



#### Head Office

Ringway Control & Automation  
ABN 47 087 315 179  
4 Lady Penrhyn Dr,  
Unanderra, NSW 2526  
[products@ringway.com.au](mailto:products@ringway.com.au)  
Ph 02 4255 4300 Fax 02 42718990

#### Mackay Office

Ringway Materials Handling  
Unit 10 Woodman Pde,  
Mackay, QLD 4740  
[products@ringway.com.au](mailto:products@ringway.com.au)  
Ph 07 49524001 Fax 07 49522216



## PRESTART ALARM

P/N's – ALSUP\_24, AL24X20, AL24X30

ALSUP\_48, AL48X20, AL48X30

### 24/48 VOLT PRE-START ALARM SYSTEM

#### DESCRIPTION:

The heart of this alarm system is the power supply / controller (**ALSUP\_24/48**). The controller is DIN-rail or foot mounted in a control cabinet and powers alarm enunciators via a two-wire supply bus. The system is totally down-line powered with no batteries or repeaters. There are several enunciator types, depending on the application and price point. The principle of operation is that there are two output states, which are **safe** (green) & **alarm** (red). The polarity of the two-wire determines the output state and is set by the controller according to an input command. In the Red or Alarm State the enunciators sound a two-tone piezo alarm while flashing a red light (if fitted). In the Green or **Safe** state the light is maintained solid green with no audio. Either output state can be maintained indefinitely. There are three voltage-free output contacts that are used (if required) to indicate the current output state and to confirm the operation of all connected units. Overlapping alarm performance is achieved with 100m centres between alarm units.

#### FEATURES:

- **Simple, robust and functional.**
- **Low cost alternative.**
- No hazardous field voltages
- Long distances achievable . fully **down line powered**.
- Ideal for overland conveyors . 48V version supports more alarms . greater distance
- Alarm **output duration** = zero to **indefinite**.
- Self calibrating operation **confirmation at source** or remotely.
- **Dual state** output allows **alarm / warning** as well as **healthy / safe** to be broadcast.
- **Two tone piezo alarm** with (AL24X30) or without (AL24X20) **LED light** indication
- Green state can be used for remote isolation confirmation
- Intrinsically Safe version available

## APPLICATIONS:

The system can be used anywhere that a single or dual state warning or permissive function is required. It is particularly suited to overland conveyors where there are no sources of power along the belt; greater distances are achievable with larger cross-section cable. Because the visibility of the alarm light is poor in direct sunlight the light tower is usually not fitted to exposed conveyors.

**1: Conveyor / Machine Pre-Start / operating Warning:** When used in conjunction with AL24X2O / AL24X3O alarm units, a two tone audible alarm is sounded at each alarm site, while ever the controller ~~red~~input is energized. With the 24V output model, up to 51 units can be connected at 100m intervals on 4mm<sup>2</sup> cable to provide ~~overlapping~~performance (as required by AS1755) over the entire length of a 5km conveyor. Greater distances and more alarms can be covered with the 48V version.

**2: Evacuation / Keep Clear Alarm:** A huge evacuation / keep clear area can be supervised by a single system. The entire area can be placed on alarm / evacuation footing from a central command. E.G. tunneling, confined work places or plant wide.

## BRIEF TECHNICAL SPECIFICATIONS:

<b>Power Supply:</b>	110V, 0.5A or 240V, 0.3A ac
<b>Alarm Output:</b>	24V dc, 1.2A
<b>Digital Inputs (24V):</b>	1= Calibrate; 2= Green 3= Red
<b>Digital Outputs (voltage free contacts):</b>	1= Calibrate Confirm; 2= Green Confirm; 3= Red Confirm
<b>Indication LEDs:</b>	<del>Ready</del> <del>Fault</del> <del>Red</del> <del>Green</del> & <del>Output</del>
<b>AL24X(2/3)O :</b>	8.5mA (24V)
<b>AL48X(2/3)O :</b>	9.5mA (48V)
<b>Operating Temperature Range:</b>	-20 +70 °C (field devices), 0 +60 °C (controller)

