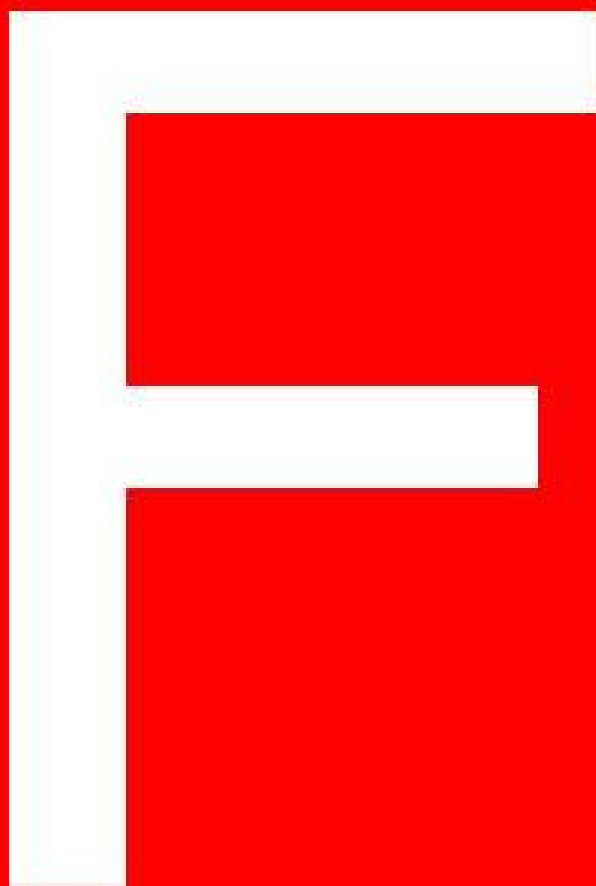


# **German Field Line Communication equipment of WW 2**



**Funksammler Publications**

## ***Amtsanschliesser 33***

### **Development and description**

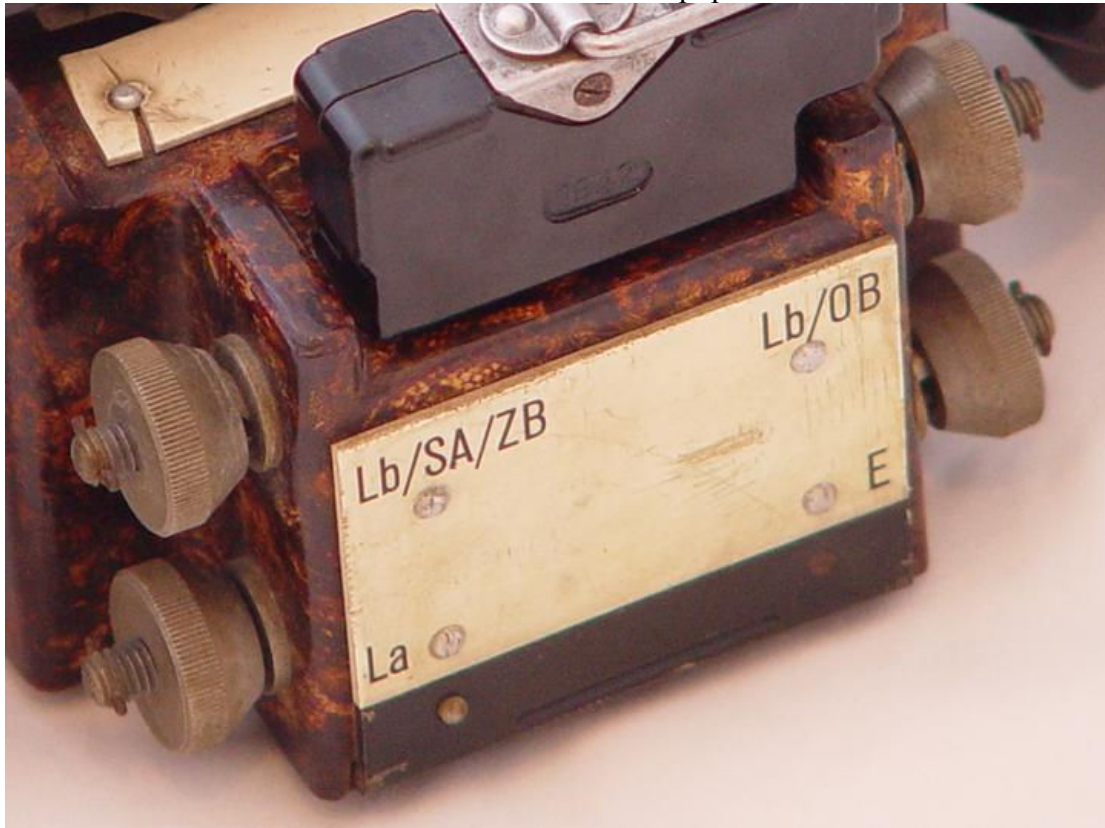
As explained in the previous section, the *FF 33* was a “no frills” piece of equipment, which consequently did not have any provisions for connection to public telephone networks. To enable this functionality, a separate unit was developed, the *Amtsanschliesser 33*.



**Figure 37: Amtsanschliesser 33**

The *Amtsanschliesser 33* could be used as an independent telephone unit, or could be connected between a field telephone line and the public network. It contained an end-pulse switch and a dialling disc, allowing connection to most public networks then in use.

With a housing made of sturdy bakelite, a dialling disc set at a comfortable angle, a “hook” to place the handset on top and connections on the backside the unit is shaped like a classic desk telephone.



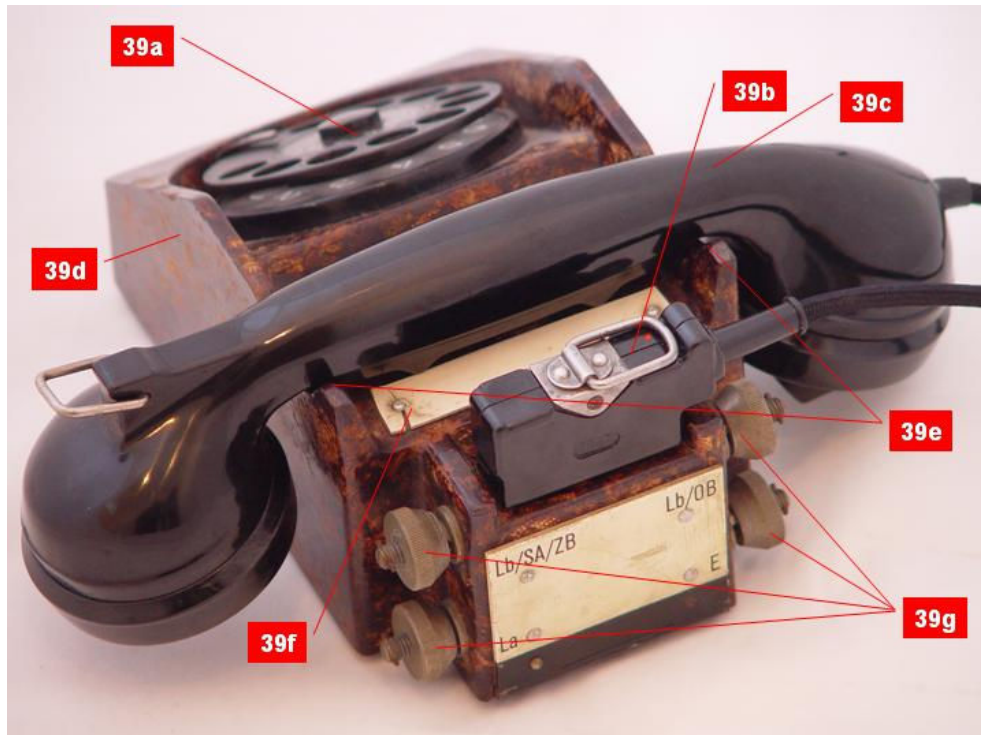
**Figure 38: Amtsanschliesser connections**

The *Ambstanschiesser 33* has four line connection terminals:

La	<i>Leitung a</i> or line a: This connects to the terminal of the automatic public network that carries the positive voltage
E	<i>Erde</i> or earth: This terminal was only used when a connection to a “Earthed System” network was made. In the 1930’s this system was already rare and being phased out.
Lb/OB	<i>Leitung b / Ortsbatterie</i> or Line b / Local battery: This terminal was only used when connecting to a “SB” ( <i>Schlusszeichen Batterie</i> ) network. This type of network would automatically free up the connection in the switchboard when the end-pulse switch was depressed. This type of network is no longer in use.
Lb/SA/ZB	<i>Leitung b / Selbsanschlussbetrieb / Zentral Batterie</i> or Line b / Self connecting network / central battery: This connects to the negative terminal of the automatic public network.

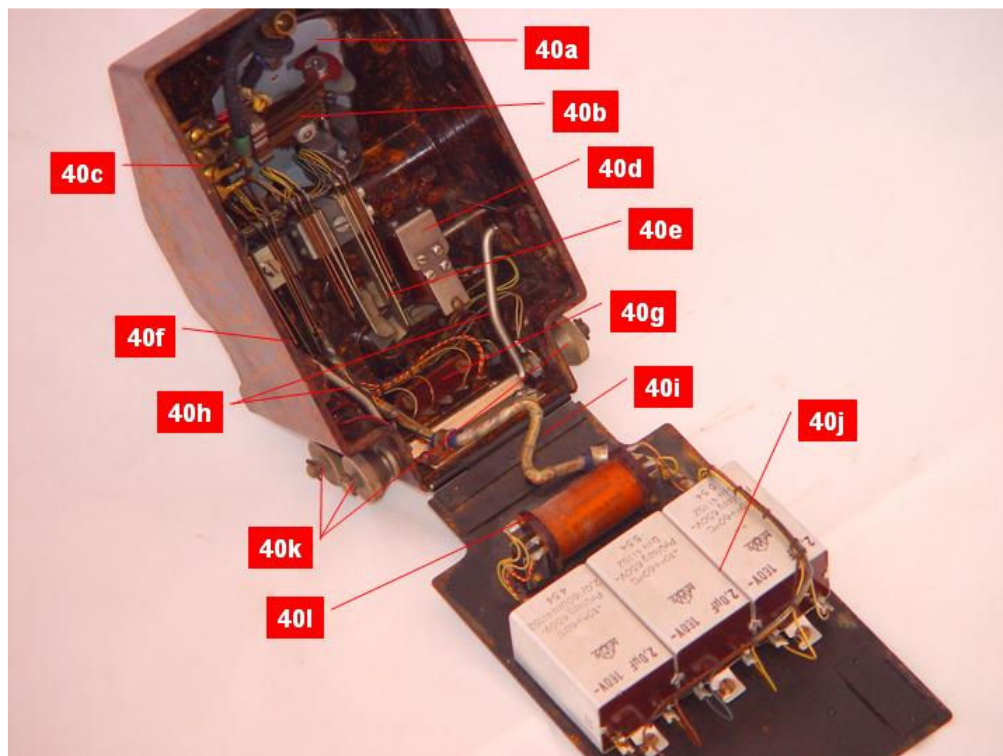
## Construction

Figure 39: Amtsanschliesser external view



- |                   |                        |                      |
|-------------------|------------------------|----------------------|
| 39a Dialling disk | 39d Bakelite housing   | 39g Line connections |
| 39b Handset plug  | 39e End-pulse switches |                      |
| 39c Handset       | 39f Writing tab        |                      |

Figure 40: Amtsanschliesser internal view



- |                                    |  |                                |
|------------------------------------|--|--------------------------------|
| 40a Dialling disk unit             | 40e Contacts for inductor and interconnection cord jacks | 40i Wiring loom                |
| 40b Dialling disk pulse contacts   | 40f End-pulse contacts                                   | 40j Capacitor blocks           |
| 40c Dialling disk connection strip | 40g Handset connection strip                             | 40k Line connection screws     |
| 40d Buzzer                         | 40h End-pulse switch suspension                          | 40l 15l Microphone transformer |

## Operation

If your public phone network supports “pulse dialling”, the *Amtsanschliesser* should work as a normal phone. Most modern networks however use “tone dialling” so a pulse to tone converter might be required.



Figure 41: Amtsanschliesser 44 ready for use. Note instruction leaflet in front

- Connect the “La” and “Lb/SA/ZB” terminal to the public phone line.
- Connect a handset from a field telephone to the *Ambstanschliesser* and place the handset on top of the unit.

To make a call, lift the handset and dial the required number using the dialling disk. Depress the microphone switch in the handset while speaking. When the handset is replaced on top of the unit the connection will be broken. The *Ambstanschliesser* is now also ready to receive calls. When a call is received the buzzer will make a rattling sound. When the handset is lifted, connection will be made.

When the *Ambstanschliesser* is to be used to interface between a field and public line:

- Place a FF 33 field telephone next to the *Ambstanschliesser*.
- Establish the field connection as described in the Field Telephone section.
- Unplug the handset from the field telephone and plug this into the *Amtsanschliesser*.
- Plug the interconnection cord (*Vermittlungsschnur*) into the one of the jacks on the side of the FF 33 field telephone.



Figure 42: Amtsanschliesser connected to FF 33

When a call is received from the public line operate the *Amtsanschliesser* as described above. Establish connection over the field telephone line. When both connections are established, place the other end of the interconnection cord into the jack on top of the *Amtsanschliesser*. The person on the far end of the field telephone line can now talk via the public network.

When the call is ended, the person on the far end of the line turns the generator crank which will cause the buzzer in the *Amtsanschliesser* to rattle. Disconnect the interconnection cord and replace the handset on top of the *Amtsanschliesser*. The placement of the interconnection cord jack on top of the *Amtsanschliesser* is such, that the handset can not be replace accidentally when the connection is in use.

When a call is received from the field telephone network the procedure is similar but the order in which the connections are made is reversed.

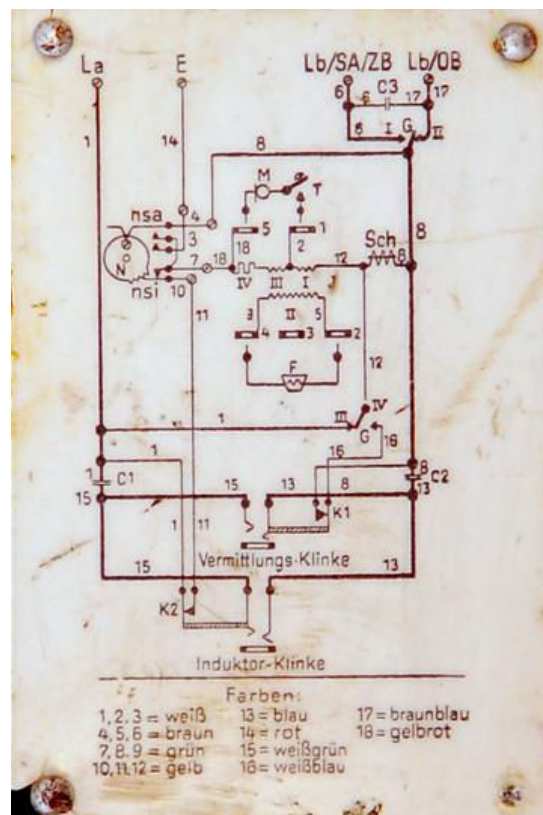


Figure 43: Amtsanschliesser schematic