SHARP

SCIENTIFIC CALCULATOR MODEL EL-510R

OPERATION MANUAL

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_ 1 _

In this calculator, the following three angular units can be

DEG (°)

Press DRG

Press (2ndF) (MODE) (0) to select the normal mode.

· If the FIX, SCI, or ENG indicator is displayed, clear the

○N/c 45 + 285 ÷ 3 =

() 1 5 (-) 8 (=) *1 3.428571429

() 18 (+) 6 () (÷)

42 × (--) 5 + 120 =

=

40 (=)

*1 The closing parenthesis () just before (=) or (M_+

*2 The addend becomes a constant. Subtraction and divi-

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sion are performed in the same manner

*3 The multiplicand becomes a constant.

In each example, press ON/C to clear the display.

indicator by pressing (2ndF) (FSE). (See page 5)

Arithmetic Operations/Constant Calculations

Determination of the Angular Unit

GRAD (g)

SCIENTIFIC CALCULATIONS

 $(5 \times 10^3) \div (4 \times 10^{-3}) = 5$ [Exp] 3 \div 4 [Exp]

45

34 + 57 = *2

68 × 25 = *3

specified

45+285÷3=

42×(-5)+120=

18+6

15-8

34+57=

45+57=

68×25=

68×40=

may be omitted.

INTRODUCTION

ENGLISH

98KUP (TINSE0272THZZ)

RAD (Radians)

PRINTED IN CHINA

01 11 20 22 23 30

140

-90.

91.

102.

1700.

2720.

1250000.

After reading this manual, store it in a convenient location for future reference.

Operational Notes

- To ensure trouble-free operation, please observe the following points: 1. Do not carry the calculator in the back pocket of slacks
- or trousers.
- 2. Do not subject the calculator to extreme temperatures.
- 3. Do not drop it or apply excessive force.
- 4. Clean only with a soft, dry cloth.
- 5. Do not use or store the calculator where fluids can
- splash onto it. Press the RESET switch only in the following cases:
 - · When using for the first time
- After replacing the batteries
- · To clear all memory contents
- · When an abnormal condition occurs and all keys are

inoperative If service should be required on this calculator, use only a SHARP servicing dealer, SHARP approved service facility, or SHARP repair service where available.

DISPLAY



Exponent Mantissa

(During actual use not all symbols are displayed at the same time.) If the value of mantissa does not fit within the range ±0.000000001 - ±9999999999, the display changes to

scientific notation. The display mode can be changed according to the purpose of the calculation. -2-

When performing calculations using constants, constants will be displayed as K.

Functions

· Before starting calculations, specify the angular unit. (See page 6)

sin60[°]=	(ON/C) (sin) 60 (=)	0.866025403
$\cos\frac{\pi}{4}$ [rad]=	$\frac{(DRG)(\cos)}{(\pi)}$	〕4 0.707106781
tan ⁻¹ 1=[g]	DRG 2ndF (tan-1) 1 = DRG	50.

· The results of inverse trigonometric functions are displayed within the following range:

	$\theta = \sin^{-1} x, \theta = \tan^{-1} x$	$\theta = \cos^{-1} x$
DEG	$-90 \le \theta \le 90$	$0 \leq \theta \leq 180$
RAD	$-\frac{\pi}{2} \le \theta \le \frac{\pi}{2}$	$0 \leq \theta \leq \pi$
GRAD	$-100 \le \theta \le 100$	$0 \leq \theta \leq 200$

(cosh 1.5 + sinh 1.5) ² =	$\begin{array}{c} (ON_{C}) (hyp) \cos 1.5 \\ + hyp) \sin 1.5 \end{array}$ $\begin{array}{c} (2ndF) x^{2} = \end{array}$	20.08553692
$tanh^{-1}\frac{5}{7} =$	(2ndF) (arc hyp) (tan) (5	0.895879734
In 20 =	(2ndF) In 20 =	2.995732274
log 50 =	(2ndF) log 50 =	1.698970004
e ³ =	$(2ndF)(e^x)$ 3 =	20.08553692
10 ^{1.7} =	(2ndF) 10 ^x 1.7 =	50.11872336

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- ←/→ : Appears when the entire equation cannot be displayed. Press ()/) to see the remaining (hidden) section.
- 2ndF : Appears when [2ndF] is pressed, indicating that the functions shown in yellow are enable.
- HYP : Indicates that hyp has been pressed and the hyperbolic functions are enabled. If (2ndF) (hyp) are pressed, the symbols "2ndF HYP" appear, indicating that inverse hyperbolic functions are enabled
- Α : Indicates that (2ndF) (ALPHA) or (STO) ((RCL)) has been pressed, and entry (recall) of memory contents and recall of statistics can be performed.
- FIX/SCI/ENG: Indicates the notation used to display a value and changes each time 2ndF) FSE are nressed
- DEG/RAD/GRAD: Indicates angular units and changes each time (DRG) is pressed.
- STAT : Appears when statistics mode is selected.
- м : Indicates that a numerical value is stored in the independent memory.

BEFORE USING THE CALCULATOR

Key Notation Used in this Manual

- In this manual, key operations are described as follows:
- r² To specify x^2 : [2ndF] x^2 To specify E_{xp} : E_{xp} (Exp)

Functions that are printed in yellow above the key require (2ndF) to be pressed first before the key. Numbers are not shown as keys, but as ordinary numbers.

Power On and Off

 $\frac{1}{6} + \frac{1}{7} =$

(12³)⁴=

4! =

10P3 =

₅C₂ =

500×25%=

 $90^{\circ} \rightarrow [rad]$

 \rightarrow [g]

 \rightarrow [°]

120 ÷400=?%

Random Numbers

 $8^{-2} - 3^4 \times 5^2 =$

 $\sqrt{49} - 4\sqrt{81} =$

Press (ON/C) to turn the calculator on, and (2ndF) (OFF) to turn it off

-3-

 $12 y^{x} 3 y^{x} 4$

 $(2ndF)(\chi^{-1}) =$

4 (2ndF) n! =

10 (2ndF) (nPr) 3 (=)

5 (2ndF) (nCr) 2 (=)

500 × 25 2ndF %

120 (÷) 400 (2ndF) (%

A pseudo-random number with three significant digits can

be generated by pressing 2ndF (RMDOM) = . To generate the next random number, press = . You can perform

• Random numbers use memory Y. Each random number

(ON/c) 90 (2ndF)(DRG►)

- 8 -

is generated on the basis of the value stored in memory

this function in the normal and statistics modes.

(2ndF) (DRG►)

(2ndF) (DRG►)

Y (pseudo-random number series).

Angular Unit Conversions

81 =

500+(500×25%)= 500 + 25 2ndF %

400-(400×30%)= 400 - 30 (2ndF) %

 $(\chi^{-1}) =$

6 (2ndF) (X⁻¹) + 7 (2ndF)

 $8 y^x$ (-) $2 - 3 y^x$

(2ndF) √ 49 − 4 (2ndF) √

4 × 5 (2ndF) x² = -2024.984375

0.309523809

6.447419591

4.

24.

720

10.

125.

30.

1.570796327

100.

90.

Clearing Methods

There are three clearing methods as follows: Clearing E a tan a 8 4+1

operation	(Display)	IVI .	STAT, ANS
ON/C	0	×	×
(2ndF) CA	0	×	0
RESET	0	0	0

O: Clear ×: Retain

- *1 Independent memory M. *2 Temporary memories X and Y, statistical data, and last
- answer memory.
- See page 9 for additional reference.

Editing the Equation

- Press or b to move the cursor. You can also return to the equation after getting an answer by pressing ▶ ((▲).
- · If you need to delete a number, move the cursor to the number you wish to delete then press [DEL] The number under the cursor will be deleted
- · If you need to insert a number, move the cursor to the place immediately after where you wish to insert the number then enter the number.

Priority Levels in Calculation

This calculator performs operations according to the following priority:

- (1) Functions preceded by their argument (x^{-1} , x^2 , n!, etc.) (2) Y^{x} , $x\sqrt{3}$ Implied multiplication of a memory value (2Y, etc.) ④ Functions followed by their argument (sin. cos. etc.) (5) Implied multiplication of a function (2sin30, etc.) (6) ${}_{n}C_{r}$, ${}_{n}P_{r}$ (7) \times , \div (8) +, - (9) =, M+, M-, \Rightarrow M, \blacktriangleright DEG,
- ►RAD, ►GRAD, DATA, CD, $\rightarrow r\theta$, $\rightarrow xy$ and other calculation ending instruction
- · If parentheses are used, parenthesized calculations have precedence over any other calculations. _1_

(2ndF) (sin ⁻¹) 0.8 (=	53.13010235	
2ndF DRG	0.927295218	
2ndF) DRG►	59.03344706	1
2ndF DRG	53.13010235	
	2ndF) (sin ⁻¹) 0.8 (=) (2ndF) (DRG)• (2ndF) (DRG)•	2ndF (sin ⁻¹) 0.8 = 53.13010235 2ndF (DRG) 0.927295218 20.927295218 2ndF (DRG) 59.03344706

Memory Calculations

This calculator has two temporary memories (X and Y), one independent memory (M) and one last answer memory. Independent memory and temporary memories are only available in the normal mode.

- [Temporary memories (X and Y)] A stored value can be recalled as a value or variable for
- the use in equations · In case you store an infinite decimal in the memory,
- recall it as a variable to obtain accurate answers. (0.3333...is stored to Y)

625. [Independent memory (M)] 280.

In addition to all the features of temporary memories, a value can be added to or subtracted from an existing memory value.

[Last answer memory (ANS)]

The calculation result obtained by pressing (=) or any

other calculation ending instruction is automatically stored in the last answer memory. Note

Calculation results from the functions indicated below are automatically stored in memories X or Y. For this reason, when using these functions, be careful with the use of memories \tilde{X} and Y. Y memory Random numbers

- $\rightarrow r\theta$, $\rightarrow xy$ X memory, Y memory
- Temporary memories and last answer memory are cleared
- even when the same mode is reselected.
- See page 4 for additional reference.

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Mode Selection

1/ 1/+2

Normal mode: (2ndF) (MODE) 0 Used to perform arithmetic operations and function calculations

Statistics mode: 2ndF MODE 1 Used to perform statistical calculations.

When executing mode selection, temporary memories, statistical data and last answer memory will be cleared even when reselecting the same mode.

Selecting the Display Notation and Decimal Places

The calculator has four display notation systems for displaving calculation results. When FIX. SCI, or ENG symbol is displayed, the number of decimal places can be set to any value between 0 and 9. Displayed values will be reduced to the corresponding number of digits.

100000÷3=		
[Floating point]	^{ON} / _C 100000 ÷ 3 =	33333.33333
→[Fixed decimal point]	2ndF FSE	33333.33333
[TAB set to 2]	2ndF TAB 2	33333.33
→[SCIentific notation]	2ndF FSE	3.33×104
→[ENGineering notation]	2ndF FSE	33.33×103
→[Floating point]	2ndF FSE	33333.33333

If the value for floating point system does not fit in the following range, the calculator will display the result using scientific notation system: $0.00000001 \le |x| \le 99999999999$

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	^{ON} / _C 8 × 2 STO M 16.
24÷(8×2)=	24 ÷ (RCL) M = 1.5
(8×2)×5=	RCL M × 5 = 80 .
	(ON/C) (STO) M 0.
\$150×3:M1	150 × 3 M+ 450.
+)\$250:M2 =M1+250	250 M+ 250 .
–)M2×5%:Discount	RCL M × 5 2ndF % 35.
Total=M	2ndF M- RCL M 665.
\$1= ¥140	140 (STO) Y 140.
¥33,775=\$?	33775 ÷ (RCL) Y = 241.25
\$2,750=¥?	2750 X RCL Y = 385000.
r = 3cm	3 (STO) Y 3.
$\pi r^2 = ?$	π (2ndF)(ALPHA) *
$(r \rightarrow Y)$	Y 2ndF x ² = 28.27433388
	24 (÷) () 4 (+) 6 ()
$\frac{24}{4+6} = 2.4(A)$	= 2.4
	3 × (ANS) + 60 ÷
3×(A)+60÷(A)=	(ANS) = 32.2
* =	

Entry of the multiplication procedure is omitted between " π " and a variable

Chain Calculations

1.

This calculator allows the preivious calculation result to be used in the following calculation.

6+4=ANS	ON/C 6 + 4 =	10.
ANS+5	+ 5 =	15.
44+37=ANS	44 (+) 37 (=)	81.
√ANS=	(2ndF) (-) (=)	9.

The previous calculation result will not be recalled after entering multiple instructions - 10 -

Fraction Calculations

- A decimal number, variable, or exponent cannot be entered as a fraction
- · In all cases, a total of up to 10 digits including integer, numerator, denominator and the symbol (Γ) can be entered. If the number of digits to be displayed is greater than 10, the
- number is converted to and displayed as a decimal number.

$3\frac{1}{2} + \frac{4}{3} = [a\frac{b}{c}]$ $\rightarrow [a.xxx]$ $\rightarrow [d/c]$	$\begin{array}{c} (ON_{C}) & 3 \underline{a}^{b_{C}} & 1 \underline{a}^{b_{C}} & 2 \\ 4 \underline{a}^{b_{C}} & 3 \underline{=} \\ \hline \underline{a}^{b_{C}} \\ 2ndF d/c \end{array}$	+ 4 □ 5 □ 6 * 4.833333333 29 □ 6
$10^{\frac{2}{3}}$ =		4.641588834
1.25 + $\frac{2}{5}$ = [a.xxx] →[$a\frac{b}{c}$]	1.25 + 2 a ^{b/} / _a 5 =	1.65 1.75 1.75 1.75 1.75 1.75 1.75 1.75 1.7
* 4 ┌ 5 ┌ 6=4 <u>5</u>		

Time, Decimal and Sexagesimal Calculations

Conversion between decimal and sexagesimal numbers can be performed. In addition, the four basic arithmetic operations and memory calculations can be carried out using the sexagesimal system.

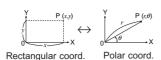
12°39'18"05 → [10]	12 (D°M'S) 39 (D°M'S 2ndF) ↔DEG	18.05 DMS 12.65501389
123.678 → [60]	123.678 (2ndF) - DEG	123°40'40.80
3h30m45s + 6h45m36s = [60]	3 (DMS) 30 (DMS) 45 (DM 45 (DMS) 36 (DMS) =	
3h45m – 1.69h = [60]	3 (D°M′S) 45 (D°M′S) — (2ndF) ↔ DEG	1.69 = <i>2°03'36.00</i>
sin62°12'24" = [10]	sin 62 (D°M'S) 12 (D°M'S)	24 (DMS) 0.884635235
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Function	Dynamic range
sinh x, cosh x, tanh x	<i>x</i> ≤ 230.2585092
sinh ⁻¹ x	x < 10 ⁵⁰
cosh ⁻¹ x	$1 \le x \le 10^{50}$
tanh ⁻¹ x	x < 1
x ²	x < 10 ⁵⁰
\sqrt{x}	$0 \le x < 10^{100}$
<i>x</i> ⁻¹	$ x < 10^{100} (x \neq 0)$
n!	$0 \le n \le 69^{\star}$
nPr	$\begin{array}{c} 0 \leq r \leq n \leq 99999999999^{*} \\ \frac{n!}{(n-r)!} \leq 10^{100} \end{array}$
nCr	$\begin{array}{l} 0 \leq r \leq n \leq 9999999999* \\ 0 \leq r \leq 69 \\ \frac{n!}{(n-r)!} < 10^{100} \end{array}$
↔DEG, D°M'S	0°00'00.01 ≤ x < 10000°
$x, y \rightarrow r, \theta$	$\sqrt{x^2 + y^2} < 10^{100}$
$r, \theta \rightarrow x, y$	$\begin{array}{l} 0 \leq r < 10^{100} \\ \text{DEG:} & \theta < 10^{10} \\ \text{RAD:} & \theta < \frac{\pi}{180} \times 10^{10} \\ \text{GRAD:} & \theta < \frac{10}{9} \times 10^{10} \end{array}$
DRG 🕨	DEG \rightarrow RAD, GRAD \rightarrow DEG: $ x < 10^{100}$ RAD \rightarrow GRAD: $ x < \frac{\pi}{2} \times 10^{98}$
* (n. r: integer)	

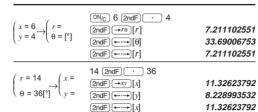
* (n, r: integer)

Coordinate Conversions

 Before performing a calculation, select the angular unit. (See page 6)



- The calculation result is automatically stored in memories X and Y Value of r or x: X memory
- Value of θ or y: Y memory



STATISTICAL CALCULATIONS

Press 2ndF MODE 1 to select statistics mode. The following statistics can be obtained:

\overline{x}	Mean of samples (x data)
sx	Sample standard deviation (x data)
σx	Population standard deviation (x data)
п	Number of samples
Σx	Sum of samples (x data)
Σx^2	Sum of squares of samples (x data)

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BATTERY REPLACEMENT

Notes on Battery Replacement

Improper handling of batteries can cause electrolyte leakage or explosion. Be sure to observe the following handlina rules:

- · Replace both batteries at the same time.
- · Do not mix new and old batteries.
- Make sure the new batteries are the correct type (LR44).
- · When installing, orient each battery properly as indi-
- cated in the calculator. · Batteries are factory-installed before shipment, and may be exhausted before they reach the service life stated in the specifications.

When to Replace the Batteries

If the display has poor contrast, the batteries require replacement.

Caution

- · Keep batteries out of the reach of children. · Exhausted batteries left in the calculator may leak and damage the calculator.
- · Explosion risk may be caused by incorrect handling. · Batteries must be replaced only with others of the same
- type · Do not throw batteries into a fire as they may explode

Replacement Procedure

- 1. Turn the power off by pressing 2ndF) OFF
- 2. Loosen both screws and remove the battery cover. (Fig. 1)



3. Remove the used batteries then replace with two fresh batteries with the positive sides (+) facing up. (Fig. 2)

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Entered data are kept in memory until (2ndF) (CA) or [2ndF] [MODE] 1 are pressed. Before entering new data. clear the memory contents.

[Data Entry]

Score

95

80

80

75

75

75

50

 $\overline{x} =$

 $\sigma x =$

 $\Sigma x =$

 $\Sigma r^2 =$

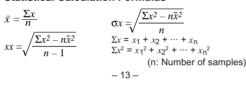
sx =

 $sx^2 =$

- Data DATA Data (FRQ(,)) frequency (DATA) (To enter multiples of the same data)
- [Data Correction]
- Correction prior to pressing (DATA) Delete incorrect data with ON/C
- Correction after pressing (DATA):
- Press () to confirm the latest entry and press (2ndF) CD to delete it.

2ndF MODE 1) 0 .
95 (DATA)	1.
80 (DATA)	2.
DATA	3.
75 (FRQ(,)) 3 (DATA	6 .
50 (DATA)	7.
\mathbb{RCL} $\overline{\overline{X}}$	75.71428571
\bigcirc RCL $\bigcirc \sigma x$	12.37179148
\bigcirc RCL $\bigcirc \Sigma x$	530.
$(RCL)(\Sigma x^2)$	41200.
RCL Sx	13.3630621
(2ndF) (X ²) (=	178.5714286

Statistical Calculation Formulas



- 4. Replace the battery cover and screws.
- 5. Press the RESET switch (on the back). · Make sure that the display appears as shown below. If the display does not appear as shown, reinstall the batteries and check the display once again.



Automatic Power Off Function

This calculator will turn itself off to save battery power if no key is pressed for approximately 10 minutes.

SPECIFICATIONS

Calculations:	Scientific calculations, statistical calculations, etc.
Internal calculations: Pending operations:	Mantissas of up to 12 digits 16 calculations 8 numeric values (4 numeric values in STAT mode)
Power source:	3V = (DC): Alkaline batteries (LR44) × 2
Power consumption:	0.0006 W
Operating time:	Approx. 2500 hours
	when continuously displaying 55555. at 25°C.
	Varies according to use and other factors
Operating temperature:	$0^{\circ}C - 40^{\circ}C$
External dimensions:	71.5 mm (W) \times 124 mm (D) \times 9.5 mm (H)
	2-13/16" (Ŵ) × 4-7/8" (D) × 3/8" (H)
Weight:	Approx. 57 g 0.126 lb
Accessories:	(Including batteries) Batteries \times 2 (installed), opera- tion manual, and hard case

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In the statistical calculation formulas, an error will occur when:

- · the absolute value of the intermediate result or calculation result is equal to or greater than 1×10^{100} the denominator is zero.
- an attempt is made to take the square root of a negative number

ERROR AND CALCULATION RANGES

1. Errors

An error will occur if an operation exceeds the calculation ranges, or if a mathematically illegal operation is attempted. When an error occurs, pressing ((or)) automatically moves the cursor back to the place in the equation where the error occurred. Edit the equation (see page 4) or press (ON_{C}) to clear the equation.

2. Error Codes and Error Types

 Syntax error (Error 1): An attempt was made to perform an invalid operati Ex. 2 2ndF) → r₀ 	on.

Calculation error (Error 2):

- The absolute value of an intermediate or final calculation result equals or exceeds 1010
- · An attempt was made to divide by 0.
- The calculation ranges were exceeded while performing calculations

Depth error (Error 3):

- The available number of buffers was exceeded. (There are 8 buffers* for numeric values and 16 buffers for calculation instructions). *4 buffers in STAT mode.
- Equation too long (Error 4):
- · The equation exceeded its maximum input buffer (159 characters). An equation must be shorter than 159 characters.

_ 1/ _

3. Calculation Ranges

- Within the ranges specified below, this calculator is accurate to ±1 in the least significant digit of the mantissa. When performing continuous calculations (including chain calculations), errors accumulate leading to reduced accuracy.
- Calculation ranges
- ±10⁻⁹⁹ ~ ±9.9999999999×10⁹⁹ and 0.

If the absolute value of an entry or a final or intermediate result of a calculation is less than 10-99, the value is considered to be 0 in calculations and in the display.

Function	Dynamic range
	DEG: x < 10 ¹⁰
sin <i>x</i> , cos <i>x</i> , tan <i>x</i>	$\begin{array}{l} (\tan x: x \neq 90 \ (2n-1))^* \\ \text{RAD:} & x < \frac{\pi}{180} \times 10^{10} \\ & (\tan x: x \neq \frac{\pi}{2} (2n-1))^* \\ \text{GRAD:} & x < \frac{10}{9} \times 10^{10} \\ & (\tan x: x \neq 100 \ (2n-1))^* \end{array}$
$\sin^{-1}x, \cos^{-1}x$	$ x \leq 1$
$\tan^{-1}x$, $\sqrt[3]{x}$	x < 10 ¹⁰⁰
In x, log x	10 ⁻⁹⁹ ≤ x < 10 ¹⁰⁰
y ^x	• $y > 0$: $-10^{100} < x \log y < 100$ • $y = 0$: $0 < x < 10^{100}$ • $y < 0$: $x = n (0 < x < 1: \frac{1}{x} = 2n-1, x \neq 0)^*,$ $-10^{100} < x \log y < 100$
x√y	• $y > 0$: $-10^{100} < \frac{1}{x} \log y < 100 \ (x \neq 0)$ • $y = 0$: $0 < x < 10^{100}$ • $y < 0$: $x = 2n-1$ $(0 < x < 1 : \frac{1}{x} = n, x \neq 0)^*,$ $-10^{100} < \frac{1}{x} \log y < 100$
e ^x	$-10^{100} < x \le 230.2585092$
10 ^{<i>x</i>}	$-10^{100} < x < 100$

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- This equipment complies with the requirements of Directive 89/336/EEC as amended by 93/68/EEC. Dieses Gerät entspricht den Anforderungen der EG-Richtlinie 89/336/EWG mit Änderung 93/68/EWG. Ce matériel répond aux exigences contenues dans la directive 89/336/CEE modifiée par la directive 93/68/CEE. Dit apparaat voldoet aan de eisen van de richtlijn 89/336/ EEG, gewijzigd door 93/68/EEG. Dette udstyr overholder kravene i direktiv nr. 89/336/EEC med tillæg nr. 93/68/EEC. Quest' apparecchio è conforme ai requisiti della direttiva 89/ 336/EEC come emendata dalla direttiva 93/68/EEC. Η εγκατάσταση αυτή ανταποκρίνεται στις απαιτήσεις των οδηγιών της Ευρωπαϊκής Ενωσης 89/336/ΕΟΚ, όπως ο κανονισμός αυτός συμπληρώθηκε από την οδηγία 93/68/ΕΟΚ. Este equipamento obedece às exigências da directiva 89/336/ CEE na sua versão corrigida pela directiva 93/68/CEE. Este aparato satisface las exigencias de la Directiva 89/336/ CEE modificada por medio de la 93/68/CEE. Denna utrustning uppfyller kraven enligt riktlinjen 89/336/ EEC så som kompletteras av 93/68/EEC. Dette produktet oppfyller betingelsene i direktivet 89/336/
- EEC i endringen 93/68/EEC. Tämä laite täyttää direktiivin 89/336/EEC vaatimukset, jota
- on muutettu direktiivillä 93/68/EEC.

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