SEU-8201   VOICE CIPHERING FOR RADIOTELEPHONES

Brief description

Features:

- No change of existing radio infrastructures necessary

- Excellent voice quality

- Robust synchronisation

- Low end-to-end delay

- Very high security

- Compatible with complex radio networks

- Custom tailored modules for retrofits

- Availability also for tactical PRC radios

ALBRECHT offers its new Voice Ciphering Module SEU-8201 for highly secure voice communication over analog radio channels. Based on complex digital signal processing techniques in conjunction with modern encryption techniques, the SEU-8201 provides a speech encryption which combines excellent speaker recognition with highest security.

The SEU-8201 is a high-security voice ciphering system which is mainly used for authorities, governmental agencies, police and military or para-military. The ciphering algorithm is a new approach, providing the highest security needed for such user groups.

From a practical standpont, it is not susceptible to attack by eaves-droppers, etc. or by using current crypto-analytical methods.

The SEU-8201 Voice Ciphering System can be implemented into *already existing* radio networks for end-to-end ciphering without the necessity of changing radio communication infrastructures.

The SEU-8201 system guarantees a secure and economic solution for high security applications without compromise.

Ciphering and deciphering take place with essentially no delay and is not noticeable by the user. The length of the communication key in conjunction with a highly sophisticated algorithm makes it suitable for high security tactical radio networks. However, user defined algorithms can be integrated.

The high security ciphering technique developed for the SEU-8201 is not affected by any political considerations. This leads to a very high level of security, an absolute must for military theatre deployment, for special police task force units or other governmental security organs.

The SEU-8201 uses a high code rate that equals the available audio channel bandwith, making attacks of an communication channel impossible with todays analysis methods. The ciphered signal is an unstructured noise signal, not having any identifiable structure. There is no residual voice in the ciphered signal. At no time are any elements of the plain voice transmitted.

Protection against spoofing is guaranteed by special processing. Analog and digital selcall can be implemented, ciphered data transmission using FEC techniques widens the scope of applications. An adaptive equalizer is set to the actual parameters of the transmission channel in use - a prerequisite for constantly high signal quality and robust synchronisation.

The module can be retrofitted into most current radio sets. Modules are available for most of the popular types of radios. The SEU-8201 can be supplied as PCBs or add-on units. A ruggedized military version for use with AN/PRC can be provided.