

Local Battery desk Telephone TS 70-T-LB



Local Battery wall Telephone TS 70-W-LB



## 1. INTRODUCTION

The local battery desk telephone set, model TS 70-T-LB, is designed for point-to-point connections wherever no centralized power/voltage supply is provided (ZB-systems). The LB telephone set has its own power supply in form of a battery - a single cell of 1,5 V - which supplies the current for the carbon microphone necessary in speaking condition. When calling another station or the exchange, the ringing voltage is generated by a magneto generator instead of the dial. It is also the same for the Wallstation TS 70-W-LB.

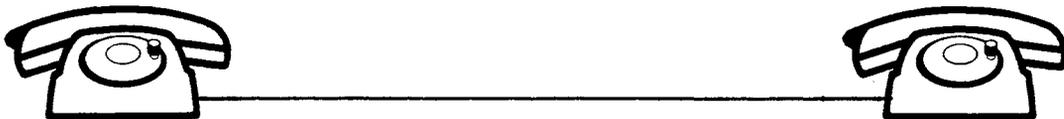
## 2. APPLICATION

The LB telephone set can be used everywhere as it is working independent of external power supply, e.g. for

- Emergency connections in power stations, in tunnels, from building to building, in hospitals, from command posts to important supply centers, etc.
- Civil defence services
- Military applications
- Along pipelines
- Shooting grounds
- Cable railways
- Connections to mountain huts
- etc.

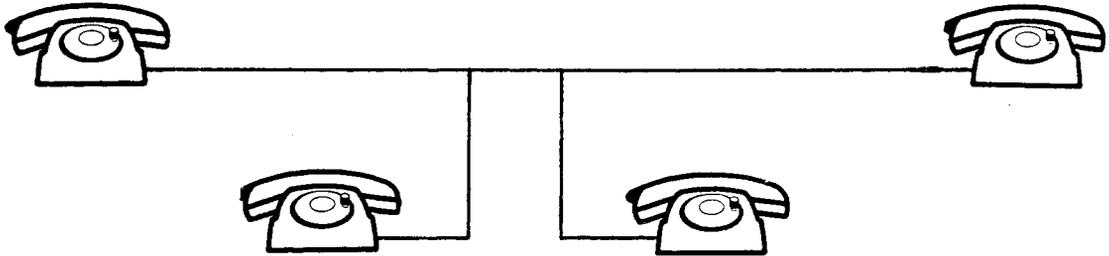
## 3. ESTABLISHMENT OF CONNECTIONS

### 3.1 Point-to-point Connection



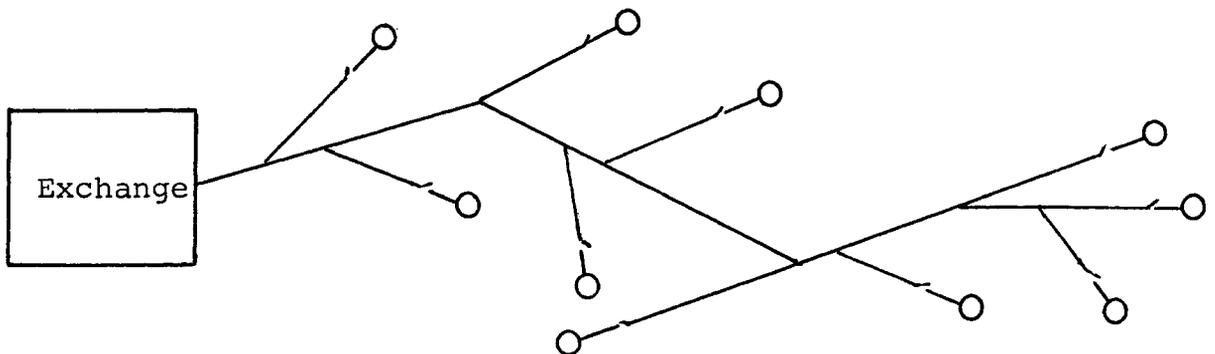
The connection between two stations is established by a 2-wire line. Up to a distance of 30 km a wire diameter of 0,8 mm is sufficient.

3.2 Extended Point-to-point Connection



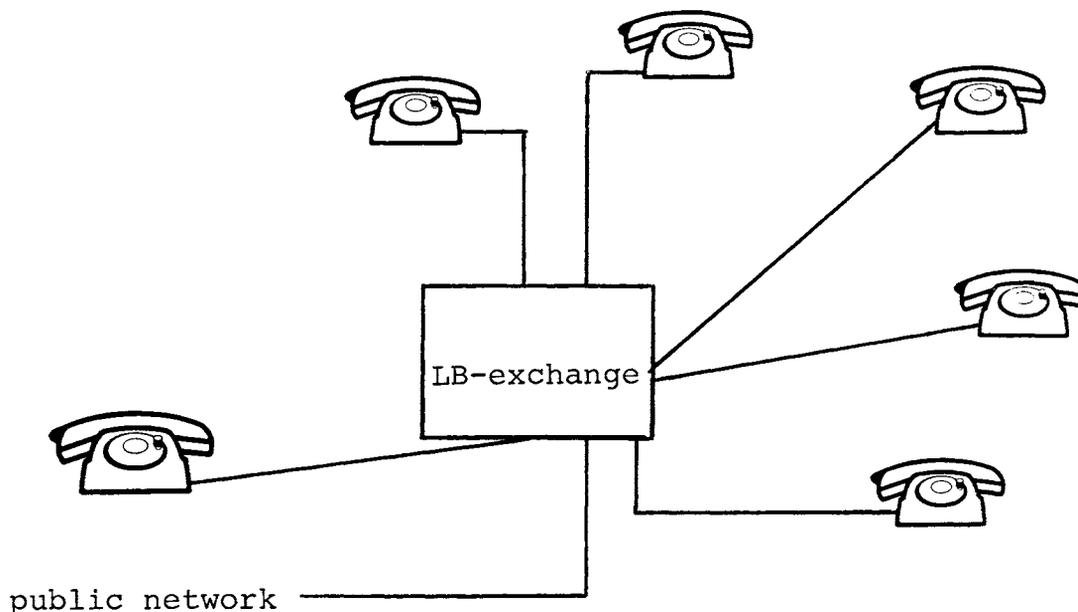
Up to 4 LB-stations can be connected to the same 2-wire line in parallel. A ringing signal with the magneto generator of any station is received on all stations simultaneously.

3.3 Trunk Line with any Number of Stations



All stations are equipped with a switch at the input line. If necessary, i.e. when using a station, it is connected to the common trunk line by means of this switch. Each connected station can be reached by the exchange but it can also call other stations. There should not be connected more than 3 outdoor stations simultaneously. The full range can only be reached with one connected station.

### 3.4 Radial Network with Local Battery Exchange



Together with a local battery exchange a radial network with switching possibilities may be established. If the LB-exchange is equipped with connection and a dialling facility to the public network, it is possible to talk to any subscriber of the public network from each LB-station.

## 4. DESCRIPTION OF THE STATION

### 4.1 Case

The case corresponds in form and colour to the PTT station TS 70. The LB-station is only available in grey colour.

### 4.2 Bottom Plate

In the bottom plate of the station (colour ivory) are screwed: the printed circuit board, the bell and the magneto generator. The battery is situated on the external side of the bottom plate behind a transparent and unloosable cover. The battery polarity is indicated.

#### 4.3 Connections

The connections for microtel and line wire (a and b) are pluggable.

#### 4.4 Magneto Generator

The magneto generator RI 70 (colour: visible parts grey) mainly consists of:

- magnet rotor
- claw pole system with toroidal coil
- crank with slip coupling
- plastic case with contact spring set

The electrical connections are pluggable and the whole magneto generator can be changed without screwing.

#### 4.5 Microtelephone

The microtelephone (colour: light grey and ivory) is equipped with two adapters for use with the microphone and receiver capsules.

#### 4.6 Microphone Capsule

Carbon microphone, model 46, type MK 102 LBZ, 35 Ohms

#### 4.7 Receiver Capsule

Receiver capsule, model 46, type HK 103 ZB, 37 Ohms

### 5. TECHNICAL FEATURES

- For technical data please refer to the enclosed product information sheet.
- The station is equipped with overvoltage protection and acoustic shock absorber.
- Weight of a station with microtel: 1.8 kg
- Environmental conditions:
  - temperature: operation - 15 ° - 40 °C
  - resting - 35 ° - 50 °C
  - humidity: operation - (short-time during days)
  - up to 90 % RF (at 30 °C)
  - resting - up to 70 % RF



Zellweger Uster AG  
Telecommunications  
CH-8634 Hombrechtikon

Telefon 055/41 61 11  
Telex 875558  
Telefax 055 416 385