

23 kHz TONE EQUIPMENT EP9/1

General

The EP9/1 is equipment for the production and distribution of 23 kHz tone for automatic monitoring systems. It consists of two OS2/35 Oscillator Units, a UN20/16 Detector Unit and a UN1/114 Tone Distribution and Switching Unit. The units occupy half a PN3/23 panel.

Fig. 1 is a circuit diagram of the system. The equipment supplies 23 kHz tone so long as the output of one of the OS2/35 oscillators is above +19 dB. The normal operating conditions are with No. 1 oscillator in use and No. 2 as standby. If the output of No. 1 oscillator falls more than 1.0 dB below the normal operating level of +20 dB, automatic change-over to No. 2 takes place. If the output of No. 1 oscillator is subsequently restored to normal, No. 2 continues to provide tone until either the *Reset No. 1* button on the UN20/16 is pressed or No. 2 oscillator subsequently fails, thus resetting No. 1. The *Reset No. 1* button has no effect if the output of No. 1 is more than 1.0 dB below normal operating level. Provision is made for an external *Systems Normal* indication, that is, No. 1 oscillator in use and No. 2 providing an output of greater than +19 dB.

Outputs

Six outputs of tone at -11 dB into 600Ω balanced (P1 - P6).

Two outputs via relay contacts for remote signalling purposes (P7, P8).

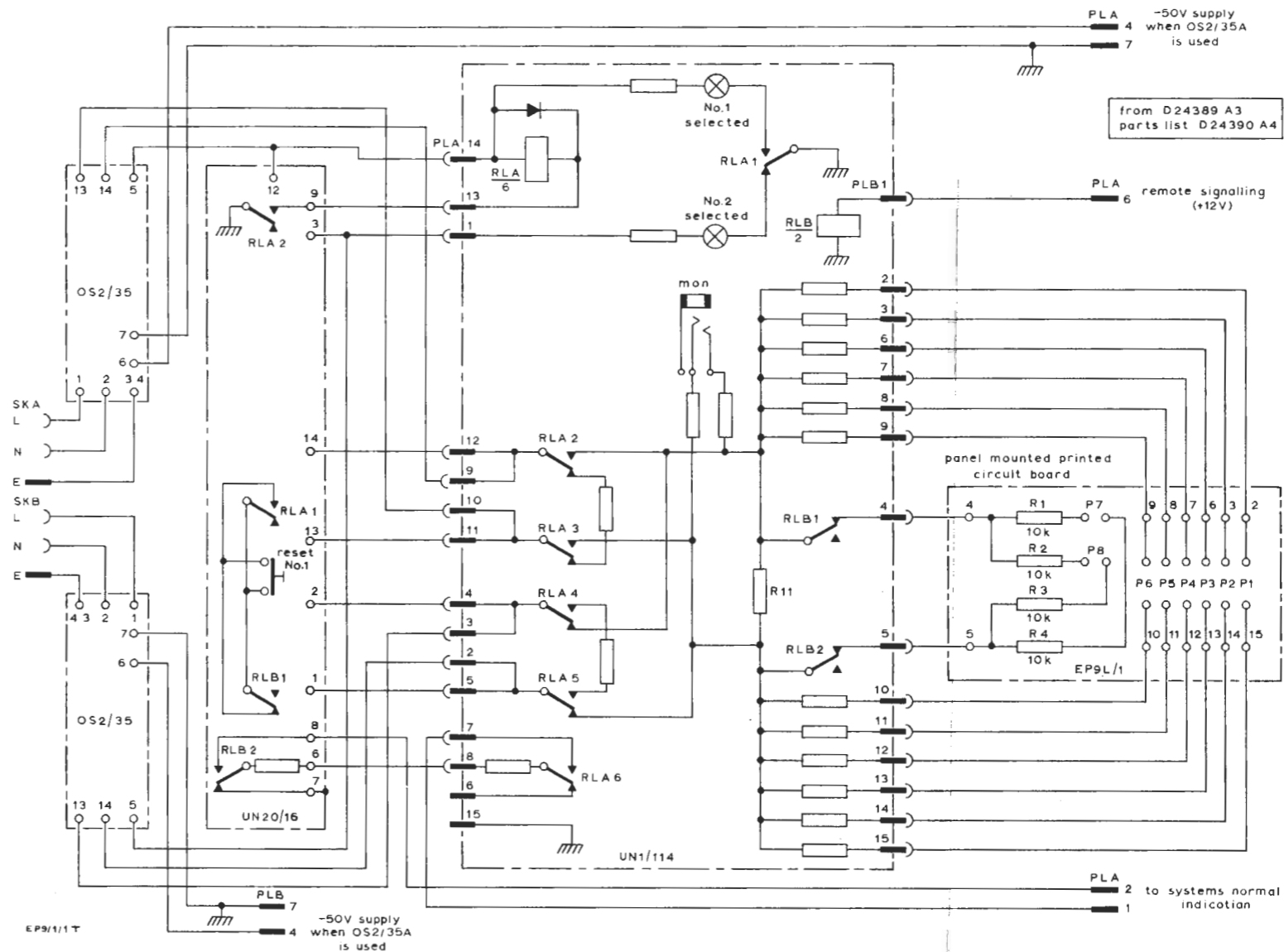


Fig. 1. Circuit and Arrangement of the EP9/1