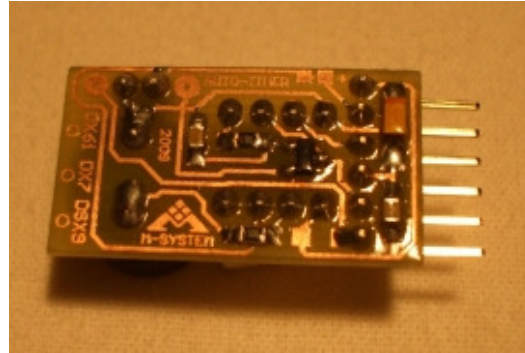
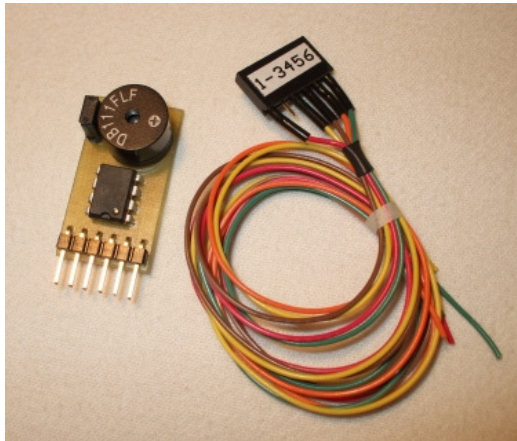


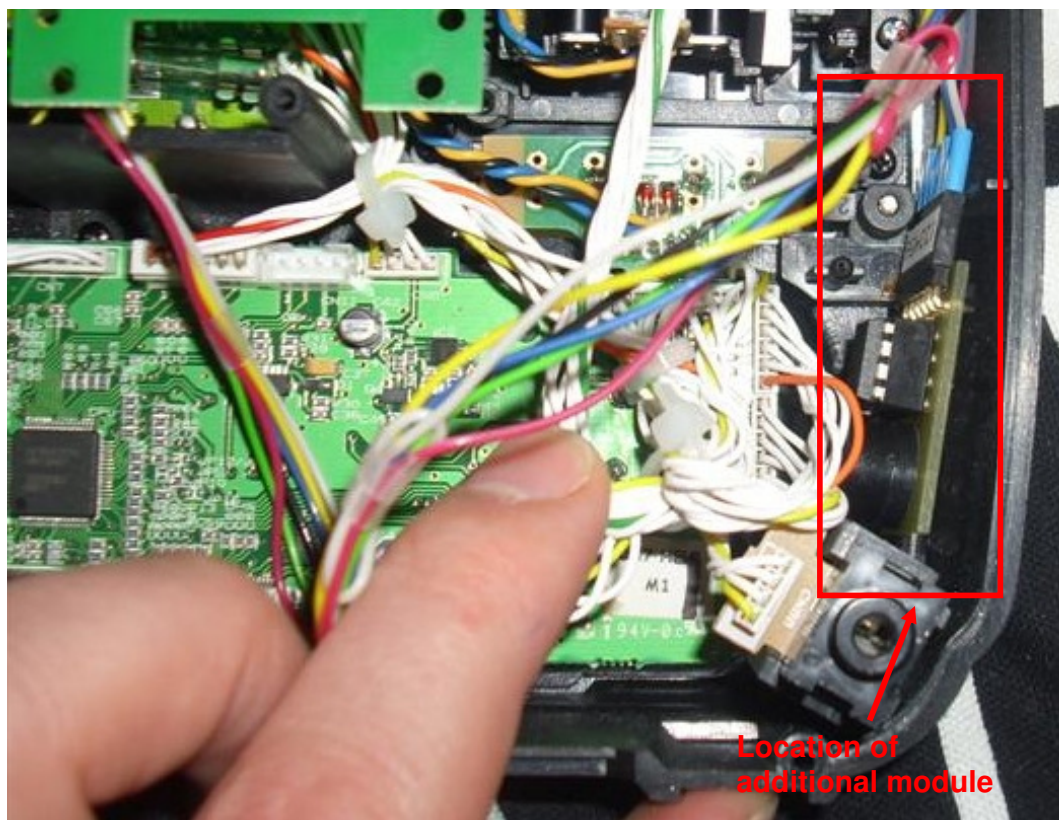
## Spektrum DX7 – Additional module for automatic switching of timer by throttle stick **VERSION 2**



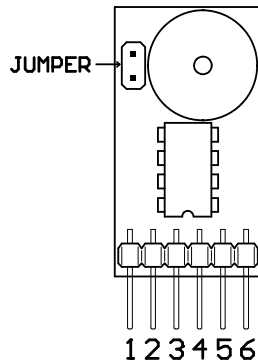
### INSTALLATION

The easiest way how to install additional PCB module is to use sandwich tape and attach module on the free area in TX.

Before the soldering is necessary to unscrew 4 screws which holds middle desk of printed circuits with VF module and slide it sideways. By these steps we made a free access to throttle potentiometer – see picture No.3.



Pict. No. 1: Location of additional PCB module in TX



Pict. No. 2: Layout of pins on PCB module – component view

**Steps:**

**Step 1 - Pin 1:** Connect (solder) wire from **pin 1** of module to **point C** – see pict. No. 3 (point C is the bottom pin of throttle potentiometer). For Mode 2 see picture No. 5.

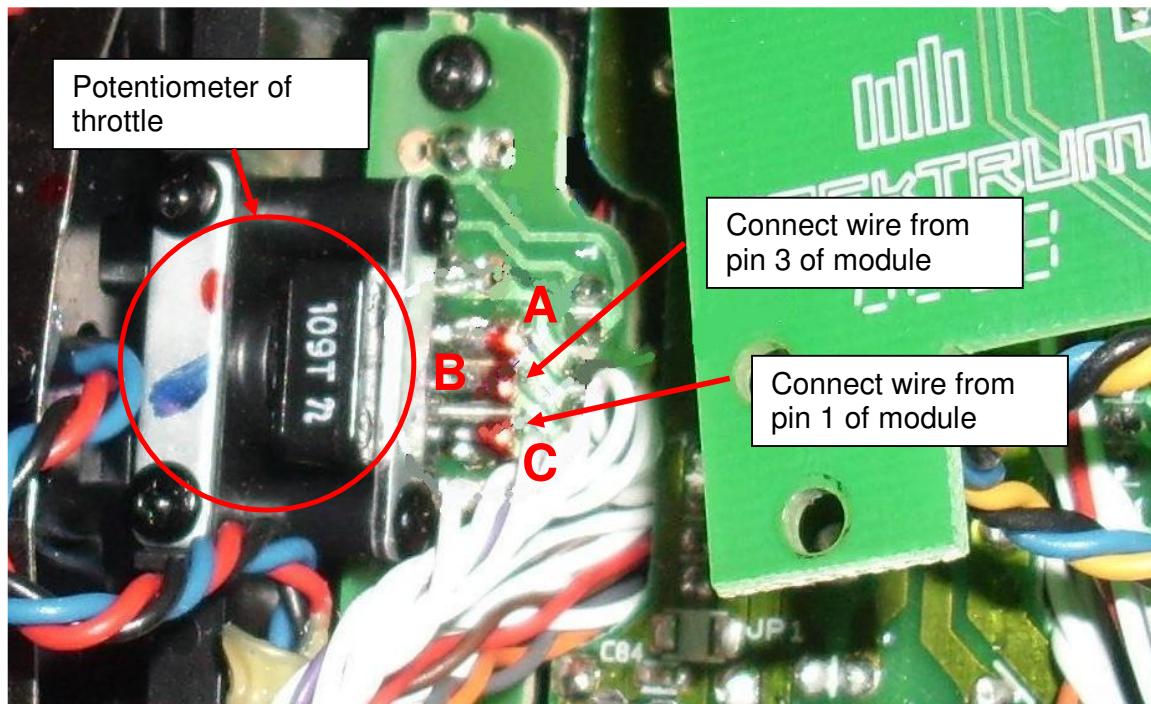
**Step 2 - Pin 2: Do not connect this pin**

**Step 3 - Pin 3:** Connect (solder) wire from **pin 3** of module to **point B** – see pict. No. 3 (point B is the middle pin of throttle potentiometer). ). For Mode 2 see picture No. 5.

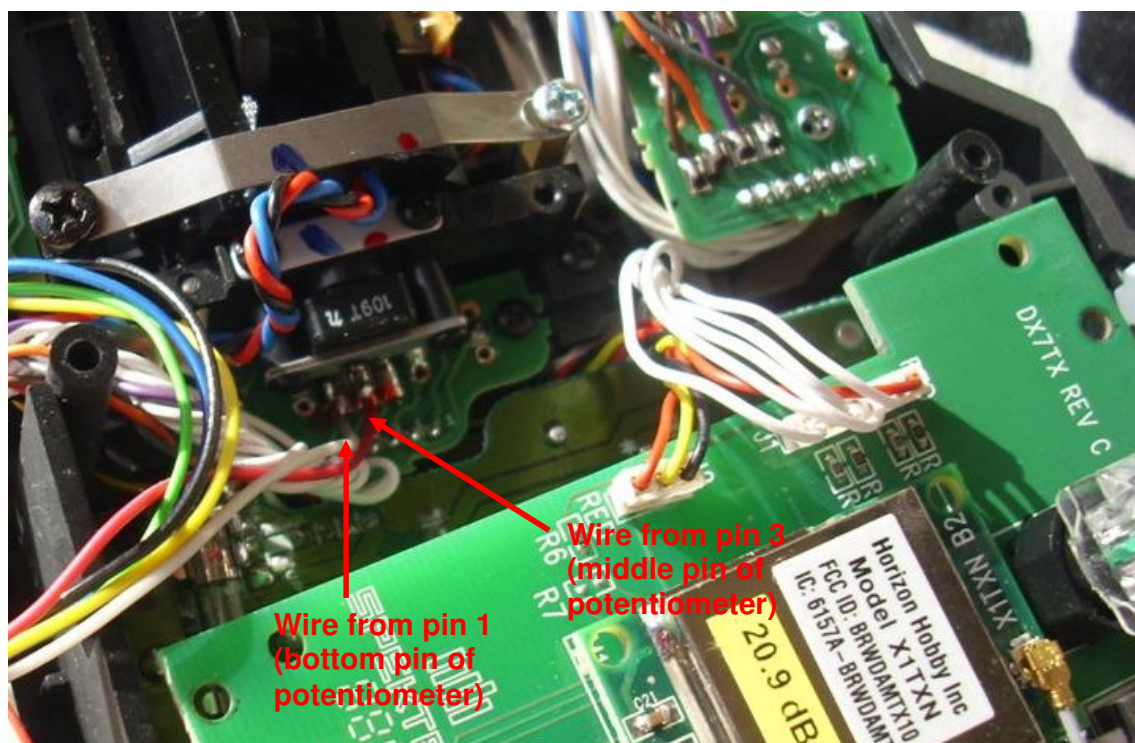
**Step 4 - Pin 4:** Connect (solder) wire from **pin 4** of module to **point 4** on PCB (on picture No. 6 point marked as 4)

**Step 5 - Pin 5:** Connect (solder) wire from **pin 5** of module to **point 5** on PCB (on picture No. 6 point marked as 5)

**Step 6 - Pin 6:** Connect (solder) wire from **pin 6** of module to **point 6** on PCB (on picture No. 6 point marked as 6)

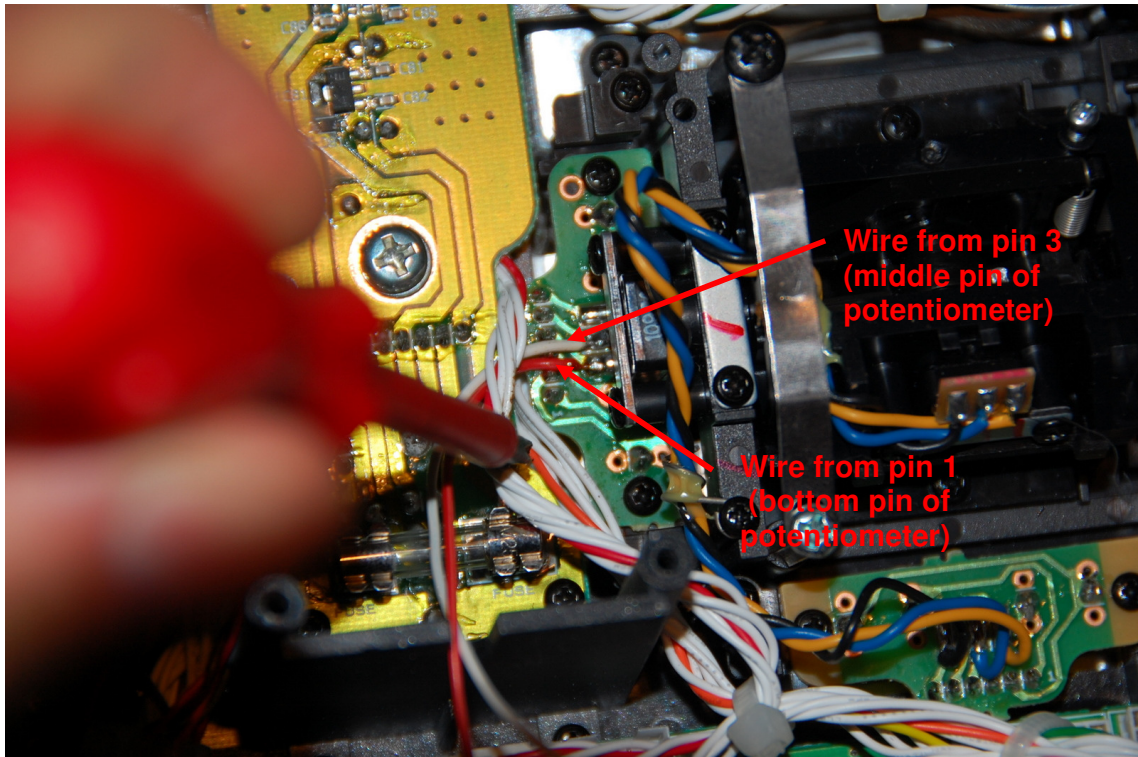


Pict. No. 3: Connecting of wires from pin 1 and pin 3 of module to throttle potentiometer (NOTE: on picture is TX **Mode 1**)

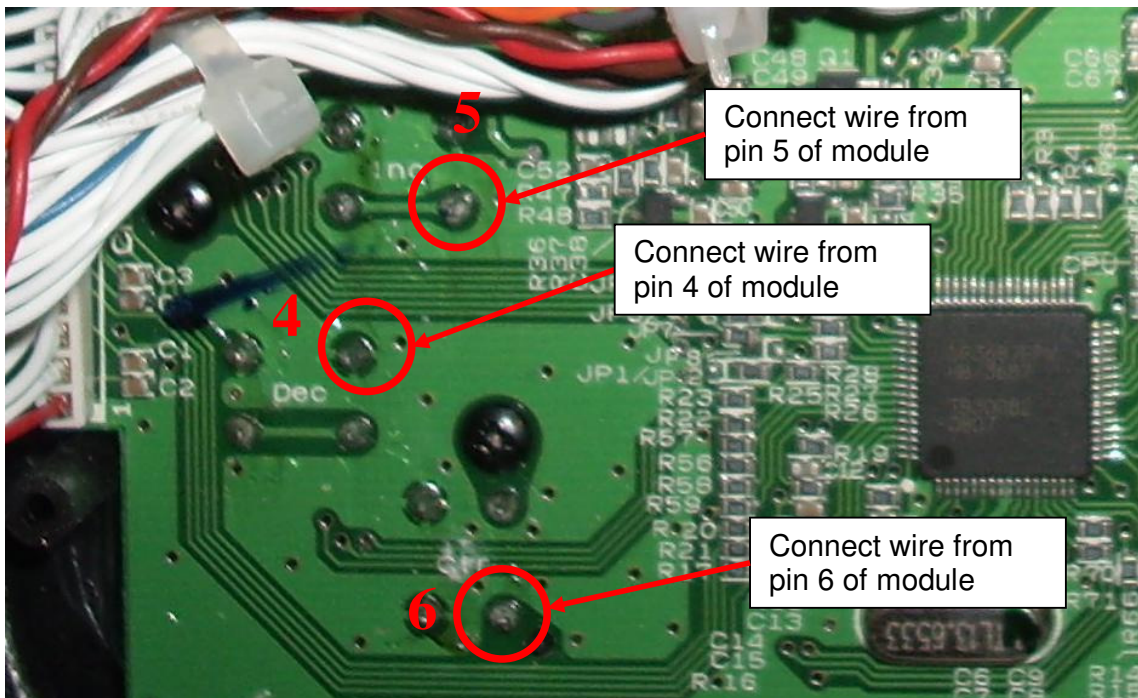


Pict. No. 4: Connecting of wires from pin 1 and pin 3 of module to throttle potentiometer (NOTE: on picture is TX **Mode 1**)

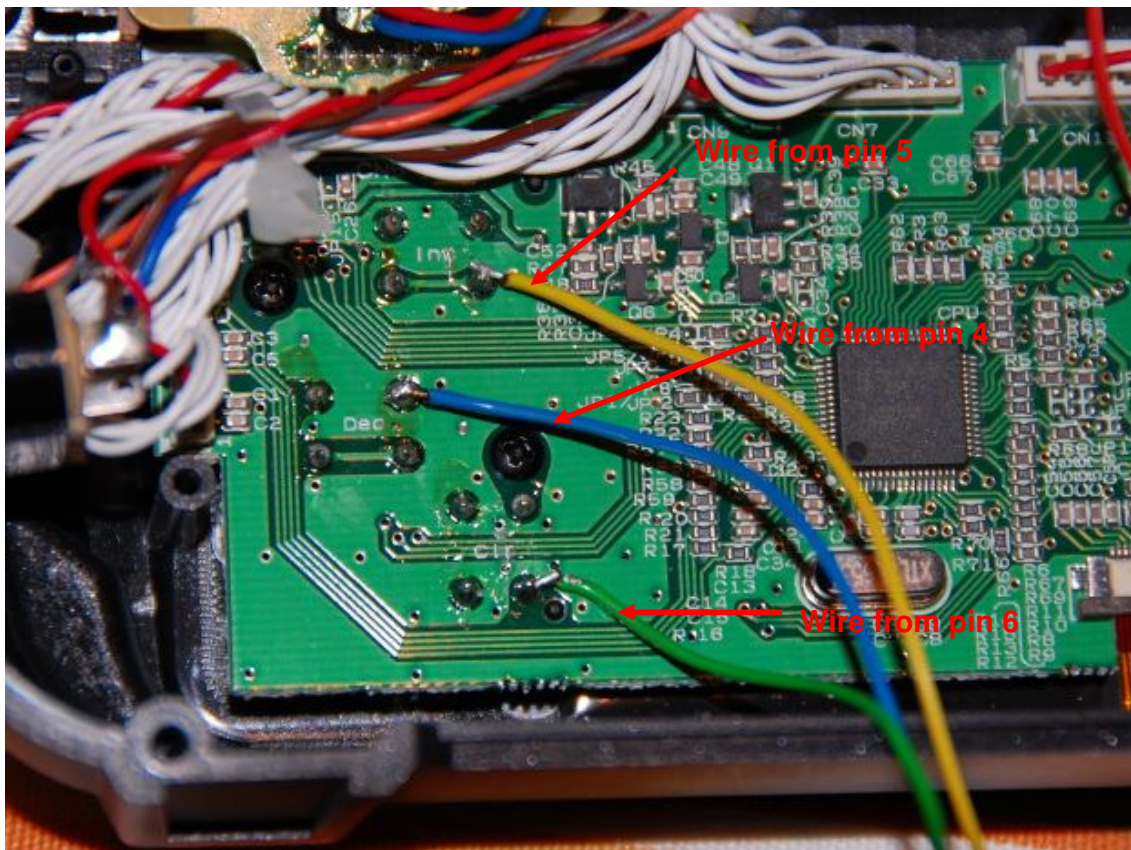




Pict. No. 5: Connecting of wires from pin 1 and pin 3 of module to throttle potentiometer (NOTE: on picture is TX **Mode 2**)



Pict. No. 6: Points for connecting of wires from pins 5, 6, and 7 of module



Pict. No. 7: Connecting of wires from pins 4, 5 and 6 of module

## MANUAL

In menu TIMER select UP or DOWN. When you select DOWN you must set time in minutes and seconds.

If automatic switching of timer is active then the module works as follows - if the position of throttle stick is below set position - timer stopped. If the position of throttle stick is above set position - timer run.

During the turning on of the transmitter you can make decision if the auto mode is activated or deactivated. Auto mode can be activated in two different, each other reversible modes. Selected mode depends on selected position of jumper.

	Standard turning on the transmitter	Press and hold CLEAR while turning on the transmitter
Mode A – jumper is ON (SHORT)	Automatic ON	Automatic OFF
Mode B – jumper is OFF (OPEN)	Automatic OFF	Automatic ON



**Note:** Do not use INCREASE and DECREASE switches for manual start or stop timer if automatic switching of timer is active. If you press one of these switches you have to press one of these switches again to get regular state of timer.

When programming the transmitter, be sure the autotimer function is turned OFF. When the automatic of timer is active, moving the throttle stick is like pushing the INCREASE switch and will affect the programming.

The module can operate in two different method and we can choose which method suits more. In a classical method (**Classic Mode**) is necessary to adjust desired position of throttle stick (position for start/stop timer) every time you turning on the transmitter. In the second method (**Store Mode**) is setting position of throttle stick stored in memory and this position will be used for start/stop timer regardless of what the position of throttle stick is set while turning on the transmitter.

### **Mode A - jumper is ON (short)**

After normally switching ON the transmitter you will hear standard beep and then another series of beeps - automatic timer is activated. You will hear:

- six short beeps ( \* \* \* \* \* ) when CLASSIC MODE is set - throttle position for start/stop timer is given by throttle position while turning on the transmitter

or

- four short and one long beep ( \* \* \* \* \_ ) if STORE MODE is set - throttle position for start/stop timer is loaded from memory (it is possible to set and stored this position - see description below)

Automatic remains activated until the transmitter OFF. If you need to work in this mode A (jumper ON) with the transmitter without the automatic timer, so you press and hold CLEAR button while turning ON the transmitter. Then you will hear standard beep and after one second next two short beeps ( \* \* ) generated by adding module. Two beeps indicates that the automatic timer is not activated. Now you can use manual start and stop timer by switches INCREASE or DECREASE. Automatic remains deactivated until the transmitter OFF.

### **Mode B - jumper is OFF (open)**

In this mode works the module opposite as in mode A. If you turn ON the transmitter in a standard way, so the automatic timer is deactivated, signaling two beeps ( \* \* ).

If you holding down the CLEAR button while turning ON the transmitter so the automatic timer will be activated and we will hear a series of beeps according to the selected mode as described in the first part of the Mode A.

Anytime it is possible to reset the timer by pressing the CLEAR button.

### **Setting Classic Mode / Store Mode and saving the setting position of the throttle stick to the memory**

Turn ON the transmitter so that the automatic timer is **DEACTIVATE** - press CLEAR button while turning ON the transmitter if jumper is set or normal turn ON the transmitter if the jumper is off. After switching ON the transmitter we will hear standard beep and then two beeps - automatic timer is deactivated. If the CLEAR button was pressed – release it immediately after two beeps.

Then wait about 1 - 3 seconds (but no more than about 4 seconds) and press and hold CLEAR button. After about 3 seconds you will hear 3 short beeps. If you release the CLEAR button now - **Classic mode** will be set (mode set will take effect the next time you turn on the transmitter). If you hear 3 beeps keep holding down the CLEAR button about next 3 seconds you will hear a long beep and 3 short beeps. If you release the CLEAR button now - the **Store Mode** will be set and for starting / stopping the timer will be used position of throttle stick already stored in memory (set mode to take effect the next time you turn on the transmitter). After you hear one prolonged and three short beeps continue to hold down the CLEAR button about next 3 seconds you will hear a series of six longer beeps - during this series you have to release CLEAR button and set the throttle stick to the desired position. At the completion of a series of beeps will throttle position stored in memory and transmitter must be switched OFF.

Mode can be changed anytime by the above procedure.

**See also diagram on next page.**

The module comes with default Classic mode. Throttle position stored in memory is about 15% of the maximum of throttle.

Author is not responsible for any damage occurred during the installation or using of device.

**PRICE:**

**For Slovakia and Czech Republic – 10,00 Euro (including wiring material and shipping cost)**  
**For others countries - 12,30 Euro (including wiring material and shipping cost)**

Contact: [jaromacko100@gmail.com](mailto:jaromacko100@gmail.com)

