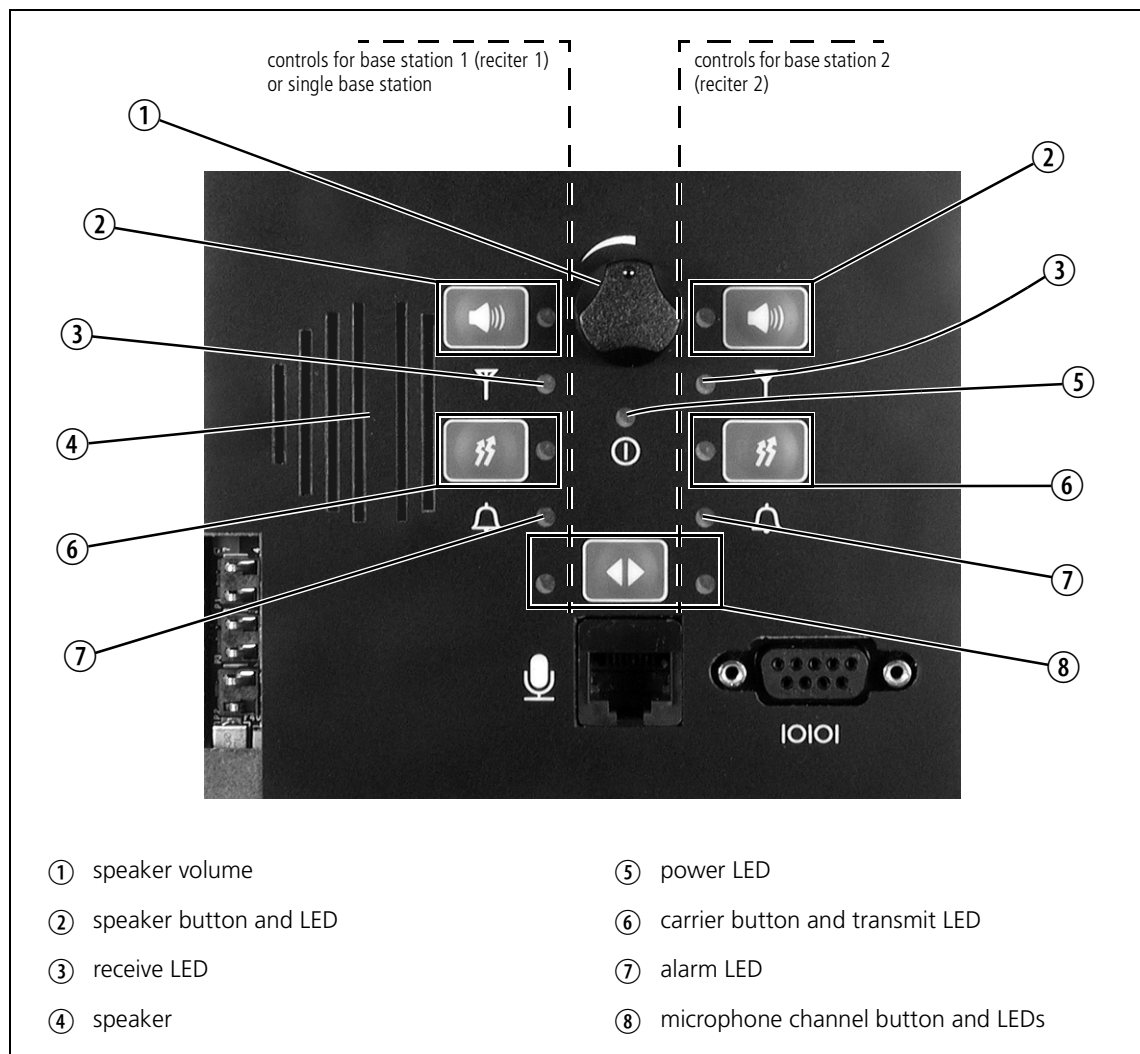# 3 Operating Controls

The TB8100 BSS has a number of hardware controls which are available to the user. These controls are located on the control panel, reciter and PMU. This chapter identifies and describes these controls.

3.1 Control Panel

The operating controls on the control panel allow some manual control of one or two base stations in a TB8100 BSS. These controls and their associated LED indicators are identified in Figure 3.1 below, and their functions are explained in the paragraphs which follow. Refer to "Connection" on page 55 for information on the connectors located on the control panel.

Figure 3.1   Operating Controls on the Control Panel

|			
①	speaker volume	⑤	power LED
②	speaker button and LED	⑥	carrier button and transmit LED
③	receive LED	⑦	alarm LED
④	speaker	⑧	microphone channel button and LEDs

Speaker Volume Controls the volume of the speaker mounted behind the control panel. Rotate clockwise to increase the volume, and anticlockwise to decrease the volume.

Speaker Button and LED

🔊))

The speaker button cycles the base station audio through three states. At power-on the speaker is off and the receiver audio is gated (muted). Pressing the button once turns the speaker on, but leaves the audio gated. Pressing the button a second time leaves the speaker on and ungates the audio (monitor mode). Pressing the button for a third time returns to the start of the sequence, with the speaker off and audio gated.
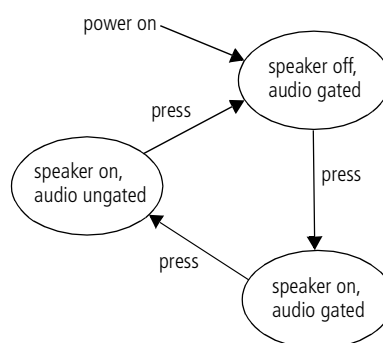
The green speaker LED is lit when the speaker is turned on.

Receive LED

Y

The green receive LED is lit when a valid signal is received on its associated base station.

Speaker The control panel is fitted with a 0.5W speaker. Audio from either or both base stations can be connected to this speaker.

Power LED

Ⓘ

The green power LED is lit when the PMU is turned on and supplying power to the TB8100 BSS.

Carrier Button and Transmit LED

⚡

The carrier button is a momentary press switch. When held down, it keys the transmitter while disabling the 600Ω balanced and unbalanced line, and microphone audio. The transmitted signal is unmodulated, i.e. carrier only.

The red transmit LED is lit while its associated transmitter is transmitting.

Alarm LED

🔔

The red alarm LED will flash at a rate of 2 to 5 Hz when an alarm has been generated by any of the TB8100 BSS modules. It will continue to flash until the alarm is cancelled or the fault is fixed. Note that only those alarms which are enabled using the Service Kit (Configure > Alarms > Alarm Control) will cause this LED to flash. Refer to the Service Kit documentation for more information.

Microphone Channel Button and LEDs

◀▶

The microphone channel button selects which base station (BS) the microphone is connected to. At power-on both base stations are selected. Pressing the button once will connect the microphone audio to base station 1. Pressing the button a second time will connect the audio to base station 2. Pressing the button for a third time returns to the start of the sequence, with the microphone audio connected to both base stations.
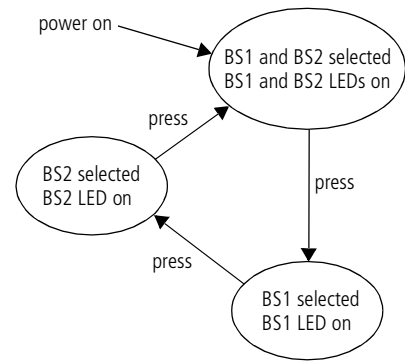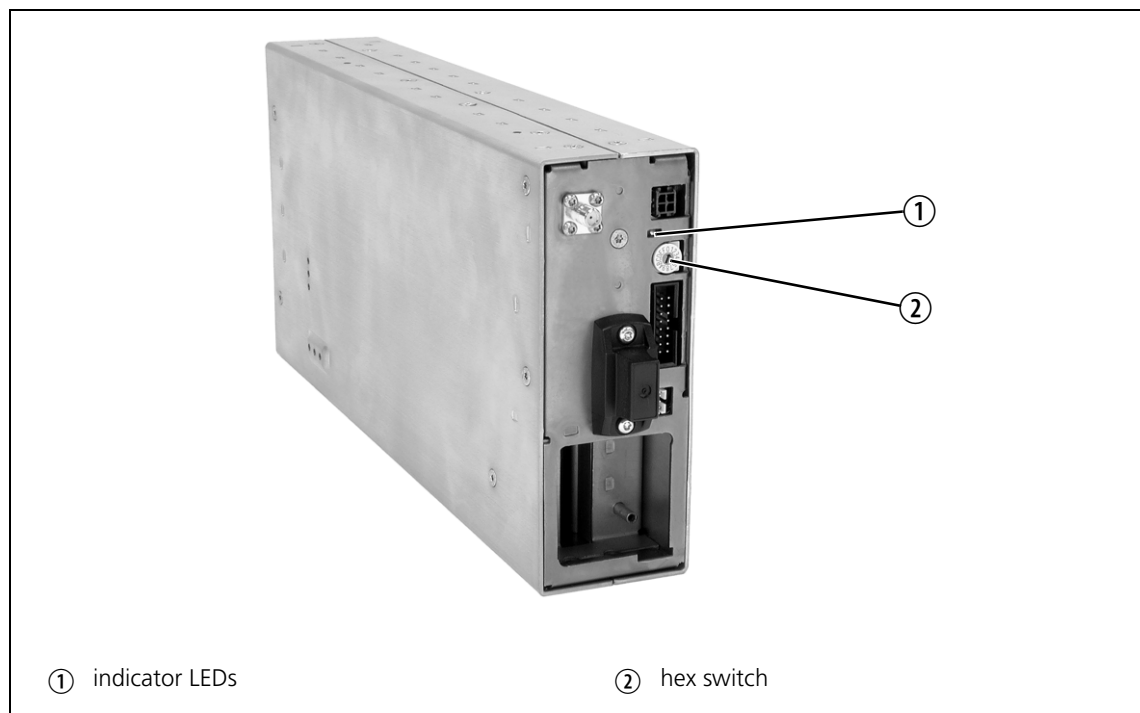
The green LED is lit when the microphone audio is connected to its associated base station.

3.2   Reciter

The only controls on the reciter are the rotary hex switch mounted on the front panel, and the indicator LEDs visible through a slot in the front panel.

Figure 3.2   Operating Controls on the Reciter

① indicator LEDs   ② hex switch

Hex Switch

This switch is used to assign an identity number to each base station in the BSS. For example, the reciters in a dual base station system would be numbered "1" and "2". The reciter with the lowest hex number becomes the "control" reciter. In a single base station system, the hex switch on the reciter is set to "1".
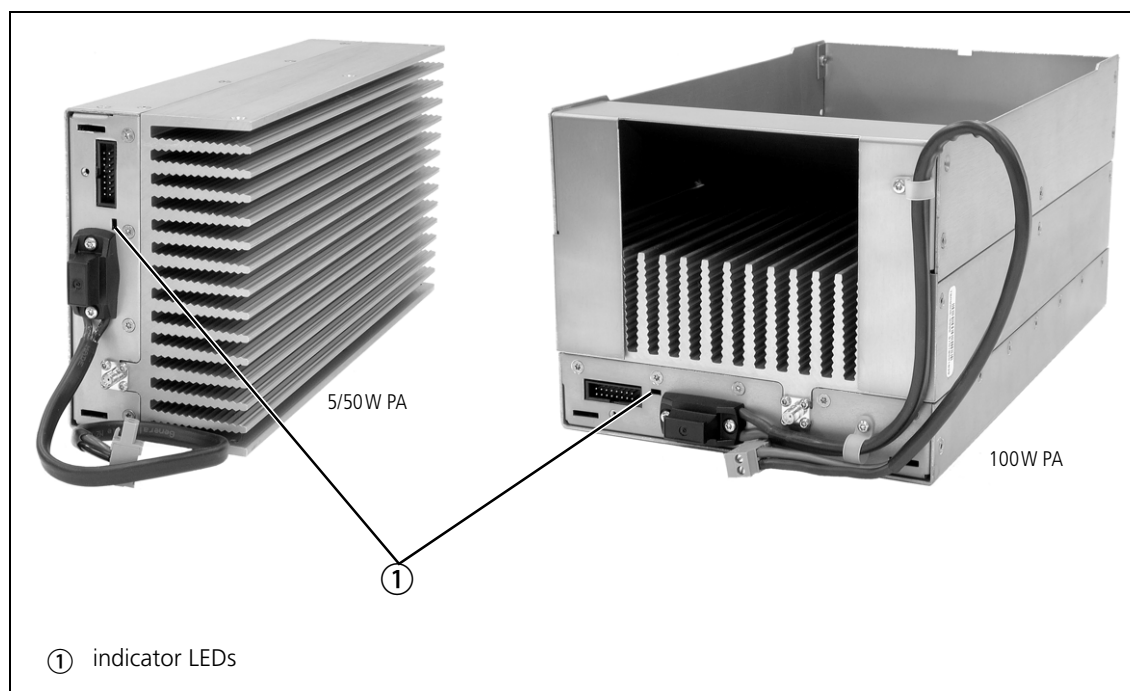
Indicator LEDs   These LEDs provide the following information about the state of the reciter:

■ steady green – the reciter is powered up

■ flashing red – one or more alarms have been generated; you can use the Service Kit software to find out more details about the alarms.

3.3   PA

The only controls on the PA are the indicator LEDs visible through a slot in the front panel.

Figure 3.3   Operating Controls on the PA

5/50 W PA

100W PA

① indicator LEDs

Indicator LEDs   These LEDs provide the following information about the state of the PA:

■ steady green – the PA is powered up

■ flashing green – the PA has no application firmware loaded; you can use the Service Kit software to download the firmware

■ flashing red – one or more alarms have been generated; you can use the Service Kit software to find out more details about the alarms.

3.4   PMU

The only controls on the PMU are the on/off switches on the rear panel for the AC and DC modules, and the indicator LEDs visible through a slot in the front panel.

Figure 3.4   Operating Controls on the PMU

rear view

front view

① AC module on/off switch   ③ indicator LEDs

② DC module on/off switch
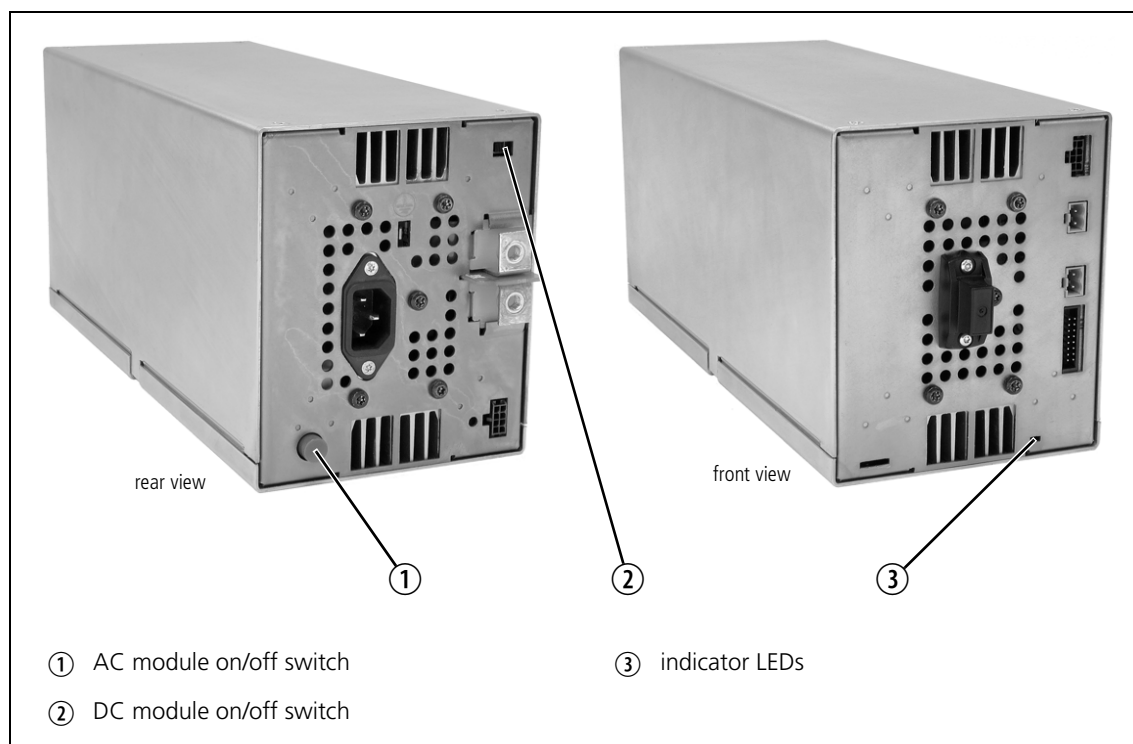
AC Module On/Off Switch
This switch turns the AC input to the PMU on and off. Note that this switch breaks only the phase circuit, not the neutral.

DC Module On/Off Switch
This switch turns the DC output from the PMU on and off. It is recessed to prevent the DC module being accidentally switched off, thus disabling the battery back–up supply.

Note that this switch disables only the control circuitry – the DC input is still connected to the power circuitry.

⚠ *Warning!!* **These switches do not totally isolate the internal circuitry of the PMU from the AC or DC power supplies. You must disconnect the AC and DC supplies from the PMU before dismantling or carrying out any maintenance. Refer to the service manual for the correct servicing procedures.**

Indicator LEDs
These LEDs provide the following information about the state of the PMU:

■ steady green – the PMU is powered up

■ flashing green – the PMU has no application firmware loaded; you can use the Service Kit software to download the firmware

■ flashing red – one or more alarms have been generated; you can use the Service Kit software to find out more details about the alarms.