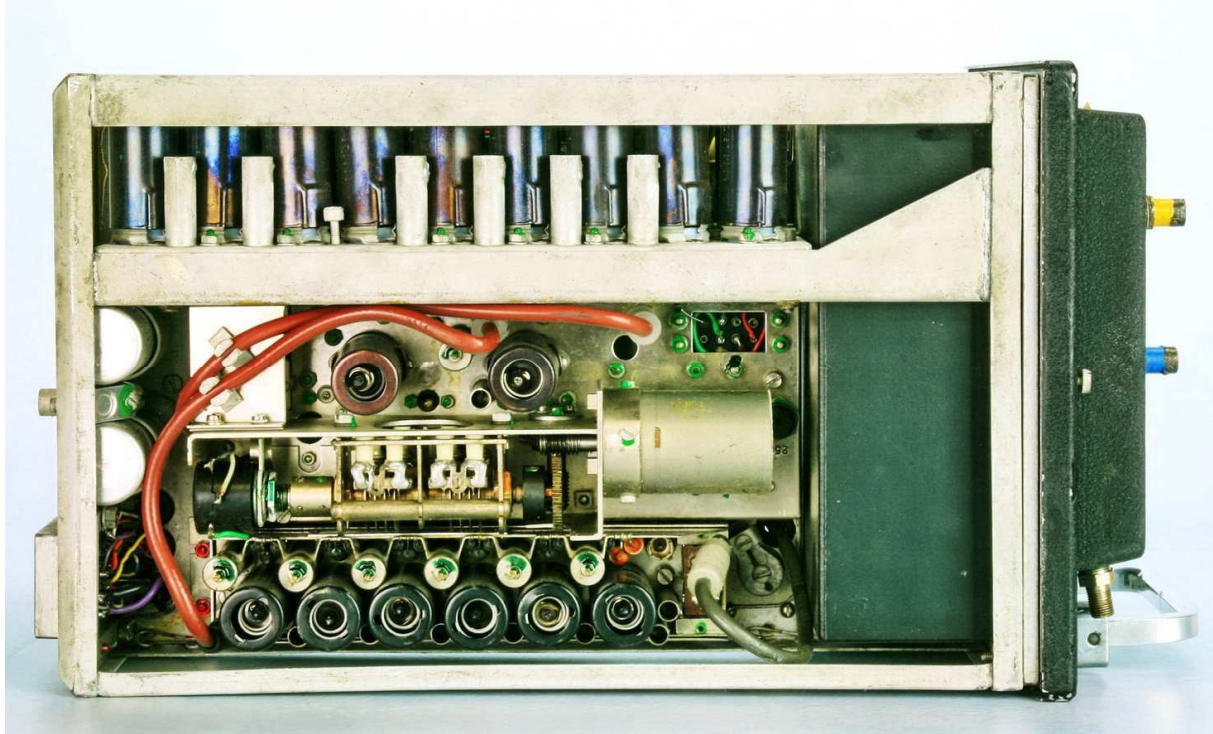


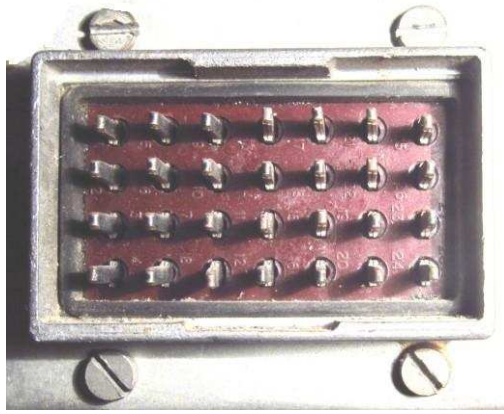
# PN-50A Interrogator

Made by Philips Sweden, ca 1960



This airborne system is an improved version of the Rebecca Mk8, made by Murphy Radio. Visually they look the same, but there are subtle differences :

- The complete interrogator runs on 19V, stabilised by an external carbon pile.
- Provision is made to connect a CRT display as in the Mk4;
- The RF output power is 350W rather than 1kW pulse;
- The strobe circuit details are different;
- The cockpit instrument is metric, with a 30km and a 300km scale

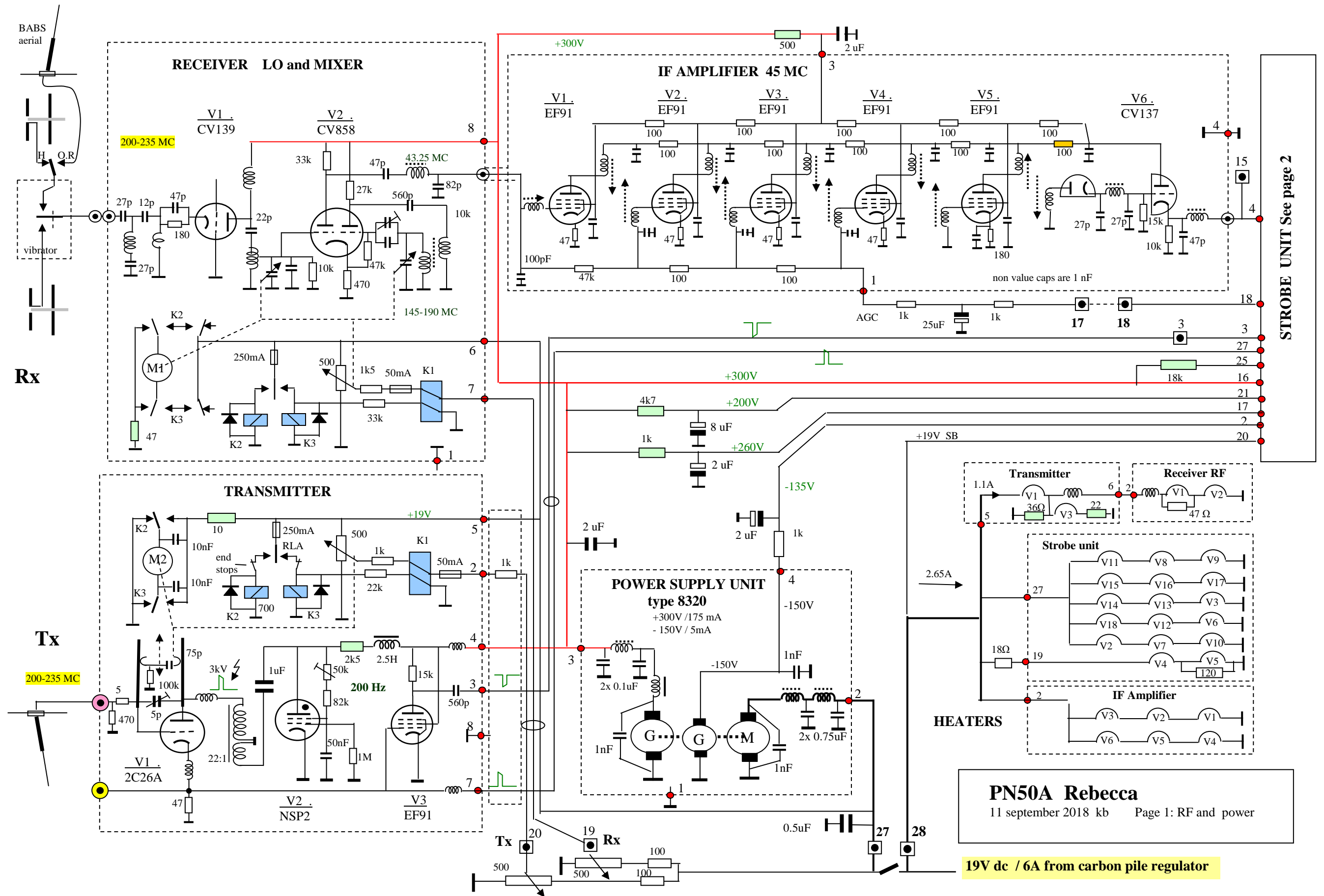


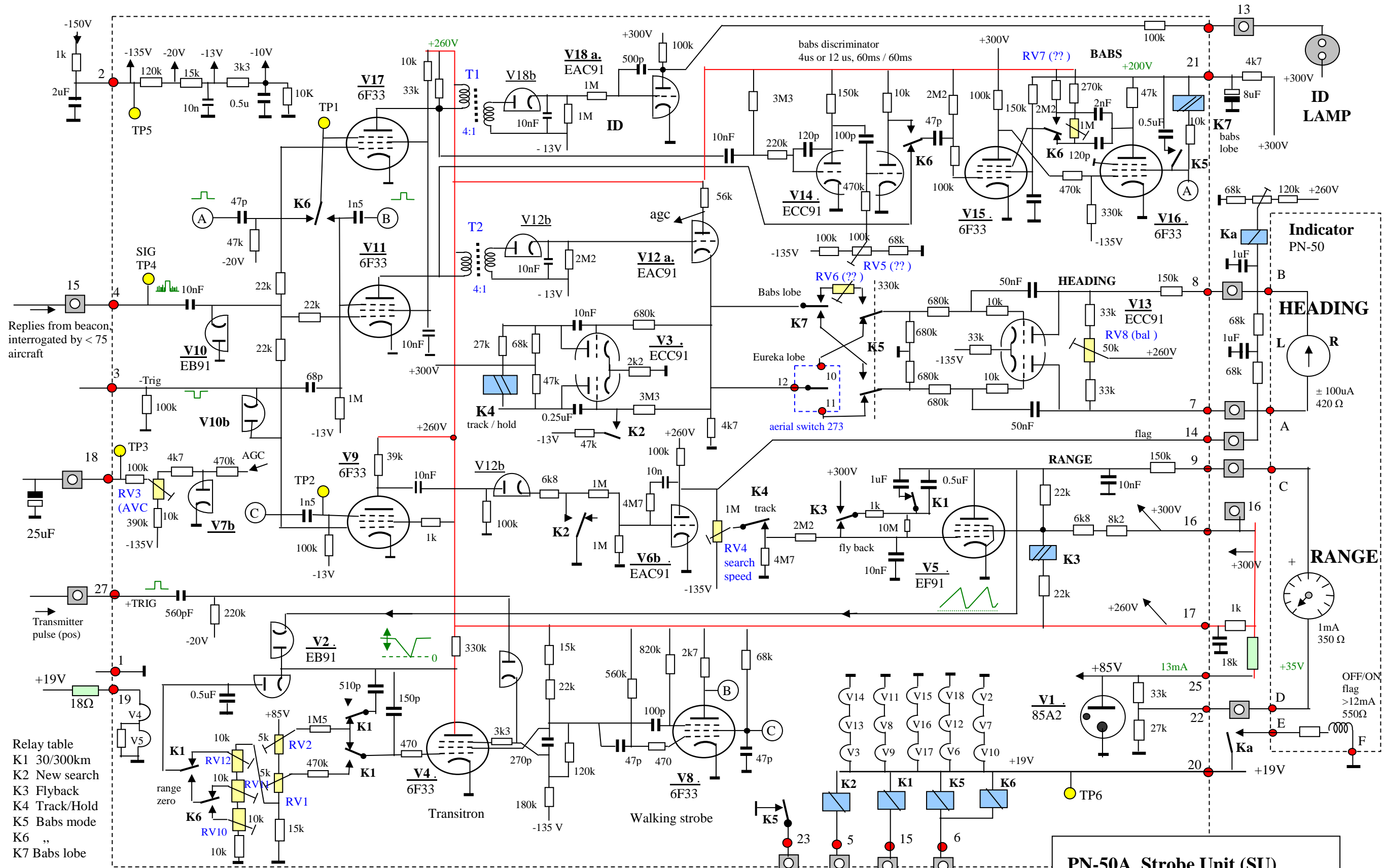
## PN-50A Connector

Both the strobe unit and the main chassis of the PN-50A have the same rectangular, 28-pole PYE connector, also made by Magnetic Devices Ltd.

The pinout is nearly identical to the Rebecca Mk8. The interconnection boxes are compatible.

pin	on main unit	on strobe unit
1	gnd	gnd
2	-135 V	-135 V
3	Tx pulse (negative)	Tx pulse (blanking) ` -TRIG`
4	30 km range	Rx videosignal `SIG`
5	Strobe release	Strobe release button to -135V
6	BABS mode	BABS mode (Relay B)
7	Heading meter +	Heading meter
8	Heading meter -	Heading meter
9	Range meter +	Range meter
10	Aerial switch L	Aerial switch left position
11	Aerial switch R	Aerial switch right position
12	Aerial switch return	Aerial switch return
13	ID neon lamp output	ID neon lamp output
14	OFF flag	OFF flag
15	Rx video signal	30km range
16	+ 300V to neon lamp	+300 V
17	AGC link to 18	+260 V
18	AGC link to 17	AGC ( -1 ... -4V)
19	Rx tuning	+12.6V for heaters
20	Tx tuning	+19 V for heaters
21	gnd	+ 200V
22	Range meter return	Range meter return
23	grounded in babs mode	grounded in babs mode
24	spare	n/c
25	n/c	+85V
26	spare	n/c
27	+19V dynamotor	+ Trigg (start transitron)
28	+19V heaters and relays	n/c





- Relay table  
 K1 30/300km  
 K2 New search  
 K3 Flyback  
 K4 Track/Hold  
 K5 Babs mode  
 K6 „  
 K7 Babs lobe

Relays K3 and K4 are bi-stable relays with 2 coils, each 1500 ohm, here used in series.  
 Relays K1, K2, K5 and K6 have 690 ohm coil.  
 Relay K7 has 2 coils each 1700 ohm.

Numbers on the main TR8193 connector ( ) are the same as on this strobe unit ( ) unless otherwise stated.

Strobe release  
 300 - 30 - BABS

**PN-50A Strobe Unit (SU)**  
 28 sept 2018 kb