



# PHILIPS

## **Philips Consumer Communications**

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### **I. Security Code Algorithm for Cordless Telephone AT&T model 9301**

The 9301 cordless telephone uses a 2 bytes (16 bits) for the security code. This represent 65,536 different possible combinations chosen in a random mode.

When a RF link is established, the security code accompanies every transmission of a message from the base to the handset and from the handset to the base. This security code is stored in a non-volatile memory and applies for both handset and base.

Neither the handset nor the base will respond or act upon a received message unless the received security code matches the stored security code; except during the registration process which is described next:

#### Registration Process

When the handset is placed in the base cradle a RF link is established and a message will be sent by the handset to the base. If the security code received by the base matches the stored value, an acknowledgment is sent to the handset (with the matching security code). If the security code does not match, the base selects a new security code at random (65,536 possible values), which is sent to the handset with the acknowledgment. If this message exchange completes in approximately eight seconds, then the handset changes its stored security code to that just received from the base and a happy tone will be heard from the handset.