

SVR P250 P25 Compliant

MULTI CHANNEL

2 WATT COVERAGE

NEW ESP PRIORITY STRUCTURE

WIDE OR NARROW BAND

EMERGENCY SIGNALING

P25 PHASE 1 COMPLIANT

AES/DES ENCRYPTION



- ▲ **P25 Phase 1 Compliant**
- ▲ 20 Channels
- ▲ New ESP™ Multi Vehicle Format
- ▲ AES / DES Encryption
- ▲ Programmable P25 or Analog Per Channel
- ▲ SVR-200 and SVR-250 Compatible
- ▲ Wide or Narrow Band Programmable Per Channel
- ▲ Emergency Signalling
- ▲ Factory Interface Cables for Most Popular Public Safety Radios

SVR P250 P25 Twenty-Channel Digital Vehicular Repeater

The SVR-P250 is the next generation vehicular repeater from Pyramid Communications that is fully compliant with the **APCO Project 25 Phase 1 Digital Common Air Interface (CAI)** protocol.

Advanced features include **secure communications** with P25 portable radios, **AES and DES encryption**, and **emergency signalling** from portable to dispatch. **PC programmable** for up to **20 channels**, with P25, wideband/narrowband, CTCSS/DCS, and emergency signalling on a per channel basis.

The SVR-P250 utilizes the new **ESP™ priority structure** that **resolves priority conflicts during repeater idle time** rather than at the critical start of a conversation. With ESP™, priority vehicles are assigned without user intervention to ensure **uninterrupted communications** when users exit their vehicles. ESP™ also ensures a quick recovery if two vehicles get in a priority mode at one scene.

The SVR-P250 is **both P25 and analog capable** and can interface to analog or P25 mobiles providing **flexible inter-operability between systems** that wouldn't normally be able to communicate. The SVR-P250 will **interface to analog, digital, conventional or trunking mobiles** and is capable of operating with SkyTerra (formally MSV) mobile satellite phones. In trunking mode, the SVR-P250 ensures proper acquisition of the trunking channel and uses the **Smart Trunking Access™** mechanism of alerting the portable users of trunking status information.

In analog mode, the SVR-P250 is **fully compatible with existing SVR-200 and SVR-250** vehicular repeaters to provide seamless integration while users upgrade their systems from analog to P25 digital.



www.

CALL 1-815-790-4494

Specifications SVR P250



TRANSMITTER

	VHF	UHF	764-870
Frequency Range	136-174 MHz	450-530 MHz	764-776 MHz + 850-870 MHz
RF power out	0.5 - 2W	0.5 - 2W	0.25 - 1W
Spurious emissions	-70dBc	-70dBc	-70dBc
Frequency stability -30°~+60°C	±1.5PPM	±1.5PPM	±1.5PPM
Modulation	10K0F1D, 10K0F1E, 10K0F7D,10K0F7E, 11K0F3E, 12K3F1D, 16K0F3E, 4K80F2D, 7K60F1D,8K10F1D, 8K10F1E, 8K10F7D, 8K10F7E, 8K40F2D	10K0F1D, 10K0F1E, 10K0F7D,10K0F7E, 11K0F3E, 12K3F1D, 16K0F3E, 4K80F2D, 7K60F1D,8K10F1D, 8K10F1E, 8K10F7D, 8K10F7E, 8K40F2D	10K0F1D, 10K0F1E, 10K0F7D,10K0F7E, 11K0F3E, 12K3F1D, 16K0F3E, 4K80F2D, 7K60F1D,8K10F1D, 8K10F1E, 8K10F7D, 8K10F7E, 8K40F2D
Hum and noise			
25/30kHz	-43dB	-43dB	-40dB
12.5kHz	-38dB	-38dB	-33dB
Audio response (300-3kHz)	Flat or -6dB/octave	Flat or -6dB/octave	Flat or -6dB/octave
Audio distortion	<3% @ 1kHz 60% deviation	<3% @ 1kHz 60% deviation	<3% @ 1kHz 60% deviation
Local mic sensitivity	300mV - 5VPP	300mV - 5VPP	300mV - 5VPP
FCC Type Acceptance	LRUSVR-P250V	LRUSVR-P250U	LRUSVR-P250M
Industry Canada Approval	2390A-SVRP250V	2390A-SVRP250U	2390A-SVRP250M

RECEIVER

	VHF	UHF	764-870
Frequency Range	136-174 MHz	450-530 MHz	764-776 MHz + 850-870 MHz
Analog sensitivity	0.28uV	0.28uV	0.28uV
Digital sensitivity (5% BER)	0.20uV	0.20uV	0.20uV
Squelch sensitivity	.2µV to 2µV adjustable	.2µV to 2µV adjustable	.2µV to 2µV adjustable
Selectivity			
25/30kHz channel	75dB	75dB	75dB
12.5kHz channel	65dB	65dB	65dB
Spurious/image rejection	75dB	75dB	75dB
IMD response	75dB	75dB	75dB
Frequency stability	±1.5PPM	±1.5PPM	±1.5PPM
Audio response (300-3kHz)	Flat or +6dB/octave	Flat or +6dB/octave	Flat or +6dB/octave
Audio output	0-5VPP AC coupled 600/2.2K	0-5VPP AC coupled 600/2.2K	0-5VPP AC coupled 600/2.2K
Local Rx audio	400 mW 8 Ohms@ <5% distortion	400 mW 8 Ohms@ <5% distortion	400 mW 8 Ohms@ <5% distortion



Power Requirements

DC Supply	13.6VDC negative ground ± 25%
Standby	170mA
Receive	250mA @ 400mW Rx Audio
Transmit	<2A @ rated output

Physical Dimensions	5.75"W x 8"L x 2.25"H
Weight	38 ounces
Case	One piece extruded aluminium

Mil-Std-810D/E Ratings	
501.2	Procedure II High Temp +60°C
502.3	Procedure II Low Temp -30°C
507.2	Procedure II Humidity
510.2	Procedure II Blowing Dust
514.3	Procedure I Category 8 Vibration, Ground Vehicle
516.3	Procedure I Shock

