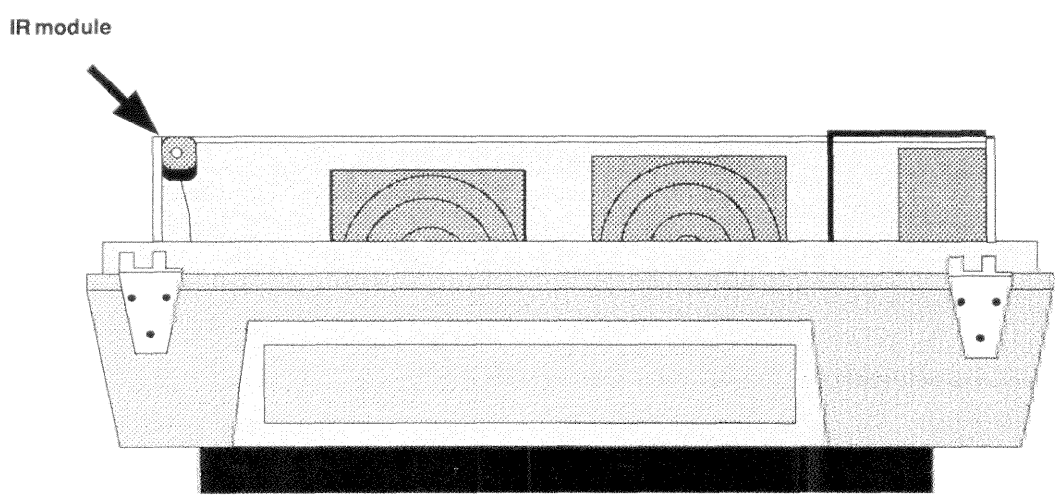
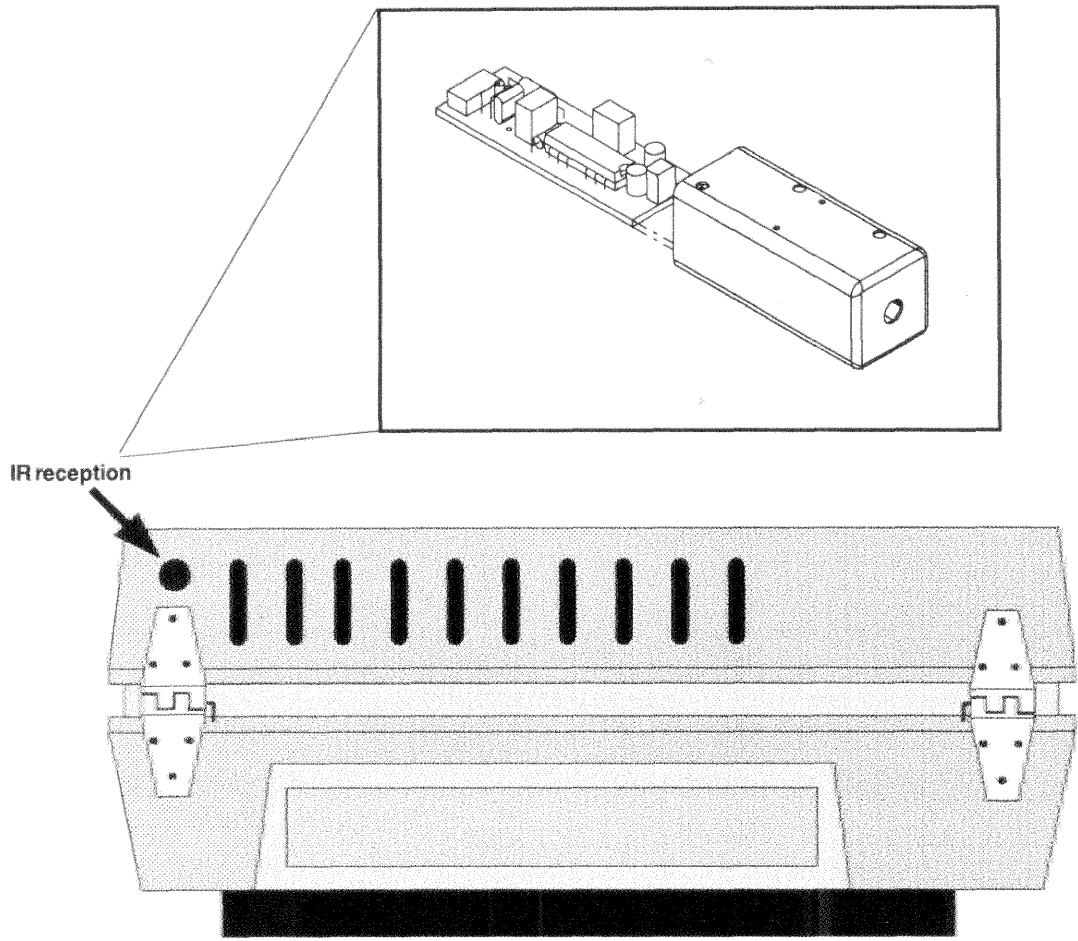


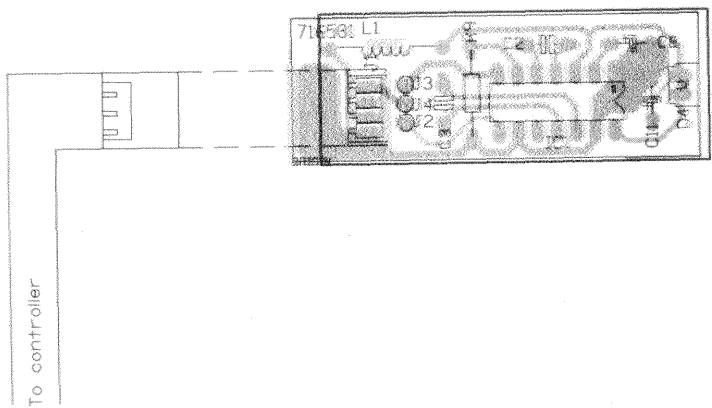


BARCO Projection Systems

SECTION **U**

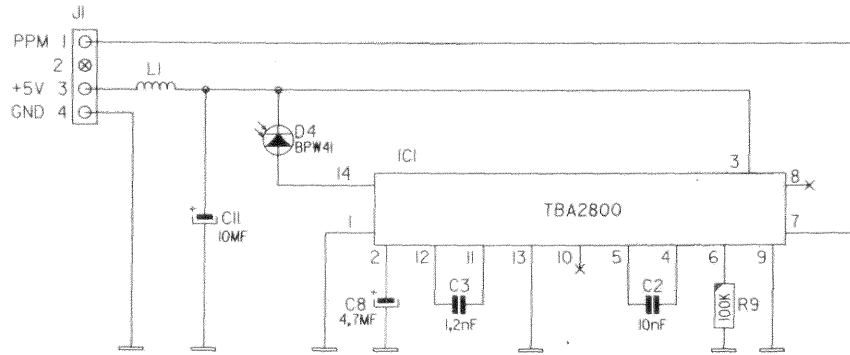
service sheet





|                    |       |             |
|--------------------|-------|-------------|
| Name               |       | Article nr. |
| IR receiver module |       | 761781      |
| Date               | Drawn | Checked     |
| 15/09/1990         | PG    | SG          |

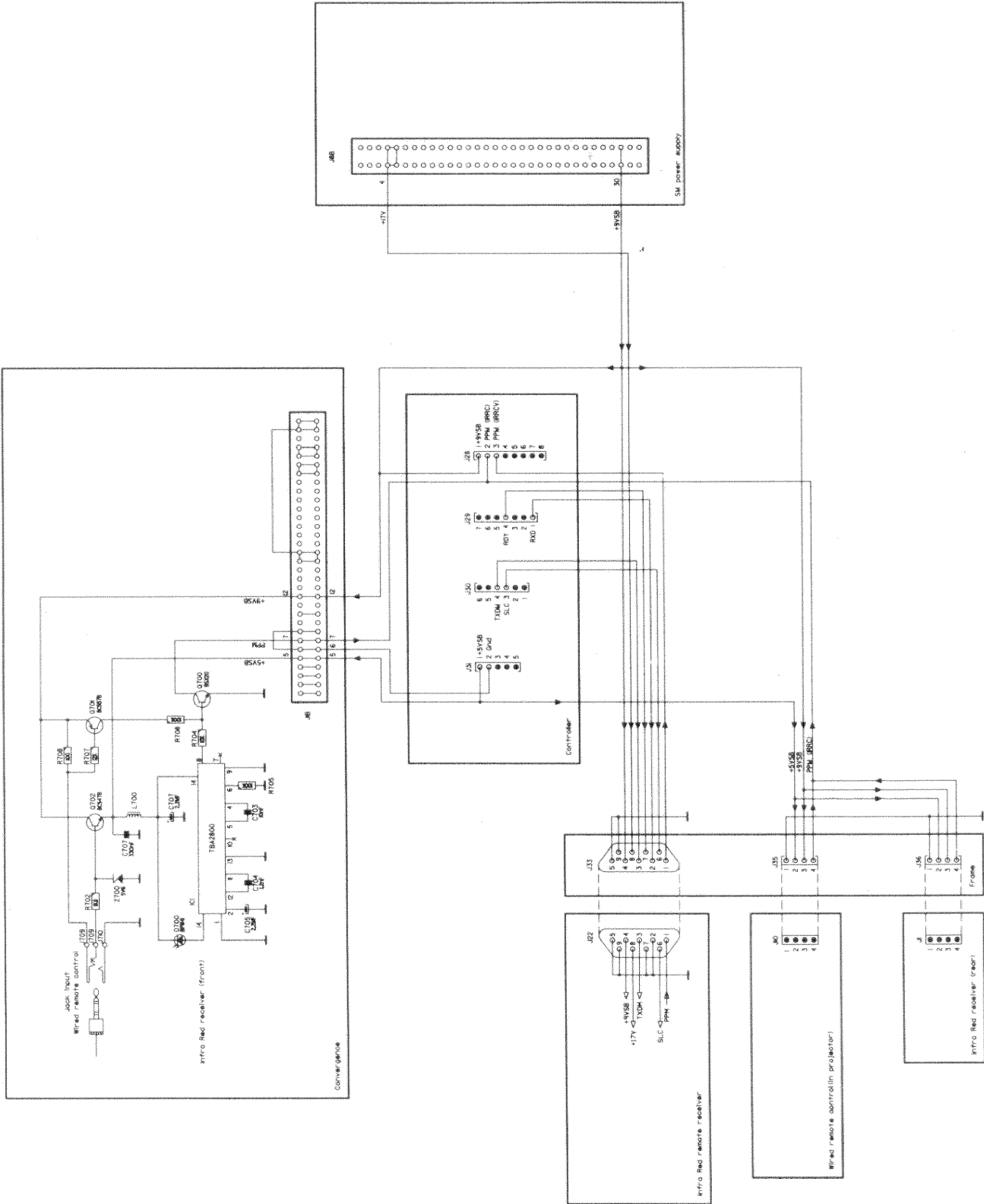
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|      |            |                           |             |         |
|------|------------|---------------------------|-------------|---------|
| Name |            | infra red receiver module | Article nr. | 1761781 |
| Date | 15/09/1990 | Drawn                     | PG          | Checked |
|      |            |                           |             | SG      |

Modifications reserved

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|                                 |  |                        |  |
|---------------------------------|--|------------------------|--|
| Name Interconnection            |  | Article n° 1800-series |  |
| Date 28/02/1991                 |  | Checked SCG            |  |
| Drawn PG                        |  | Checked SCG            |  |
| <b>BARCO PROJECTION SYSTEMS</b> |  |                        |  |

## 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

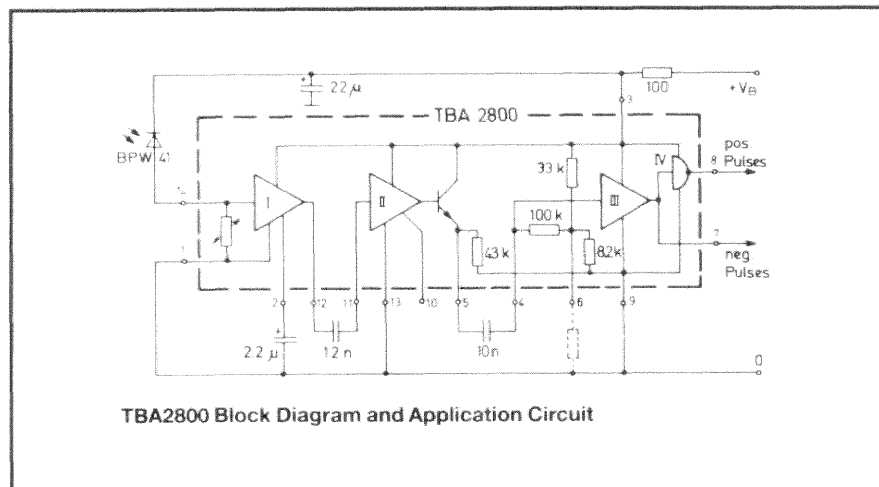
Amplifier I has a wide dynamic range and thus ensures interference-free operation, even at bright ambient light or at intensive infrared light as it comes from infrared sound transmissions or at bright 50 Hz modulated lights as it originates from fluorescent lamps.

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 a decrease in sensitivity.



## PARTS LISTING

| ITEM NO. | SIT. | DESCRIPTION        | ITEM NO. | SIT. | DESCRIPTION             |
|----------|------|--------------------|----------|------|-------------------------|
| 11 5940  | C..2 | C PP RA 10N J 63E2 | 13 2824  | L..1 | U 2800 TBA DIP14 PIRREC |
| 11 59181 | C..3 | C PP RA 1N2J100E2  | 30 61582 | L..1 | CH AX NS 1,5 MH         |
| 11 15915 | C..8 | C EL RA 4M7M 35E2  | 71 6581  | PC.. | PCB EP RCVDS800 RX IR   |
| 11 15935 | C.11 | C EL RA 10M M 35E2 | 10 1160  | R..9 | R CF H100K J 0W25       |
| 13 1681  | D..4 | D BPW41 PHO        |          |      |                         |

## SPARE PARTS

| ART NO.  | DESCRIPTION               | QUANTITY |         |                        |   |
|----------|---------------------------|----------|---------|------------------------|---|
| 13 1681  | D BPW41 PHO               | 1        | 36 2121 | SCR DIN7985 M 3 X 6    | 1 |
| 13 2824  | U 2800 TBA DIP14 PIRREC   | 1        | 36 6102 | NUT DIN934 M 3         | 1 |
| 30 61582 | CH AX NS 1,5 MH           | 1        | 36 7502 | WSHR DIN6798 A 3,2 F Z | 2 |
| 31 5331  | SLDRLUG SCR 1TAG D3.2 L12 | 1        | 80 2880 | SCRN PJ49 G800 REC IR  | 1 |

