# an Down Notif

## Teldio's Man Down Notifier (MDN) is a cost-effective and potentially lifesaving way of detecting if a worker has had a fall or accident. Using the integrated accelerometer on the MOTOTRBO Expansion Board, the Man Down Notifier monitors workers by detecting a lack of movement, a horizontal tilt, or a combination of both. MDN assures proactive surveillance of employee well-being and dispatches automatic emergency notifications to the appropriate response individuals or arouns when the need arises individuals or groups when the need arises.

Communicating Beyond Frequencies

#### A smart Man Down for a safer workplace

#### The Answer to Employee Safety and Security

In a world where employers are coming under more and more scrutiny to provide robust safety systems for their employees, a solution is necessary to provide a proactive means of monitoring employees who work in dangerous environments and/or complete hazardous tasks.

Teldio's Man Down Notifier (MDN) is a cost-effective and potentially lifesaving way of detecting if a worker has had a fall or accident. The application is both reliable and robust, and integrates perfectly with Teldio's existing MOTOTRBO two-way radio application portfolio. Using the integrated accelerometer on the MOTOTRBO Expansion Board, MDN monitors workers by detecting a lack of movement, a horizontal tilt, or both.

#### MDN assures proactive surveillance of employee well-being and dispatches automatic emergency notification to the appropriate response individual or group when needed.



- MDN utilizes the MOTOTRBO radio's accelerometer to gauge the worker's movement and vertical position. When powering an MDN-enabled radio, the application renews its "point of reference" - the vertical axis it now considers its 0°. The application then monitors the radio user for periods of lack of movement, tilting that go beyond the application's configured parameters, or both.
- (a) Upon hearing the audible signal emitted by the Pre-Alarm, the worker simply presses the OK button on his radio to clear it and reset the MDN application.
  (b) Should the Pre-Alarm not be cleared, MDN is then fully activated. A message is sent to the central server and the radio emits a loud audible noise.
- 3. The message sent by the fallen worker's radio is captured by the central server on which the application is housed. The message is then dispatched to other radios defined as the "response group". When paired with Teldio's ACS Alarm Control System (optional), MDN emergency messages can be sent to multiple communication devices (MOTOTRBO radios, cell phones, pagers, etc.) based on time of day, worker competency and/or location.
- 4. The man-down notification message is directly sent to the response individual or groups' mobile devices with the radio ID or worker's name, the time, and their last know location (when MDN is paired with Teldio's IPS optional). To ease the response process, a loud audible help beacon is emitted by the fallen worker's radio.

#### The Difference: Intelligent Functionality

Teldio recognizes that not all job tasks are completed when standing up-right; thus, MDN parameters can best detect when an employee may have suffered a fall, or been victim of an incident on the work site.

The point of reference of the application (or its 0° mark) is renewed every time the radio is powered on to give the appropriate flexibility to the solution. The parameter timers can also be customized for each individual worker to allow administrators the ability to change the settings to fit worker needs. The administrator is also the only one able to disable the application. This ensures that workers needing MDN monitoring do not accidentally turn it off. To provide freedom of use to the worker, MDN can go into sleep mode. When activated, the application is disabled for a preconfigured lapse of time. The user is notified by an audible cue when the application is automatically reactivated.

The intelligent functionality in Teldio's MDN ensures employees are proactively monitored without affecting their job performance.

#### Quick Facts. Benefits

- Ensures employee safety via proactive monitoring of those who encounter work dangers and hazards
- Automatic notification process removes workplace inefficiencies and streamlines the emergency response
- Increases awareness of safety incidents in real-time
- MDN sends location-specific information to the targeted response individuals for efficient and rapid response

#### **Key Features**

- Intelligent Man Down Detection Algorithms to spot when a worker is in danger or has suffered a fall
- Man Down Alarm Audio Beacons help other employees locate the fallen employees
- Man-Down Pre-Alarms allow users to cancel false alarms
- Sleep Mode permits users to temporarily disable man-down detection
- Configurable Motion, Tilt, Pre-Alarm and Sleep Mode Timers
- Automatic emergency notification process with when Man-Down alarms are triggered
- Different communication devices can simultaneously receive the Man-Down alarm notifications when paired with ACS
- Server-based software enhances the robustness of the solution and prevents false alarms
- Complementary operation alongside RBX +Plus on the same expansion card
- Fully compatible with Teldio's application portfolio

### Monitoring the well-being of your employees.

#### For enhanced worker safety.

Whether it be a guard on patrol alone at night, or a utility worker accomplishing a tricky repair; all workers need the assurance that their well-being is monitored in potentially dangerous situations.

MDN is an intelligent application that lets employees complete their jobs; it works non-intrusively in the background to ensure that your most precious assets are not left to their own peril.

#### For increased situational awareness.

Workers in many industries often work out of sight and out of sound of collegues and superviors. By installing MDN on workers' radios, these remote employees are given an additional assurance that if something were to happen to them, others would be alerted. Once the MDN alarm has been fully activated, the loud audible beacon facilitates the quick recovery of the worker in an emergency situation.

#### MDN + ACS

#### **Proactive Monitoring and Automatic Notification**

Teldio's Alarm Control System (ACS) is an intelligent alarm management and notification solution that provides organizations with the platform to automatically listen for alarm outputs, such as Teldio's MDN. This solution enables instantaneous notification to the right individuals of ongoing events, such as an emergency mandown situation, based on worker schedules, competencies, and communication media. ACS is a closed loop system, meaning that alarms will never go unnoticed. Backup workers are assigned so that if the primary employee does not receive or acknowledge the alarm message the alarm will be appropriately escalated to the next user until it is acknowledged and has been responded to.

To increase workplace efficiency and provide greater employee safety, ACS redefines how alarm notifications are sent to employees. Communication is targeted to the right worker based on time of day, competency, user device and location.



MDN detects if employees are motionless or are no longer in a vertical position for a certain period of time

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#### About Teldio.

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Teldio ensures greater employee safety, security, and situational awareness by providing cost effective radio to telephony unified communications, alarm management and indoor positioning solutions. We have given ourselves the mandate of providing breakthrough solutions to integrate existing communication infrastructures. Teldio solutions are also scalable, helping your communication network grow.

How can we help your company? Teldio employs a mix of highly skilled engineers and industry business veterans to tackle the most complex challenges faced in the two-way radio and alarm management markets. As such, Teldio has become the bridge between mobile, telephony and alarm networks ensuring the maximization of communication technology investment by significantly reducing recurring costs.

The company's world headquarters are located in Ottawa, Canada with a regional office in Cambridge, England and presence in the United States. Combining its network of strategic partners, Teldio has representation in over 90 countries across 6 continents. Teldio is also a Zonith A/S Global Distribution Partner, and serves as its primary channel in North America.



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