



ATOM DBP

Transmitter with three different alarms

Function

ATOM DBP is an alarm trigger with one button but three different functions. If the button is pressed once, a *normal* alarm is transmitted. If the button is pressed twice within 2.5 s, a *double press* alarm is transmitted. And if the button is pressed for more than 2.5 s, a *long press* alarm is transmitted.



Different ATOMs

The visual difference between the normal ATOM and ATOM DBP is the label on the back side. The ATOM has a barcode and the ATOM DBP has a data matrix. See figure 1.

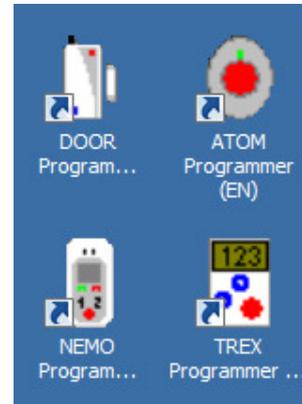
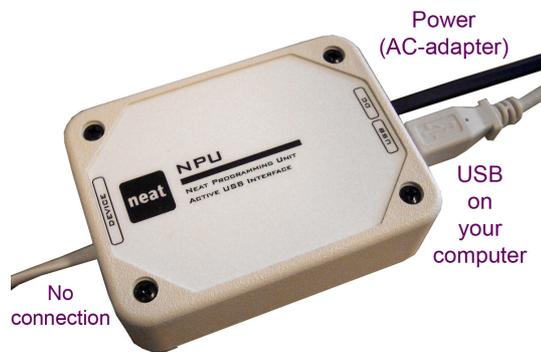


Figure 1 From left to the right ATOM, ATOM DBP, I-ATOM and D-ATOM. The ATOM DBP has a data matrix and can be distinguished from a normal ATOM which has a barcode.

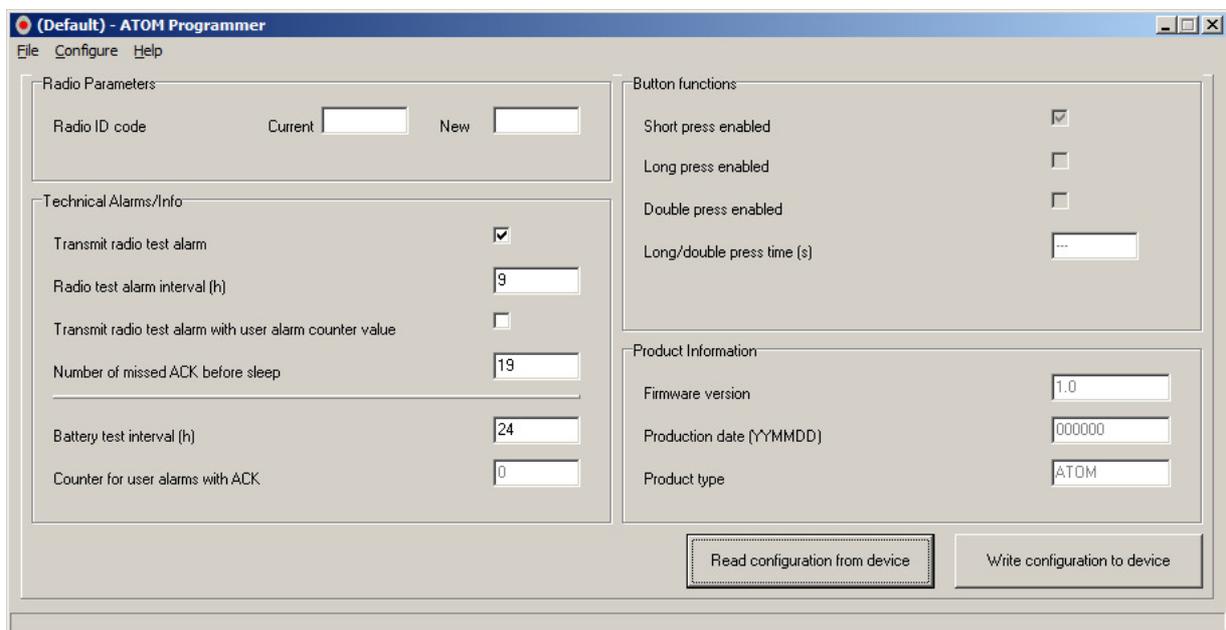
You can also control whether it is a normal ATOM or an ATOM DBP by pressing the red button. If it is not an ATOM DBP the LED will light up immediately. If it is an ATOM DBP the LED will light up with a delay of around three seconds.

Neat Programming Unit and ATOM programmer

Connect the Neat Programming Unit (NPU) to a power outlet and to a USB-port on your computer. Note that the white cable should not be connected to anything.



When you download the ATOM programmer from NEAT Electronics' web site you get a shortcut to the program installed on your computer's desk top. Double click on the symbol to start the program. The default version is shown below.



Read from ATOM DBP

To read the configuration from an ATOM DBP you click on the button "Read configuration from device". Then a popup will be shown. See the next page.



After pressing the red button on the ATOM DBP another popup will be shown.

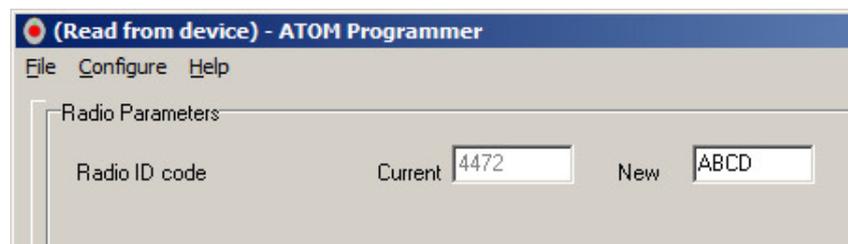


After pressing a second time the stored information in the ATOM DBP will show up in ATOM programmer.

Now we will take a look at the settings in ATOM programmer starting from the top left side.

Radio parameters

If you want to replace an ATOM that is already programmed into NEO or TREX it is very convenient to be able to change the radio code. Let's for instance change the radio code from 4472 to ABCD.



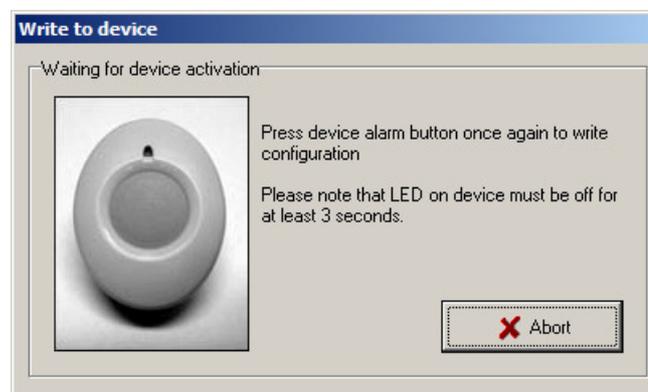
After writing ABCD as "New" you press "Write configuration to device" in the right bottom corner. Then a popup is shown. See below.



When you press the ATOM DBP another popup asks for approval.



When you press yes you get a third popup.

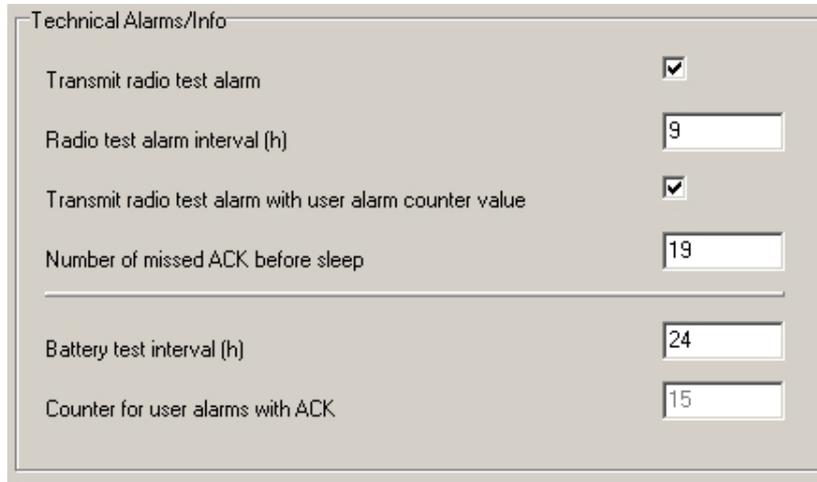


When pressing the ATOM DBP a second time the new radio code is stored and ATOM programmer looks like this:



Technical Alarms/Info

Now let's look at the next headline called Technical Alarms/Info. There are some things that need to be explained.



| Technical Alarms/Info | |
|---|-------------------------------------|
| Transmit radio test alarm | <input checked="" type="checkbox"/> |
| Radio test alarm interval (h) | <input type="text" value="9"/> |
| Transmit radio test alarm with user alarm counter value | <input checked="" type="checkbox"/> |
| Number of missed ACK before sleep | <input type="text" value="19"/> |
| <hr/> | |
| Battery test interval (h) | <input type="text" value="24"/> |
| Counter for user alarms with ACK | <input type="text" value="15"/> |

The time for radio test alarm is set in hours. Standard setting for the interval is 9 hours and radio test alarm can be deactivated using the checkbox "Transmit radio test alarm".

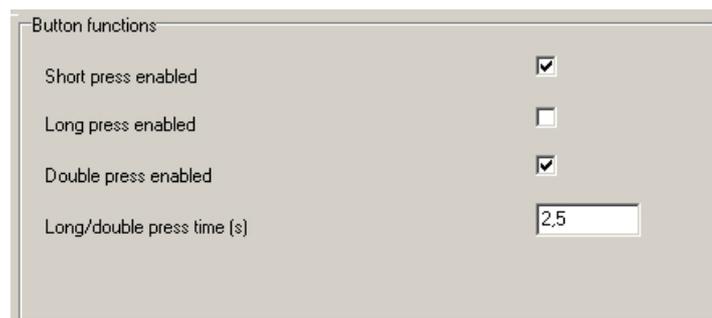
"Number of missed ACK before sleep" (19 in this case) is a way to save battery when the ATOM DBP is not used. If the ATOM DBP hasn't received any answer to this number of test alarms, it will stop sending radio test alarms.

Battery test interval is set in hours and the default value is 24 h.

The number of acknowledged alarms from ATOM DBP can be seen in the last box.

Button functions

Now let's look at the right column on the screen starting with Button functions. See the picture below.



| Button functions | |
|----------------------------|-------------------------------------|
| Short press enabled | <input checked="" type="checkbox"/> |
| Long press enabled | <input type="checkbox"/> |
| Double press enabled | <input checked="" type="checkbox"/> |
| Long/double press time (s) | <input type="text" value="2.5"/> |

There are three possible alarm types in the ATOM DBP called Short press, Long press and Double press. They can be used all three at the same time or you can set a combination of two or you can use just one of them. The setting is activated or deactivated with the three checkboxes.

If you press the ATOM DBP button one time, a *normal* alarm is transmitted. This is the same as with a standard ATOM. If you press the button twice within 2.5 s, alarm *double press* is transmitted. If you keep the button pressed for more than 2.5 s, then an alarm *long press* is transmitted. The default time of 2.5 s for long press and double press can be changed in the last box.

In Table 1 you can see the alarm types that are sent from ATOM DBP to the alarm receiver for different pressing modes.

Table 1 The alarm types for battery alarm, radio test alarm, normal trigger alarm, double press alarm and long press alarm.

| Function | Hex code | Decimal code |
|----------------------|----------|--------------|
| Normal trigger alarm | 00 | 00 |
| Double press | 29 | 41 |
| Long press | 2A | 42 |
| Battery alarm | 0B | 11 |
| Radio test alarm | 1C | 28 |

Product information

Production date and firmware version can be seen under "Product information".

The image shows a software window titled "Product Information". It contains three rows of data, each with a label on the left and a text box on the right:

- Firmware version: 1.0
- Production date (YYMMDD): 100524
- Product type: ATOM DP

Connecting ATOM DBP to alarm receiver TREX

When an ATOM DBP is used together with alarm receiver TREX you should turn off the test alarm (using ATOM programmer). If you want to use double press or long press the new alarm type must be defined in TREX. Open TREX-programmer and look under the tab "Alarm types". If you for instance

want to use the long press as an assault alarm you define it as shown in the next page.

| Item | ID | Text | Acoustic indication |
|------|----|---------------|---------------------|
| 1 | 0 | Alarm | Use equipment type |
| 2 | 8 | Mains failure | Type 2 |
| 3 | 9 | Mains OK | Type 2 |
| 4 | 11 | Battery weak | Type 2 |
| 5 | 35 | Pos | Type 2 |
| 6 | 42 | Assault | Type 2 |
| 7 | | | |

After that it's easy to install the ATOM DBP under the tab "Transmitters" in Trex-programmer.

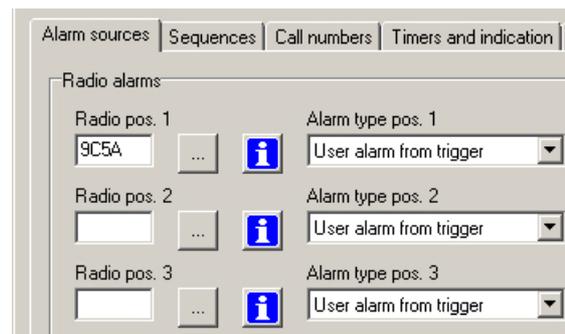
If the setting you want is already done in TREX-programmer then ATOM DBP can be installed using the buttons on TREX. Then do as follows:

1. Choose *Add transmitter* from the *Programming* menu in the TREX.
2. Press the push button on ATOM DBP.
3. TREX beeps to indicate that a radio code is received.
4. Select identity and equipment to complete the programming.

More detailed information is obtained in TREX user guide NE41 05004-02.

Connecting ATOM DBP to care phone NEO

The double press and long press, alarm type 29 and 2A, is not understood by NEO unless you have a special program version. But ATOM DBP can of course be used as a normal ATOM. Then you install the radio code in the first vacant position of the three defined as "User alarm from trigger" in NEO programmer. See the example to the right.



You can also install ATOM DBP using the buttons on NEO. Then do as follows (German NEO see the next page):

1. Press and hold the grey button on NEO while switching NEO on.
2. Wait until you hear a beep, then release the button.
3. Press the push button on ATOM DBP.

4. The care phone sounds to indicate that the radio code from ATOM DBP is stored.
5. Press the green button on NEO to end the programming.

In the German version of NEO alarm sources are installed in a different way.

1. Press and hold the grey and the green button on NEO while switching Neo on.
2. Press the red button once times. Wait until a beep is heard.
3. Press the push button on ATOM DBP.
4. The care phone sounds to indicate that the radio code from ATOM DBP is stored.
5. Press the grey button on NEO to end the programming.