24 - 12 VOLT DC-DC REGULATOR WITH RELAY
QUICK GUIDE

1. Introduction

This configuration acts as a regulator that converts a 24VDC input to a 12VDC output which enables devices such as a POLOphone intercom system to receive power from a 24VDC gate motor. In addition, a relay is included for connecting a pillar light to gate motors that do not provide an onboard relay for this application.

2. Technical Specifications

Input voltage	24V - 30V DC
Regulator Voltage Output	12V DC
Regulator Current Output	300mA
Switching Relay Rating	3A @ 12/24V DC and 1A @ 220V AC
IP Rating of Housing	IP56
Regulator Board Dimensions	40mm x 57mm

3. Wiring Diagrams

3.1. Typical Regulator Circuit

Regulate the +/- 24V DC auxiliary supply provided by the DX SMART controller down to 12V DC for use on ancillary devices that strictly work off a 12V DC supply, e.g. POLOphone.

+24VDC In
-24VDC In
+12VDC Out (Max: 300mA)

RED
BLACK
RED

Or
Or

POLOphone intercom or other ancillary device that needs strictly 12V DC

SMART DX Controller

3rd Party 24V Input
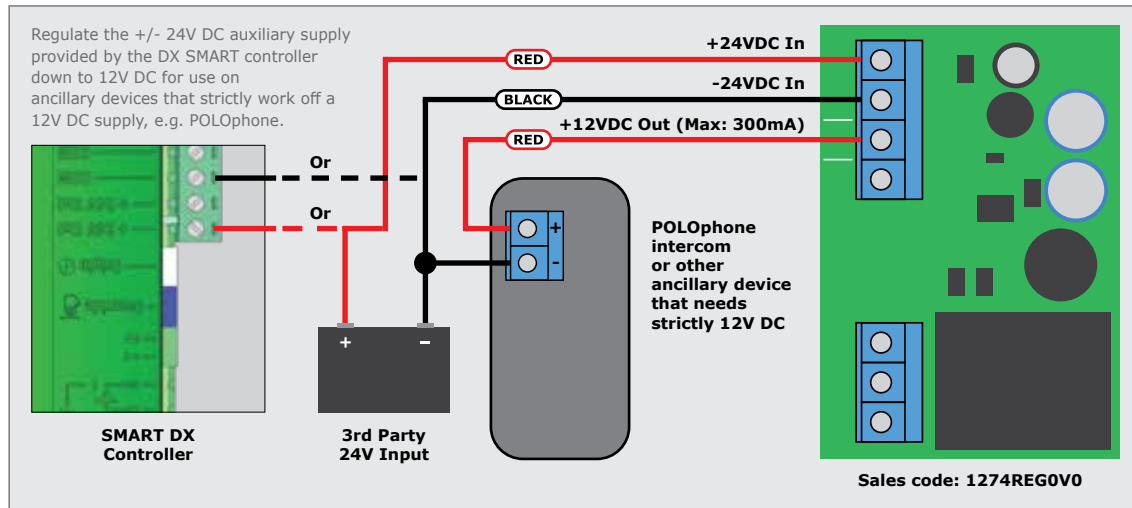
Sales code: 1274REG0V0

FIGURE 1

3.2. Typical Relay Circuit

Allow any of the channels provided on the DX SMART controller when set to act as an output, to switch an ancillary item with a load or voltage requirement outside of the capability of the channel.
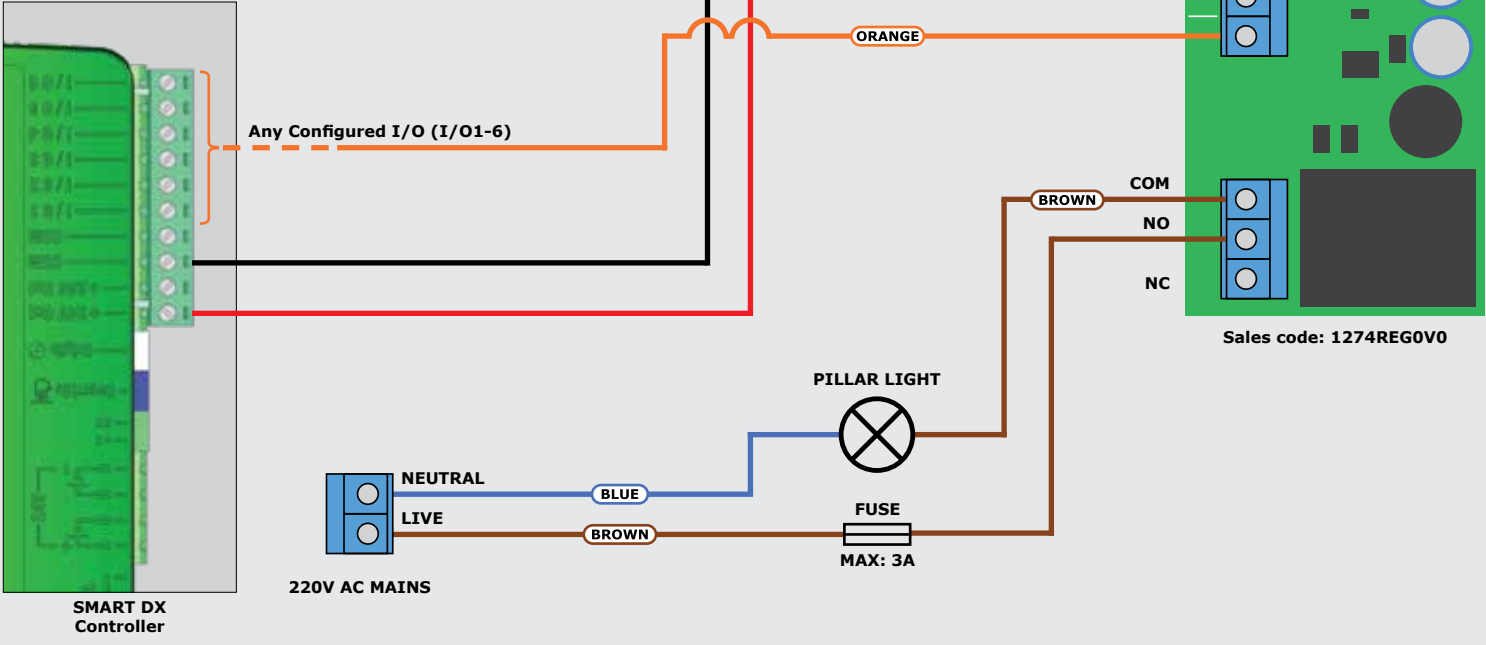

+24VDC In — RED
-24VDC In — BLACK
ORANGE

Any Configured I/O (I/O1-6)

COM — BROWN
NO
NC

Sales code: 1274REG0V0

PILLAR LIGHT

NEUTRAL — BLUE
LIVE — BROWN

FUSE
MAX: 3A

220V AC MAINS

SMART DX Controller

FIGURE 2