AGC FUNCTION

The REPEATER has AGC function on both paths that serve to prevent the saturation of the power amplifier. The power amplifier has a directional coupler and a detector at its output to monitor the output power. When a high signal is received the automatic level control detects the amplitude and sends a feedback signal to a voltage variable attenuator, which attenuates the signal level so that the output power of the amplifier does not exceed the preset limit. The LED on the amplifier illuminates when the power output of the amplifier is within the set limit (when the AGC is On and when the AGC is OFF).

An On/Off switch enables the AGC function. If the AGC is disabled then the amplifier gives maximum gain.

BDA MONITOR

The BDA monitor monitors the DC voltage of the channels. The fault LED illuminates when the voltage is below or above the specified limits.

The monitor box also monitors the current to each one of the 4 amplifiers. If the current is below or above the specified limits then a LED illuminates.

FAULTS LIST (up link & down link)

P.S. Illuminates when the Power Supply voltage is below or above its limits.

P.AMP. Illuminates when the Power Amplifier current is above or below its specified limits. Note: The downlink amplifier will trip a fault when overdriven by RF signals.

L.N.A. Illuminates when the Low Noise Amplifier current is above or below its specified limits.

FAN Illuminates when the internal FAN current is above or below its specified limits.

N.C. Not connected. (Future option)

A pushbutton switch on the BDA monitor turns on all the alarms. This is used to test the alarm functions of the BDA.

REMOTE ALARM The BDA monitor has a dry contact relay arms output. These contacts are short circuit at no fault and open circuit at any fault or when the power is off. This function can be used to operate a modem for remote alarm warning.

The relay contacts are connected to pins A and C (small pins) on the alarm connector at the front panel.