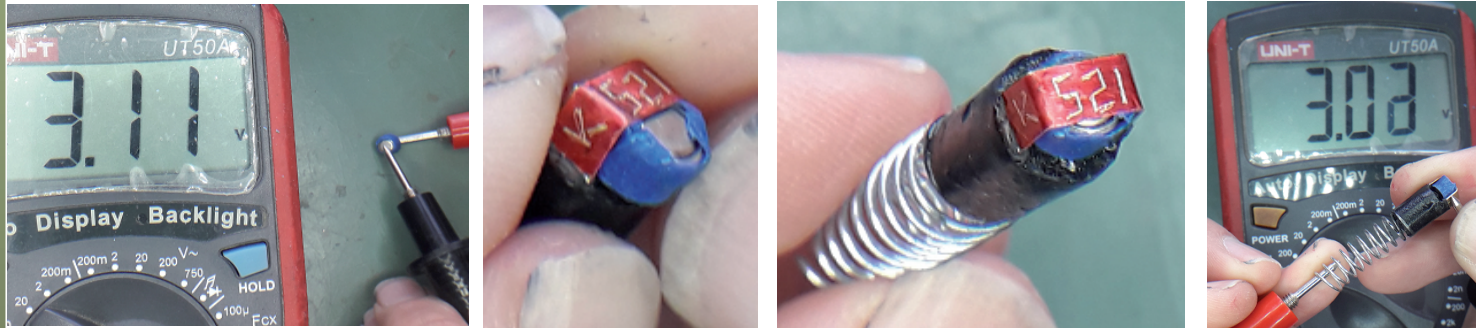
I

J

- Carefully roll the batteries with your fingers. It is important that the tape is flat over the batteries' "wall" (Fig. E and F)
- Roll the batteries twice with the tape (Fig. G), and then separate them from the rest of the masking tape roll
- Cut the excess with very thin scissors (like those used to cut nails), both at the top and bottom. The top can be cut at an angle so you will not short-circuit the negative with the positive (nothing will happen if you do, but you may shorten the batteries' life) (Fig. H and I). The package should look like Fig. J.
- You can check that the batteries are well connected by checking Voltage with a Multimeter (Fig H below)

## 2.-TO PREPARE THE DART'S TRANSMITTER:

Install the batteries on the VHF transmitter by gently inserting them on the Transmitter's battery receptacle taking these considerations:



Figures:

H

I

J

K

- Insert them on the side where you can see the "red wall" on your left hand side. This is necessary you will not bend the spring (Fig I)
- Your units have been thoroughly tested so the batteries can be inserted with enough comfortability, although some force has to be applied. If you sense too much force is necessary to insert then remove some of the masking tape, as this will thinner the walls. Also check top and bottom of your battery package to verify no masking tape is on the way
- If you have your receiver turned on, you will be able to hear the signal as soon as the batteries start to make contact. Place the batteries well on the center (Fig J)

- **IMPORTANT:** If the unit does not emit signal, sounds like a "chirp", or is noticeable weak, check that the voltage is not below 2.5V or is decreasing rapidly with the help of a multimeter. The positive can be connected to the antenna, and the negative to the metal on the transmitter's battery receptacle (Fig K). If voltage is low then either the batteries are dead or there is a short circuit between the batteries and the transmitter. Slightly move the batteries and/or check the Tape has not broken.

- If the voltage is already at 1.5 V or less, let the batteries rest for about 10 minutes, then measure voltage again and if it is close to 3V re-install them on the transmitter. If the voltage remains low after 10 minutes then they are dead, replace them with new ones.

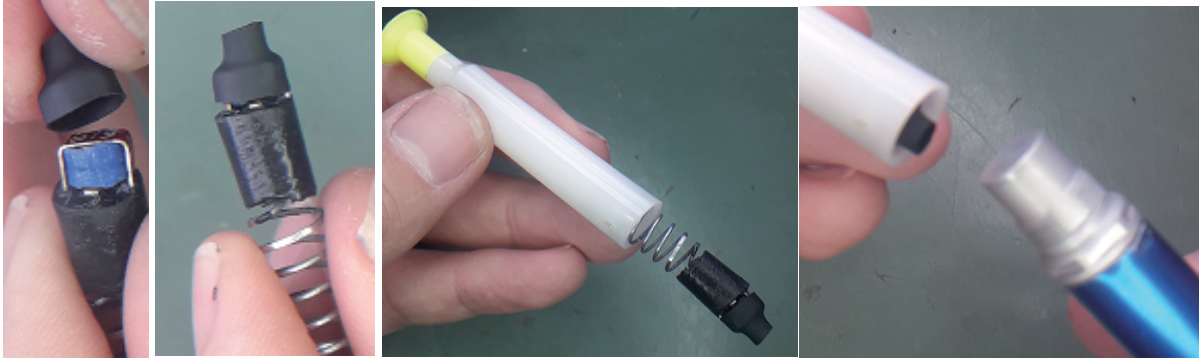


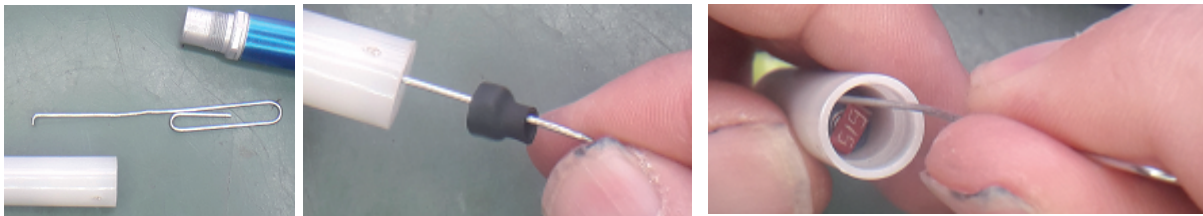
Figure L M N O

4.- Attach the cap over the batteries. (Fig L and M), then insert on the dart's receptacle with the antenna first (Fig N), and finally push the transmitter while closing the dart

DONE: You are ready to use your dart!

5.- TO TAKE OUT THE TRANSMITTER:

It may simply fall on its own, or you may have to shake it a bit by throwing downwards over a table (do not smash the dart's receptacle, as you may damage it). In case it is still stuck you can bend a regular "clip" and make a hook (Fig P). You can first pull the cap (Fig Q), and then you can find your way to the bottom of the batteries and pull from there (Fig R)



Figures: P Q R

6.- HOW TO MAKE A NEW CAP:

The cap has 2 purposes: To help keep the batteries in place, and to lower the force received by the transmitter at the moment of impact (which is why it protrudes from the ceiling of the transmitter's battery receptacle). This is how you can make a new one if the cap gets damaged or if it gets lost:

- Install dead batteries on the transmitter, as the heat will damage them
- Take the heatshrink (or thermocontractile) tube provided and insert it on the transmitter (Fig S)
- Cut the tube at around 3 mm on top of the ceiling of the transmitter's battery receptacle (Fig T)
- Get a metal plate of a piece of wood to protect both your hand and the transmitter (Fig U)
- Apply hot air over the tube with a heatgun, or a hairdryer. Keep a distance between the heatgun and the cap and start approaching slowly until you notice the tube starts to shrink. Roll the transmitter so the tube shrinks on all sides.

WARNING: Take extreme care that the transmitter itself (black cylinder) is fully protected from the heat by making sure it is entirely protected behind the metal plate or piece of wood.



Figure S T U V

THANK YOU!