

# OPERATING INSTRUCTIONS - 24 Volt AC/DC Relay Module, 12 VDC Control



## **HOLATRON SYSTEMS, LLC**

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#### 1.0 HARDWARE DESCRIPTION.

The module contains 6 spring terminals and an indicator. The components associated with the latching function, shown in the photograph, are not included in the RELAY24 version. The two terminals marked "POWER IN" connect to your 24 volt supply. Power polarity is not critical (even AC power may be used), but output polarity will match power polarity, as defined by the red and black terminals. That is, when turned on, power red is connected to output red. Power black is always connected to output black, whether on or off. DO NOT EXCEED 24 VOLTS, as that will damage the indicators. The two terminals marked "24 VDC OUTPUT" connect to the 24 volt device you wish to actuate. The output indicator lights when 24 volts is present at the output terminals. The input indicator lights similarly for the input terminals. Any voltage up to a maximum of 24 volts. either AC or DC, may be switched. Note that the indicators will dim as the input voltage is reduced. Maximum current capacity of the relay is 5 amps. Operation with devices consuming more than 5 amps, or with shorted output terminals, will damage the relay and void the warranty. Please note that the output is not fused. So be very careful not to connect to a short circuit. Modules with internal automatic resetting fuses are available at a higher price.

#### 2.0 OPERATION.

The two terminals marked "12 VDC Control" connect to a spread-spectrum receiver's 12 VDC output terminals or to another 12 VDC control signal. These inputs may be swapped since they are not polarity-sensitive. Applying 12 VDC to the module's control input turns on the device connected to the module's output. The device will remain on as long as the control input is on.

An **input modification is required to enable the module to be used with our SafeFire-12 receiver** 18V outputs if those outputs will be on for durations longer than one second. It may be used without modification if the SafeFire-12 firing output will always be shorter than one second. Note that an 18V control input longer than one second may damage an unmodified relay module and void its warranty.

### 3.0 SPECIFICATIONS.

Parameter	Minimum	Typical	Maximum
Output Current			5 Amps
Supply Voltage		24 VDC	28 VDC
		or	or
		24 VAC rms	28 VAC rms
Control Voltage	10 VDC	12 VDC	14 VDC
Control Current (12 VDC		14 milliamp	
in)			
Control Input Impedance		850 ohm	
Leakage current from			
power input to control			
inputs			0 milliamps

If further information or service is required, contact:

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