

QUICKSTART GUIDE

Man Down Pendant – Gateway – Gateway Relay Interface

Overview

The Man Down Pendant/Gateway system is designed primarily as a serial communication device. When using external equipment that does not support serial communications, an additional piece of hardware called the Gateway Relay Interface is required. The Gateway converts messages such as PANIC and MPANIC to toggle the DTR lines of the Gateway, which in turn cause the Gateway Relay interface to open and close relay contacts.

Supported Man Down Functionality with external equipment:

- Man Down “Panic” indication via a pendant button press or lack of motion sensed generated PANIC
- Man Down Panic “Acknowledgement” is acknowledged by external equipment

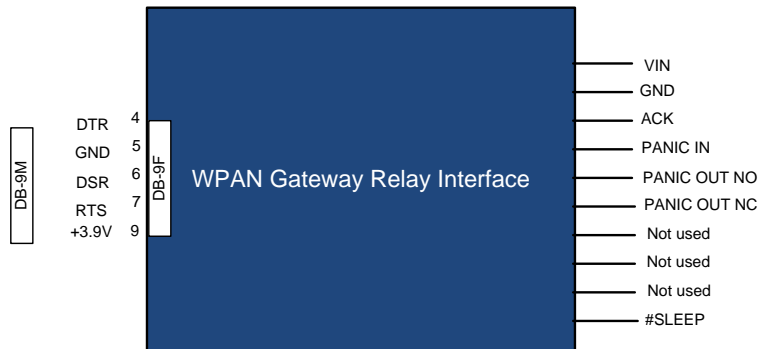
Supported features, independent of external equipment:

- Out of Range notification when pendant moves out of range of Gateway
- Low Battery notification

Unsupported features:

- Out of Range notification of pendant to external equipment
- Paging features

System Block Diagram



Signal Name	Description
VIN	Power Supply Input 5-26V
GND	Power Ground
ACK	Panic Acknowledgement Input. Active low, normally high.
PANIC IN	Common contact for PANIC state controlled relay
PANIC OUT NO	Normally open contact for PANIC state controlled relay
PANIC OUT NC	Normally closed contact for PANIC state controlled relay
Not used	
Not used	
Not used	
#SLEEP	Sleep input. Pull to GND to put the interface into a low power mode.



System Components



Installation

The Gateway Relay Interface has two connectors, one on each end. The DB9F connector is used to interface to the serial Gateway and the 10-position terminal block is used to interface to the external equipment.

To connect the Gateway Relay Interface to the serial Gateway, simply plug the DB9M connector from the serial Gateway to the DB9F connector on the Gateway Relay Interface. The system block diagram shows the pinouts between the Gateway Relay Interface and the external equipment.

Configuration

Only the serial Gateway device requires configuration. The minimum configuration required to use with the Gateway Relay Interface is as follow:

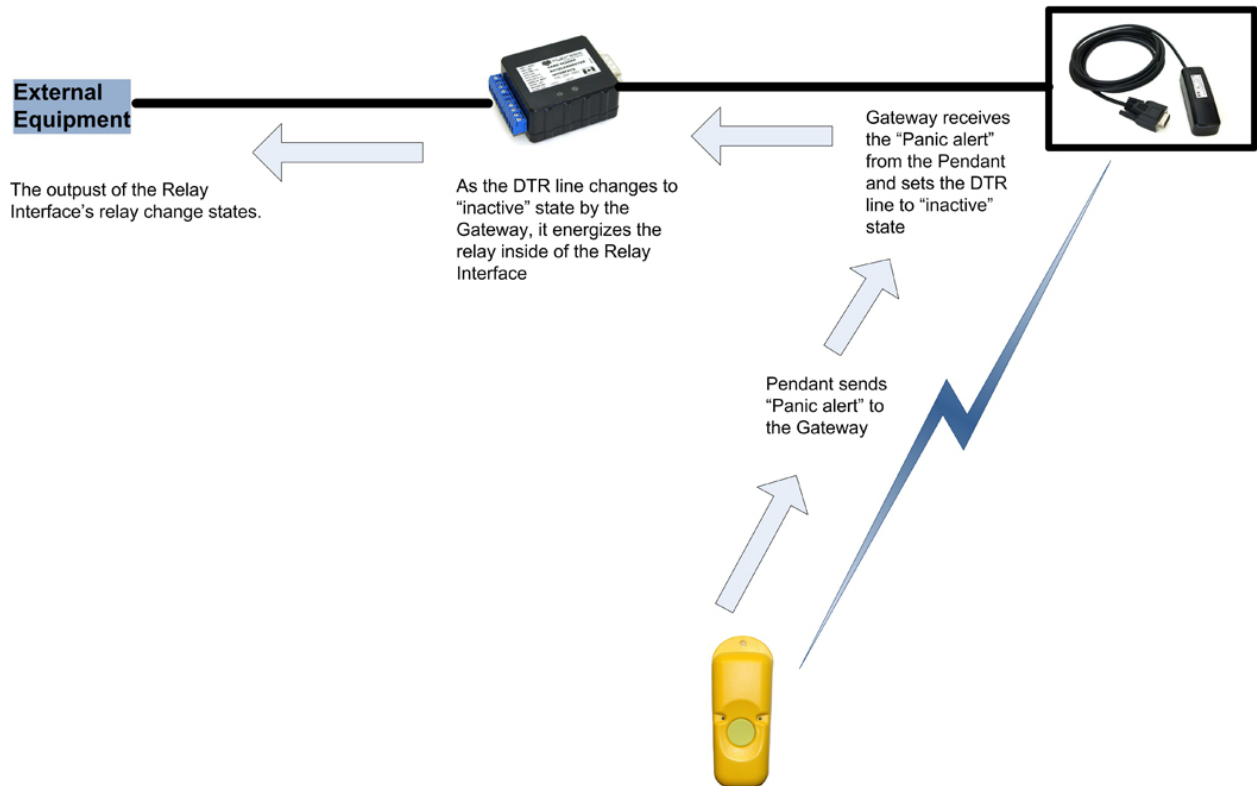
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AT&F1
AT^DTRPANIC=1
AT^ZBEEADDDEV=FFFFFFFFFFFFFFFF (or actual device ID(s) of the Pendant(s))
AT&W
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For information on how to configure the serial Gateway device, please refer to:
http://www.cypress.bc.ca/windshield_gateway.html

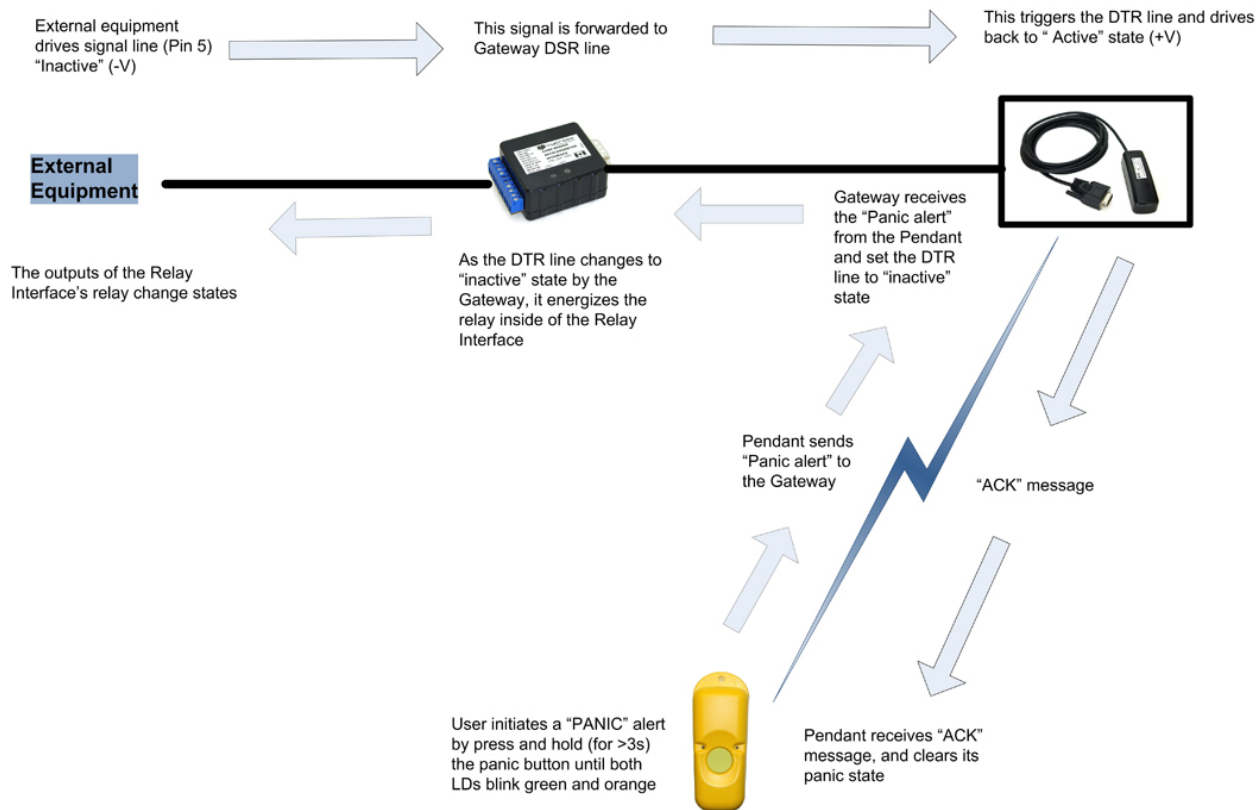
Operation

The operation of the Gateway Relay Interface is straightforward. When the user initiates a PANIC alert, the DTR line is changed to an inactive state by the Gateway; the Gateway energizes the relay inside of the Gateway Relay Interface and changes the relay output states. The process of PANIC alerts and acknowledgements is illustrated below.

PANIC Alert Process



Acknowledgement (ACK) Process



Timing Diagram

