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THE SOUND OF SAFETY

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**DSX-TX ADSU & DSX-RX
LONE WORKER MAN DOWN ALARM**



Diktron DSX-TX

ATEX approved Lone worker Alarm

The DSX -TX Lone Worker Alarm is ideal where users have to work alone. The DSX-TX unit will automatically emit a 96-dBA alarm and transmit the units identification to the receiver should the wearer be rendered unconscious or trapped. A new concept in Distress Signal design, with many options to suit individual needs, the unit is built with the wearer in mind and will accommodate fixing to all B.A. sets. Made to a high specification and backed by the Diktron name, a name with standards you have come to expect and depend on.



Highly Secure Protocol

provide an unprecedented level of security which prevents copying or grabbing whilst also obtaining the optimum range from the transmitter and receiver

Up to 48 DSX _TX lone workers per receiver

Certification : Ex II 2 G EEx ia IIB T4

Compliant with European EN 300 220 standard.

Utilizes UHF FM-narrow band transmitter with PLL controlled oscillator for high frequency stability.

“Free to air” systems where neither the supplier nor the user has to pay a transmitting licence fee unlike paging companies and mobile services providers.

Technical Specifications

- * CONTINUOUS LOCATION FLASHES. * MANUAL ALARM-IMMEDIATE OR "TONE DELAY".
- * MOVEMENT DETECTOR. ...PRE-ALARM AFTER 30 SECONDS. ...FULL ALARM 96 dBA AT 2M IN FREE AIR. ...RED LED FLASHES WITH DISTRESS SIGNAL.
- * TEMPERATURE SENSOR – OPTIONAL, * EVACUATION WHISTLE – OPTIONAL, * BA DURATION TIME - OPTIONAL
- * EMC TESTED AND APPROVED. * SMALL AND LOW PROFILE UNIT. 119.5 x 87 X 39mm.
- * VERY SECURE FIXINGS AVAILABLE FOR VERTICAL AND HORIZONTAL STRAPS
- * REMOVABLE KEY FOR TALLY BOARD ENTRY CONTROL SYSTEMS.
- * LONG OPERATIONAL BATTERY LIFE. LOW BATTERY INDICATION - AUDIO/VISUAL.

FREQUENCY RANGES AUDIO 2.7Khz - 3.0Khz Sounders
FREQUENCY TRANSMIT 869.750 MHz

Certification Ex II 2 G EEx ia IIB T4

CAUTION FLASH	1 FLASH EVERY 1-SEC. ALTERNATING SIDES & FRONT.
MOVEMENT MONITOR PERIOD	30 SECONDS.
PRE-ALARM	10 SECONDS AT 80dBA
BATTERY	DURACELL MN 1604
AUTO MODE RESET INDICATOR	AMBER LED 1 SEC FLASH ON RESET
FULL ALARM SOUND	JCDD 38 OR SOS.
BA DURATION TIMER**	
EVACUATION WHISTLE	JCDD 40 SPECIFICATION.
SIZE	119.5 x 87 x 39mm
WEIGHT	300 GRAMS.
BATTERY LIFE (ON MONITOR)	157 HOURS WITH MN1604
LOW BATTERY INDICATION	1-SEC. AUDIO TONE & RED LED EVERY 2-SEC.
DESIGN SPECIFICATION	EXCEEDS JCDD 38

FOR WORKERS IN THE INDUSTRIAL SECTOR PETROCHEMICALS, POWER STATION, GAS AND ELECTRIC,
CONSTRUCTION WORKERS CHEMICAL CLEANING COMPANIES, FIRE AND RESCUE SERVICES AND MANY MORE.

Diktron DSX-RX

Lone worker Alarm Receiver

The DSX-RX receiver will monitor for a man down signal from the DSX-TX units listed on the rear label. If a signal is received the units serial number will be displayed or corresponding LED will illuminate and the sounder will start.

Highly Secure Protocol

provide an unprecedented level of security which prevents copying or grabbing whilst also obtaining the optimum range from the transmitter and receiver

Up to 48 DSX TX lone workers per receiver (Basic model 4)

Compliant with European EN 300 220 standard.

Utilizes UHF FM-narrow band transmitter with PLL controlled oscillator for high frequency stability.

“Free to air” systems where neither the supplier nor the user has to pay a transmitting licence fee unlike paging companies and mobile services providers.

FREQUENCY AUDIO RANGES	2.7Khz - 3.0Khz Sounders
FREQUENCY RECEIVER.	869.750 MHz
POWER	MAINS ADAPTOR OR PP3 BATTERY
BATTERY	DURACELL MN 1604
SIZE (L*H*D)	170 x 110 x 50mm
WEIGHT	500 GRAMS.
BATTERY LIFE (ON MONITOR)	15 HOURS WITH MN1604

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CONSTRUCTION WORKERS CHEMICAL CLEANING COMPANIES, FIRE AND RESCUE SERVICES AND MANY MORE.



48 user model



Basic unit

DSX-RX Receiver

Receiver Operation: Basic model

Power on test:

Turn power switch to the ON position, the red power led will illuminate this is then followed by all four large LEDs flashing twice.

The DSX-RX receiver will then monitor for a man down signal from the DSX-TX units listed on the rear label.

If a man down signal is received the corresponding LED will illuminate and the sounder will start, this can only be cancelled by turning the receiver unit off and then back on. If the DSX unit is still transmitting the receiver will go back into alarm mode.

Receiver Operation: 48 user model

Turn power switch to the ON position, the Display will show "No Data".

The DSX-RX receiver will then monitor for a man down signal from the DSX-TX units listed on the rear label.

If a man down signal is received the LCD will display the corresponding DSX-TX serial number and the sounder will start, this can only be cancelled by pressing the mute button, any another DSX-TX units man signal when received will start the sounder, again press the Mute button to cancel sound, using the UP and Down arrows it is possible to cycle through the serial numbers received.

Both units have low battery indication

DSX – TX ADSU

ON / OFF KEY

Firstly, the unit is electronic and is armed by a key situated in the bottom centre of the body, which is removed by depressing the serrated upper part of the key, and then withdrawing in a downward action. Having completed this operation the user will hear a coded tone (O.K.) Morse Code, this tone confirms that the electronics are working correctly. It is not necessary for you to learn Morse Code for you to verify that all is well, the sound which is of low intensity, 70-85 dBA will soon be recognisable to you, and generally it will either not operate, or, it will give a continuous sound which would indicate that all is not well with the unit.

LOCATION FLASHES

When the unit is turned on, the location lights will flash alternately on the front face and then on the two sides of the unit. This facility will enhance the visibility of Operators to each other as well as rescue and other staff.

AUTOMATIC MODE .

The unit incorporates an Automatic function that relies on movement or non-movement to operate. You will find in practise that the need for you to be conscious of this fact will be very rare, but it is worth noting that the unit is designed to be very sensitive in the upright position but still allows for heavy breathing, and less sensitive in the horizontal position to cover any movement occurring to the user whilst unconscious. If pre-alarm is experienced a slight movement of the body will cancel.

DURATION TIMER .

The provision of the optional Duration Timer if using Breathing apparatus does not mean that you no longer carry out your normal procedure, it should only be considered as an aid to your personal responsibility for your own well being. With the use of longer duration cylinders a possibility, the timer has been designed to continue beyond your present use. Whichever cylinder you use it will give you a “tap on the shoulder” at the following intervals. Upon removal of the key the unit starts to count. After fifteen minutes it emits 5 low intensity bleeps, look at your gauge, from this time on the unit will emit 5 bleeps every 5 minutes infinite. This function will of course be overridden by the distress mode and zeroed by replacing the on/off key.

EVACUATION WHISTLE

The optional evacuation whistle feature simulates the sound of the Acme Thunderer whistle, and has a sequence of three blasts every 20 seconds. It should be used in strict accordance with your brigade’s application of operational procedures as each brigade may have its own guidelines for its use. For instances where in deep penetration the whistle sound (initiated on the outside of the incident) may not be heard by all B.A. operators or where the evacuation instruction is given verbally to the member of the B.A. team with a radio, then the instruction to evacuate can be “relayed” or “past on” to other B.A. operators by the pressing of the evacuation button on the side of the unit. When the button is pressed a short tone will highlight the delayed action on the button after which the Whistle blast sequence will commence.

MANUAL ALARM

The manual alarm button is located at the top of the unit when pressed the unit emits the full alarm sound and start to transmit the units identity to the DSX-RX receiver this will continue to sound until key is replaced.

LOW BATTERY WARNING LIGHT

Depending upon your Brigades use of batteries the need to change will occur on a 12 monthly or 6 monthly basis. However, this may be necessary before, depending upon usage and shelf age of the battery used, therefore you will be required to note if the red light and an audible warning occurs, this indicates the need to change the battery. The low level of the battery can only be monitored whilst under load, namely in use. There is a possibility that the warning may occur whilst in an incident. The unit will continue to operate for more than one hour in full alarm after this point is reached, but you may find that having replaced the key for a few minutes the unit no longer shows the warning light when activated again. This is because the battery has recovered to above its normal monitoring level, however the initial warning should not be ignored and the changing of the battery should be implemented.

CHANGING THE BATTERY .

If you are required to change the battery at any time, the following points should be noted.

Never change the battery with the activating key removed. Always change the battery in a safe area. Only use batteries listed on the back of the unit. The use of batteries other than those listed would invalidate the Intrinsic Safety Certificate and present a potential danger.

IMPORTANT NOTICE: Under no circumstances should thread locking fluids be used to retain screws. For further information contact Diktron Developments Limited.