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**Schematic Package Supplement to**

![Quantum ATARI Logo]

**Operation, Maintenance, and Service Manual**

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Schematic Reference Designators and Symbols

Logic symbols depict the logic function performed by that particular device and may differ from the manufacturer's data.

**REFERENCE DESIGNATORS:**

- C: Capacitor
- CR: Diode, signal or rectifier
- F: Fuse
- J: Connector
- L: Inductor, fixed or variable
- LS: Speaker
- P: Connector
- Q: Transistor or silicon-controlled rectifier
- R: Resistor, fixed or variable
- S: Switch
- T: Transformer
- TP: Twisted wire pair
- VR: Voltage regulator
- Y: Crystal

**WIRE COLORS:**

- R: Red
- GN: Green
- Y: Yellow
- W: White
- BU: Blue
- BN: Brown
- BK: Black
- OR: Orange
- V: Violet
- GY: Gray

Electrical components shown on the schematic diagrams are in the following units unless otherwise noted:

- Capacitors = microfarads (μF)
- Resistors = ohms (Ω)
- Inductors = microhenrys (μH)

**SYMBOLS:**

- Ground
- PCB edge connector pad
- Test Point
- PCB test connector pad

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Quantum™ PCB Schematic Diagram

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Adjusting the X- and Y-Axis Video Potentiometers

The X- and Y-Axis potentiometers; which are X SIZE, X CENTER, X LINEARITY, Y SIZE, Y CENTER, and Y LINEARITY; are set at the factory and then sealed. These do not need to be adjusted by the game operator.
GENERAL NOTES

1. Resistance values in ohms, ± 5% unless otherwise noted. R = 1,000, M = 1,000,000.
2. Capacitance value of 1 or less is in microfarads, unless otherwise noted.
3. * Q600 and Q600 are not in High-Voltage PCB.

4. All D.C. voltages are ±10% measured from point indicated to ground, using a high-impedance meter. Voltages are measured with no signal input and controls are in a normal operating position.
5. Circled numbers indicate location of waveform reading.
6. ZD100-101 uses (6X10040-007) zener diode in series with (34X1235-034) 330-ohm resistor in early production models.
7. Use a ±1000 T probe when measuring G2 (screen) or focus voltage.

WARNING

Components identified by shading have special characteristics important to safety and should be replaced only with identical types.