

- Offices
- Leisure Centres
- Schools
- Theatres
- Stadia
- Museums
- Railway Stations
- Factories
- Airports
- Corporate HQ
- Arenas
- Conference Centres
- Ferries
- Cruise Ships
- Hotels
- Magistrates Courts
- MOD
- Call Centres
- Multi Building Sites
- Retail
- County Courts
- Shopping Centres



**Standby Battery Units** are designed to provide a self-contained 24V D.C. supply that can be exactly tailored to provide the standby supply capability required.

They are provided in standard 19" rack frames and three standard capacities, each in a 3U high chassis. The size of the battery unit associated with each amplifier or the number of amplifiers supported by each battery unit will be determined by the size of the amplifiers and the category of Voice Alarm system as defined by BS5839.

Audix Systems engineering staff can provide additional information or assistance to establish the most cost effective battery configuration for a particular system.

- Up to 4 individually fused protected outputs for amplifiers are available on each battery unit.
- Dual 24AH battery units incorporate 2 separate charger circuits.
- 48AH battery units maintain similar performance with a double capacity charger circuit.

**SBS241/242/481**

**Standby Battery Units**

**Consultant Engineering Specification**

The Standby Battery Supply for the Voice Alarm System shall be housed in a rack mounted frame within the rack bay of the equipment being served. Standby batteries shall be of 24V D.C. rating and of maintenance free sealed lead acid construction, characterised for long life on float standby. The Standby Battery Supply shall interface directly to the Audix Fault Monitoring System meeting the requirements of BS5839. Standby battery units shall incorporate mains powered charging circuits derived from a toroidal mains transformer providing continuous charge current, without ripple to disturb amplifier performance and automatically compensated for battery temperature to achieve maximum standby life. The Standby Battery Supply units shall be Audix Systems type SBS241 / SBS242 / SBS481.

**Battery Charger Characteristics**

The battery charger voltage characteristics are designed to compensate for the temperature of the batteries, in accordance with the battery manufacturers' recommendations. This is in order to achieve maximum life in standby operation.

**Two-Step Charging**

The battery charger fitted in the battery unit has a two step charging characteristic for speedier recovery from a discharged state. The charger normally maintains the optimum battery condition in FLOAT mode, however if demand is made on the battery such that its voltage falls then the charger will switch to BULK CHARGE mode. Battery voltage increases as charge is restored to at least 85% when the charger returns to FLOAT mode.

**Charger Performance**

For a battery starting from 100% discharge at a nominal 20°C, the bulk charge rate will restore 85% charge after 14 hours. Following the transition to Float Charge mode, restoration to 100% typically takes a further 9.6 hours. This betters the requirement of BS5839 for 85% charge in 24 hours.

**BS5839 Fault Monitoring**

To provide central identification of Mains, Charger and Battery power supply faults, the Battery Standby Units are fully integrated with the Audix Fault Monitoring system. The unit interfaces directly with the Audix Fault Monitoring System via its associated Alpha units, where local Light Emitting Diode indicators are situated.

- Battery failure. (disconnection or low voltage) is indicated by yellow LED.
- Charger failure is indicated by yellow LED. There are also local monitoring circuits within the battery unit.
- Charger operating (on mains power) is indicated by a green LED.
- A second green LED shows when the charger is operating in FLOAT mode.
- Direct indication of low battery voltage is provided by a yellow LED. This is primarily for use during routine maintenance procedures.

Type Number	Description	Weight (approx Kg)	Units Height
SBS241	Single 24AH 24V	19.0	3U
SBS242	Dual 24AH 24V	36.5	3U
SBS481	Single 48AH 24V	36.2	3U

Audix Systems reserves the right to modify or withdraw any product or service without notice