

Icom America Systems

6.25 DVR



6.25 FDMA Digital Voice Repeater

Repeats FDMA digital voice signals at 6.25kHz

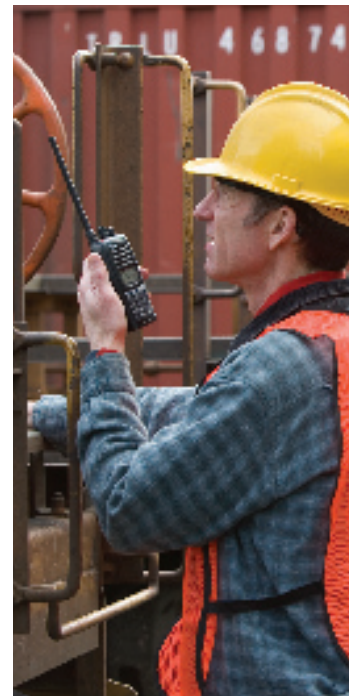
Extend the range of your digital portables and mobiles. The 6.25 DVR repeats an incoming FDMA signal from a portable or mobile unit. A typical application would include a 6.25 DVR centrally located in the desired coverage area, with an antenna mounted as high as possible; and within the license ERP requirements. Users can easily experience two to three times the coverage versus simplex operation.

Repeats world-class analog signals at 12.5 or 25kHz

Combining legacy equipment with your new digital equipment? The 6.25 DVR can handle it. With 512 channel capacity and each channel individually PC programmable, this is a repeater your company or agency can grow with!

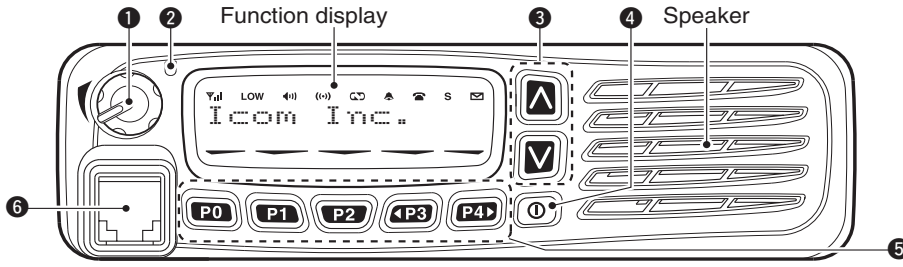
Features

- Built-in power supply: 13.8 VDC in or 110 VAC in or 220 VAC in
- Built-in battery back up and battery charging capabilities
- Built-in heavy duty A/C EMI filtering
- Built-in duplexer (optional)
- Built-in RF pre-selector (optional)
- 3 RU tall, built-in rack handles
- 19" Standard rack or cabinet mounting
- Built-in, automatic, heavy duty cooling fan (CPU controlled)
- Powder-coated steel chassis
- Built-in repeater controller
- Utilizes N style bulkhead connectors
- Built-in grounding stud
- Designed for max air cross-flow: 120 CFM fans for excellent ventilation
- Each unit is thoroughly tuned-tested and staged prior to shipment
- DB-25 rear connector for interfacing external equipment

**DIGITAL**

A large, continuously-running fan on the rear panel keeps the 6.25 DVR running cool. All connections are clear and simple, and well-marked.

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1 AF VOLUME CONTROL KNOB

Rotate the knob to adjust the audio output level.
 • Minimum audio level is pre-programmed.

2 LED INDICATOR

• Lights red while transmitting a signal.
 • Lights green while receiving a signal.

3 UP/DOWN KEYS [CH Up] [CH Down]

Push to select an operating channel, etc.
 * The desired function can be assigned by your dealer.

4 POWER SWITCH [POWER]

Push to turn the power ON and OFF.
 • Automatic scan start, Password prompt and Set mode access are available at power ON.

5 DEALER-PROGRAMMABLE KEYS

Desired functions can be programmed independently by your dealer.

6 MICROPHONE CONNECTOR

Connection for microphone.

SPECIFICATIONS

GENERAL

Frequency range :	F5061	136–174 MHz
	F6061	400–470, 450–512 MHz
Types of emissions :		
Wide	16KOF3E	25 kHz
Narrow	11KOF3E	12.5 kHz
	8K10F1E/D	12.5 kHz
	4K00F1E/D	6.25 kHz
Number of channels :	Max 512 ch. (128 zones)	
Antenna connector :	"N" female (50Ω)	
Requirements :	105-130 VAC 50/60 Hz 5A Max	
	185-250 VAC 50/60 Hz	
Max. external voltage :	13.8 VDC on battery input terminals	
Operating temp. range :	-10°C to +45°C (14°F to 113°F)	
Intermittent duty cycle :	TIA 603	
Dimensions (Projections not included) :		
	480 (W) x 133 (H) x 364 (D) mm;	
	18.90 (W) x 524 (H) x 14.33 (D) in.	
Weight :	8.6 kg; 18 lb	

TRANSMITTER

RF output power :	25W
Modulation system :	Variable reactance freq. modulation
Max. frequency deviation :	±2.5 kHz [Narrow]
	±5.0 kHz [Wide]
Frequency error :	±1.0 ppm
Spurious emission :	75 dB typical
Adjacent channel power :	60 dB [Narrow]
	70 dB [Wide]
Audio harmonic distortion :	3% typical at 1 kHz, 40% deviation
FM hum and noise (typ.) :	40 dB [Narrow]
	45 dB [Wide]
Limiting character of 70-100% of max deviation modulation	
Microphone connector :	8-pin modular (600Ω)

This repeater has been specified to operate at 25 watts. Operation at higher TX power output may cause damage and will void any applicable warranties.

All specifications are subject to change without notice. Optional duplexer and preselector specifications not listed.

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RECEIVER

Receive system :	Double-conversion superheterodyne
Intermediate frequency :	1st: 46.35 MHz, 2nd: 450 kHz
Sensitivity :	0.25 μV at 12 dB SINAD
Squelch sensitivity :	0.25 μV TYP
Adjacent channel :	75 dB [Narrow] Selectivity TYP
	85 dB [Wide] TYP
Spurious response :	90 dB TYP
Intermodulation :	77 dB TYP
Hum and noise :	45 dB [Narrow] TYP
	50 dB [Wide] TYP
Audio output power :	4W typical at 10% distortion with a 4Ω load
External SP connector:	2-conductor 3.5 (d) mm (1/8")/4Ω

OPTIONS



Built-in duplexer (left)
 Built-in RF pre-selector (right).

HAND MICROPHONES



HM-152 Single handset microphone.
 HM-152T 21.5" transmitter kit.
 HM-148 Heavy duty handset microphone. Stereo accepted.

DESKTOP MICROPHONE



Icom America Systems

Systems for People Who Make Smart Choices

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