

## **Firmware Update & Factory Reset your Spektrum AR630 series BNF or off-the-shelf receiver**

This article shows how to reset a BNF Spektrum receiver back to factory settings: as if new off-the-shelf. Many Spektrum BNF receivers can be factory reset, some cannot. For the purpose of this article, we will be talking about the AR630, AR631 and the AR637T. If you have a different model from an older BNF, you will need to check to see if you can flash (reset) what you have back to factory setting.

My experience has been that any Spektrum Air receiver that has built in Telemetry capability is capable of accepting firmware updates and the factory reset through SPEKTRUM FORWARD PROGRAMMING on your transmitter. Your Spektrum receiver has to be a model that includes Spektrum's 'forward programming' capability. Check your model first if different from RX types mentioned here.

I have read a few posts that suggest that the AR636(A/B) series of receivers, which were never sold outside a BNF plane, can be reset using this method. One such post can be viewed here and only pertains to the AR636 variations.

<https://www.rcgroups.com/forums/showthread.php?2899256-Modify-Settings-on-an-AR636-SAFE-Select-Receiver>

However, I have not tried this on an AR636(A/B) receiver(s) and previously had been told by Horizon Hobby support that the firmware upgrade is not possible. That said, Gordon C has followed the rcgroups procedure and found it to work.

I personally have successfully executed the update, reset, and programming on AR631's and a AR637T(A) receivers following the steps listed below.

### **Required Items to Update the Firmware:**

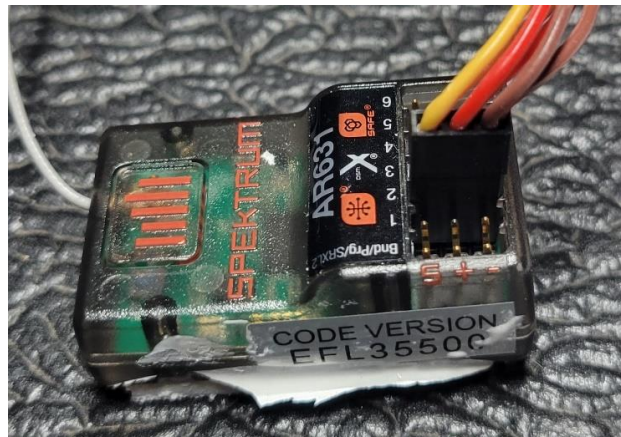
**The following items you will need to purchase or access to complete the steps needed to update, reset, and re-program and Spektrum BNF RX or to update a Spektrum RX that was purchased outside of a BNF.**

1. You will need a Spektrum SPMA3065 programming cable and a Spektrum Forward Programmable capable RX. You can order the cable from Horizon Hobby.
2. You need a receiver from a BNF plane that is no longer in use or a newly purchased Spektrum receiver.
3. You need to have a Spektrum transmitter capable of forward programming. (Note if you do see this option (forward programming) on your Spektrum Transmitter) you will need

to update the firmware on your Spektrum TX before trying to program your newly flashed RX.

## Procedure to Update the Firmware:

- 1) Download the Spektrum Programmer software to your PC. You can find the file many places if googled but here is a link that works:  
[http://spektrumrc.cachefly.net/apps/spektrum\\_programmer.html](http://spektrumrc.cachefly.net/apps/spektrum_programmer.html) - Video on how to install and use the programmer software.  
<https://www.youtube.com/watch?v=QPzOB6DH36Y> .
- 2) You will need to create an account on SpektrumRc.com.
- 3) Once you have created your account, you will need to register the receiver you wish to flash in your new Spektrum account.
- 4) Plug the SPMA3065 cable into your USB port on your pc so Windows can recognize the device and setup drivers for it, if needed.
- 5) Login to the Spektrum Programmer using your Spektrum account.  
Steps needed to initiate and complete the firmware upgrade and then the reset. The update will be done on your windows computer using this information
- 6) Once the program is running, plug the opposite end of the SPMA3065 cable into the receivers **bind/program port**. Make sure you observe the correct polarity. Lightest colored wire to the numbered side of the receiver. See photo below for an example of the polarity I speak of.



- 7) In the Spektrum programmer app, look at the upper right of the screen, there you will see a check box to power cable; check this box. **PROVIDE NO OTHER POWER SOURCE TO THE RX.**
- 8) If the receiver does not show up on the screen with the version number and serial number, click connect and it should.
- 9) The software at this point should tell you if there is an update for the firmware. It may say you are at the current level, which it did with me. Firmware revisions change with time. If you are at the current level, then there is nothing to flash therefore you will not be able to unlock your BNF receiver. If you cannot unlock it by flashing the firmware to the newest revision, then you cannot reset it back to the factory configuration. If you cannot reset it back to factory configuration then you will not be able to use the Factory Reset option in Forward Programming because the receiver remains locked not allowing access to these options under forward programming.
- 10) If that is the case, then choose “load a different version” of the firmware. Choose a version a level or two behind the current revision of your receiver. Then flash the receiver with the older version. When the installation completes, load newer version one at a time until you load the most current version. Now you should be at the highest level of firmware for your receiver.
- 11) Disconnect the **SPMA3065** cable using the proper Windows procedure for unmounting a USB stick.
- 12) All remaining steps are through the transmitter using forward programming. When you go to forward programming (Transmitter powered, receiver on, and bound) you should see “Gyro setting” and “other settings”, “Other setting” will be where you find the factory reset. Here is where you would simply select the reset option in Forward Programming (I suggest backing up the receiver before flashing) and when done your receiver is as if it came from the hobby shop as new; only better! It has the current firmware level on it, and you know it, because you did it.
- 13) Look at this video >>> <https://youtu.be/F3isbv1U8eM>
- 14) Tom’s video here is specific to the AR636. **The AR636 receiver does not have Spektrum’s forward programing built in.** >>>>> <https://youtu.be/7Np6CBNF0ZI>

Here is a video playlist on how to program an open stock AR637T or factory reset AR637TA - <https://www.youtube.com/playlist?list=PL3xicOtuJ600AEzUjw7Q03tC4aRD-8T-2>

I know the link above shows the "AR637TA", Spektrum chose to use this receiver as the example because it ONLY comes in BNF. This should work with any of the new receivers that have forward programming capabilities. The forward programming feature is NOT part of the transmitter, although, the transmitter and the firmware on the transmitter need to be new enough to support it, forward programming is in the receiver.

This should get you going. If you hit a snag look at the steps again.

Note: the receiver needs to be bound to the transmitter you are using so the reset can take place. You will also have an option to backup what is on the receiver before wiping it out. I strongly suggest backups.