

INTERCARRIER DETECTOR UN20/537

Accepts a 1/2-volt feed of reserve drive and produces an output of sync pulses if both the sound carrier and the modulated vision carrier are present at the input. Constructed in a die-cast box 119 mm by 94 mm by 52 mm.

USE

The Intercarrier Detector UN20/537 is used with UHF/77 transmitters to monitor the presence of both the sound carrier and the modulated vision carrier from the reserve drive equipment.

The input signal, derived from a 10-dB directional coupler FL1/20, is fed to the UN20/537 either via an attenuator or via an amplifier if the input level is incorrect.

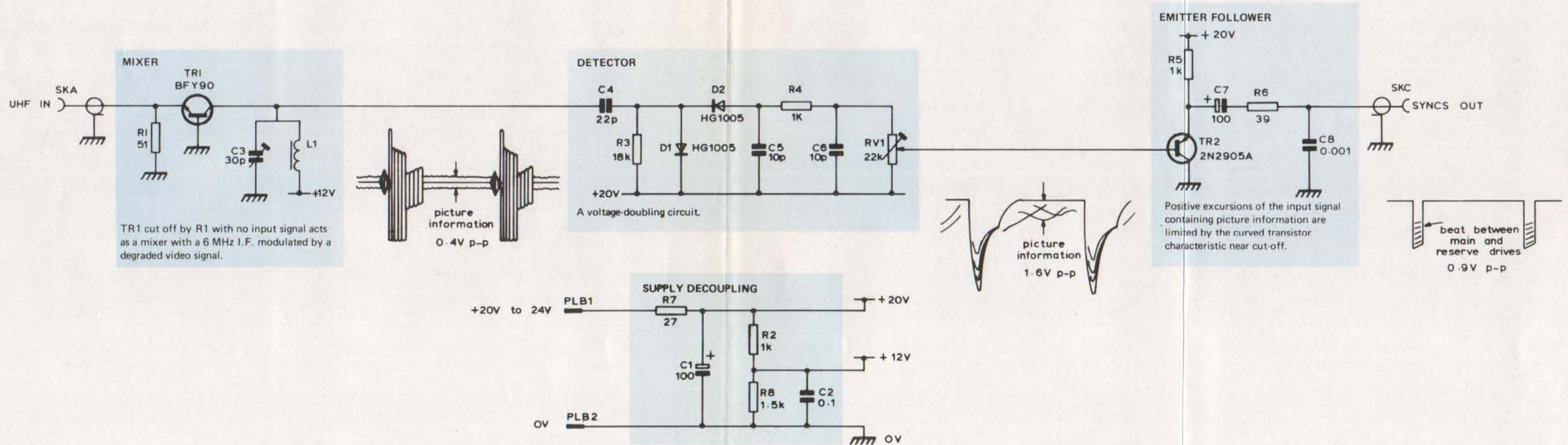
The output sync pulses are fed to a sync pulse monitor MN1/508 which operates the reserve drive alarm.

ALIGNMENT

Tuning of the UN20/537 should be carried out with the oscilloscope connected to the output. This waveform may suffer from a low-frequency beat between the reserve and main drive frequencies.

Adjust RV1 to give maximum sync-separation consistent with reliable operation of the sync Monitor.

NOTE: The internal waveforms are given only as a guide. These are high impedance points which loaded by the input capacitance of the oscilloscope degrade the waveforms as shown.



TR1 cut off by R1 with no input signal acts as a mixer with a 6 MHz I.F. modulated by a degraded video signal.

A voltage-doubling circuit.

Positive excursions of the input signal containing picture information are limited by the curved transistor characteristic near cut-off.

beat between main and reserve drives
0.9V p-p

