ATX3 TRANSCEIVER FOR DOGE AS1

The ATX3 transceiver is able to control up to **8 wireless sirens** and to **receive** and **manage** all information coming from the memorized sirens.
The transmitting section consists of two control inputs for the **alarm**, two inputs for **on/off** system status signaling, and a button (**P1**) that transmits continuously (if pressed) the code to be **memorized** on the sirens and which can be used also to modify this code, by keeping it pressed during the first power supply.
The receiving section consists of a **7 segment display**, **4 signalling LED**, **2 open collector outputs**, **1 relay output (NC)** and the **P2 button**.
The display will show, from **1** to **8**, which siren has indicated the problem.
The **3 surface mounted LEDs** allow to view the type of anomaly detected on the sirens: **tamper**, **no supervision** and **low battery level**.
The red led which protrudes from the housing collects **all** these signals.
The tamper led is reset **upon activation** of the main station while the other two leds are reset when battery power or radio transmission is **restored**.
If anomaly is detected on more than one siren, the display starts to cycle, **displaying** for **2 seconds** the number of siren, while the **3 leds** show the type of anomaly noticed.
Button **P2** is used to access programming, memorize siren codes and exit programming. The sequence is the following:

See the doge AS1 manual to learn about ATX3 programming.

<u>Descrition of inputs</u>

ON/OFF inputs (terminals n.3 and n.4)

Terminal n.3 Input to be connected to the **ON/OFF** output of the alarm main station.
When it turns to **LOW level (GND)**, after about **1 second** there is a **system ON** transmission, with a duration of **2 seconds**.
The display indicates this condition with the letter "**A**" on steady.
When it returns to **HIGH level** after about **1 second**, there is a **system OFF** transmission with a duration of **2 seconds**.

Terminal n.4 Input to be connected to the **ON/OFF** output of the alarm main station.
When it turns to **HIGH level (12 Vdc)** after about **1 second**, there is a **system ON** transmission with a duration of **2 seconds**.
The display indicates this condition with the letter "**A**" on steady.
When it returns to **LOW level** after about **1 second**, there is a **system OFF** transmission with a duration of **2 seconds**.

ALARM inputs (terminal n.5 and n.6)

Terminal n.5 Input to be connected to the alarm output of the main station.
When it turns to **LOW level (GND)** after about **1 second**, an alarm transmission is sent to the sirens, with a duration of **2 seconds**.
When it returns to **HIGH level,** after about **1 seconds**, there is a transmission of **2 seconds** which silences all the wireless sirens.

Terminal n.6 Input to be connected to the alarm output of the main station.
When it turns to **HIGH level (12 Vdc)** after about **1 second**, an alarm transmission is sent to the sirens, with a duration of **2 seconds**.
When it returns to **LOW level,** after about **1 seconds**, there is a transmission of **2 seconds** which silences all the wireless sirens.

Descrition of output

Tamper Output (Terminal n.7 and n.8)

This relay output (with contact normally closed) **collectos** all tamper indications from the memorized sirens.
When a tamper transmission arrives from **one** of the sirens, this output opens for **2 seconds**.
The **display** and the **tamper LED** memorize and display the event.
The condition persists until the **next activation** of the main station or until the **siren** that caused it is **delected** from memory.

Supervision Output (terminal n.9)

This open collector output **collects** all lack of supervision signals from all memorized sirens.
If no supervision signal is received from the memorized sirens in **3 hours**, there is a negative output on terminal n.9.
The **display** and the **spv** LED display and memorize the event.
This condition persists until the **resolution of the problem** generated it, or until the **siren** that caused it is **deleted** from memory.

LOW BATTERY output (terminal n. 10)

This open collector output **collects** all discharged battery signals from the memorized sirens. When an exhausted battery transmission arrives from one of the memorized sirens, there is a negative output on terminal n. 10.
The **display** and the **low battery LED** display and memorize the event.
This condition persists until the discharged batteries of the siren are replaced or until the **siren** that caused it is **deleted** from memory.

Description of buttons

Button P1

This button allow to constantly transmit a radio signal to be memorized on the outdoor sirens.
In this phase, the display shows the letter **"t"** flashing.
During programming it is used to **delete** a siren code. During power-on (first start-up) it generates a **new 16-bit code.**
In this phase it displays horizontal dashes in **continuous rotation.**

Button P2

This allows to access programming, select the 8 zones to be memorized and to exit programming.

Description of the terminal board

Terminal **n. 1** Positive power supply **13.6 Vdc**

Terminal **n. 2** Negative power supply **GND**

Terminal **n. 3** **ON/OFF** input for **negative** signals

Terminal **n. 4**	**ON/OFF** input for **positive** signals
Terninal **n. 5**	**ALARM** input for **negative** signals
Terminal **n.6**	**ALARM** input for **positive** signals
Terminal **n.7 and 8**	**TAMPER output** (relay **NC 100mA**
Terminal **n.9**	**SUPERVISION** output max **30 mA**
Terminal **n. 10**	**DISCHARGED BATTERY** output max 30 mA
Terminal **n. 11**	**GND**
Termnal **n. 12**	Output for **antennal**

Description of Jumper JP3

Jumper JP3 is used to exclude display of lack of supervision by the led that protrudes from the housing.

JP3	ON (closed)	=	Display enabled
JP3	OFF (open)	=	Display excluded

Technical Features

Nominal operating voltage	= 12 Vdc
Min. absorption	= 20 mA
Max absorption	= 70mA
Transmission frequency	= 433.92 Mhz with ASK modulation (10mW)
Receiving frequency	= 433.92 Mhz with ASK superheterodyne receiver
Operating temperature	= + 5°c to + 40°C