Testing:

The beacon sounder is tested after installation as a part of the site's fire alarm system or on maintenance activities, following the described sequence of steps:

A command for activation is sent from the 7002 panel to the stand-alone beacon sounder –menu "Setup → Checks → Addressable outputs" and choose the signal loop's INDIVIDUAL address of the beacon sounder. The beacon sounder should activate with the pre-defined sound mode (from the micro-switches, pos.2, fig.1);

A command for reset is sent from the 7002 panel to the individual address beacon sounder – exit from menu "Setup → Checks → Addressable outputs".

The individual address beacon sounder should change back to duty mode.

Service schedule:

Authorized personnel should service the fire alarm system and devices of type FD7204, based on the following activities:

1. Inspection for visible physical damage — Monthly

2. Test as part of the system installation — Monthly

Warranty

The warranty period is 12 months from the date of sale, in case that the requirements set herein are observed.

The manufacturer does not bear warranty liabilities for damages caused through accidental mechanical damage, misuse, adaptation or modification after production. The manufacturer bears warranty liabilities for damages in the unit caused through manufacturer's fault only.

ADDRESSABLE SOUNDER BEACON DEVICE – BASE WITH BUILT-IN SHORT-CIRCUIT ISOLATOR
type FD7204

EVPÜ
1293-CPD-0284
CE
1293

Stereovision
Total vision in security

Instruction manual 04-7204-06-14

General description:

Addressable sounder beacon device – base with built-in short-circuit isolator and accumulator battery, is used for sound and flash indication on registered events by the Interactive fire alarm panel IFS7002. The FD7204 is used for indoor applications.

The device is installed on base type FD7100.

The sounder and beacon device can be used as a stand-alone device with an individual address on the signal loop. The FD7204 is triggered on IFS7002 panel's command for activation (fig.1);

The communication between the beacon sounder and the IFS7002 panel is based on the private protocol UniTALK on the panel's signal loop. The beacon sounder device is power supplied by the charged (through the same signal loop) Li-Ion accumulator battery. A short-circuit protection, in the signal loop, is provided by a built-in the device, hardware short-circuit isolator.

The beacon sounder is consisted of a body with integrated detector's base (pos.1, fig.1), micro-switches for FD7204's parameters set-up (pos.2, fig.1) and a plastic cover (pos.3, fig.1).

Fig.1

Programmable parameters of the beacon sounder:
- type of the sound/signal;
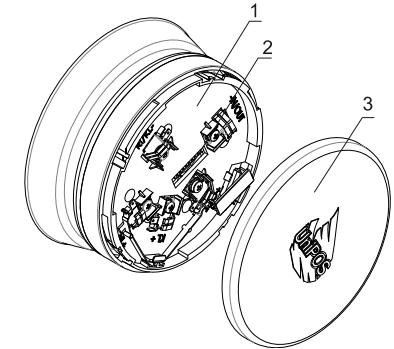- selectable sound level or NO sound mode (only beacon);

Technical parameters:

Power supply (from the signal loop)	- (16÷33)V DC
Power consumption from the signal loop in "Duty mode" with fully charged battery	- 390 µA on 24V DC
Power consumption from the signal loop in "Duty mode" with battery on charge (discharged battery)	- (0,3-4,0)mA on (15-33)V DC
Power consumption from the signal loop in "Alarm mode" of the sounder beacon	- 2mA w/o flash / 5mA with flash
Sound level on distance 1 m	- optional 80dB, 85dB or 90dB (table 2)
Type of the sound tone	- optional - 25 tones (table 1)
Temperature range	- from minus 10°C to 50°C
Relative humidity resistance (without condensation)	- ≤95%
Dimensions	- Ø100, h50 mm (with cover)
Weight	- 0,160 kg
Cross section of the connecting wire	- (0,8-2,5) mm^2
Protection rating	- IP 21
Rechargeable battery	- PLi-Ion 3,7V/320 mAh
Minimum life cycle on fully charged battery in Alarm mode	- 1 hour

Indication:

Three types of LEDs indication:
- RED (alarm status) indication – 1 red LED situated on the front side of the sounder (fig.3, position1);
- YELLOW (fault status) indication situated – 1 yellow LED situated on the front side of the sounder (fig.3, position 2);

- RED (alarm flash) beacon indication (optional) – 12 LEDs situated on 180 degrees all over the periphery of the 7204's;

LEDs modes of indication:
- Duty mode –YELLOW fault status indication flash shortly on a period of 16 seconds. The RED beacon indication is turned off;
- Alarm mode – the RED alarm status indication is continuously turned on and the RED beacon indication flashes on every 2 seconds. The YELLOW fault status indication is turned off;
- Fault mode (activated short-circuit isolator) – the YELLOW fault status indication is flashing shortly on a period of 1s. The RED alarm status indication and the RED beacon indication are turned off;
- Fault mode (discharged/low battery) – the YELLOW fault status indication is flashing shortly on a period of 5s. The RED alarm status indication and the RED beacon indication are turned off;
- Fault mode (removed battery) – the YELLOW fault status indication is continuously turned on. The RED alarm status indication and the RED beacon indication are turned off;

Installation:
The addressable beacon sounder is used with a base type 7100, which is supplied as a separate item.
The installation steps of the beacon sounder are as follow:
1. Fix the base type 7100 using pins and screws;
2. Cable installation:
The cable installation is based on the scheme on fig.2. It is recommended cable shoes to be used. The "+IN" and "+OUT" of the connectors are conditional – they are not obligatory and it is not necessary to take into consideration.
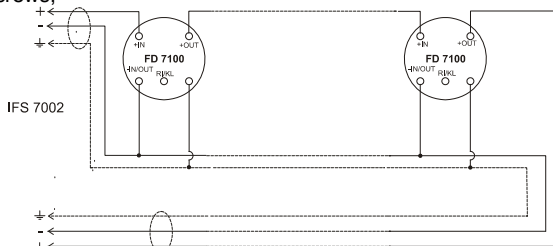

Fig.2

3. Program the optional parameters of the beacon sounder using the 8-pin micro-switches (fig.3):
- type of the sound/signal (table 1);
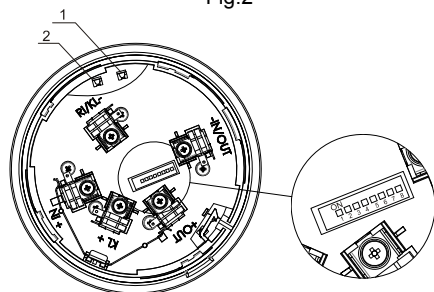- selectable sound level or no sound mode (only beacon) (table 2);

Fig.3

4. Mechanical installation:
4.1. The beacon sounder is placed on the base and is rotated clockwise until reaching the guiding grooves;
4.2. It is rotated until rest;
4.3. The slots of the base and the beacon sounder should match;

5. Table 3 represents a ratio between maximum number of beacon sounders (without flash and with flash) and fire alarm detectors (series FD71xx), that can be connected to an addressable loop. Bear in mind that a loop may have a maximum of 125 addresses.

Table 1

Sound No	Type of the sound DIP SW 1,2,3,4,5	Activation mode	Nominal frequency	Frequency of the activation mode	Description	Standard
1	On,On,On,On,On	Sequence	554/440	2Hz (100mS/400mS)	French Fire Sound AFNOR	NFS 32-001
2	Off,On,On,On,On	Sequence	800/970	1Hz		BS5839 Pt1
3	On,Off,On,On,On	Sequence	800/970	2Hz	Alternating tone Telecoms	BS5839 Pt1 FP1063.1 Telecoms
4*	Off,Off,On,On,On	Increasing ring	2400-2850	1Hz	*Same as Sound No32	
5*	On,On,Off,On,On	Increasing ring	2400-2850	1Hz	*Same as Sound No32	
6*	Off,On,Off,On,On	Increasing ring	2400-2850	1Hz	*Same as Sound No32	
7	On,Off,Off,On,On	Sequence	660		All Clear	
8	Off,Off,Off,On,On	Sequence	970			BS5839 Pt1
9	On,On,On,Off,On	Sequence	1200			
10	Off,On,On,Off,On	Sequence	2850		Banshee / Bedlam HF Continuous	
11	On,Off,On,Off,On	Sequence	4000			
12	Off,Off,On,Off,On	Interrupted sequence	660	0.05Hz 6.5s on, 13s off		
13	On,On,Off,Off,On	Interrupted sequence	660	0.277Hz 1.8s on, 1.8s off		
14	Off,On,Off,Off,On	Interrupted sequence	660	3.33Hz 150mS on, 150.S off	Swedish Alarm Tone	
15	On,Off,Off,Off,On	Interrupted sequence	970	0.8Hz 0.25s on, 1s off	Intermittent Tone	BS5839 Pt1
16	Off,Off,Off,Off,On	Interrupted sequence	970	1Hz 1s on, 1s off	Backup alarm HF & BS5839 Pt1	BS5839 Pt1
17	On,On,On,On,Off	Interrupted sequence	2580	1Hz	Backup alarm HF& BS5839 Pt1 2nd Tone	BS5839 Pt1
18	Off,On,On,On,Off	Interrupted sequence	970	1Hz 500mS on, 500mS off	ISO 8201 LF & BS5839 Pt1	BS5839 Pt1, ISO 8201
19	On,Off,On,On,Off	Interrupted sequence	950	0.22Hz (0.5s on,0.5s off)*3, 1.5s off		
20	Off,Off,On,On,Off	Interrupted sequence	2850	4hz 150mS on, 100mS off	Pelican Crossing	
21*	On,On,Off,On,Off	Increasing ring	2400-2850	1Hz	*Same as Sound No32	
22	Off,On,Off,On,Off	Increasing ring	1200-500	0.99Hz 1s on, 0.01s off	Evacuate, DIN tone & PFEER	DIN, PFEER
23	On,Off,Off,On,Off	Increasing ring	2400-2850	7Hz	Fast Sweep Vds	Vds
24	Off,Off,Off,On,Off	Increasing ring	500-1200	0.5s off, 3.5s on	Slow whoop evacuate Netherlands NEN 2575	
25	On,On,On,Off,Off	Increasing ring	800-970	50Hz	LF buzz BS5839 Pt1	BS5839 Pt1
26	Off,On,On,Off,Off	Increasing ring	800-970	7Hz	Fast sweep LF BS5839 Pt1	BS5839 Pt1
27	On,Off,On,Off,Off	Increasing ring	800-970	1Hz	Medium sweep LF buzz BS5839 Pt1 Vds	BS5839 Pt1
28	Off,Off,On,Off,Off	Increasing ring	2400-2850	50Hz		
29*	On,On,Off,Off,Off	Increasing ring	2400-2850	1Hz	*Same as Sound No32	
30*	Off,On,Off,Off,Off	Increasing ring	2400-2850	1Hz	*Same as Sound No32	
31*	On,Off,Off,Off,Off	Increasing ring	2400-2850	1Hz	*Same as Sound No32	
32	Off,Off,Off,Off,Off	Increasing ring	2400-2850	1Hz		

Table 2

DIP setting SW 6,7	Level of the sound
Off,Off	The sound is disabled (the flash beacon indication is only enabled)
On,Off	Low Sound level (80dB)
Off,On	Middle Sound level (85dB)
On,On	High sound level (90dB)

Table 3

	Number of beacon sounders per loop	Detectors FD71xx series
FD7204 without flash	10	< 115
	20	< 105
	30	< 95
	40	< 85
	50	< 32
FD7204 with flash	10	< 115
	20	< 32