TB8100 Change-over Module
TA2444-01

Introduction

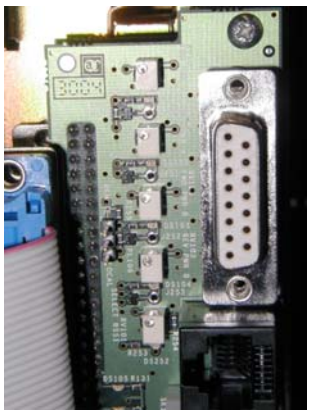
The TA2444-01 TB8100 Change-over module provides automated failure protection for the Tait TB8100 base station equipment. In the event of a failure, the stand-by base station is brought into service and takes over operations from the active system. Both TB8100 base stations are equipped with the Advanced Task Manager (TBAS020), which carries out failure detection and decision making processes. The TA2444-01 provides the physical change-over mechanics, interfaces to external alarm components and termination points for remote audio connections.

Features

The TA2444-01 Change-over module mounts onto the rear of one of the TB8100 reciters. It plugs directly into the signal interface (SIF - XBAS0C0) of the base station, and via a cable loom connects to the SIF in the other base station reciter.

Received Signal Strength Indicator (RSSI) Comparisons

The RSSI levels in the two reciters are monitored and compared by the TA2444-01. If the stand-by channel has significantly greater signal strength, a change-over occurs.



Receiver Gate Monitoring

The active and stand-by channels monitor the receiver gate status of both themselves and the other base station.

External Power Measurement

External forward and reverse power levels can be monitored and compared against user adjustable failure limits. This provides a more robust antenna and cable fault detection after the antenna combiner equipment.

Active and Stand-by Channel Select

A three-way link is used to select the active channel, with LED's used to display this.

Four wire E&M Change-over

As well as the connections between the base stations, there is a termination point for a four wire E&M port. In the event of a failure, this port will be switched from the active to redundant base station via latching relays.

TB8100 Base Station Alarm Priorities

Base stations are capable of generating two levels of alarm priority. Alarm events that have a higher priority have precedence in initiating a change-over to a base that has previously generated a lower priority alarm that caused an initial change-over. For example, a change-over that was initially generated due to a fan failure in one base station, could be superseded by a power amplifier failure in the other, bringing the base station with the fan failure back into service.

Installation Kit

To minimise installation problems, an installation kit (TA2444-02) is available containing all the parts for the fitting and interconnecting of the coaxial relay, monitor module and power splitter (to feed the receivers with the same antenna signal). The kit includes the coaxial relay, but not the frequency dependent items like the power splitter. Refer to the following diagram to establish your exact requirements.

TB8100 Change-over Module Accessory selection guide for a base station pair