# Spektrum DX6-Putting you Tank to Sleep

by Steve Kostelak (SD Steve)

Here at S.C.A.T., we have several members who have wanted to use the new Spektrum DX6 radios. While the Spektrum radio has many good features, such as eliminating the need for frequency pins or getting 'hit' by stray radio signals, unfortunately the radios have one glaring deficiency. When you turn the radio off, instead of the tank going into '*Sleep Mode*' as it would with a conventional radio, it resets and can again take hits. What follows is a description of how to set up a Spektrum radio to enable you to shut down your tank after it has been knocked out of a battle.

The modification is really quite easy, and the cost can range anywhere from just about zero to $25. So let's get to it. To get the Tamiya electronics into '*Sleep Mode*' you must interrupt the signal from the *Rudder Line* on the DMD. **OPTION #1** Depending on what you have in your junk box, you can probably make everything you need for just a few dollars. Now I don't like to mess with my Tamiya electronics, so rather than cutting the line coming from the DMD unit, I suggest you buy a *Servo Extension Cable*. This is just a cable with the male server connector on one end and a female on the other. The Cable can be purchased at most RC stores for a few dollars, or built from spare parts you may already have. Now, all we have to do is identify the *Signal Wire*. On the Tamiya electronics, the *Signal Wire* is the *White Wire* from the *Rudder Channel* (see picture above). Plug the *Rudder Channel Cable* from the DMD into your *Servo Extension Cable*. Pull the *White Wire* out from the other two of the *Servo Extension Cable* and cut it. Now strip both ends of the *Signal Wire* and install some kind of switch in there. See picture to the right for my first attempt at a switch. This is nothing more than a small micro switch I have hot glued to a servo.

OPTION 2 While working on another problem with the Spektrum radios, I found a company that makes an electronic switch that takes the place of a servo, thereby eliminating all of the mechanical problems which are susceptible to dirt. The Pico Switch is available from [Dimension Engineering](#) for less than $25. Take the two signal wires that you cut and hook them to the output of the *Pico Switch*. I then plugged mine into the channel for the Landing Gear on the DX6 Tx. Lowering the Gear Switch opens the *Signal Wire Circuit* and the Tamiya electronics go into '*Sleep Mode*'. This method will work with both the older AR6000 and the newer BR6000. If you use the AR6000 receiver, you must leave the radio transmitter turned on. With the BR6000 you can program all the channels to go to neutral, except the *Landing Gear,* which can be programmed to stay *ON* so you can turn off the transmitter and your tank will stay in '*Sleep Mode*' while conserving the *Transmitter Batteries*.
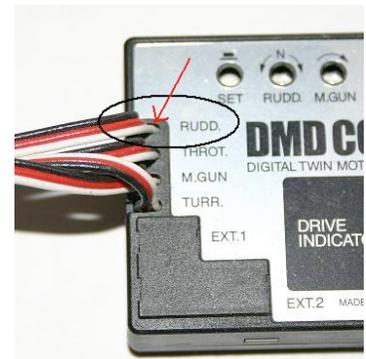
EXTENDING Tx BATTERY LIFT

There are also a couple of ways to extend the life of the transmitter batteries in the Spektrum radio, first replace the transmitter battery with a battery of more capacity, such as the one at the link below

http://www.allerc.com/product_info.php?cPath=42&products_id=2748

Another answer to the short battery life problem with the Spektrum radio is to replace the *Voltage Regulator* in your radio with a more efficient one. Instructions on how to do this and where to get the parts can be found at the link below

http://www.dimensionengineering.com/appnotes/spektrum_mod/spektrum_mod.htm

SPEKTRUM FOR DUMMIES

And last but not least, is a link to the DAK website where Doug Sharpe has put together a little *'How To Guide'* on programming your Spektrum for tank use, including the use of the other Spare Channel to fire the Main Gun.

http://web.mac.com/ethandunsford/iWeb/DAK2/Radio%20Room_files/The%20Spectrum%20DX6%20for%20Dummies.pdf

Thanks Doug.

I hope this helps those of you who would like to use the new Spektrum radio for our hobby. If any of you have other methods or other improvements for using the Spektrum radios, please let us know. You can either contact S.C.A.T. at one of the e-mails on our contact page, or you can contact me directly, San Diego Steve at skosti@cox.net.