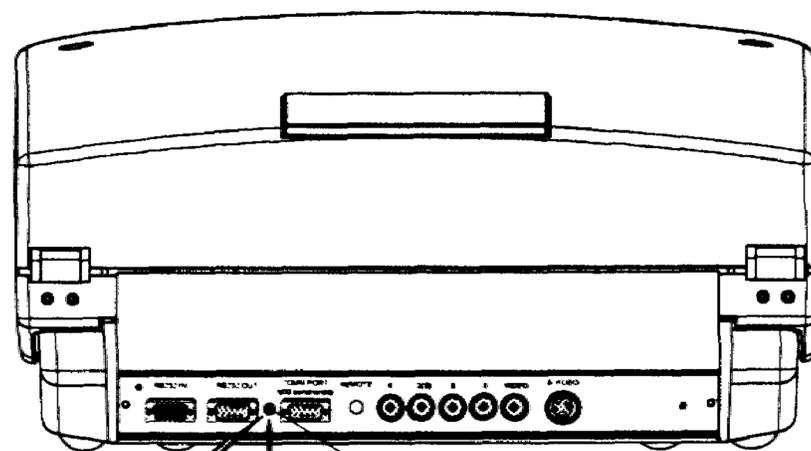
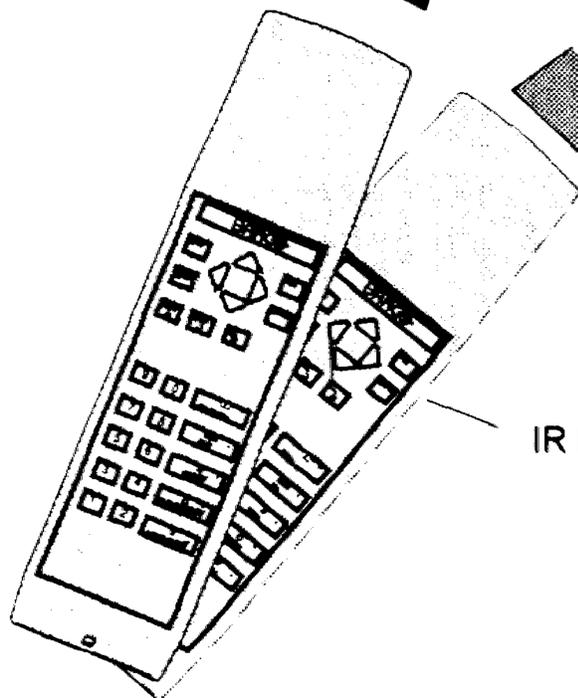


IR Receiver

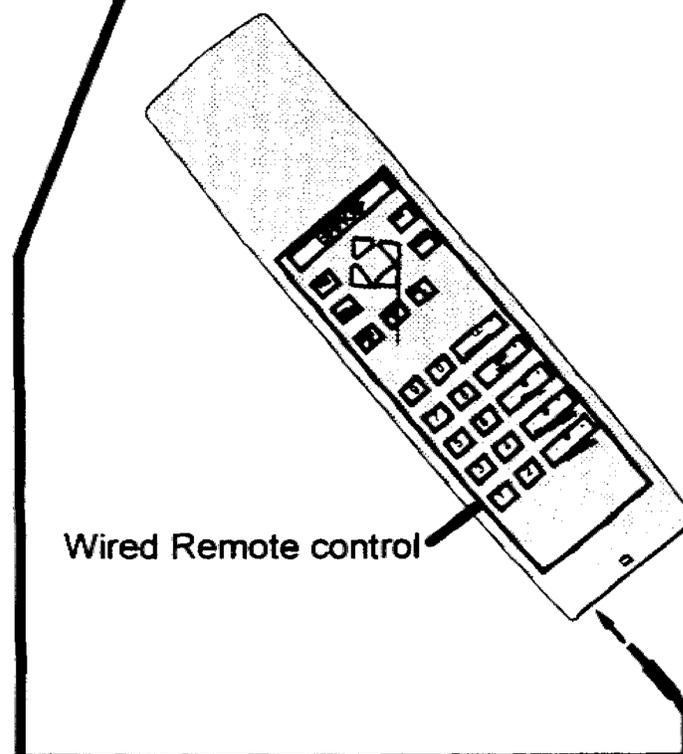
IR Receiver Front



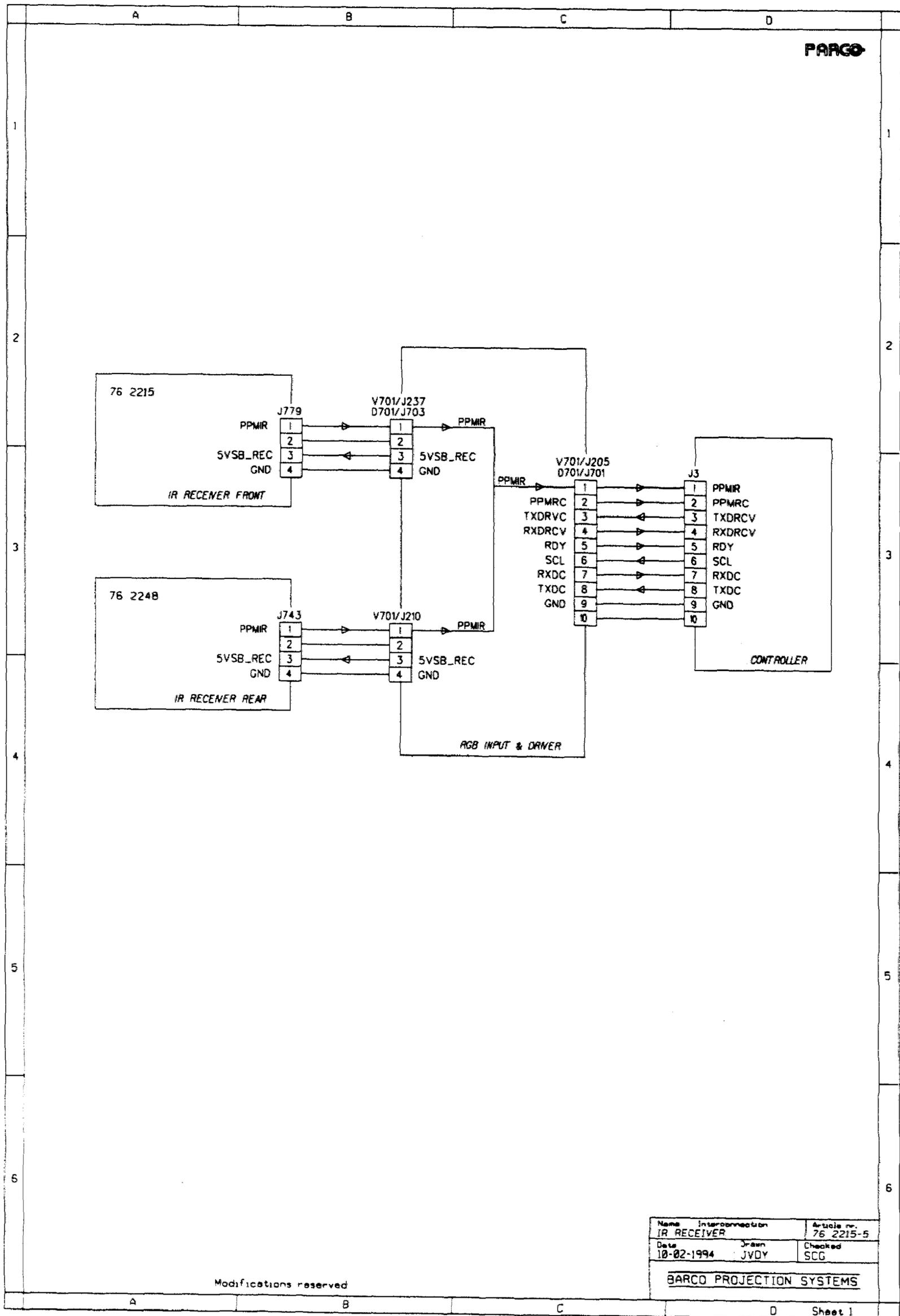
IR Receiver Rear



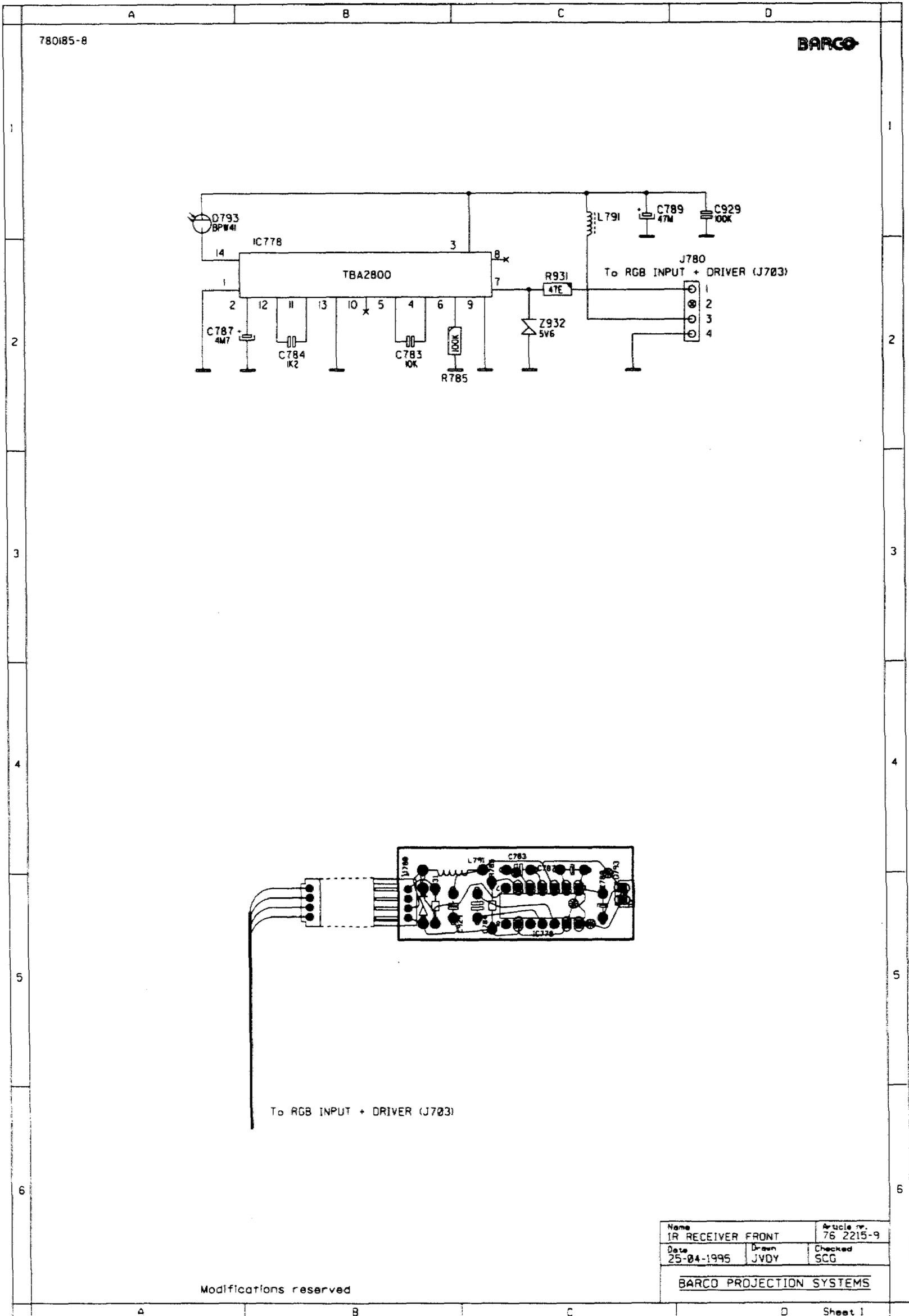
IR Remote control



Wired Remote control



SCHMATIC NAME: irbik.sch SHEET NUMBER: 1 DATE: May 15, 1996



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

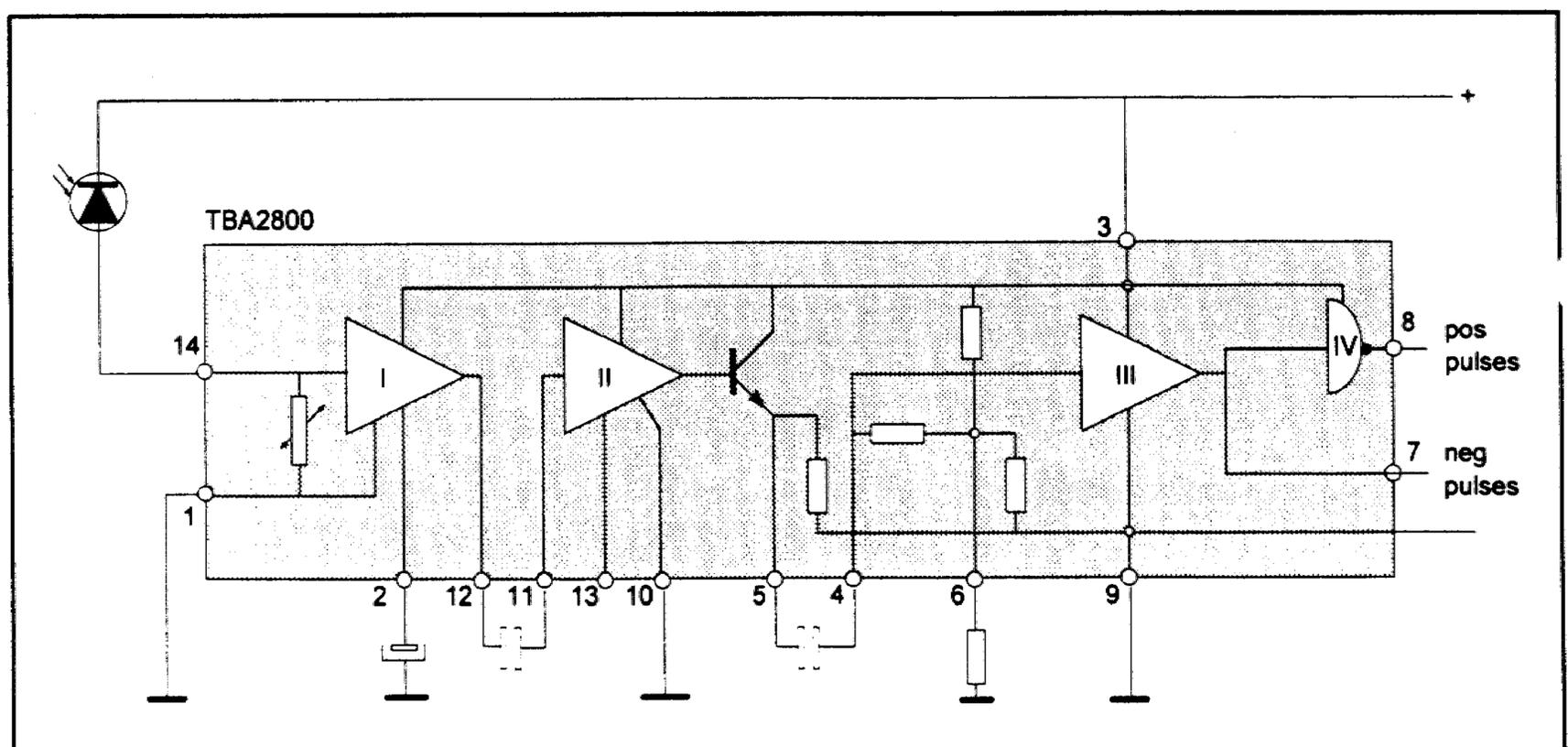
Amplifier I has a wide dynamic range and thus ensures interference-free operation, even at bright ambient light or at intensive infrared light as it comes from infrared sound transmissions or at bright 50 Hz modulated lights as it originates from fluorescent lamps.

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 76 2215

ITEM NO.	SIT.	DESCRIPTION	ITEM NO.	SIT.	DESCRIPTION
11 59181	C781	C PP RA 1N2J100E2	13 1681	D794	D BPW41 PHO
11 5940	C782	C PP RA 10N J 63E2	13 1621	D931	D 1N4148 SW DO35
11 1476	C790	C EL RA 47M M 25E2 85	13 1621	D933	D 1N4148 SW DO35
11 27741	C928	C CE MI 100N S 63E1			
11 15915	C788	C EL5 RA 4M7M 35E2 85	13 2824	I777	U 2800 TBA DIP14 PIRREC

