

# ROM Programmings

Programming for Up to 10, 8-Mbit PROMs

## R4952

- Can be Used for 16-Mbit PROMs
- High-Speed Programming Algorithm
- Reduction in Function Execution Time
- Standard Serial I/O and Parallel I/O Interface



## R4952 EPROM Gang Programmer

The R4952 gang programmer allows high-speed programming for up to ten 16-Mbit PROMs with large capacity and diverse packages. Simultaneous writing for up to 10 PROMS is possible.

The standard RS-232C and parallel interfaces allow files managed by the host computer to be transferred and remote-controlled. With the standard 8-Mbit buffer memory, the ADVANTEST's unique hard stack system makes it possible to reduce the overhead time and function execution time.

### ■ Can be Used for 16-Mbit PROMs

Typical EPROMs and EEPROMs with a capacity of 64 Kbits to 16 Mbits can be programmed with easy operation. (16-Mbit PROM programming is available only in the Master mode.)

### ■ High-Speed Programming Algorithm

Accommodates various high-speed programming algorithms including 4-byte and 2-word programming.

### ■ Reduction in Function Execution Time

By making ADVANTEST's unique hard stack system faster, the read verification time can be reduced to approx. 1/2 times. (Measured by ADVANTEST.)

### ■ Standard Serial I/O and Parallel I/O Interface

The standard RS-232C interface allows remote control and data input and output for the R4952 from the host computer. With the standard Centronics parallel interface, high-speed data input is possible.

For example, write data of the R4952 is transferrable to the host computer and the data can be compared and checked.

## Compatible with Remote Control Software

### Specifications

#### Applicable devices:

EPROM/EEPROM (including flash EEPROM) with a capacity of 64 kbits to 16 Mbits (16 Mbits: in the master mode)

\* Applicable types depend on the socket adaptor.

\* For details, see the device list for each manufacturer.

#### Standard socket adaptor:

R49512B, 32 pins, DIP type

#### Simultaneous write operation: 1 to 10 ROMs

#### Buffer memory capacity: 8 Mbits (1 Mbyte)

#### Device functions:

Blank check, Program, Erase, Read check, Copy, B.P.R. sequence, E.B.P.R. sequence (with EEPROM), P.R. continuous operation

#### Data mode: Master mode, Buffer RAM mode

#### Address modes:

8-bit wide ROM: Normal, 16-bit split, 32-bit split

16-bit wide ROM: Normal (data exchangeable), 32-bit split (data exchangeable), page splitting

#### Write modes:

High-speed programming: Intel, Intel quick, Fujitsu, AMD, T.I. snap. and other mega-bit high-speed EPROM program of each manufacturer.

#### Intelligent identifier mode (ID mode):

ID AUTO: Automatically sets the ROM type.

ID CHECK: Checks the set ROM type.

#### ROM type selection: Scroll setting by means of the Maker and Type keys.

#### Output voltage comparison level:

$V_{OL} + 0.5 V \pm 35 mV$  ( $I_{OL} \approx 1.8 mA$ )

$V_{OH} + 2.3 V \pm 35 mV$

#### EPROM protective functions:

- Power-down at device insertion
- Check for reverse or improper insertion (ON/OFF possible)

#### Data edit functions:

RAM edit, Checksum, Data clear, Clear move

#### Reliability check functions:

- $V_{CC}$  margin check (4.75 V, 5.25 V)
- $V_{OL}$  and  $V_{OH}$  level check
- Checksum

#### Automatic setting functions:

(Backed up by the EEPROM)

Type, I/O conditions, Translation format, etc.

#### Set data backup:

Set data including ROM type, baud rate, translation data bit configuration etc. can be stored and recalled from EEPROM.

#### I/O Specifications

##### Standard interface:

- Serial I/O interface in conformance with RS-232C  
Baud rate: 110 to 19,200 bps  
Parity: Non, even, odd  
X ON, X OFF
- Parallel I/O interface in conformance with Centronics

#### General Specifications

##### Display: Function state: Indicated by the LED indicator.

Type settings: Displayed on the LCD screen in 16 characters x 2 lines.

##### Power supply: 90 to 132 VAC or 198 to 250 VAC (selectable by the rear switch)

Option No.	Standard	40
Power voltage (V)	90 to 132	198 to 250

##### Power frequency: 48 to 66 Hz

##### Power consumption: 70 VA or less

##### External dimensions: Approx. 364(W) x 80(H) x 256(D) mm

For applicable socket adapters, see the description of socket adapters for programmers.