
ADVANTEST®
ADVANTEST CORPORATION

*INSTRUCTION
MANUAL
TR45103
EXTERNAL KEYBOARD*

MANUAL NUMBER OEA00 9006

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TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

Preface

PREFACE

List of related manuals

TR45102	Bubble Memory Driver
TR4512	Synthesized Signal Source
TR4623	Scalar Network Analyzer
TR4726	Logic Analyzer
TR4251	Pattern Generator
TR4751	Logic Analysis System
TR4931	ROM Programmer
R4611	Network Analyzer

TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

Table of Contents

TABLE OF CONTENTS

1. OVERVIEW	1 - 1
1.1 Requirements Before Using the TR45103	1 - 1
1.1.1 Checking External View and Accessories	1 - 1
1.1.2 Devices that Can be Connected to the TR45103	1 - 1
1.1.3 Function Key Plate	1 - 2
2. OPERATION	2 - 1
2.1 Names and Functions of Parts	2 - 1
3. SPECIFICATION	3 - 1
LIST OF ILLUSTRATIONS	F - 1
LIST OF TABLES	T - 1

TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

List of Illustrations

LIST OF ILLUSTRATIONS

<u>No.</u>	<u>Title</u>	<u>Page</u>
1 - 1	Function Key Plate	1 - 2
2 - 1	TR45103 Top View	2 - 1
2 - 2	TR45103 Bottom View	2 - 3

TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

List of Tables

LIST OF TABLES

<u>No.</u>	<u>Title</u>	<u>Page</u>
1 - 1	TR45103 Standard Accessory List	1 - 1

TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

1.1 Requirements Before Using the TR45103

1. OVERVIEW

This manual describes the devices connected to the external board TR45103 and how to operate their devices.

1.1 Requirements Before Using the TR45103

1.1.1 Checking External View and Accessories

On receiving the TR45103 inspect the external view and check whether any cracks or damage has occurred during transportation. Then, check the standard accessories according to Table 1-1 and verify each quantity and specification. If any cracks or damage is found or if some accessories are missing, contact the sales division or agency nearest your place of business. Address and telephone numbers are listed at the end of this manual.

Table 1 - 1 TR45103 Standard Accessory List

Item	Q'ty	Remarks
Function Key Plate 01	1	For TR4931
Function Key Plate 02	1	For TR4751
Function Key Plate 03	1	For TR45102 to 4511 or TR4512
Function Key Plate 04	1	For TR4623
Function Key Plate 05	1	For TR4251

1.1.2 Devices that Can be Connected to the TR45103

The TR45103 can be connected to the Advantest's devices below.

TR45102 : Bubble Memory Driver
TR4512 : Synthesized Signal Source
TR4623 : Scalar Network Analyzer
TR4726 : Logic Analyzer
TR4251 * : Pattern Generator
TR4751 * : Logic Analysis System
TR4931 * : ROM Programmer
R4611 : Network Analyzer

The device with asterisk is equipped with the external keyboard(this device).

TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

1.1 Requirements Before Using the TR45103

1.1.3 Function Key Plate

Six kinds of plates are prepared for the TR45103. The 09 plate is attached to the R4611. Because the meaning of function key depends on the device connected. Figure 1-1 shows the devices corresponding to function key plates. The function key plate is a seal type. If the rear paper is removed from the plate, the plate can be stuck to the device. It is recommended that the plate for use should be stuck to the device in advance.

Plate for TR4931

SEQ. F1	BLANK F2	PRGM F3	READ F4	L. V. / I/O F5	ERASE F6	COPY F7	AUTO F8	MANUAL F9	DEVICE F10	EDIT F11	SELECT F12	CONT F13	STOP F14
------------	-------------	------------	------------	-------------------	-------------	------------	------------	--------------	---------------	-------------	---------------	-------------	-------------

01

Plate for TR4751

F1	F2	F3	F4	F5	F6		SET UP	EXE	GP-IB RUN	SYS	ACQ	PAT	STOP
----	----	----	----	----	----	--	--------	-----	--------------	-----	-----	-----	------

02

Plates for TR45102 to TR4511, and TR4512

F6 F1	F7 F2	F8 F3	F9 F4	F10 F5	EXIT PRG	PLIST LIST	RECALL	DEL LN INS LN	DELCHR INSCR	CLRSCR CLR LN	DELED STEP	PAUSE CONT	STOP RUN
----------	----------	----------	----------	-----------	-------------	---------------	--------	------------------	-----------------	------------------	---------------	---------------	-------------

03

Plate for TR4623

F6 F1	F7 F2	F8 F3	F9 F4	F10 F5	DISPMODE LABEL	LIST	RECALL	DEL LN INS LN	DELCHR INSCR	CLRSCR CLR LN	DELED STEP	PAUSE CONT	STOP
----------	----------	----------	----------	-----------	-------------------	------	--------	------------------	-----------------	------------------	---------------	---------------	------

04

Plate for TR4251

F1	F2	F3	F4	F5	F6		SET UP	EXE	GP-IB RUN	PAGE ↑	PAGE ↓	RUN	STOP
----	----	----	----	----	----	--	--------	-----	--------------	-----------	-----------	-----	------

05

Plate for R4611

↓	↑	LIST	DEL LN	CLR LN	CHKDSK	F4	F5	F6	CHANGE MODE	NEXT	PAUSE	CONT	STOP
↺	↻		INS LN	CAT	EDIT	F1	F2	F3		PREV	CLS	STOP	RUN

09

Figure 1 - 1 Function Key Plate

TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

2.1 Names and Functions of Parts

2. OPERATION

2.1 Names and Functions of Parts

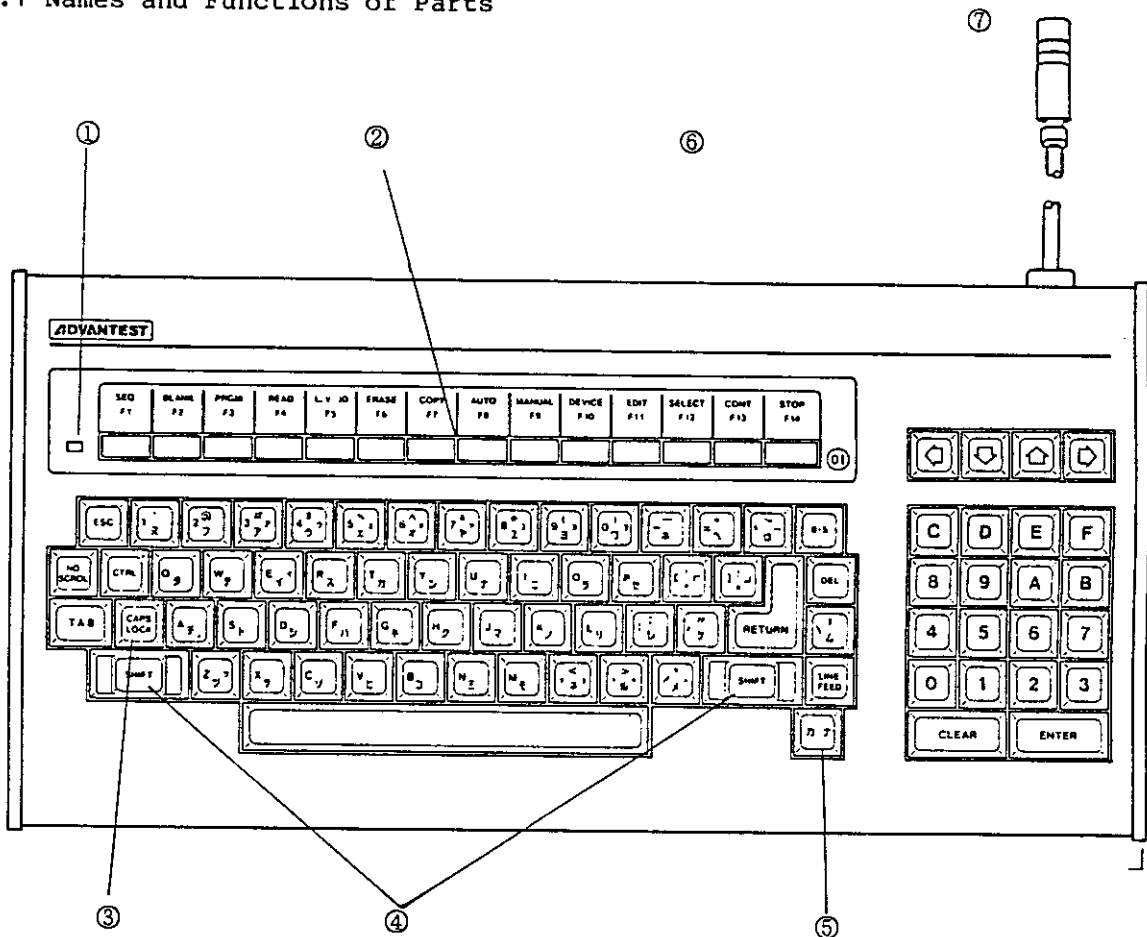


Figure 2 - 1 TR45103 Top View

① Keyboard Lock Indicating Lamp

While this lamp lights, entering the key is not acceptable. This function is controlled by device connected.

② Function Key

The meaning of function key depends on the device connected. Select the proper one of attached function key plates (01 to 05:five kinds). (The function key plate in Figure 2-1 is 01) For the detail, refer to each operation manual of device.

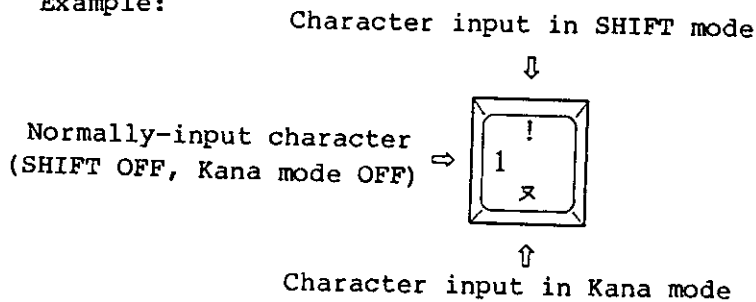
③ CAPS LOCK Key

This key is in the toggle mechanism. When the key is pressed, ON or OFF is switched. When it is off, small alphabetical letters are input. When it is on, capital alphabetical letters are input.

④ SHIFT Key

This key changes the input mode of keys to the SHIFT mode. When keys are pressed with the SHIFT key pressed, different character or function is input.

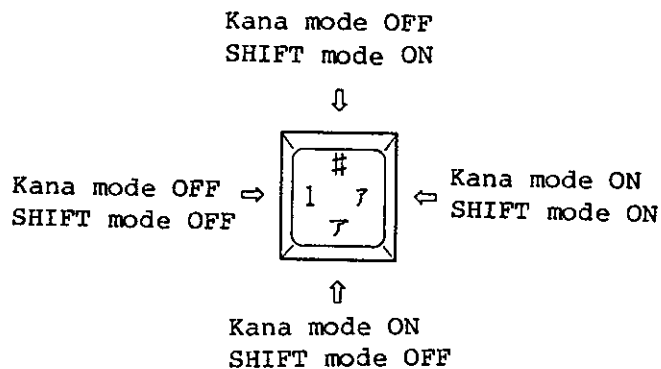
Example:



⑤ Kana Mode Select Key

This key changes the input mode of keys from the alphabetical character mode to the Kana mode. The key is in the toggle mechanism. When it is pressed, the mode is changed to the Kana mode.

Example:



Kana depends on the device connected, so it may not be used. Input by Kana is not enabled for the TR45102, TR4511, TR4751, and TR4251, so the Kana mode must be changed to OFF.

⑥ Cursor Key

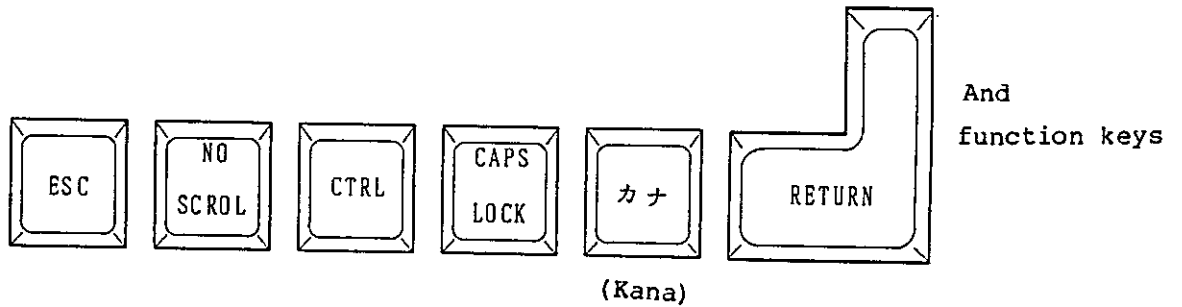
This key moves the cursor to the directions of the arrow. This key is in the double action mechanism. When it is depressed, auto repeat is enabled. Since the key depends on the device connected, it may not move the cursor and can scroll the screen. For the detail, refer to each operation manual of device.

TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

2.1 Names and Functions of Parts

• Auto-repeat

When each key keeps pressed, the function of the key is automatically repeated at constant speed and is input. When the key is released, the input stops. However, the auto-repeat is not enabled for the following keys.



⑦ Connector to be Connected

This connector is connected to this device.

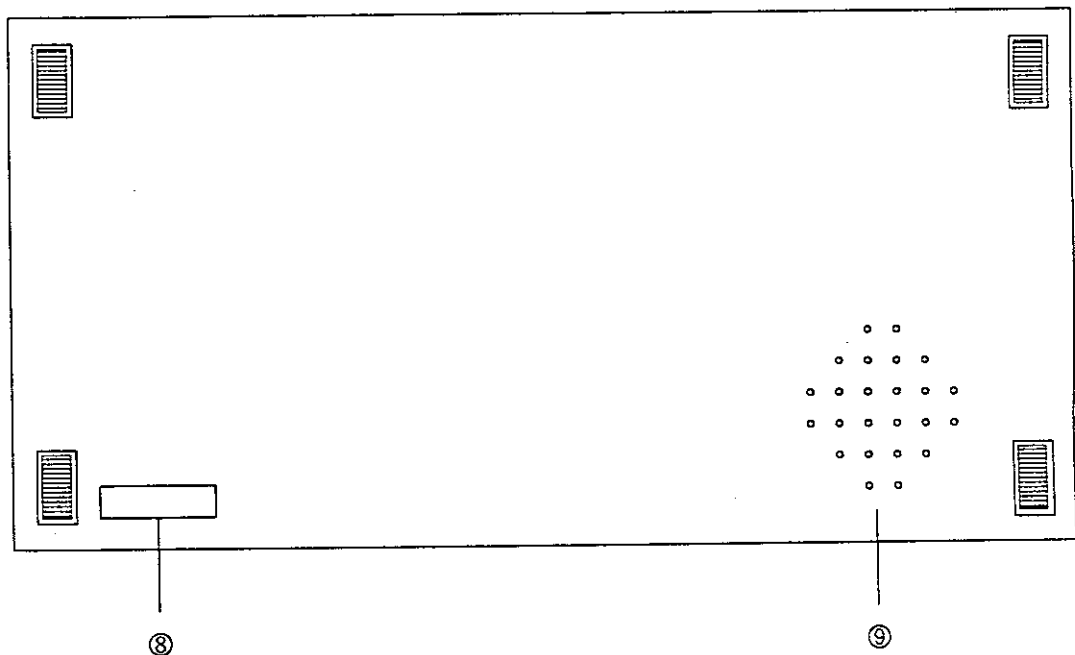


Figure 2 - 2 TR45103 Bottom View

⑧ Serial Number

⑨ Speaker

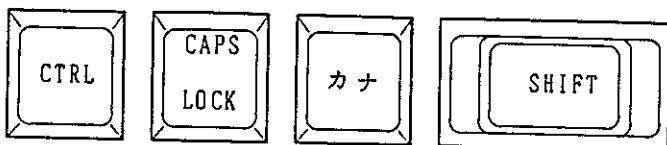
Key click and bell sounds.

TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

2.1 Names and Functions of Parts

● Key Click

The TR45103 activates a click indicating that the key is entered accurately. When repeating the key, it sounds a click for repeat number. However, it activates no click even if the following keys are pressed.



(Kana)

TR45103
EXTERNAL KEYBOARD
INSTRUCTION MANUAL

3. Specification

3. SPECIFICATION

(1) Protocol

Serial start-stop system full duplex
Start/stop bit : 1 bit
Character length : 8 bits
Parity check : None

(2) Baud rate : 9600 bps

(3) Input/output level : TTL level, open corrector for output

(4) Working environment : Temperature : 0 to 40°C
Relative humidity : Less than 85%

(5) Temperature for storage : -20 to 70°C

(6) Outside dimensions : About 424 (W) x 210 (D) x 50 (H) mm

(7) Weight : About 2.3 kg

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