

## Fax and Voice Encryption Elite Model 2000XL

### Product Description

Convert your analog cell phone, or your ordinary telephone and fax machine into a highly sophisticated encryption device.

- Sophisticated and easy to use
- Exceptional voice reconstruction
- Receiver authentication for fax operation
- Global secure mode for international compatibility
- Unlimited secure conference calling

Cellular voice and fax transmissions are totally scrambled and undecipherable over the air waves. Encryption codes are never transmitted so they cannot be intercepted.

When using the encryption units over regular telephone systems, conversations and fax transmissions are encrypted at the source and only deciphered at the end users telephone handset or fax machine. Intercepted calls will only result in the listener hearing highly encrypted scrambled voices.



### Technical Details

#### VOICE OPERATING

CLEAR MODE - Voices transmitted full duplex unencrypted.  
SECURE MODE - Voices transmitted full duplex encrypted.  
POWER FAIL MODE - Will operate fully by battery backup.  
SPEECH DELAY - 250 milliseconds when encrypted.  
ECHO CANCELLER - Automatic near/far echo cancellation.  
SECURE CONFERENCE MODE - Symmetrical encryption, decryption conference calling capability.

#### FAX OPERATING

CLEAR MODE - Fax message transmitted half duplex unencrypted.  
SECURE MODE - Fax transmitted half duplex encrypted mode.

#### CRYPTOGRAPHY

ENCRYPTION ALGORITHM - Proprietary CES safe, non-linear phase signal encryption.  
ENCRYPTION MODE - Fixed length convolver 10E10,000 combinations  
COMPUTATION CAPACITY - 40 million operations per second.  
KEY MANAGEMENT - Fully automatic proprietary.  
KEY DIVERSITY - Unlimited 128 bit message keys.  
MESSAGE KEYS - Not necessary.  
GROUP MEMBERSHIP - Global, corporate and personal.

#### INTERFACES

Connection to PSTN, PABX, via RJ11 connection.  
Connection to phone, fax, via RJ11 connection.

#### POWER

POWER SUPPLY - 9 volt wall adapter  
BATTERY BACKUP - 6 x AA battery internal

#### PHYSICAL

SIZE - 117mm W x 37mm H x 219mm D  
WEIGHT - 423 grams, 14.8 ounces  
For more information and pricing, contact RigSat Communications Inc.



## Telephone Voice Encryption Elite Model 2000XT

### Product Description

Telephone security is a practical and affordable option for most systems. Connect an Elite 2000XT secure telephone and you can communicate sensitive information in confidence without complicated set up procedures.

Recent developments in electronic design make it possible to integrate highly sophisticated levels of security in a telephone at a price that is a fraction of the value of one lost business deal.

- Simple to use, very user friendly
- Can replace existing desk set telephone
- There is no need for synchronisation and consequent reconnection
- Encrypted data is unavailable in the form required for conventional code breaking
- Acquiring the keys through wire tapping is impossible, since they are never transmitted.
- Users can switch between encrypted and non-encrypted communication or change the key anytime
- Voice reconstruction is excellent



### Technical Details

#### OPERATING

CLEAR MODE - User's voice transmitted full duplex unencrypted.

SECURE MODE - User's voice transmitted full duplex encrypted.

POWER FAIL MODE - Phone will still operate as in clear mode but without the need for external power source.

SPEECH DELAY - 250 milliseconds when encrypted.

DIAGNOSTICS - Extensive self-tests performed on power up.

ECHO CANCELLER - Automatic near/far echo cancellation.

MUTE - Button on handset.

COMPUTATION CAPACITY - 40 million operations per second.

KEY MANAGEMENT - Fully automatic proprietary.

KEY DIVERSITY - Unlimited 128 bit keys.

SYNCHRONIZATION - Not necessary.

#### CRYPTOGRAPHY

ENCRYPTION ALGORITHM - Propriety (CES Safe) non-linear phase signal encryption.

ENCRYPTION MODE - Fixed length convolver, 10E10,000 combinations.

#### INTERFACES

TELEPHONE LINE - RJ-11, RJ-45

LOOP CURRENT SENSITIVITY - Minimum 15mA

RINGING VOLTAGE - Minimum 25V RMS, 16Hz to 25Hz

#### ELECTRICAL

SIGNAL BANDWIDTH - 300Hz to 3,000Hz

LINE IMPEDANCE - 600 Ohm and BT versions available

HANDSET - 2 programmable receive volume levels

SPEAKER - 8 programmable receive volume levels

RINGER - 3 pitches and 8 volume levels (programmable)

#### POWER

POWER SUPPLY - External power pack, 12V unregulated, AC or DC

#### PHYSICAL

HOUSING - ABS, JSR15 or similar

SIZE (HANDSET CRADLED) - 160mm W x 76mm H x 222mm D (6.3"W x 3"H x 8.75"D)

WEIGHT - 590 grams (1.3 lbs.)

#### ENVIRONMENTAL

OPERATING TEMPERATURE - 0c to plus 45c

STORAGE TEMPERATURE - Minus 20c to plus 70c

HUMIDITY - 5% to 95% non-condensing

