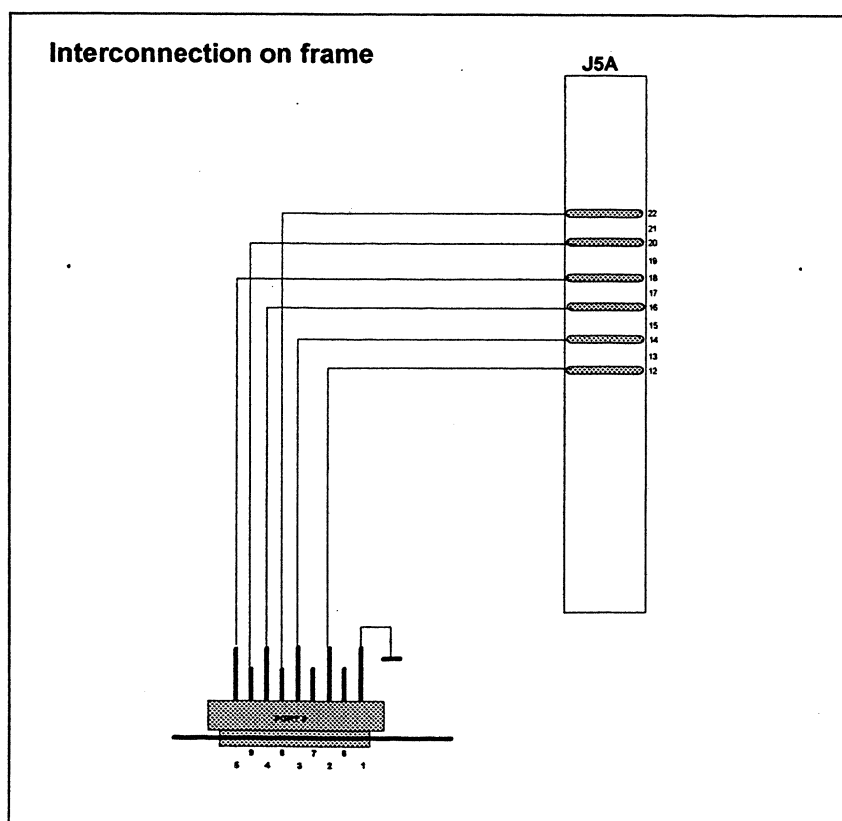
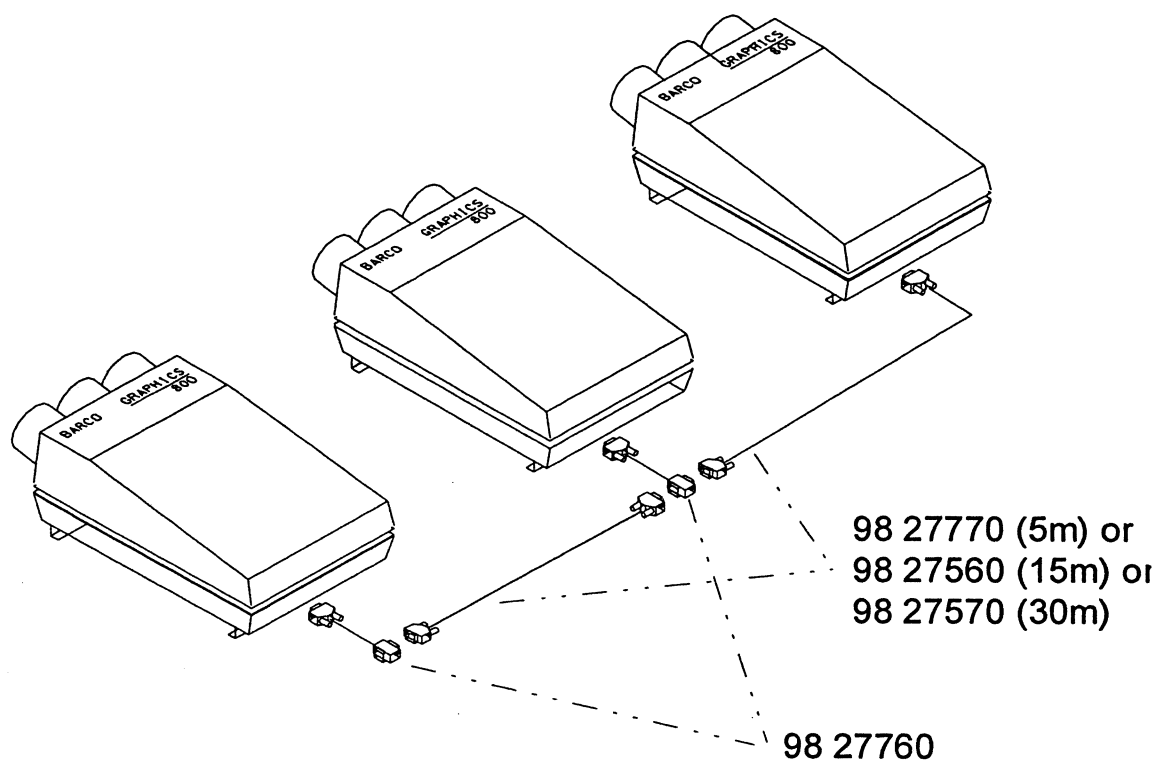


IBCL linked projectors



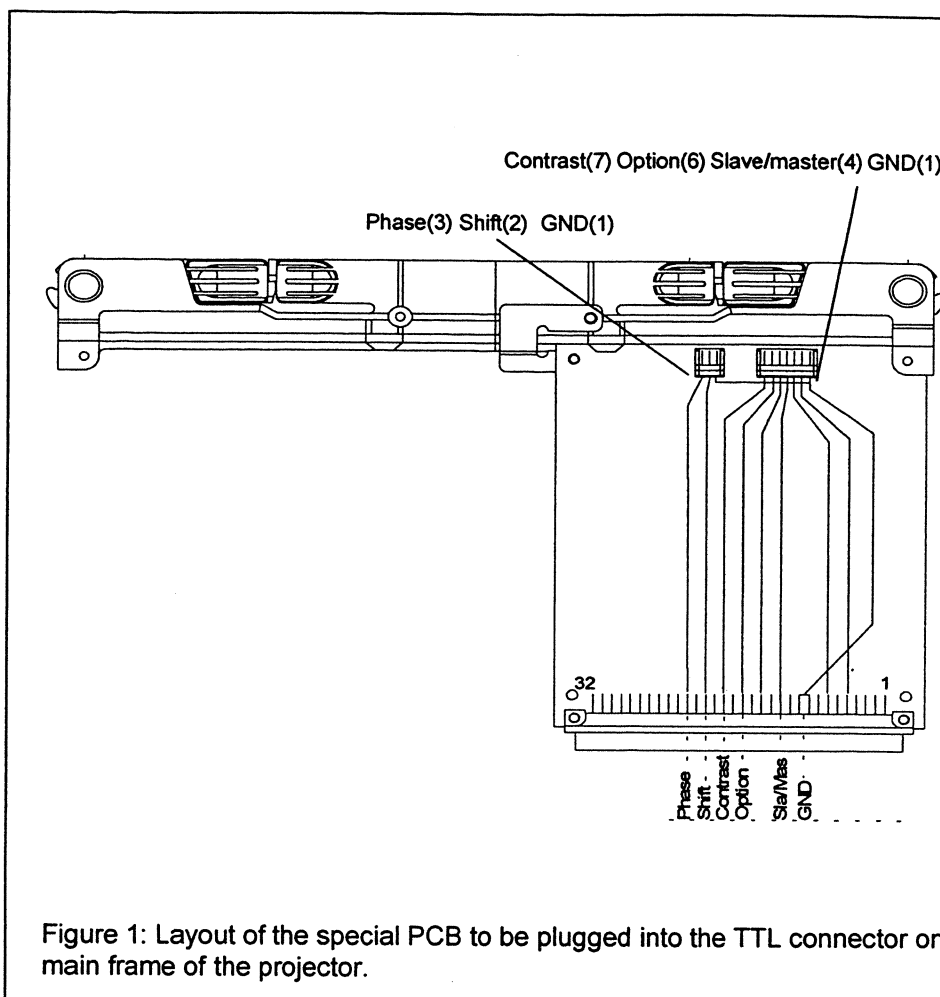


Figure 1: Layout of the special PCB to be plugged into the TTL connector on main frame of the projector.

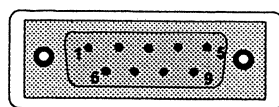
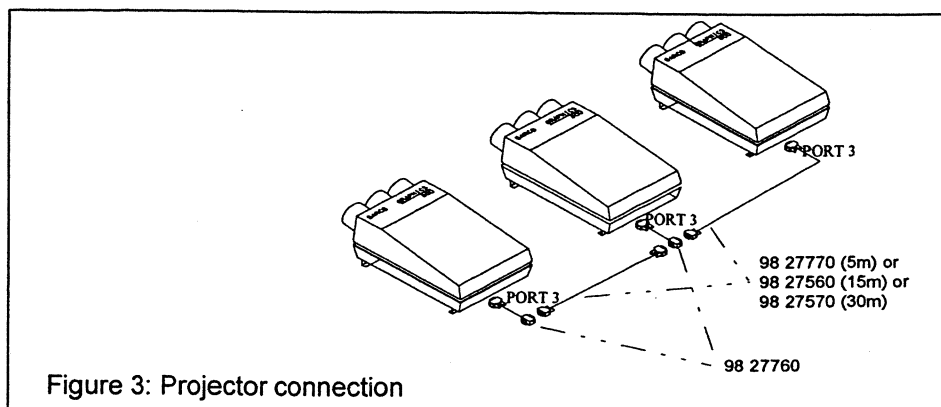


Figure 2: PORT 3 connector

- 1: GND
- 2: (Slave /master selection IBCL)*
(Pull down to GND => slave)
- 4: (Option (remote IR link))*
- 5: Contrast IBCL
- 8: Phase
- 9: Shift

* not standard



SPECIAL GAIN CONTROL MODULE

The object of the modification on the GAIN CONTROL IBCL board 7618375, is to control the light output of nine projectors.

Each projector normally owns an IBCL beam current limiter circuit. It cuts down the cathode current when it exceeds a limit, which may damage the CRT tube. Unfortunately, this limiter changes the contrast of the shown picture. To prevent each projector of having its own contrast level, we configured one projector as 'master'. The master controls the contrast for all nine projectors by using a common contrast line.

1) The special board in the second RGB slot.

For this special configuration, we used the PORT3 output connector to link the nine projectors. (see figure 3)

WARNING! Don't connect a 2nd RGB source to the PORT3 connector, it doesn't work at all!

As you can see, we made a special link PCB (761838) to plug into the 2nd RGB slot. (inside the projector). The 3 pins connector can be used to link orbiting signals through. The 7 pins connector passes the contrast signal from the decoder module to the PORT3 connector. The special PCB can always be removed and replaced by a 2nd RGB board.

The contrast lines of all nine projectors are connected together through a 470 ohm resistance. (J8) and protected by a diode D50. R250 and C140 determine the time constant of the contrast adjustment.

One projector is used as master. The strap S3 connects in this case, the internal contrast line from the projector to the common contrast line J8(2). (The red jumper is in the 'master' position)

The other projectors must be in the 'slave' mode by plugging the strap S3 in the slave position. The internal contrast signal is neglected.

2) Switching between stand alone and linked projector.

- Disconnect the wires on the PORT3 input when you were using it.
- Plug the special link PCB 761838 in the 2nd RGB slot.
- Connect the 7 pins connector (from the decoder subunit) to the link PCB.
- Put the red S3 jumper on the decoder subunit in the 'slave' position
- Connect the special loop through wire on the PORT3 connector to link the projector

3) Switching between linked and stand alone projector. (SLAVE->MASTER)

- Disconnect the wires on the PORT3 connector.
- Put the red jumper(S3) on the decoder subunit in the master position.

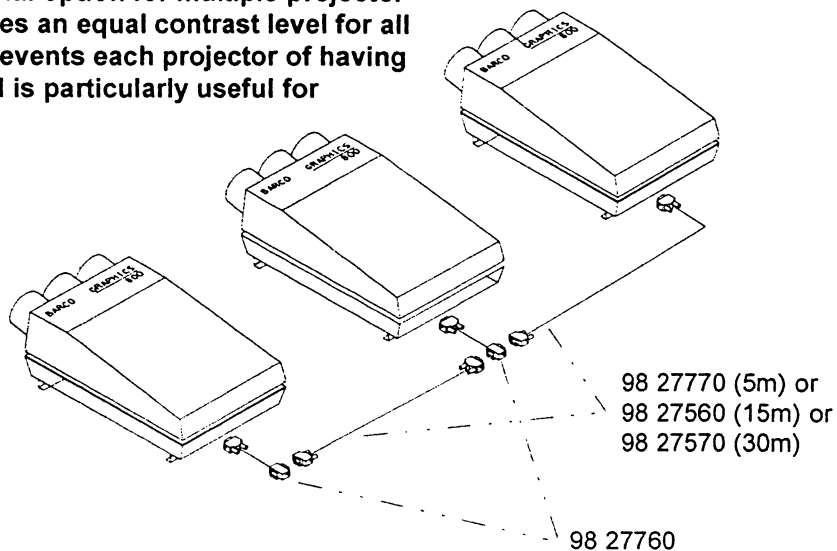
The special link PCB in the 2nd RGB slot can be replaced by a normal 2nd RGB board. In this case, connect the 7 pins connector J3 of the 2nd RGB board to the RGB switch board J3. The 7 pins connector J8 coming from the decoder is now unused.

4) Installation of linked projectors.

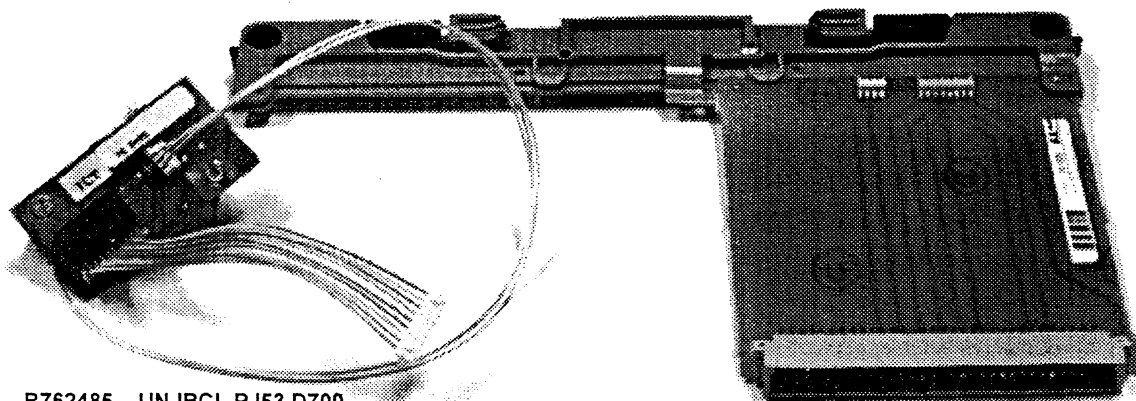
- Switch 1 projector to the 'master' mode.
- Switch the other projectors to the slave mode.
- Connect the loop through wire to the PORT3 connector of the 8 projectors.
- Adjust the contrast level of the master and the slaves will follow.
- Adjust the different lenses
- Start with the focus adjustment of each projector.
- Adjust the geometry of each projector
- Match the 8 green pictures to each other by using the green convergence control
- Adjust the geometry for RED and BLUE for each projector.
- Adjust the convergence for RED and BLUE.
- Adjust the black level of all projectors.
- Put the brightness control on 50% and adjust the highlights.

Remark: It's possible that the picture flickers. Change C140 to 10 uF to increase the time constant.

Barco's BCL link is a special option for multiple projector installations which provides an equal contrast level for all the projectors. The link prevents each projector of having its own contrast level, and is particularly useful for simulation installations.



R761838 Signal Transfer module



R762485 UN IBCL PJ53 D700

Contents of the kit :

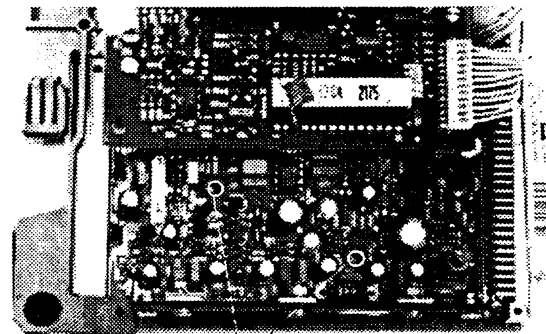
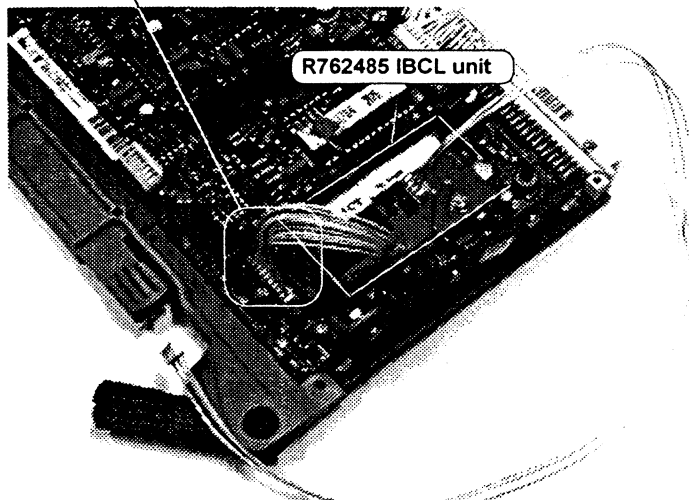
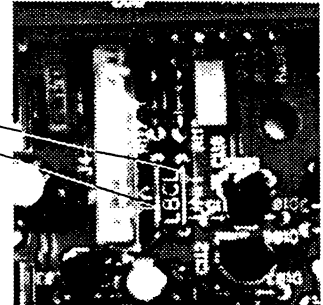
R5930361	BOX404 325X180X 80	1
R593545	BAG AST 203X305MM	1
R761838	UN BCL PJ49 IBCL LINK	1
R762485	UN IBCL PJ53 D700	1
R806106	BOXF BAR 265X165X25 PEF	1

Mounting of the IBCL unit R762485 on the QUAD Decoder+RGB Drive module

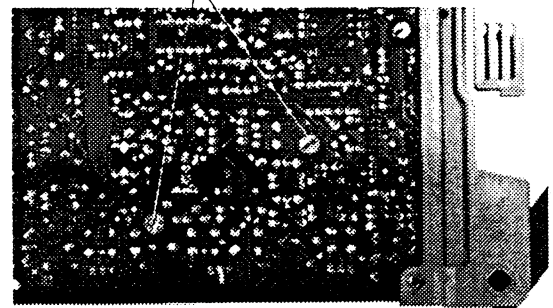
ATTENTION: remove before mounting the unit the two jumpers nearest the IBCL connector on the module.

Place the IBCL unit on the module lining up the threaded holes in the two spacers with the two holes in the module.
Using the two screws provided, tighten the unit into place.

Insert the plug of the IBCL unit cable into the IBCL connector on the module.

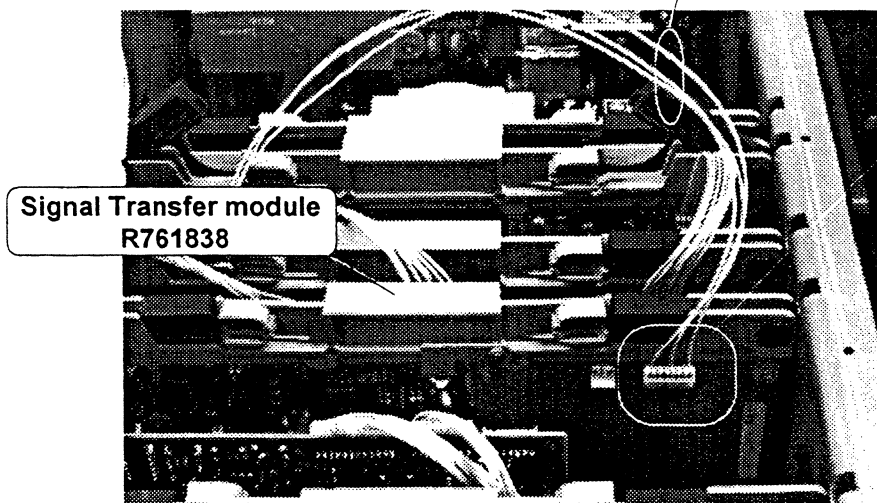


provided holes
screws



Mounting the Signal Transfer module R761838

- Remove the RGB Analog Auto Sync Input module and insert the Signal transfer module R761838
- Install the connection with the IBCL unit by plugging in the plug of the three wired cable into the provided connector on the Signal Tranfert module.



FRAME

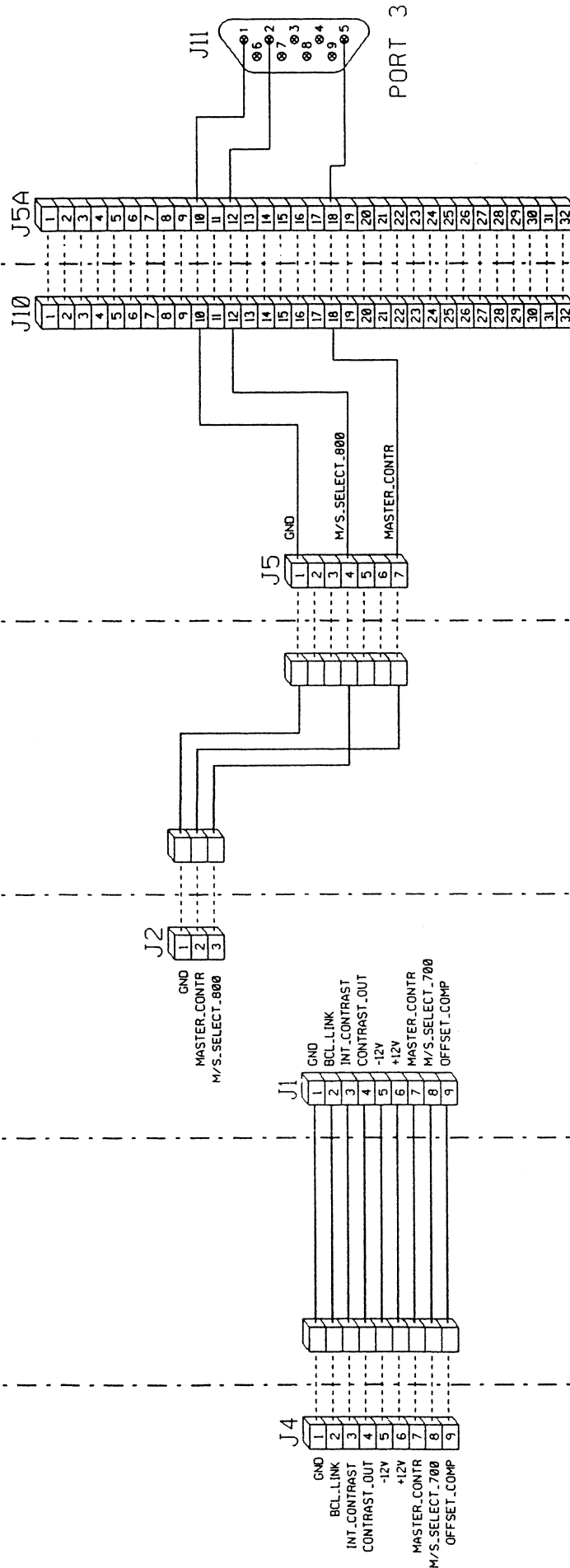
BCL LINK UNIT
OR CONTRAST
MODULATION

WIRE-UNIT
R3485070

LINKED
BCL
MODULE

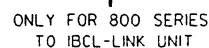
WIRE-UNIT

DECODER



LINKED BCL

Name LINKED BCL		Article nr. 800 series
Date 06-02-1995	Drawn JVDY	Checked CHT
BARCO PROJECTION SYSTEMS		

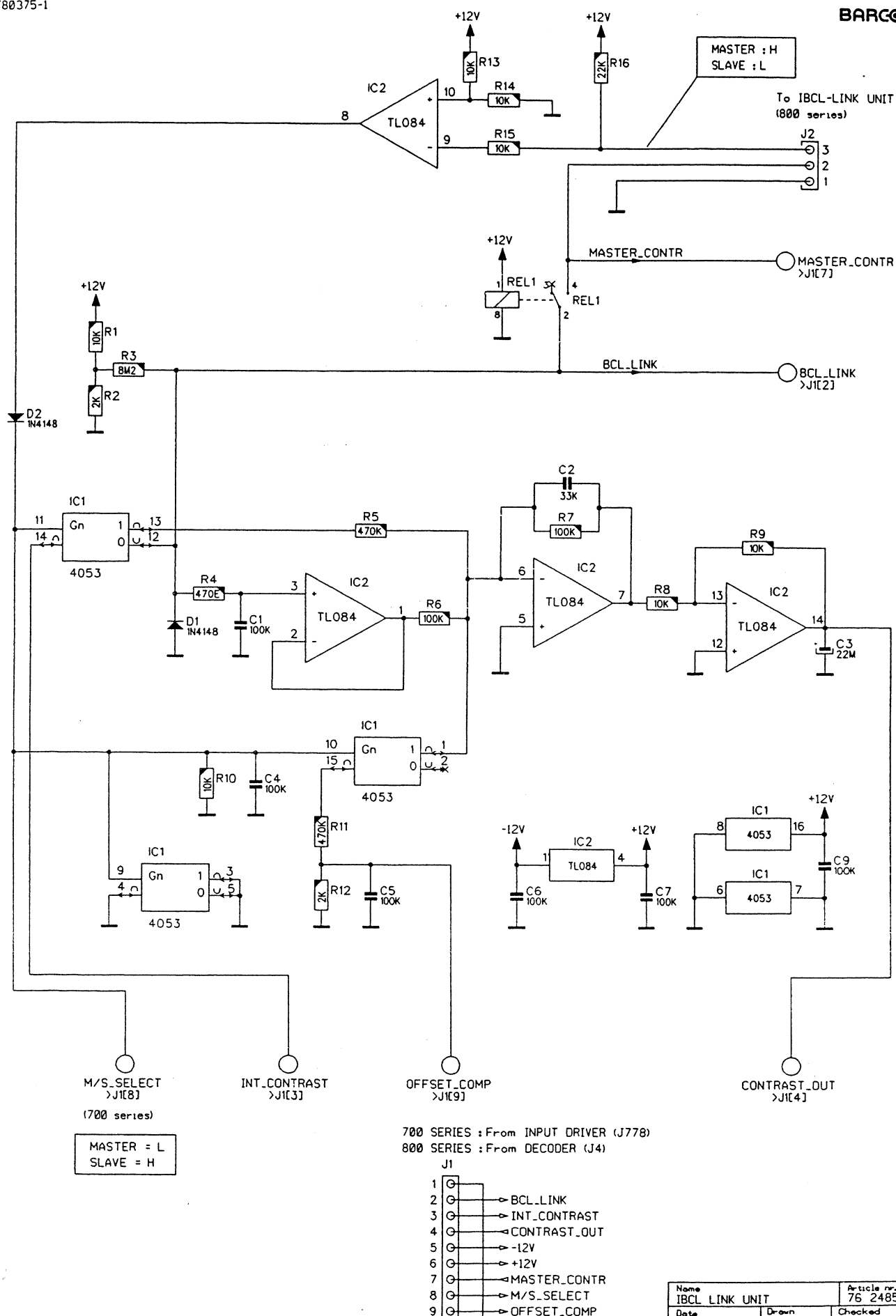


A diagram showing a multi-core processor with 8 cores. Each core has an output line, and all 8 output lines are connected to a single bus.

COMP.	LOC.	COMP.	LOC.
C1	B 2	J1	C 3
C2	C 2	J2	C 3
C3	B 2		
C4	C 2	R1	B 2
C5	C 1	R2	B 2
C6	C 2	R3	B 2
C7	C 2	R4	C 2
C9	C 2	R5	C 2
		R6	C 2
D1	B 2	R7	C 2
D2	C 2	R8	C 2
		R9	B 2
FD1	B 3	R10	C 2
FD2	C 3	R11	C 2
FD3	C 3	R12	C 1
		R13	C 2
IC1	C 2	R14	C 2
IC2	C 2	R15	C 2
		R16	C 2
		REL1	C 3

Name LINKED BCL UNIT		Article nr. 76 2485-I
Date 26-04-1995	Drawn JVDY	Checked KBU
BARCO PROJECTION SYSTEMS		

Modifications reserved



Name IBCL LINK UNIT		Article no. 76 2485-1
Date 06-02-1995	Drawn JVDY	Checked KBU

BARCO PROJECTION SYSTEMS

Kit BCL link *801S/*808

R9827861

Parts listing R9827861

SIT.	ITEM NO.	DESCRIPTION	QUANTITY	SIT.	ITEM NO.	DESCRIPTION	QUANTITY
9000	R5930361	BOX404 325X180X 80	1	2000	R762485	UN IBCL PJ53 D700	1
9010	R593545	BAG AST 203X305MM	1				
2100	R761838	UN BCL PJ49 IBCL LINK	1	9100	R806106	BOXF BAR 265X165X25 PEF	1

Parts listing R762485

SIT.	ITEM NO.	DESCRIPTION	QUANTITY	SIT.	ITEM NO.	DESCRIPTION	QUANTITY
3000	R3484092	CD CT FTMT P 9 100	1	PC	R780375	PCD#PJ53 D700 IBCL	1
3100	R3485070	CD CT \$FTFT P7/3 400	1				
110	R3631059	SCR D933 M 3 X 8 XIC	4	R 1	P200097	R# CE H 10K J 0W12 1206	1
100	R802666	SPR L17 D 6 M 3 B	2	R 2	P200080	R# CE H 2K J 0W12 1206	1
C 1	P210122	C# X7R MU 100N K 50 1206	1	R 3	P200674	R# CE H 8M2 K 0W12 1206	1
C 2	P210097	C# X7R MU 33N K 50 1206	1	R 4	P200065	R# CE H470E J 0W12 1206	1
C 3	P212031	C# TA 22M M 16 7343	1	R 5	P200137	R# CE H470K J 0W12 1206	1
C 4	P210122	C# X7R MU 100N K 50 1206	1	R 6	P200121	R# CE H100K J 0W12 1206	1
C 5	P210122	C# X7R MU 100N K 50 1206	1	R 7	P200121	R# CE H100K J 0W12 1206	1
C 6	P210122	C# X7R MU 100N K 50 1206	1	R 8	P200097	R# CE H 10K J 0W12 1206	1
C 7	P210122	C# X7R MU 100N K 50 1206	1	R 9	P200097	R# CE H 10K J 0W12 1206	1
C 9	P210122	C# X7R MU 100N K 50 1206	1	R 10	P200097	R# CE H 10K J 0W12 1206	1
D 1	P234099	D#4148 R DMMELF	1	R 11	P200137	R# CE H470K J 0W12 1206	1
D 2	P234099	D#4148 R DMMELF	1	R 12	P200080	R# CE H 2K J 0W12 1206	1
I 1	P230030	U#4053 SO16 I	1	R 13	P200097	R# CE H 10K J 0W12 1206	1
I 2	P230203	U#084 TL SO14 P	1	R 14	P200097	R# CE H 10K J 0W12 1206	1
J 1	R313923	JCT H MBT P 3 M2SN	1	R 15	P200097	R# CE H 10K J 0W12 1206	1
				R 16	P200105	R# CE H 22K J 0W12 1206	1
				REL1	R324350	RLY 12V 2C BH DIP M	1

Parts listing R761838

SIT.	ITEM NO.	DESCRIPTION	QUANTITY	SIT.	ITEM NO.	DESCRIPTION	QUANTITY
210	R367434	RVT POP D2.4 L 6 P AA	1	J1	R313525	J EUR2C MBS P64 E1C2S 1,6	2
110	R367435	RVT POP D2.4 L 9.3 P AA	1	J2	R313943	JCT H MBS P 3 M2SN	1
220	R367448	RVT POP D2.4 L11.5 P AA	1	J3	R313947	JCT H MBS P 7 M2SN	1
10	R367699	RVT CHB D2.38L6.35 P A	4				
100	R722276	LOCK PJ49 PCB UN CPL	1	PC	R780154	PCS PJ49 800 IBCL LINK	1
200	R802877	LOCK PJ49 PCB TTL	1				