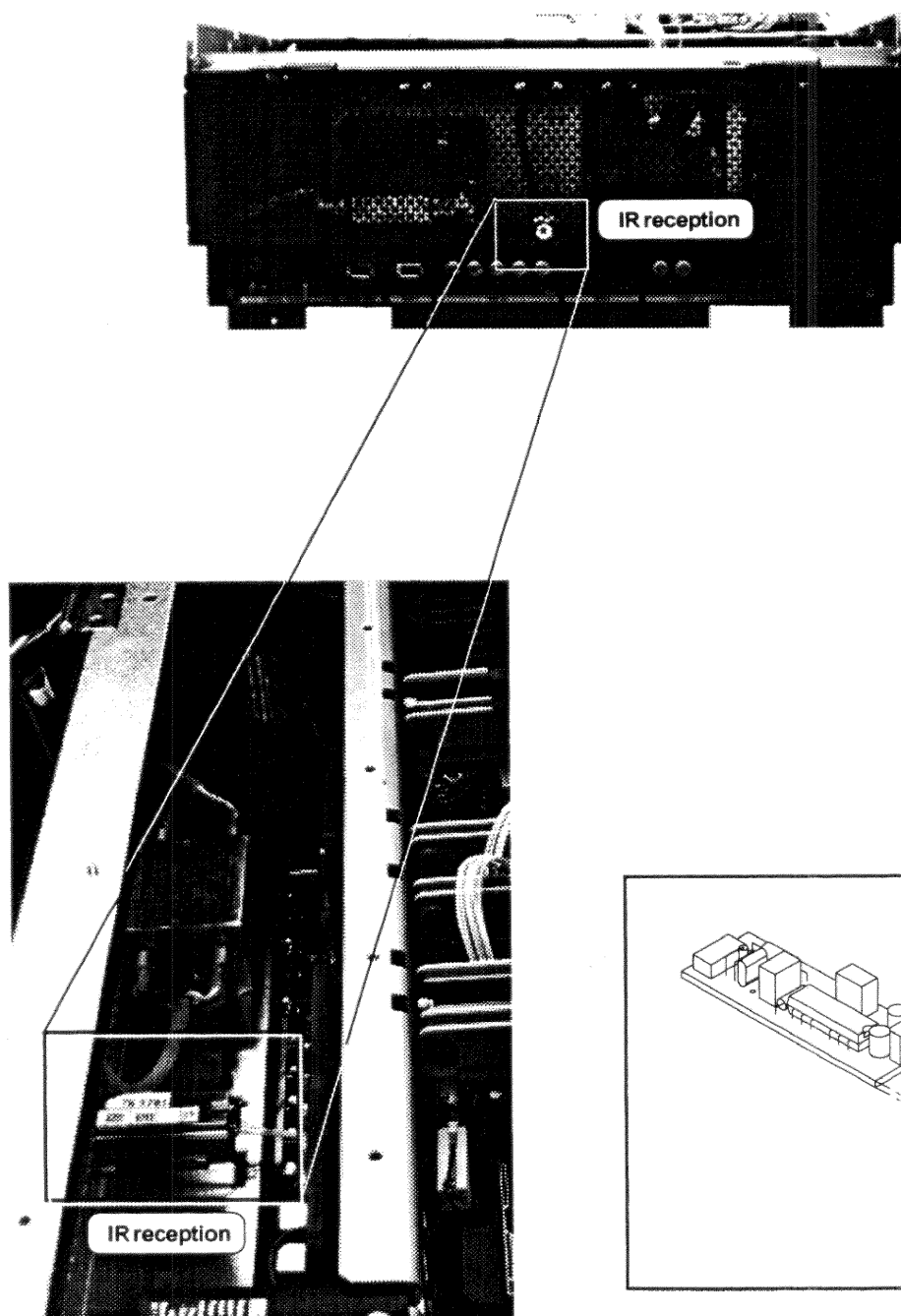




BARCO Projection Systems

SECTION 0

service sheet





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TBA2800 Infrared Preamplifier IC (14-Pin Plastic Package TO-116)

Bipolar integrated circuit intended as a receiver preamplifier for the infrared-remote control systems designed with the SAA1250 integrated circuit.

The TBA2800 preamplifier IC contains four main parts:

- gain-controlled amplifier I
- amplifier II
- pulse-separating amplifier III and
- inverter IV

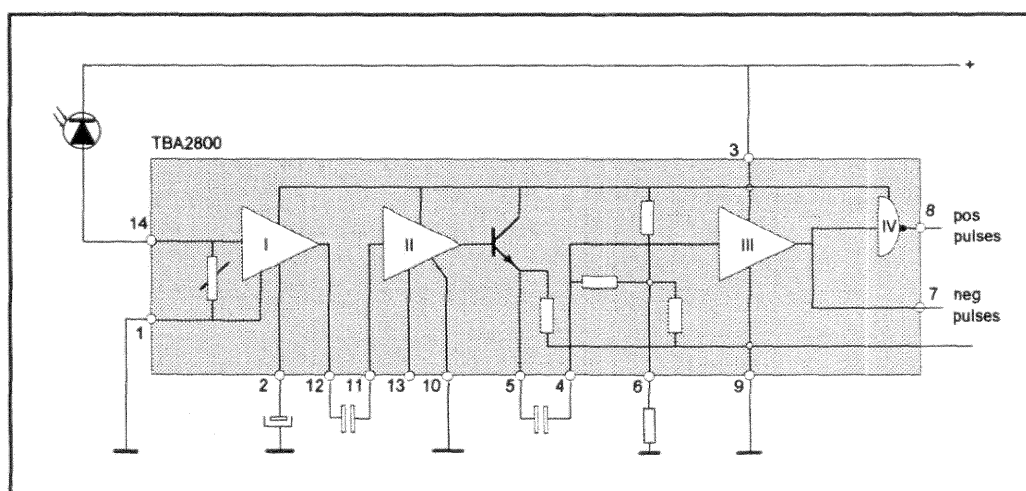
Amplifier I has a wide dynamic range and thus ensures interference-free operation, even at bright ambient light or at intensive infrared light as it comes from infrared sound transmissions or at bright 50 Hz modulated lights as it originates from fluorescent lamps.

It is also possible for the remote-control transmitter to be near the receiver without causing malfunctions by overdriving the receiver.

Amplifier II further amplifies the signal, and amplifier III separates the pulse-shaped intelligence signal from noise and other unwanted parts.

The additional inverter IV inverts the negative output pulses at pin 7 and thus delivers positive output pulses at pin 8.

If an additional resistor is inserted between pin 6 and GND, noise immunity is increased. But this is accompanied by decrease in sensitivity.

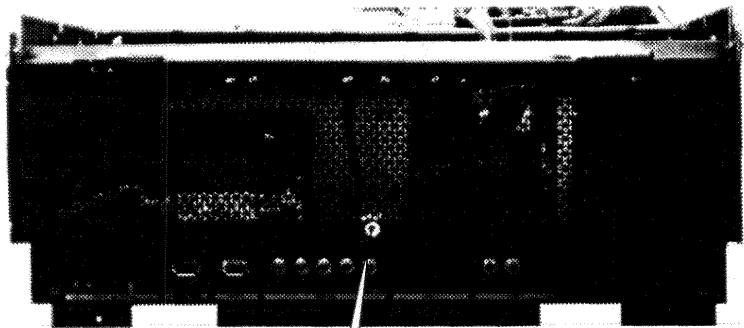


PARTS LISTING

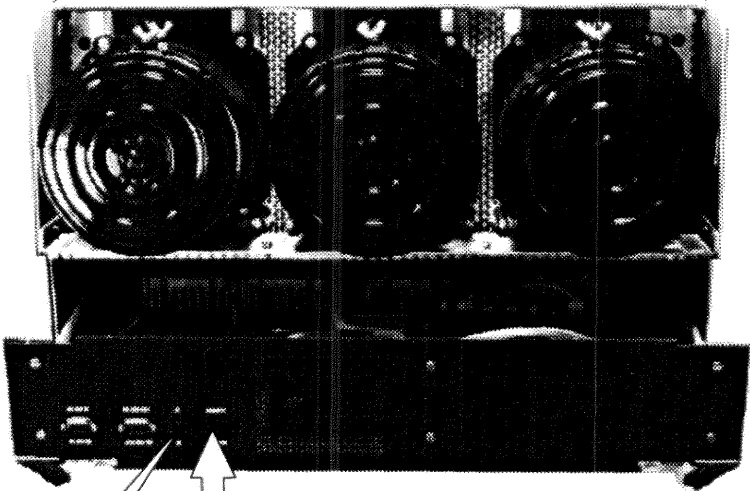
ITEM NO.	SIT.	DESCRIPTION	ITEM NO.	SIT.	DESCRIPTION
115940	C..2	C PP RA 10N J 63E2	132824	L..1	U 2800 TBA DIP14 PIRREC
1159181	C..3	C PP RA 1N2J100E2	3061582	L..1	CH AX NS 1,5 MH
1115915	C..8	C EL RA 4M7M 35E2	716581	PC..	PCB EP RCVDS800 RX IR
1115935	C.11	C EL RA 10M M 35E2	101160	R..9	R CF H100K J 0W25
131681	D..4	D BPW41 PHO			

SPARE PARTS

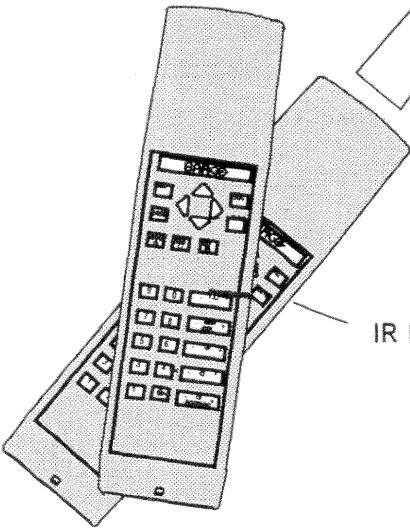
ART NO.	DESCRIPTION	QUANTITY			
131681	D BPW41 PHO	1	362121	SCR DIN7985 M 3 X 6	1
132824	U 2800 TBA DIP14 PIRREC	1	366102	NUT DIN934 M 3	1
3061582	CH AX NS 1,5 MH	1	367502	WSHR DIN6798 A 3,2 F Z	2
315331	SLDRLUG SCR 1TAG D3.2 L12	1	802880	SCRN PJ49 G800 REC IR	1



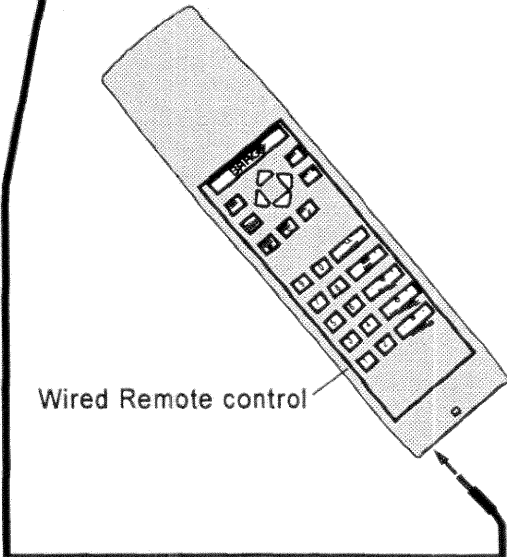
IR Receiver
Rear



IR Receiver
Front



IR Remote control



Wired Remote control