



### 3.6 Decoding your first message

Now that we've established the correct operation of your Enigma-E, it's time to decode our first message. For this we use a real message with a simplified setup procedure, which is reprinted here with kind permission from Dr. David Hamer.

**IMPORTANT NOTICE**

When typing the message, you need to PRESS and HOLD DOWN a key, in order to see the enciphered letter. Try this a few times to get familiar with it. Here is an example. Press and hold the **A** key. The translated letter, say **H**, will now be lit on the lamp panel. As soon as you release the key, the lamp panel will be cleared again, just like on a real Enigma.

You are the radioman on the U-516 that departed Kristiansand, Norway on 16 April 1945. The date is now 30 April 1945 and the Radio Officer has set your Enigma to the daily settings, which are:

Umkehrwalze	<b>C</b>
Walzenlage	Gamma, II, I, V (shown on the display as: <b>c215</b> )
Ringstellung	<b>ASOD</b>
Grundstellung	<b>AMZI</b>
Steckerbrett	<b>AD LR ZJ XI BU KV SW FH EN MY</b>

M4

The following encrypted message has been received:

HRQN SMAD LVIO DMMW JLKN GSRJ VNLC IKGT  
 MDRB IDAW YLIK IFIF CMC~~G~~ HRQN SMAD

ASTV  
ASTV

Select the **M4** emulation and setup the *Walzenlage*, *Ringstellung* and *Steckerbrett* to the settings given above. Setup the *Grundstellung* so that it reads **AMZI** in the display and type the first two four-letter groups. This will reveal the message key in duplicate. Set the four *wheels* of your Enigma to this key and decrypt the remainder of the message. Just to give you a hint: the first word **LVI** should translate as **DER**, so if you don't get this, think again! The final pair of four-letter groups is a repeat of the enciphered message key and may be ignored.

DERF UGHR ERIS TTOT

If you accidentally press the wrong key when typing the above message, ignore it and proceed to the next character. Do not re-enter the character that was wrongly keyed or the rest of the message will become meaningless...

XDER KAMP FGEH TWGI

Note:

As stated at the beginning of the paragraph, we've taken certain liberties with history here, by using the simpler message key employed by the German army in 1939. The naval key system is far too complex at this stage...

TERX DOEN ITZX  
WNAH MAUX

### 3.7 Sending messages

By now you should know how to decode a message, but what about encoding a message? Well, due to the way in which the Enigma works, the cipher process is reversible. In other words: encoding works exactly the same as decoding. Exchanging Enigma messages, requires both the sender and the receiver to setup their Enigma in exactly the same way.