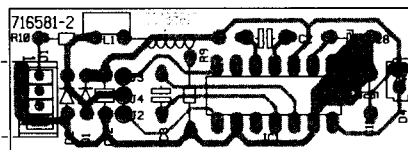


To CONTROLLER
via FRAME



Modifications reserved

Name	INFRA RED RECEIVER	Article nr.	76 1830-2
Date	08-02-1994	Drawn	JVDY
		Checked	SCG

BARCO PROJECTION SYSTEMS

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

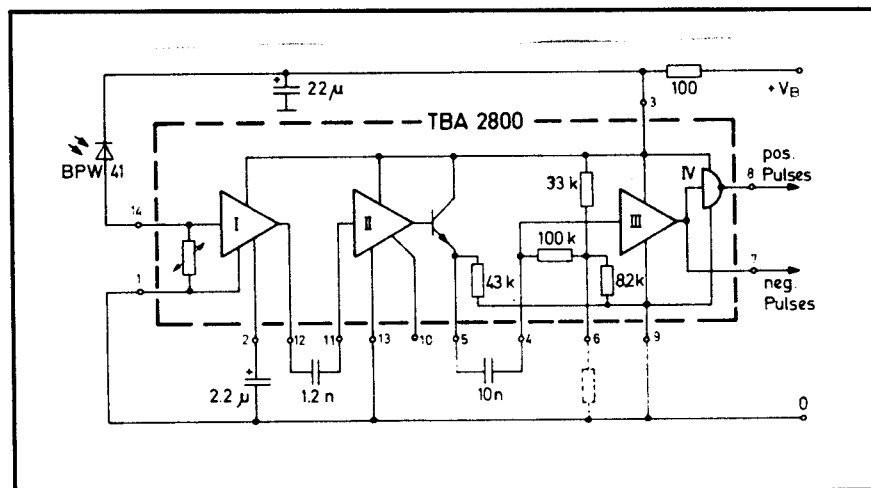
Amplifier I has a wide dynamic range and thus ensures interference-free operation, even at bright ambient light or at intensive infrared light as it comes from infrared sound transmissions or at bright 50 Hz modulated lights as it originates from fluorescent lamps.

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.



IR Receiver module

76 1830

Parts listing

ITEM NO.	SIT.	DESCRIPTION
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34 85045		CD CT FTMS P 4 700
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11 5940	C..2	C PP RA 10N J 63E2
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11 59181	C..3	C PP RA 1N2J100E2
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11 15915	C..8	C EL5 RA 4M7M 35E2 85
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11 1476	C.11	C EL RA 47M M 25E2 85
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13 1681	D..4	D O BPW41 032
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ITEM NO.	SIT.	DESCRIPTION
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13 2824	I..1	U 2800 TBA DIP14 PIRREC
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30 61582	L..1	CH AX NS 1.5 MH
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71 6581	PC..	PCS EP49 RCVDS800 RX IR
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10 1160	R..9	R CF H100K J 0W25
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Spare parts

ART NO.	DESCRIPTION
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QUANTITY

13 1681	D O BPW41 032
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1

13 2824	U 2800 TBA DIP14 PIRREC
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1

30 61582	CH AX NS 1.5 MH
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1

31 5303	J REC FWT H 2.8S0.5 PCS
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1

ART NO.	DESCRIPTION
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QUANTITY

34 85045	CD CT FTMS P 4 700
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1

80 3723	FRM PJ53 RX IR SCRN 01
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1