



Advanced Test Equipment Rentals
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KEITHLEY

**Model 706
Instruction Manual**

**Contains Operating and Servicing Information
for the Model 706 Scanner**

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SPECIFICATIONS

GENERAL

DISPLAY: Seven 0.5" LED digits with decimal point, function and IEEE status annunciators.

INTERNAL CLOCK: Displays hours/minutes/seconds or date/month; less than 1 minute/month error (typical).

BATTERY BACKUP: Rechargeable 3.6V nickel-cadmium. 1 month retention of data with unit turned off.

OPERATING ENVIRONMENT: 0° to 50°C, 0% to 80% relative humidity up to 35°C.

STORAGE ENVIRONMENT: -25°C to 65°C.

CONNECTORS: Four BNC (TTL compatible): External Trigger, Alarm Out/Serial-In, Channel Ready, Serial Out.

CAPACITY: Ten plug-in cards per mainframe.

EXPANSION CAPACITY: Daisy chain allows up to 4 SLAVE units with 1 MASTER unit.

SWITCHING RATE: 100 channels/second (10ms), programmable to 1 channel/16 minutes (999.999s).

RELAY DRIVE: 4A minimum.

POWER: 90-125V or 195-250V (internally selected), 50Hz to 400Hz, 75V•A maximum.

DIMENSIONS, WEIGHT: 178mm high × 438mm wide × 448mm deep (7" × 17 1/4" × 17 3/8"). Net weight 8.6kg (19 lbs).

ACCESSORIES AVAILABLE:

Model 7008-3: IEEE-488 Cable, 0.9m (3 ft.)

Model 7008-6: IEEE-488 Cable, 1.8m (6 ft.)

Model 7010: IEEE-488 Adapter for Model 85 Computer.

Model 7024-1: Triaxial Cable, 0.3m (1 ft.)

Model 7024-3: Triaxial Cable, 0.9m (3 ft.)

Model 7024-10: Triaxial Cable, 3.0m (10 ft.)

Model 7051-2: BNC to BNC Cable, 0.6m (2 ft.)

Model 7051-5: BNC to BNC Cable, 1.5m (5 ft.)

Model 7052: 4 × 5 Matrix Card

Model 7053: High Current Scanner Card

Model 7054: High Voltage Scanner Card

Model 7056: General Purpose Scanner Card

Model 7057A: Thermocouple Scanner Card

Model 7058: Low Current Scanner Card

Model 7059: Low Voltage Scanner Card

Model 7061: Universal Interface Card

Model 7068: Fixed Rack Mounting Kit for 706

Model 7069: Slide Rack Mounting Kit for 706

IEEE-488 BUS IMPLEMENTATION:

Multiline Commands: DCL, LLO, SDC, GET, GTL, UNT, UNL, SPE, SPD.

Uniline Commands: IFC, REN, EOI, SRQ, ATN.

Interface Functions: SH1, AH1, T6, TE0, L4, LE0, SR1, RL1, PP0, DC1, DT1, C0, E1.

Programmable Parameters: Display Mode, Output Format, EOI, SRQ, First, Last, Open, Close, Display Channel, Alternate Output, Pole Mode, Date Format, Save/Recall, Reset, I/O Port, Time, Date, Settle Time, Interval Time, Alarm Time, Program Mode, Trigger Mode, Terminator, Self Test.

Digital I/O Port: A separate edge connector consisting of eight input and eight output lines as well as common and +5VDC. Outputs will drive one TTL load. Inputs represent one TTL load. Mating connector supplied.

FRONT PANEL PROGRAMS

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|--------------------------|--|
| 0 - Digital I/O | Read or change state on digital I/O port. |
| 1* - Date Format | Changes date display between MM.DD and DD.MM. |
| 2* - Settle Time | Time to output CHANNEL READY pulse after closing relay. |
| 3* - IEEE Address | Set bus address; not programmable from bus. |
| 4* - Save Setup | Stores present relay setup in buffers 1-75. |
| 5* - Recall Setup | Recalls relay setup in buffers 1-75. |
| 6* - Poles | 1, 2, or 4-pole configuration for scanning (1-pole requires 7056). 0-pole for matrix card. |
| 7 - Alarm Time | Set time for Alarm output pulse; repeats daily. |
| 8 - Self Test | Check RAM, ROM, LEDs. |
| 90* - Stand Alone | Single 706 configuration. |
| 91* - Master | Daisy Chain configuration. |
| 92* - Slave | Daisy Chain configuration. |
| 93 - Inspect | Display closed relays only. |
| 94 - Clear | Clear buffer location. |
| 99 - Reset | Reset battery backup parameters to factory values. |

*Battery backed up.