



MV2000TBHK-A/MV2025TBHE-A
Backpack Audio/Video Transmitter
(Two-way Voice Intercommunication)



MV2025RJ7-A
Rack Mountable Receiver
(Two-way Voice Intercommunication)

Introduction:

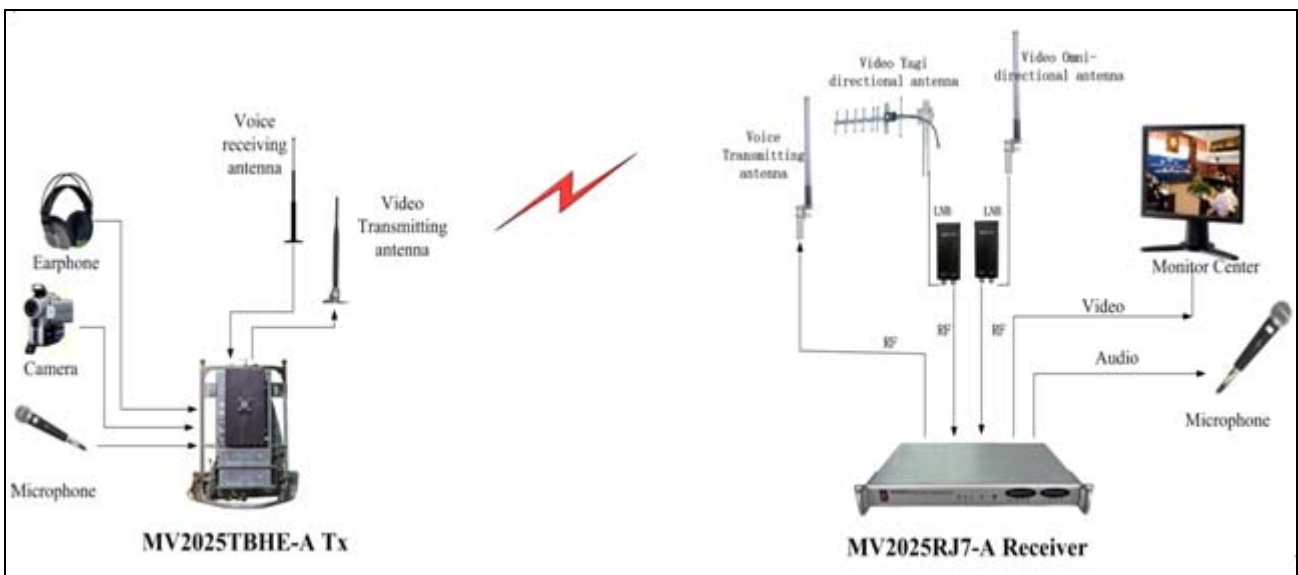
The product is developed with COFDM technology and designed specially for the transmission of audio and video data. The COFDM modulation and MPEG-2 video compression guarantee the stability and quality of the transmission. The AES 128 bit encryption and ALLTECH Basic Scrambling ensure the transmission security. In addition, the feature of voice intercommunication strengthens the function and utility of the system. By voice intercommunication, the first responder can get dictation from the commanding center. This product is the ideal solution for NLOS (non line-of-sight) transmission and widely applied in many fields, such as: Police Forces, First Responders, Security Services, Fire Services, Port Security, Homeland Security, Traffic Management, Police Technical Support Units, Special Forces, Military Command and Control Posts, Airport, Border Control, Major Incident Support.

Main Features:

- Two way voice intercommunication
- Inset high-performance power amplifier
- Stable transmission with omni-directional antenna
- Great security by encryption of AES 128 bit/ ALLTECH Basic Scrambling
- Mobile and NLOS(Non line-of-sight) transmission
- Aluminium casing with built-in cooling plates, waterproof and shockproof
- COFDM modulation, Stable transmission, MPEG-2 video compression, DVD video quality
- In NLOS (non line-of-sight) environment, the transmission range is 0.5~2 km (depends on the height of antennas)

Product Application:

The product is new equipment in remote surveillance. The outstanding feature is voice intercommunication that strengthens the system with greater stability and practicability. The first responder can carry the equipment on the back to enter accident ground and then the transmitter send the camera's digital, compressed signals to the commanding vehicle. Especially, through the voice intercommunication, the first responder can get instructions from the commanding center.



Transmitter Specification:

Frequency	325MHz-399MHz,460-500MHz(customized),
	560MHz-760MHz,760MHz-860MHz(customized) ,
	1.0-1.4GHz(customized) ,2.3-2.5GHz(customized) ,
	Frequency is adjustable continuously
Bandwidth	MV2000TBHK-A: 6/7/8MHz , /MV2025TBHE-A : 1.25/ 2.5 MHz, 6/7/8MHz (optional)
Power Output	≥32dBm
CNR	≥-30dB @ 32.5dBm power output
Modulation	COFDM
Constellation	QPSK, 16QAM, 64QAM
FEC	1/2, 2/3, 3/4, 5/6, 7/8
Carrier	2K



Guard Interval	1/4, 1/8, 1/16, 1/32
Video Amplitude	1~1.2Vp-p@75Ω
Video Input	PAL/NTSC
Magnitude-frequency	-0.5~1.5dB (0~4.8MHz); -4.0~1.5dB (5.5MHz)
Audio Channel	Stereo/ left and right
RS232 Control Interface	Standard RS232 level, 9600, 8, N, 1
RS232 Data Interface	Standard RS232 level, supporting 1200~115200
Audio Rx Sensitivity	≤-110dBm
Audio Modulation	GFSK
Audio Decoding	adjustable
Frequency Step	150KHz
Audio Output	2.1Vp
DC Input	DC12V~DC16V
Working Current	≤3A@DC12.5V
Battery	14.8V/8.2AH
Casing Protection	IP66 (dustproof, waterproof)
Encryption	AES 128 bit / ALLTECH Basic scrambling
	RS232 serial port for configuration
Dimension	140mm*238mm*90mm
Weight	2.7 Kg

Receiver Specification:

Working Voltage	AC220V±20V
Working Current	≤1.5A@DC12.5V (if the voice module works)
	≤7A@ DC12.5V (When the voice module working)
Working frequency	170MHz~450MHz 500MHz~860MHz
Bandwidth	1.25/2.5MHz or 6/7/8MHz
Receiving Sensitivity	≤-103dBm @ 1.25/2.5MHz,
	≤-94dBm @ 6/7/8MHz
Modulation	OFDM
Constellation	QPSK/16QAM @ 1.25/2.5MHz,
	QPSK/16QAM/64QAM @ 6/7/8MHz
FEC	1/3, 2/3 @ 1.25/2.5MHz,
	1/2, 2/3, 3/4, 5/6, 7/8 @ 6/7/8MHz
Carrier	2K



Two-way Voice Transmission System

Guard Interval	1/8, 1/16 @ 1.25/2.5MHz, 1/4, 1/8, 1/16, 1/32 @ 6/7/8MHz	
Video Type	PAL/NTSC	
Magnitude-frequency	0~4.8MHz	-0.5~1.5 dB
	5.5MHz	-4.0~1.5 dB
Rx Feeding Voltage	DC10V~DC12V	
Rx Feeding Current (MAX)	800mA/line	
Audio Input	Right/ Left, Stereo	
RS232Control Interface	Standard RS232 level, 9600, 8, N, 1	
RS232 Data Interface	Standard RS232 level, support 1200~115200	
Voice working Frequency Range	Customized	
Voice Tx Power output	≥40dBm	
Voice Modulation	GFSK	
Second Harmonic	<-43dB	
Frequency Step	150KHz	
Spurious Emission	≤60dB	
Voice sample	8KHz 16bit	
Voice Transmitting Delay	1~60 S	
Voice input Strength (MAX)	320mVpp	
Dimension (mm)	1U	
Weight (Kg)	3.6	