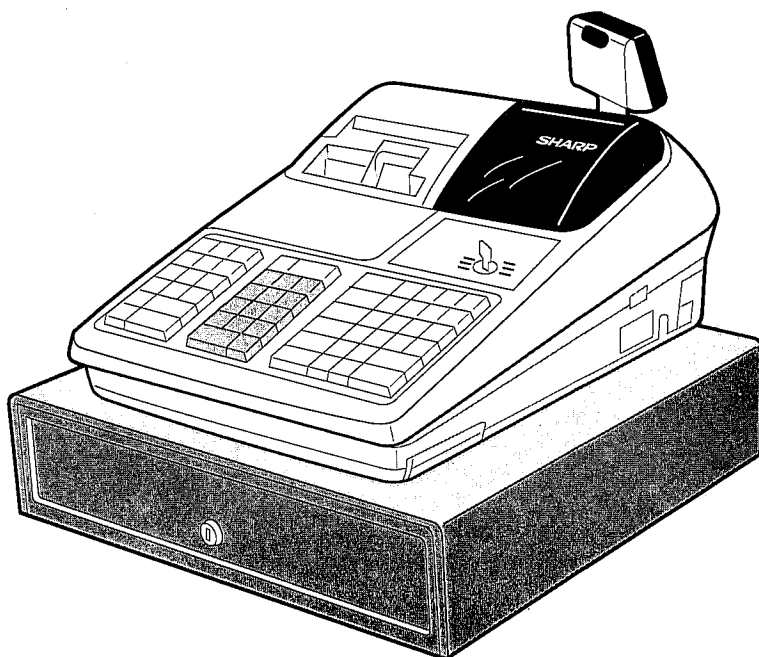


# SHARP®

## ELECTRONIC CASH REGISTER

MODEL  
**ER-A460**  
**ER-A470**

## INSTRUCTION MANUAL



The above illustration shows model ER-A460.

# CONTENTS

INTRODUCTION .....	1
IMPORTANT .....	1
PRECAUTION .....	1
<b>EXTERNAL VIEW OF THE ER-A460</b> .....	6
Front view .....	6
Rear view .....	6
<b>EXTERNAL VIEW OF THE ER-A470</b> .....	7
Front view .....	7
Rear view .....	7
<b>PRINTER</b> .....	8
<b>KEYBOARD</b> .....	9
1 ER-A460 standard keyboard layout .....	9
2 ER-A470 standard keyboard layout .....	11
3 Standard key number layout .....	13
4 Inserting of the key sheet .....	13
<b>KEYS AND SWITCHES</b> .....	14
1 Mode switch and mode keys .....	14
2 Cashier keys .....	15
3 Receipt ON-OFF function .....	15
4 Drawer lock key .....	15
5 Printer cover lock key .....	15
<b>DISPLAYS</b> .....	16
1 Operator display .....	16
Dot matrix display .....	16
7-segment display .....	17
Machine state indicator lamps .....	17
2 Customer display (Pop-up type) .....	17

## FOR THE MANAGER

<b>PRIOR TO PROGRAMMING</b> .....	20
1 General instructions .....	20
2 How to program alphanumeric characters .....	23
By using character keys on the keyboard .....	23
By entering character codes .....	24
By using character keys on the programming remote keyboard .....	24
<b>PROGRAMMING</b> .....	26
Preparations for programming .....	26
1 Setting the date and time .....	26
Setting the date (#2610) .....	26
Setting the time (#2611) .....	27
2 Setting the register and consecutive numbers .....	27
Setting the register number (#2612) .....	27
Setting the consecutive number (#2613) .....	28
3 Programming the tax rate .....	28
Programming (#2711) .....	28
4 Programming for departments .....	29
Functional programming (#2110) .....	29
Tax status (#2111) .....	31
A limit amount (HALO) of entry (#2112) .....	32
Alphanumeric characters (#2114) .....	33
Unit price (#1110) .....	34

Commission group assignment (#2115).....	34
Group number (#2116).....	35
Key number assignments for departments (#2119) .....	36
5 Price lookup (PLU) programming .....	37
Department assignment (#1200, 2230).....	38
Unit prices (#1210) .....	40
Base quantity (#1211) .....	40
Sign (+/-) and tax status (#2211, 2232).....	41
Alphanumeric characters (#2214) .....	43
Assigning of PLUs to commission groups (#2215, 2235).....	44
Set PLU (#2221).....	45
Link PLU (#2220).....	45
Programming of PLU levels and direct PLU keys (#2219) .....	46
PLU/subdepartment mode (#2210, 2231) .....	47
Stock quantity (#1222, 1220, 1221).....	48
6 Programming for miscellaneous keys.....	50
Programming the rate (%, EX, commission rate) and the deduction (⊖) (#1310).....	50
A limit amount (HALO) of entry (⊖, RA, PO) (#2312).....	51
+/- sign (%, ⊖) (#2311) .....	52
% item or % subtotal selection (%) (#2315) .....	53
Percent rate limitation (%) (#2313).....	53
⊖ item or ⊖ subtotal selection (⊖) (#2316) .....	54
7 Programming for the [TL], [CA2], [CH] through [CH4], and [CR1] through [CR4] keys.....	55
Functional programming (#2320) .....	55
High amount lockout (HALO) for cheque cashing, cash in drawer and cheque change (#2321).....	57
High amount lockout (HALO) of entry for media keys (#2322).....	57
8 Programming of function text.....	58
Programming (#2314).....	58
List of function texts.....	59
9 Cashier programming .....	61
Cashier code (#1500) .....	61
Cashier name (#1514).....	62
Functional programming to cashiers (#2510).....	63
10 Programming various functions .....	64
Programming for optional feature selection (#2616) .....	64
Programming alarm length of time with drawer opening (#2617).....	67
Programming the limit on the number of times of validation printing and the number of feed lines after printing of a difference subtotal (#2615).....	68
Programming of logo text (#2614) .....	69
Programming of guidance messages (#2644).....	71
Programming of error messages (#2641).....	74
Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence (#2620).....	76
Secret codes to control access to PGM1 mode, X1/Z1 mode and X2/Z2 mode (#2630, 2631, 2632).....	77
Setting the time range for hourly report (#2619).....	78
Programming of AUTO keys (#2900) .....	79
11 TRAINING mode .....	80
12 Reading stored programs .....	81
Program details and procedures for their reading .....	81
Sample printouts.....	82

<b>READING (X) AND RESETTING (Z) OF SALES TOTALS</b> .....	90
1 Summary of reading (X) and resetting (Z) reports and the key operations to obtain the reports .....	90
2 Daily sales totals.....	92
Full reading and resetting of sales totals .....	92
Cashier reading and resetting .....	95
Reading and resetting of hourly sales information .....	97

Full department reading .....	98
Individual group reading .....	98
Full group reading.....	98
Reading and resetting of sales information for a range of PLUs/subdepartments .....	99
Reading of sales information on PLUs/subdepartments associated with an individual department...	100
Reading of sales information on PLUs/subdepartments whose sales amounts are zeros.....	100
Reading of sales information for the price amount range of PLUs/subdepartments .....	101
PLU stock information .....	101
Commission sales information.....	101
Transaction reading.....	102
Total in drawer reading.....	102
Reading and resetting of a stacked report.....	102
3 Periodic consolidation.....	103
General information .....	103
Reading and resetting of the daily net totals .....	104
Reading and resetting of a stacked report.....	104
<b>COMPULSORY CASH/CHEQUE DECLARATION .....</b>	<b>105</b>
<b>OVERRIDE ENTRIES .....</b>	<b>107</b>
<b>CORRECTION AFTER FINALIZING A TRANSACTION (AFTER GENERATING A RECEIPT).....</b>	<b>108</b>
<b>TIME DISPLAY AND AUTOMATIC UPDATING OF THE DATE .....</b>	<b>109</b>
1 Time display .....	109
2 Automatic updating of the date.....	109

<b>FOR THE OPERATOR</b>
-------------------------

<b>PRIOR TO ENTRIES .....</b>	<b>112</b>
1 Preparations for entries .....	112
2 Error warning .....	112
<b>ENTRIES .....</b>	<b>113</b>
1 Item entries.....	113
Single item entries .....	113
Repeat entries .....	115
Multiplication entries .....	116
Successive multiplication entries .....	117
Split-pricing entries .....	118
Single item cash sale (SICS)/single item finalize (SIF) entries.....	119
2 Special entries for PLUs .....	120
PLU level shift (for direct PLU) .....	120
Set PLU entries .....	122
Link PLU entries .....	122
3 Displaying and printing subtotals .....	123
Normal subtotal .....	123
Difference subtotal (Differ ST) .....	123
4 Finalization of transaction .....	124
Cash or cheque tendering .....	124
Mixed tendering (cheque + cash) .....	124
Cash or cheque sale that does not need any tender entry.....	125
Credit sale .....	125
Mixed-tender sale (cash or cheque tendering + credit tendering) .....	126
5 Computation of VAT(Value Added Tax)/tax .....	127
VAT/tax system .....	127
VAT shift entries .....	128
6 Auxiliary entries .....	129
Percent calculations (premium or discount) .....	129
Deduction entries.....	130
Refund entries .....	131

Printing of non-add code numbers .....	131
7 Payment treatment .....	132
Currency exchange .....	132
Received on account entries .....	133
Paid out entries.....	133
No sale (exchange) .....	134
Cashing a cheque.....	134
8 Automatic sequencing key (AUTO key) entries.....	135
<b>CORRECTION</b> .....	136
1 Correction of the last entry (direct void).....	136
2 Correction of the next-to-last or earlier entries (indirect void).....	137
3 Subtotal void.....	138
4 Correction of incorrect entries not handled by the direct or indirect void function .....	138
<b>SPECIAL PRINTING FUNCTIONS</b> .....	139
1 Copy receipt printing.....	139
2 Guest check copy .....	140
3 Validation printing function .....	141
Validation slip setting and printing .....	141
Validation printing examples.....	141
Validation slip specifications.....	144
4 Printing of the employee arrival and departure times .....	145
<b>OVERLAPPED CASHIER ENTRY</b> .....	146
<b>OPERATOR MAINTENANCE</b> .....	147
1 In case of power failure .....	147
2 In case of printer's motor locking .....	147
3 Paper roll near-end sensing function (only for journal paper) <option>.....	148
4 Installing and removing the paper roll.....	148
Installing the paper roll .....	149
Removing the paper roll .....	150
Removing a paper jam .....	151
Recording paper specifications .....	151
5 Installing the ink ribbon cassette .....	152
6 Ink refill .....	153
7 Removing the till and the drawer .....	154
8 Opening the drawer by hand .....	154
9 Before calling for service .....	155
10 Resetting your cash register.....	155
<b>LIST OF OPTIONS</b> .....	156
<b>SPECIFICATIONS</b> .....	157
<b>PROGRAMMING REMOTE KEYBOARD (OPTION) MODEL ER-01RK</b> .....	158
1 External view .....	158
2 Precautions.....	159
3 Installing AAA batteries .....	159
4 Programming .....	160

[Click here to download the full manual at THE-CHECKOUT-TECH.COM](http://THE-CHECKOUT-TECH.COM)