

Head Office

Ringway Control & Automation ABN 47 087 315 179 4 Lady Penrhyn Dr, Unanderra, NSW 2526 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
Ph 07 49524001 Fax 07 49522216



PRESTART ALARM

P/N's - ALSUP_24, AL24X2O, AL24X3O ALSUP_48, AL48X2O, AL48X3O

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 £afeq (green) & £alarmq(red). The polarity of the two-wire determines the output £tateqand 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 £afeqstate 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.
- Lost 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 (AL24X3O) or without (AL24X2O) 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 ±edqinput is energized. With the 24V output model, up to 51 units can be connected at 100m intervals on 4mm² cable to provide ±verlappingqperformance (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:

Power Supply: 110V, 0.5A or 240V, 0.3A ac

Alarm Output: 24V dc, 1.2A

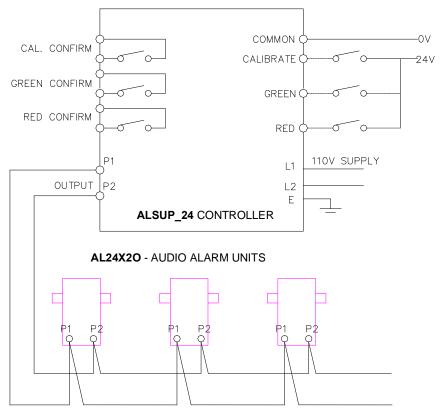
Digital Inputs (24V): 1= Calibrate; 2= Green 3= Red

Digital Outputs (voltage free contacts): 1= Calibrate Confirm; 2= Green Confirm; 3= Red Confirm

Indication LEDs: Readyq Faultq Redq Greenq& Dutputq

AL24X(2/3)O : 8.5mA (24V) **AL48X(2/3)O** : 9.5mA (48V)

Operating Temperature Range: -20 +70 °C (field devices), 0 +60 °C (controller)



2-WIRE ALARM SYSTEM 'DAISY CHAIN' PARALLEL CIRCUIT 1: ALARM SOUNDS WHEN OUTPUT IS ON & P1 IS POSITIVE