

EXICOM

Exicom EX4400 : A 4 channel tactical video communication system has wide range of applications in military, paramilitary, law-enforcement, security and live media broadcasting. EX4400 can be configured in 4 separate transmitters at various locations for ground operations either as man-mobile or vehicle-mobile. It can also be used for air to ground or sea to ground communications in various applications. EX4400 uses COFDM modulation to enable reliable operation in difficult terrain & challenging environment. EX4400 is designed to withstand operation in harsh conditions like desert heat to Arctic cold, providing secure and highly dependable service over short or long radio paths.

COMPETITIVE ADVANTAGE

- › Exicom's long history of reliable products
- › Ease of operation
- › A/V transmission while moving at high speed
- › Designed for wide range & performance

APPLICATIONS

- › Mobile video transmission
- › Video broadcast
- › Covert monitoring and surveillance
- › Law-enforcement, military & border security



EX4400

TACTICAL VIDEO COMMUNICATION SYSTEM (TVCS)

HIGH PERFORMANCE

- › High quality digital video processing
- › High reliability & performance on range of environment
- › COFDM for data reliability & mobile operations
- › Range of UHF and microwave frequency bands
- › 128bit AES encryption for security
- › Diversity receiver for reliable & quality reception

LOW COST OF OWNERSHIP

- › Durable/ High quality harness & casing
- › Fast deployment
- › Same transmitter and receiver units for different configurations



EX4400 Tactical Video Communication System

Features

- Four channel A/V simultaneous receiver
- In-built 4-CH A/V synchronous hard disk video recording
- MPEG-2/MP@ML/4:2:0 DVD decoding standard
- AES128 bit encryption
- Panel configurable Channel parameters
- Bi-directional audio support* (optional)
- High definition image and Hi-Fi stereo output
- -96 dBm Sensitive receiver with diversity receiving - 106dBm@1.25MHz
- Adjustable bandwidth to provide broadcast level quality
- Simultaneous Video Broadcast over IP
- Adjustable Frequency in 1MHz step
- Audio and video simultaneous for PAL and NTSC
- Transmitter in waterproof and dust-proof case
- NLOS range for up to 1.5 Km
- Battery Backup : Transmitter 2 hrs/batt. & Down link 3hrs/batt.



Tactical Transmitter



Tactical 4 channel Down link

Tactical Video Communication System

System Parameters

Frequency bands	300–2600 MHz (Other bands can be customized)
RF channel bandwidth	1.25/2.5 MHz or 6/7/8 MHz
Modulation type	COFDM / CDMA
Constellation	QPSK / 16QAM @ 1.25/2.5 MHz QPSK / 16QAM / 64 QAM @6/7/8 MHz
GUI	1/4, 1/8, 1/16, 1/32 optional
Video Encode/Decode	MPEG-2 / MPEG-4
Carrier Mode	2k/8K
FEC	1/3, 2/3 @ 1.25 / 2.5 MHz 1/2, 2/3, 3/4, 5/6, 7/8 @ 6/7/8 MHz
C/N	≥28 dB @32 dBm
Encryption	AES-128 bit
Video Input	1~1.2 Vp-p@75
Video Resolution	720 x 576 (PAL) 720x480 (NTSC)
Video White Bar	650 ~ 720mV
Video Sync Amplitude	260 ~ 275 mV
Video Input	PAL/NTSC
Audio Input	Left / Right Channel, Stereo
RS-232 Control	Standard RS-232, Level 9600, 8 N 1
Delay	50mSec

Video Transmitter

Maximum transmit power 21 to 36 dBm, adjustable in 1dB steps

Audio

Frequency Range	475~479.950 MHz
Receiving Sensitivity	≤ -110 dBm
Transmission Module	GFSK
Step	50 Khz

Tactical Down Link

Recording

Viewing	Play, Pause & Forward
Video Format	PAL/NTSC
Video Encoding	H.264
Resolution	1920 x 1080
Video Resolution	D1, CIF, QCIF
Video Frame rate	Adjustable, standard PAL 25fps, NTSC 30fps
Storage Device	500GB Built-in, 1TB SATA HDD *(optional)

Video Display

Monitor Size	10.4 inch
Aspect Ratio	4:3
LCD	TFT
Resolution	640x480
Display colors	16.2 M

Interface

Video	75Ohm
Audio	600Ohm single track
Receiver RF	50Ohm N Type Socket
Transmitter RF	50Ohm UHF Socket
Audio Input	Microphone 6.35mm, Mic 3.5mm
USB	Mountable USB Flash Disk
Network	10/100Mbps RJ-45 type Connector
DC Power	Anton Mount
AC Power	3-core power, IEC Socket

Power, Mechanical and Environmental

Working Temperature

Tactical Transmitter	-35°C to 65°C
Down Link	-30°C to 60°C

Storage Temperature

Tactical Transmitter	-40°C to 70°C
Down Link	-40°C to 80°C

Power Supply Voltage

Tactical Transmitter	12 – 16 VDC
Down Link	10 – 12 VDC / 230VAC ±5%

Batteries

Battery Transmitter	14.2V/8.2AH
Battery Down Link	14.2V/10AH

Current

Tactical Transmitter	<2.8 A @ 12.5 VDC
Down Link	<300mA/<3.5 A (Audio TX) @ 12.5 VDC

Transmitter Protection	Dust-proof and rainproof
Transmitter Weight	2.5 Kg [†] (Without Battery & Harness)