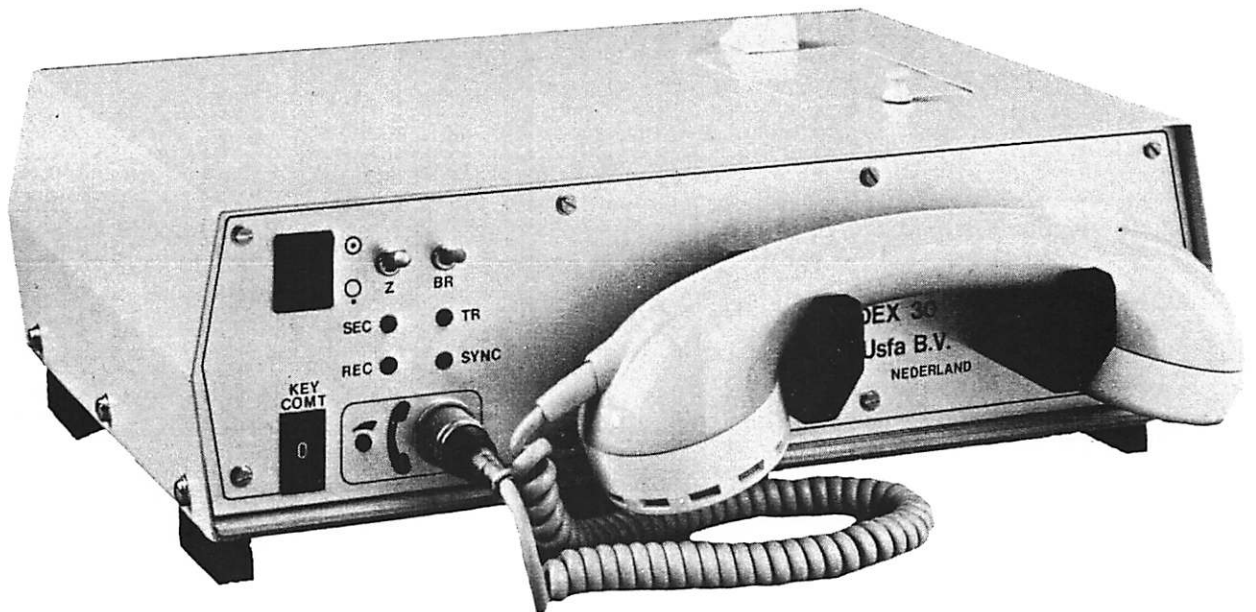


**Philips Usfa B.V.**

EINDHOVEN · THE NETHERLANDS

# SPENDEX 30

NARROW-BAND SECURE VOICE EQUIPMENT TYPE UA 8237



PROVISIONAL



# PHILIPS

## DESIGN

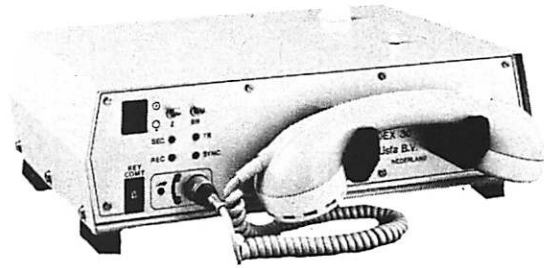
Spendex 30 is a low cost, narrow-band, high-grade speech security system of a compact desk-top design. The Spendex 30 in conjunction with a modem of 4800 bits/second, operates over the Post Office public switched telephone network or leased telephone lines in half-duplex mode.



*APPLICATION OF  
A SPENDEX 30*

## APPLICATION

Spendex 30 is an extension to your normal Post Office telephone set, which remains available to you for normal telephone calls.



*SPENDEX 30*

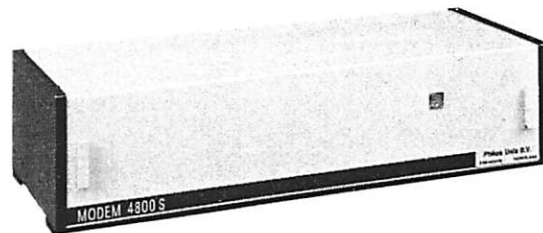
It allows you to have a secure communication channel with others who also own a Spendex 30, by switching over to the secure mode, after establishing contact in clear language via the normal Post Office telephone set. The ease of operation of Spendex 30 makes the equipment particularly suitable for staff personnel in both the military and public sectors. By simply lifting the handset the user can ensure that no one has access to the communicated information.

The user can select any one of the seven crypto keys stored in the equipment.

This possibility not only allows him to have special crypto keys for different user groups but also to provide back-up crypto keys.

All stored crypto keys can be individually updated daily for up to 47 days by an automatic procedure.

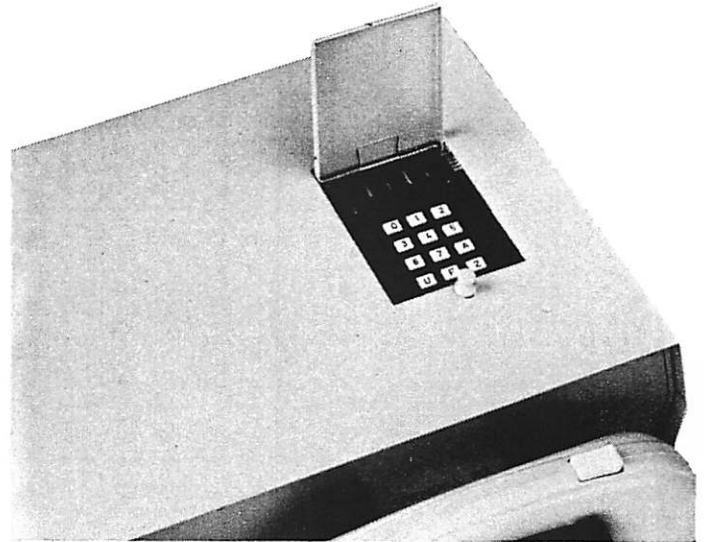
The crypto keys can be retained in the storage compartments for up to 48 hours during idle periods or for bridging power supply failures.



*MODEM*

## INSTALLATION

The Spendex 30 equipment is easy to install. The modem can be placed at any convenient point, regardless of the location of the Spendex 30 device (max. distance 10 m). One possibility is to hook up the modem to the Post Office line terminal box/socket and to place it close to this terminal box. The modem does not in fact require any manual control or attention after it has been connected to the mains and switched on. The Spendex 30 device can be placed next to the Post Office telephone set and be interconnected by a cable to the modem unit and to the mains with ground connection.



KEY-SETTING  
ARRANGEMENT

## OPERATIONAL DATA

- Simple operation, parallel to the Post Office telephone set.
- Does not limit the use of the normal Post Office telephone set.
- No installation costs.
- Good intelligibility ( > 95% sentence intelligibility) and voice recognition.

## CRYPTOGRAPHIC DATA

- High grade (all classifications) digital encryption (no scrambling).
- $10^{30}$  different key-setting possibilities.
- Update possibility (max. 47 times).
- A total of 7 key compartments.



SPENDEX 30 AND  
POST OFFICE TELEPHONE SET

## TRANSMISSION DATA

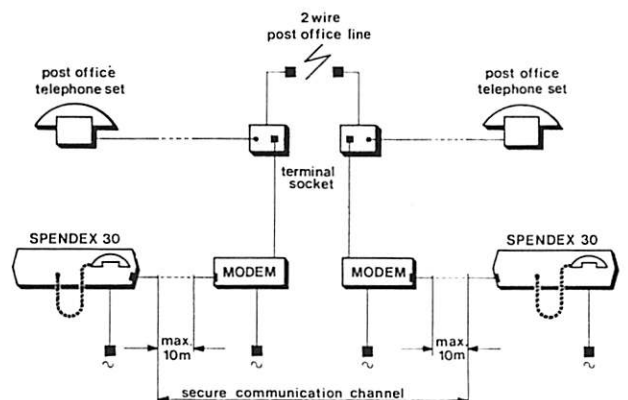
- Entirely automatic and instantaneous key-starting operation.
- 2-wire Post Office line connection (switched telephone network, voice grade line).

## PHYSICAL DATA

- Dimensions of modem unit h x w x d: 135 x 545 x 225 mm, weight 12 kg.
- Dimensions of Spendex 30 device h x w x d: 115 x 350 x 230 mm, weight 7 kg.
- Operating temperature: 0°C to +55°C.
- Storage temperature : -25°C to +70°C.

## ELECTRICAL DATA

- Power consumption: approx. 60 VA.
- Mains voltage : 220 Vac  $\pm$  10%, 47 - 63 Hz.



BLOCK DIAGRAM OF A  
SPENDEX 30 SYSTEM

## COMPANY PROFILE

*Philips Usfa B.V. have been producing special electronic and electro-optical military equipment for more than 30 years.*

*Once reason for the company's success over this period has been due to its direct access to the extensive experience, industrial know-how and high-level technology of the entire Philips Group of Companies. In particular, use has been made of the facilities offered by the Philips Research Laboratories.*

*Being at the forefront of technology has led recently to such developments as advanced thermal imaging devices and special high energy, long storage batteries.*

*A wide range of activities and facilities together with experience and craftsmanship provide the ideal environment for modern, project orientated development, manufacture, repair and maintenance. Current projects include contribution to large military programmes as a fully qualified subcontractor.*

*Philips Usfa B.V. meets the NATO quality control system requirements for industry AQAP-1, as laid down in STANAG-4108, which is generally recognised as being one of today's most stringent industrial quality assurance programmes for military equipment.*

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*Descr. nr. 13949E0280*

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