

## SECTION 678-9

### INPUT FILES

#### 678-9.1 Input Files Assembly:

##### 678-9.1.1 General Requirements:

- (a) The "I" Input File assembly consists of a fourteen (14) slot card cage which, when fully populated, serves to house twelve (12) two-channel Loop Detector modules, and two (2) two-channel DC Isolator modules for Ped isolation. The "J" Input File assembly consists of a fourteen (14) slot card cage which, when fully populated, serves to house eleven (11) two-channel Loop Detector modules, one (1) four-channel Opticom 754 Phase Selector, and one (1) two-channel AC Isolator module for railroad preemption. All detector slots will be cross-wired to allow four-channel card operation. When viewed from the front, left to right as follows:

#### "I" FILE

SLOT #	MODULE	FUNCTION	PIN #	CHANNEL #
1A	Loop Detector # 1	Ext, Cnt, Call	<C1-39>	Phase 1
1B	Loop Detector # 2	Ext, Cnt, Call	<C1-39>	Phase 1
2A	Loop Detector # 3	Ext, Cnt, Call	<C1-40>	Phase 2
2B	Loop Detector # 4	Ext, Cnt, Call	<C1-41>	Phase 2
3A	Loop Detector # 5	Ext, Cnt, Call	<C1-41>	Phase 2
3B	Loop Detector # 6	Ext, Cnt, Call	<C1-41>	Phase 2
4A	Loop Detector # 7	Ext, Cnt, Call	<C1-42>	Phase 3
4B	Loop Detector # 8	Ext, Cnt, Call	<C1-42>	Phase 3
5A	Loop Detector # 9	Ext, Cnt, Call	<C1-43>	Phase 4
5B	Loop Detector # 10	Ext, Cnt, Call	<C1-44>	Phase 4
6A	Loop Detector # 11	Ext, Cnt, Call	<C1-44>	Phase 4
6B	Loop Detector # 12	Ext, Cnt, Call	<C1-44>	Phase 4
7A	Loop Detector # 13	Ext, Cnt, Call	<C1-45>	Phase 5
7B	Loop Detector # 14	Ext, Cnt, Call	<C1-45>	Phase 5
8A	Loop Detector # 15	Ext, Cnt, Call	<C1-46>	Phase 6
8B	Loop Detector # 16	Ext, Cnt, Call	<C1-47>	Phase 6
9A	Loop Detector # 17	Ext, Cnt, Call	<C1-47>	Phase 6
9B	Loop Detector # 18	Ext, Cnt, Call	<C1-47>	Phase 6
10A	Loop Detector # 19	Ext, Cnt, Call	<C1-48>	Phase 7
10B	Loop Detector # 20	Ext, Cnt, Call	<C1-48>	Phase 7
11A	Loop Detector # 21	Ext, Cnt, Call	<C1-56>	Phase 8
11B	Loop Detector # 22	Ext, Cnt, Call	<C1-57>	Phase 8
12A	Loop Detector # 23	Ext, Cnt, Call	<C1-57>	Phase 8
12B	Loop Detector # 24	Ext, Cnt, Call	<C1-57>	Phase 8
13A	DC Isolator P2	Ped Call	<C1-75>	Ped 2
13B	DC Isolator P6	Ped Call	<C1-76>	Ped 6
14A	DC Isolator P4	Ped Call	<C1-77>	Ped 4
14B	DC Isolator P8	Ped Call	<C1-78>	Ped 8

"J" FILE

SLOT #	MODULE	FUNCTION	PIN #	CHANNEL #
1A	Loop Detector # 25	System Sensor	<C1-58>	SS 1
1B	Loop Detector # 26	System Sensor	<C1-59>	SS 2
2A	Loop Detector # 27	System Sensor	<C1-60>	SS 3
2B	Loop Detector # 28	System Sensor	<C1-61>	SS 4
3A	Loop Detector # 29	System Sensor	<C1-62>	SS 5
3B	Loop Detector # 30	System Sensor	<C1-63>	SS 6
4A	Loop Detector # 31	System Sensor	<C1-64>	SS 7
4B	Loop Detector # 32	System Sensor	<C1-66>	SS 8
5A	Loop Detector # 33	Spare	<C1-57>	Spare
5B	Loop Detector # 34	Spare	<C1-57>	Spare
6A	Loop Detector # 35	Spare	<C1-42>	Spare
6B	Loop Detector # 30	Spare	<C1-46>	Spare
7A	Loop Detector # 31	Spare	<C1-66>	Spare
7B	Loop Detector # 32	Spare	<C1-79>	Spare
8A	Loop Detector # 33	Speed Loop	<C1-49>	Speed 1A
8B	Loop Detector # 34	Speed Loop	<C1-50>	Speed 1B
9A	Loop Detector # 35	Speed Loop	<C1-53>	Speed 2A
9B	Loop Detector # 36	Speed Loop	<C1-54>	Speed 2B
10A	Loop Detector # 37	Speed Loop	<C1-55>	Speed 3A
10B	Loop Detector # 38	Speed Loop	<C1-68>	Speed 3B
11A	Loop Detector # 39	Speed Loop	<C1-69>	Speed 4A
11B	Loop Detector # 40	Speed Loop	<C1-79>	Speed 4B
12A	754 Aux Card	Preempt	<C1-73>	EV C
12B	754 Aux Card	Preempt	<C1-74>	EV D
13A	754 Phase Selector	Preempt	<C1-71>	EV A
13B	754 Phase Selector	Preempt	<C1-72>	EV B
14A	AC Isolator RR 1	Preempt	<C1-51>	RR 1
14B	AC Isolator RR 2	Preempt	<C1-52>	RR 2

(b) DC Isolators can be substituted for AC Isolators in the event that the type of a particular isolator input signal demands it. For example, if an RRP signal were a DC type then a DC Isolator could be plugged-in in place of an AC Isolator. This is possible since the physical and electrical input / output wiring configurations or "footprints" for the AC and DC Isolators shall be identical.

**678-9.1.2 Physical Requirements:**

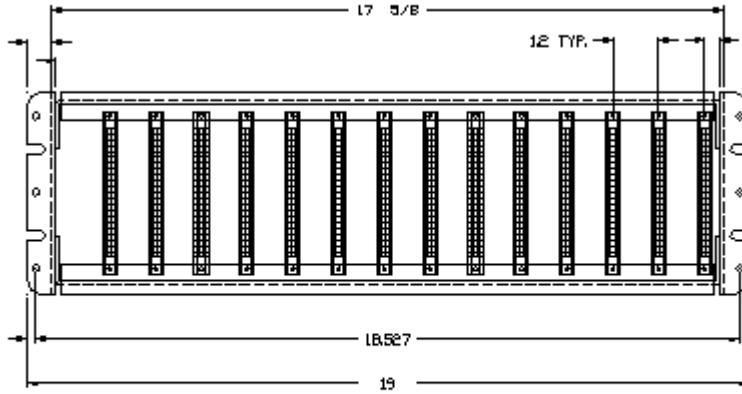
- (a) The Input File physical dimensions shall be a maximum of 17.5 inches wide x 5.25 inches high with 3/4 inch mounting flanges for a 19-inch rack (See Figure 678-25).
- (b) The back plane shall NOT consist of printed wiring. Any backplane interconnection shall be by discrete wiring only.
- (c) Each of the back plane connectors shall be a double row forty-four (2x22) position connector utilizing 0.156 inch finger spacing.
- (d) Each of the back plane connectors shall be wired in such a method that an AC or DC Isolator Module(s) and two or four channel detector(s) may be installed in them.

**678-9.1.3 Electrical Characteristics/Pin Assignments:**

(a) Input File connectors shall be hardwired as follows:

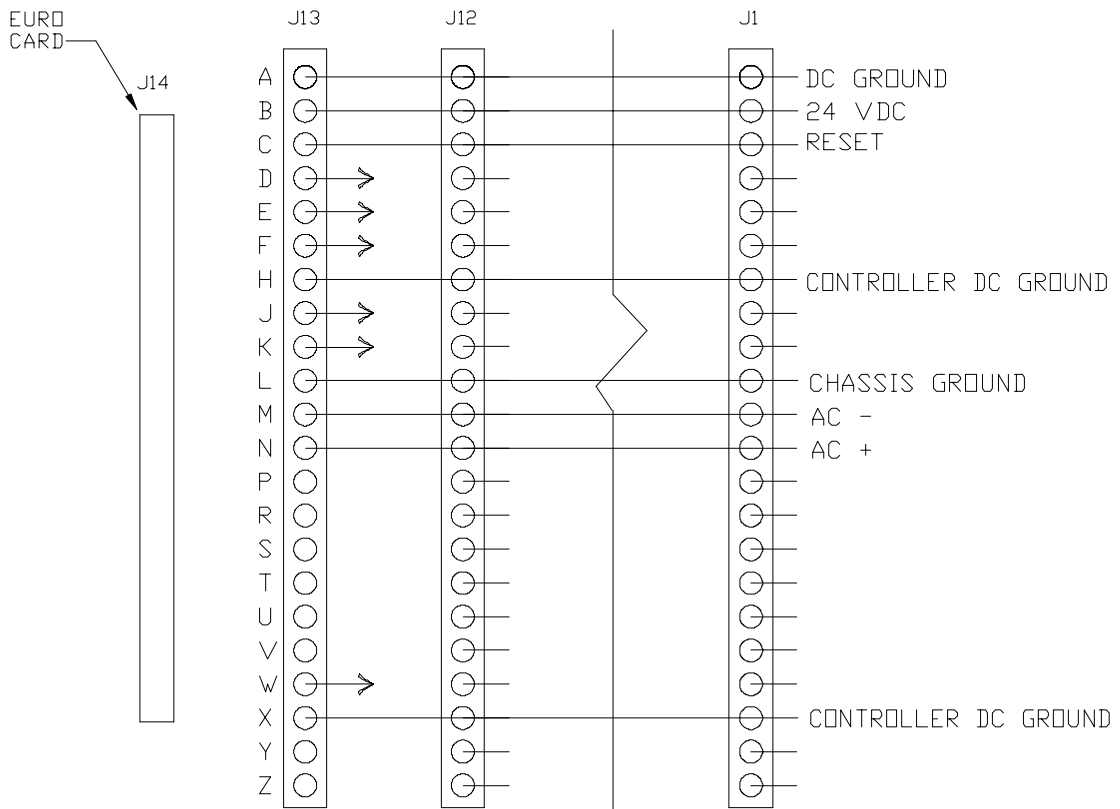
F	Channel 1 Output
W	Channel 2 Output
D	Channel 1 Input +
E	Channel 1 Input -
J	Channel 2 Input +
K	Channel 2 Input -
L	Equipment Ground

(b) Each of the 2x22 Pin connectors are bussed as shown in Figure 678-26.



14 POSITION CARD RACK REAR VIEW  
FOR 552A/660A RACK

Figure 678-25: INPUT FILE RACK DIMENSIONS



**INPUT FILE WIRING DIAGRAM**  
**REAR VIEW**  
 N.T.S.

Figure 678-26: INPUT FILE BACKPLANE WIRING