

FIREPOWER
Driver Board Logic Diagram
(System 4-7)

LIST of EQUIVALENT COMPONENTS:

Transistors
TIP122 NPN Darlington = TIP102 (SE9302) or TIP120
2N4401 NPN Pre-Driver = 2N3904
2N6427 NPN Darlington = MPSA14 (NTE46)
2N6122 NPN Power = TIP241C or 2N5296
2N5060 SCR = 2N5061 (NTE5400)

ICs
MC14049 Invert. Hex Buffer = 4049
6503 PIA = xx6821, xx68A21, xx68B21, where xx can be MC (Motorola) or HD (Hitachi Data).
also G65SC21P (CMD).
740x = 74LS0x, 74HCT0x

SPECIAL SOLENOID TABLE

ST#	PIA	CHIP	Pin#	Location / Board
1	III	IC10	Lamps	19 Mid PIA Driver Board
2	III	IC10	Lamps	39 Mid PIA Driver Board
3	II	IC11	SW Matrix	19 Left PIA Driver Board
4	II	IC11	SW Matrix	39 Left PIA Driver Board
5	IV	IC 5	Solenoids	39 Right PIA Driver Board
6	I	IC18	Displays	19 Via J1-26 CPU Board

IMPORTANT NOTE:

System 7 (Black Knight and later games) used 0 ohm resistors or wire jumpers on the Switch Matrix Drive. The positions are shown as W9 to W16 on the diagram
System 6 (Alien Poker, Firepower and earlier games) used 330 ohm resistors in the same 8 locations, called R204-R211. In all other respects the driver boards are identical.

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