| C-MM | Special Function 3 | Special Function 3 | Special Function 3 | Special Function 3 | Special Function 3 |
| C-FF | Special Function 4 | Special Function 4 | Special Function 4 | Special Function 4 | Special Function 4 |

Output Mode 12 provides Interrupted Sync Pulses on the active Offset output. Interrupted Sync Pulses are provided at intervals equal to 20% and 25% of the cycle on alternate cycles.

Output Mode 13 & 14 provides a flashing output on the inactive preempt status outputs.

14.2.5.3.5 ABC OUTPUT MODE 15-19 FUNCTIONS

Pin	Mode 15	Mode 16	Mode 17	Mode 18	Mode 19
A-DD				Sign 1A - THRU & OK	Preempt 1 Status
A-e				Sign 1B - THRU	Preempt 3 Status
B-s				Sign 2A - THRU & OK	TBC Auxiliary 1
B-e				Sign 2B - THRU	TBC Auxiliary 2
C-N				Sign 3A - THRU & OK	Ring 3 Dwell
C-CC				Sign 3B - THRU	Ring 4 Dwell
C-NN				Sign 4A - THRU & OK	Reserved
C-GG				Sign 4B - THRU	Reserved
B-A				Sign 1A - LEFT	Preempt 2 Status
B-C				Sign 1B - LEFT & OK	Preempt 4 Status
B-t				Sign 2A - LEFT	Preempt 5 Status
B-f				Sign 2B - LEFT & OK	Preempt 6 Status
C-M				Sign 3A - LEFT	Cycle 0
C-DD				Sign 3B - LEFT & OK	Ring 1 Dwell
C-PP				Sign 4A - LEFT	Ring 2 Dwell
C-HH				Sign 4B - LEFT & OK	Any Priority
A-u				Sign 1A - ONLY	Free Status
A-d				Sign 1B - ONLY	Automatic Flash Status
B-r				Sign 2A - ONLY	TBC Auxiliary 3
B-K				Sign 2B - ONLY	Detector Reset
C-k				Sign 3A - ONLY	Special Function 1
C-BB				Sign 3B - ONLY	Special Function 2
C-MM				Sign 4A - ONLY	Special Function 3
C-FF				Sign 4B - ONLY	Special Function 4

14.2.5.4 D CONNECTOR PIN / FUNCTIONS

Input / Output connector pin terminations of the optional Connector "D" interface is in accordance with the following:

	37 Pin (socket) AMP # 747315-2				
Pin	Function	I/O	Pin	Function	I/O
1	Mode * Input 1	(I)	22	Mode * Output 1	(O)
2	Mode * Input 2	(I)	23	Mode * Output 2	(O)
3	Mode * Input 3	(I)	24	Mode * Output 3	(O)
4	Mode * Input 4	(I)	25	Mode * Output 4	(O)
5	Mode * Input 5	(I)	26	Mode * Output 5	(O)
6	Mode * Input 6	(I)	27	Mode * Output 6	(O)
7	Mode * Input 7	(I)	28	Mode * Output 7	(O)
8	Mode * Input 8	(I)	29	Mode * Output 8	(O)
9	Automatic Flash	(I)	30	Auxiliary 1	(O)
10	Preempt 1 Detector	(I)	31	Auxiliary 2 or Any Preempt	(O)
11	Preempt 2 Detector	(I)	32	Auxiliary 3 or Detector Reset	(O)
12	Preempt 3 Detector	(I)	33	Logic Common	(O)
13	Preempt 4 Detector	(I)	34	Optional Serial Comm. 1	(O)
14	MMU/Conflict Flash Status	(I)	35	Optional Serial Comm. 1	(O)

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37 Pin (socket) AMP # 747315-2					
Pin	Function	I/O	Pin	Function	I/O
15	Local Flash Status	(I)	36	Reserved Output	(O)
16	Mode * Input 9	(I)	37	Reserved Output	(O)
17	Mode * Input 10	(I)			
18	Mode * Input 11	(I)			
19	Mode * Input 12	(I)			
20	Mode * Input 13	(I)			
21	Mode * Input 14	(I)			

(*) Denotes multi purpose inputs or outputs. The function of the input or output is dependent on CU "D" Connector Mode programming and whether the unit has an address other than "000".

14.2.5.4.1 D INPUT MODE FUNCTIONS

A Mode Input # function is dependent on CU "D" Connector Mode programming and whether the unit has an address other than "000".

	Address = "000"					
Pin	Mode 0	Mode 1	Mode 2	Mode 3	Mode 8	Mode 9
1	TBC On Line	Special Detector 1	On Line	Special Detector 1	On Line	Computer Control
2	T Plan A (Dial A)	Special Detector 7	T Plan A (Dial A)	Special Detector 7	T Plan A (Dial A)	T Plan A (Dial A)
3	T Plan B (Dial B)	Special Detector 8	T Plan B (Dial B)	Special Detector 8	T Plan B (Dial B)	T Plan B (Dial B)
4	T Plan C (Split A)	Special Detector 5	T Plan C (Split A)	Special Detector 5	T Plan C (Split A)	T Plan C (Split A)
5	T Plan D (Split B)	Special Detector 6	T Plan D (Split B)	Special Detector 6	T Plan D (Split B)	T Plan D (Split B)
6	Offset 1	Special Detector 2	Offset 1	Special Detector 2	Offset 1	Offset 1
7	Offset 2	Special Detector 3	Offset 2	Special Detector 3	Offset 2	Offset 2
8	Offset 3	Special Detector 4	Offset 3	Special Detector 4	Offset 3	Offset 3
16	Alt Sequence A	Special Status 1	Alt Sequence A	Special Status 1	Special Status 1	Special Status 1
17	Alt Sequence B	Special Status 2	Alt Sequence B	Special Status 2	Special Status 2	Special Status 2
18	Alt Sequence C	Special Status 3	Alt Sequence C	Special Status 3	Special Status 3	Special Status 3
19	Alt Sequence D	Special Status 4	Alt Sequence D	Special Status 4	Special Status 4	Special Status 4
20	Set Clock	Special Status 5	Preempt 5 Detector	Preempt 5 Detector	Preempt 5 Detector	Preempt 5 Detector
21	Dimming Enable	Special Status 6	Preempt 6 Detector	Preempt 6 Detector	Free	Preempt 6 Detector

	Address <> "000"					
Pin	Mode 0	Mode 1	Mode 2	Mode 3	Mode 8	Mode 9
1	Special Detector 1	TBC On Line	Special Detector 1	On Line	Special Detector 1	Computer Control
2	Special Detector 7	T Plan A (Dial A)	Special Detector 7	T Plan A (Dial A)	Special Detector 7	T Plan A (Dial A)
3	Special Detector 8	T Plan B (Dial B)	Special Detector 8	T Plan B (Dial B)	Special Detector 8	T Plan B (Dial B)
4	Special Detector 5	T Plan C (Split A)	Special Detector 5	T Plan C (Split A)	Special Detector 5	T Plan C (Split A)
5	Special Detector 6	T Plan D (Split B)	Special Detector 6	T Plan D (Split B)	Special Detector 6	T Plan D (Split B)
6	Special Detector 2	Offset 1	Special Detector 2	Offset 1	Special Detector 2	Offset 1
7	Special Detector 3	Offset 2	Special Detector 3	Offset 2	Special Detector 3	Offset 2
8	Special Detector 4	Offset 3	Special Detector 4	Offset 3	Special Detector 4	Offset 3
16	Special Status 1	Alt Sequence A	Special Status 1	Alt Sequence A	Special Status 1	Special Status 1
17	Special Status 2	Alt Sequence B	Special Status 2	Alt Sequence B	Special Status 2	Special Status 2
18	Special Status 3	Alt Sequence C	Special Status 3	Alt Sequence C	Special Status 3	Special Status 3
19	Special Status 4	Alt Sequence D	Special Status 4	Alt Sequence D	Special Status 4	Special Status 4
20	Special Status 5	Set Clock	Preempt 5 Detector	Preempt 5 Detector	Preempt 5 Detector	Preempt 5 Detector
21	Special Status 6	Dimming Enable	Preempt 6 Detector	Preempt 6 Detector	Free	Preempt 6 Detector

Input Mode 0 provides Coordination & Alt Sequence inputs when no system address is programmed and Special Detectors & Special Status inputs when a system address is programmed.

Input Mode 1 provides input functions just opposite of Input Mode "0". Coordination & Alt Sequence inputs when a system address is programmed and Special Detectors & Special Status inputs when no system address is programmed).

Input Mode 2 provides input functions similar to Mode "0" except Preempt 5 and Preempt 6 inputs replace functions on pin 20 and pin 21.

Input Mode 3 provides input functions similar to Mode "1" except Preempt 5 and Preempt 6 inputs replace functions on pin 20 and pin 21.

Input Mode 4 is not used at this time.

Input Mode 5 is not used at this time.

Input Mode 6 is not used at this time.

Input Mode 7 is not used at this time.

Input Mode 8 provides input functions similar to Mode "2" except Pin 16, 17, 18, 19, and 21 do not change function based on Address. This input mode automatically modifies the output functions as follows:

Pin	Address = "000" Function	Address <> "000" Function
32	Free (No Coordination)	Free (No Coordination)

The modifications to Pin 21 & 32 functions as defined above eliminates the Preempt 6 and TBC Auxiliary 3 capability.

Input Mode 9 provides input functions which may be utilized with a central computer system.

D OUTPUT MODE FUNCTIONS

A Mode Output # function is dependent on CU "D" Connector Mode programming and whether the unit has an address other than "000".

							Address = "000"		
Pin	Mode 0	Mode 1	2-3	Mode 4	Mode 5	6-8	Mode 9
22	T Plan A (Dial A)	Special Function 7		Preempt 6 Status	T Plan A (Dial A)		R3 Dwell
23	T Plan B (Dial B)	Special Function 8		Any Priority	T Plan B (Dial B)		R4 Dwell
24	T Plan C (Split A)	Special Function 5		Preempt 4 Status	T Plan C (Split A)		R1 Dwell
25	T Plan D (Split B)	Special Function 6		Preempt 5 Status	T Plan D (Split B)		R2 Dwell
26	Offset 1	Special Function 2		Preempt 1 Status	Offset 1		Special Function 2
27	Offset 2	Special Function 3		Preempt 2 Status	Offset 2		Special Function 3
28	Offset 3	Special Function 4		Preempt 3 Status	Offset 3		Cycle 0
29	Automatic Flash	Special Function 1		Special Function 1	Automatic Flash		Special Function 1

							Address <> "000"		
Pin	Mode 0	Mode 1	2-3	Mode 4	Mode 5	6-8	Mode 9
22	Special Function 7	T Plan A (Dial A)		Preempt 6 Status	T Plan A (Dial A)		R3 Dwell
23	Special Function 8	T Plan B (Dial B)		Any Priority	T Plan B (Dial B)		R4 Dwell
24	Special Function 5	T Plan C (Split A)		Preempt 4 Status	T Plan C (Split A)		R1 Dwell
25	Special Function 6	T Plan D (Split B)		Preempt 5 Status	T Plan D (Split B)		R2 Dwell
26	Special Function 2	Offset 1		Preempt 1 Status	Offset 1		Special Function 2
27	Special Function 3	Offset 2		Preempt 2 Status	Offset 2		Special Function 3
28	Special Function 4	Offset 3		Preempt 3 Status	Offset 3		Cycle 0
29	Special Function 1	Automatic Flash		Special Function 1	Automatic Flash		Special Function 1

Output Mode 0 provides Coordination outputs when no system address is programmed and System Special Function outputs when a system address is programmed.

Output Mode 1 provides output functions just opposite of Output Mode "0". Coordination outputs when a system address is programmed and System Special Function outputs when no system address is programmed.

Output Mode 2 provides output functions similar to Mode "0" except when any Preempt routine has control then it is like Mode 4 below.

When Auxiliary #2 is not programmed for output as a TBC Auxiliary function, it will become an Any Preempt active function. The Any Preempt output will become active when any Low Priority routine or any Preempt routine is in control. This output may provide the control signal to correctly utilize these dual function outputs.

Output Mode 3 provides output functions similar to Mode "1" except when any Preempt routine has control then it is like Mode 4 below.

Output Mode 4 provides preempt status outputs that are active whenever a preempt routine (Preempt or Low Priority) is in control. The presence of the Any Priority output indicates a Low Priority routine is in control. Each routine (Preempt or Low Priority) is mutually exclusive.

Output Mode 5 provides output functions similar to Mode "0" (Address = "000") except provides Interrupted Sync Pulses on the active Offset output. Interrupted Sync Pulses are provided at intervals equal to 20% and 25% of the cycle on alternate cycles.

Output Mode 6 provides output functions similar to Mode "4" except when a Preempt is active provides a flashing output on the inactive preempt status outputs.

Output Mode 7 is not used at this time.

Output Mode 8 is not used at this time.

Output Mode 9 provides output functions which are provided as status feedback for the central computer system control established with Input Mode 9. It is established automatically when Input Mode 9 is programmed.