SAM4s

SER-7000 Series Quick Start Guide

Contents

About the S*ER-7000* Series

Congratulations!   You have selected a very flexible point of sale terminal designed to provide years of reliable service. Your SAM4s/Samsung dealer will help you configure the SER-7000 to your specific needs.

The S*ER-7000* Series is offered in two different versions:

- The S*ER-7000* features a flat 160-position keyboard with 107 NLU keys.   (NLUs are used to merchandise categories/departments or for individual menu items in a restaurant environment.)   Because it offers protection from spills, this keyboard works best in restaurants, food service shops, or convenience stores where food is served.

- The S*ER-7040* features a 90-position keyboard with traditional raised keys.   In the standard configuration, the keyboard provides 15 NLU keys – it can be expanded to 40 NLU keys.   The S*ER-7040* works best in retail stores, or shops where it is not necessary to place a large number of preset item keys on the keyboard.

SER-7000 series manuals include instructions for both models.   The keyboard is the only significant difference between the two models.   All other features are the same, unless otherwise noted.

ATTENTION

The product that you have purchased contains a rechargeable Ni-MH battery.   This battery is recyclable.   At the end of its useful life, under various state and local laws, it may be illegal to dispose of the battery into the municipal waste system.

Check with your local solid waste officials for details concerning recycling options or proper disposal.

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Product Manual CD

The SER-7000 Product Manual CD is included with each new SER-7000 series terminal. The CD contains the following files:

7000_operate.pdf

The SAM4s SER-7000/7040 Operation Manual contains samples of typical operation sequences, including screen shots and print samples. Also included are default keyboard layouts, key descriptions, report sequences and report samples.

7000_program.pdf

The SAM4s SER-7000/7040 Program Manual contains a summary and description of all program options, both P-Mode (program mode) and S-Mode (secure mode). Typically most programming will be designed and input by the installing dealer, based on the requirements of the end user. The end user may perform some ongoing program maintenance, i.e. PLU item and price programming. Managers should consult with the installing dealer to determine authority levels for access to specific programs for routine changes.

AdbeRdr60 enf full.exe

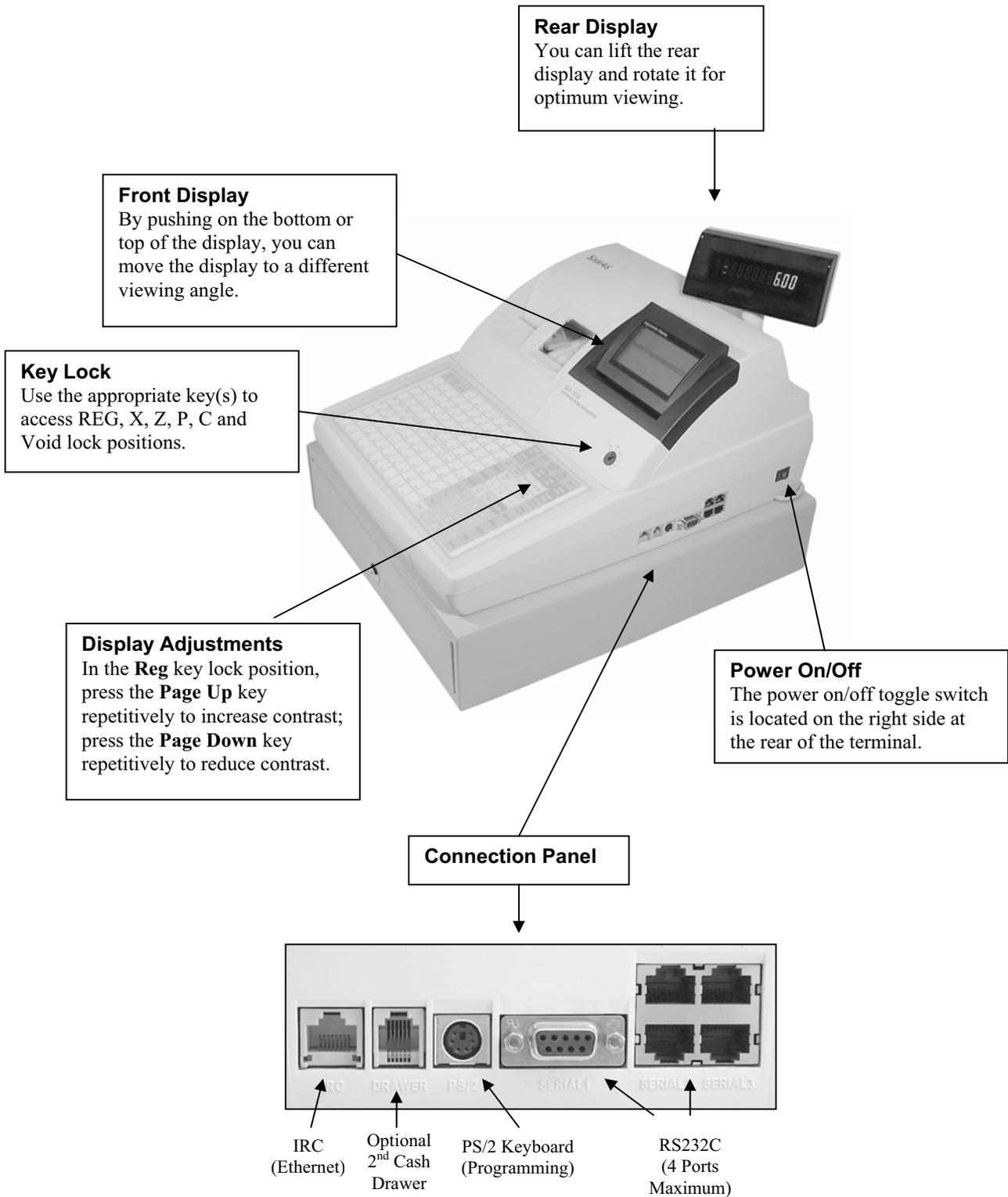Adobe® Reader® 6.0 is free software that lets you view and print Adobe Portable Document format (PDF) files on a variety of hardware and operating system platforms. For Windows™ 95/98/ME/NT/XP, double-click the *AdbeRdr60 enf full.exe* file to install the reader, or go to:

http://www.adobe.com/prodindex/acrobat/readstep.html#reader

in order to download and install Adobe Acrobat for your PC operating system.

Register Controls

Rear Display
You can lift the rear display and rotate it for optimum viewing.

Front Display
By pushing on the bottom or top of the display, you can move the display to a different viewing angle.

Key Lock
Use the appropriate key(s) to access REG, X, Z, P, C and Void lock positions.

Display Adjustments
In the **Reg** key lock position, press the **Page Up** key repetitively to increase contrast; press the **Page Down** key repetitively to reduce contrast.

Power On/Off
The power on/off toggle switch is located on the right side at the rear of the terminal.

Connection Panel

IRC (Ethernet)

Optional 2nd Cash Drawer

PS/2 Keyboard (Programming)
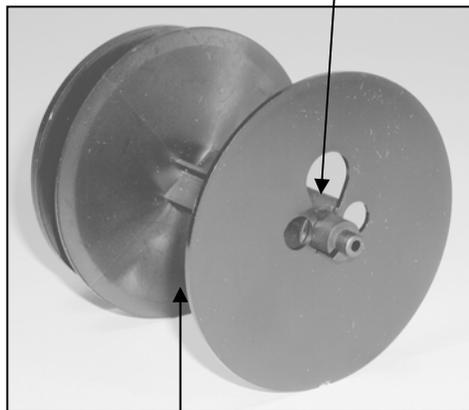
RS232C (4 Ports Maximum)

Initial Setup

1. Un-box and unpack the terminal.   Be sure to remove tape securing the printer compartment door and the tape securing the receipt and journal printer paper compartments.

2. Assemble the 2-piece journal take-up spool by snapping the flat, right side of the spool on to the paper spindle.

3. Load the receipt and journal paper using the initial paper rolls supplied:

   - Squeeze the blue tab and lift the journal paper compartment access door.

   - Drop the paper into the compartment with the paper spooling from the bottom of the roll.

   - Close the compartment door and press gently until you hear the snap securing the access door shut.

   - Load the receipt paper in the same manner.

   - Fold the paper end of the journal paper and insert the folded end into the slot on the journal paper spool spindle.   Place the journal spool in the take-up mechanism.

   - Replace the printer compartment door.   Take care to route the receipt paper through the slot in the door.
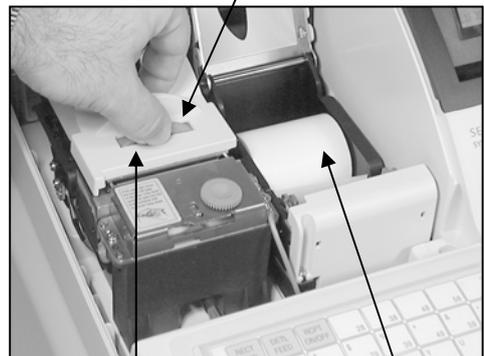
Note: Reorder thermal paper rolls 58 mm wide (57.5 mm±0.5 mm) ×80 mm maximum diameter.

Step 2:   Snap Flat Right Side of Spool on Paper Spindle

Step 3:   Squeeze the Blue Tap to Open the Paper Compartment   (Shown on Receipt)

Journal Paper
Spool

Receipt Paper
Compartment

Journal Paper
Compartment

Initial Startup

1. Plug the terminal into a grounded outlet on an isolated circuit. *Clean isolated power is essential for the proper operation of sophisticated electronic equipment. Consult your dealer to determine if additional power conditioners are required for your installation.*

2. Turn the power on. The power on/off toggle switch is located on the right side at the rear of the terminal. The display will light and the journal printer will advance.

3. Insert an operator key into the key lock and turn to the **REG** position.

4. Your SAM4s dealer will perform a memory all clear before beginning to program your SER-7000/7040. This will insure that any residual program data will be cleared before your program is installed. Refer to "Memory All Clear" in the SER-7000/7040 Program manual. You will need an S key to perform this secure function.

5. The default program is installed at the completion of the Memory All Clear. Each key will be set with the function of the default key sheet. All PLUs will operate as zero value preset keys and all functions will operate as labeled.

6. You must sign on an employee before registrations are accepted. If the message **ENTER EMPLOYEE #** displays, you can sign on a default employee by pressing the numeric **1** and then the **EMP#** key.

Notes:

Before using this terminal for the first time, leave it powered ON in the REG mode for at least 24 hours. This allows the Ni-Mn battery, which maintains the terminal's memory while the power is OFF, to fully charge.

Should it ever become necessary to replace the battery, proper disposal of the battery is required. Refer to your local codes for disposal requirements.

Navigating the SER-7000

Review the information contained in this chapter before attempting to program your SER-7000.

Default Keyboard – SER-7000

The SER-7000 keyboard is shown below with the default legends and key assignments. This configuration has 107 NLU key locations.

RECT FEED	DETL FEED	RCPT ON/OFF	28	38	48	58	68	78	88	98	PRICE LVL 1	KEYB LVL 1	RECEIPT ISSUE	TIME CLOCK	EMP #
1	10	19	29	39	49	59	69	79	89	99	PRICE LVL 2	KEYB LVL 2	ERR CORR	VOID ITEM	MDSE RTRN
2	11	20	30	40	50	60	70	80	90	100	TAX1 SHIFT	EXEMPT TAX	YES/NO	ENTER	CANCEL
3	12	21	31	41	51	61	71	81	91	101	MACRO 1	PAGE UP	↑	PAGE DOWN	RECALL CHECK
4	13	22	32	42	52	62	72	82	92	102	MACRO 2	←	↓	→	STORE CHECK
5	14	23	33	43	53	63	73	83	93	103	MACRO 3	@/FOR	PLU	CLEAR	MISC 2
6	15	24	34	44	54	64	74	84	94	104	%1	7	8	9	MISC 1
7	16	25	35	45	55	65	75	85	95	105	%2	4	5	6	CHECK
8	17	26	36	46	56	66	76	86	96	106	%3	1	2	3	SBTL
9	18	27	37	47	57	67	77	87	97	107	DONE	0	00	·	CASH

ER-7040 Keyboard – Default 15 NLU Configuration

The S*ER-7040* keyboard is shown below with the default legends and key assignments. This configuration has 15 keyboard NLU locations and can be expanded to 40 NLU locations.

RECT FEED	DETL FEED	RCPT ISSUE	ENTER	DONE	TAX 1 SHIFT	VOID	MDSE ACCT	PAID RTRN	ERROR CORR	MACRO 2	MACRO 3	#NS	CANCEL	EMP#
CURSOR UP	CURSOR DOWN	X/TIME	PLU	CLEAR			1	6	11				F/S SHIFT	TIME IN/OUT
CURSOR LEFT	CURSOR RIGHT	7	8	9			2	7	12				F/S SUB	MISC 1
PAGE UP	PAGE DOWN	4	5	6			3	8	13				F/S TEND	CHECK
% 1	YES/NO	1	2	3			4	9	14				SBTL	
% 2	% 3	0	00	.			5	10	15				CASH	

ER-7040 Keyboard – Expanded 40 NLU Configuration

RECT FEED	DETL FEED	RCPT ISSUE	ENTER	DONE	TAX 1 SHIFT	VOID	MDSE ACCT	PAID RTRN	ERROR CORR	MACRO 2	MACRO 3	#NS	CANCEL	EMP#
CURSOR UP	CURSOR DOWN	X/TIME	PLU	CLEAR	1	6	11	16	21	26	31	36	F/S SHIFT	TIME IN/OUT
CURSOR LEFT	CURSOR RIGHT	7	8	9	2	7	12	17	22	27	32	37	F/S SUB	MISC 1
PAGE UP	PAGE DOWN	4	5	6	3	8	13	18	23	28	33	38	F/S TEND	CHECK
% 1	YES/NO	1	2	3	4	9	14	19	24	29	34	39	SBTL	
% 2	% 3	0	00	.	5	10	15	20	25	30	35	40	CASH	

Essential Function Keys

Because the *SAM4S SER-7000* keyboard is programmable, you can use the default keyboard, you can modify it, or you can design a keyboard that fits your exact needs.

In order to program and operate the SAM4S SER-7000, you must place all of the following keys on every keyboard:
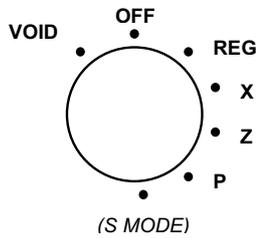
- **Numeric Keys 0-9**
- **CLEAR**
- **Y/N**
- **ENTER**
- **Cursor Control Keys ↑ ↓ ← →**
- **PAGE UP/PAGE DOWN**
- **DONE**
- **@/FOR**
- **EMP#**

Notes: Moving essential keys is not advised.   When programming an alpha field with the alpha overlay, the essential keys will shift back to their original position as part of the alpha overlay.

You cannot change the assignment of an essential key (i.e. numeric key, Y/N, cursor keys, ENTER, etc.) unless it is first located in a different position on the keyboard.

Many function keys have programming options.   See "Function Key" programming in "P-Mode Programming" for individual function key programming options.

Control Lock

(S MODE)

VOID	Use to void (correct) items outside of a sale.
OFF	The register is inoperable.
REG	(Register) use for normal registrations.
X	Use to read register reports and perform other manager functions.
Z	Use to read register reports and reset totals to zero.
P	(Program) Use to program the register.
S MODE	Use for tests and special settings. This position is not marked on the control lock.

The *SER-7000* includes two sets of keys that can be used to access the following control lock positions.

Key	Positions Accessible
VOID	VOID, OFF, REG, X
X	OFF, REG, X
Z	OFF, REG, X, Z
PGM	VOID, OFF, REG, X, Z, PGM
C	ALL POSITIONS

Entering Alpha Characters

You have the option of using the Alpha Keyboard Overlay to enter descriptors (the default method) or you can enter descriptors by entering a three-digit code (see page 12) for each character.   See "General Function Options" in P-Mode Programming to select the method you wish to enter descriptors.

PS/2 Keyboard

A third option is to connect a PC keyboard to the standard PS/2 connector on the connection panel.   With a PS/2 keyboard connected, you can complete all programming tasks.   Use the Space Bar to toggle from *yes* to *no* at Y/N fields.   The commands: Page Up/Page Down, Cursor Keys, and Enter can be used on either the terminal or PC keyboard.

Alpha Overlay

The key layout of the SER-7000 Alpha Keyboard Overlay is shown below:

RECT FEED	DETL FEED	RCPT ON/OFF	-	+	|	{	}	:	"	=	PRICE LVL 1	KEYB LVL 1	RECEIPT ISSUE	TIME CLOCK	EMP #
!	@	#	$	%	^	&	*	(	)	_	PRICE LVL 2	KEYB LVL 2	ERR CORR	VOID ITEM	MDSE RTRN
Q	W	E	R	T	Y	U	I	O	P	\\	TAX1 SHIFT	EXEMPT TAX	YES/NO	ENTER	TRANS VOID
A	S	D	F	G	H	J	K	L	;	'	MACRO 1	PAGE UP	↑	PAGE DOWN	RECALL CHECK
Z	X	C	V	B	N	M	,	.	/	<	MACRO 2	←	↓	→	STORE CHECK
CAPS	SHIFT	BOLD	SPACE	SPACE	SPACE	SPACE	SPACE	BACK	?	>	MACRO 3	@/FOR	PLU	CLEAR	MISC 2
								[	]		%1	7	8	9	MISC 1
											%2	4	5	6	CHECK
											%3	1	2	3	SBTL
											DONE	0	00	.	CASH

Alpha Code Chart

CHAR	•	¾	©	"fs"	"tx"	®	↑	↓	→	←
CODE	007	008	009	011	020	021	024	025	026	027
CHAR	SPACE	!	"	#	$	%	&	'	(	)
CODE	032	033	034	035	036	037	038	039	040	041
CHAR	*	+	,	-	.	/	0	1	2	3
CODE	042	043	044	045	046	047	048	049	050	051
CHAR	4	5	6	7	8	9	:	;	<	=
CODE	052	053	054	055	056	057	058	059	060	061
CHAR	>	?	@	A	B	C	D	E	F	G
CODE	062	063	064	065	066	067	068	069	070	071
CHAR	H	I	J	K	L	M	N	O	P	Q
CODE	072	073	074	075	076	077	078	079	080	081
CHAR	R	S	T	U	V	W	X	Y	Z	[
CODE	082	083	084	085	086	087	088	089	090	091
CHAR	\	]	^	_	`	a	b	c	d	e
CODE	092	093	094	095	096	097	098	099	100	101
CHAR	f	g	h	I	j	k	l	m	n	o
CODE	102	103	104	105	106	107	108	109	110	111
CHAR	p	q	r	s	t	u	v	w	x	y
CODE	112	113	114	115	116	117	118	119	120	121
CHAR	z	{	|	}	~		Ç	ü	é	â
CODE	122	123	124	125	126	127	128	129	130	131
CHAR	ä	à	å	ç	ê	ë	è	ï	î	ì
CODE	132	133	134	135	136	137	138	139	140	141
CHAR	Ä	Å	É	æ	Æ	ô	ö	ò	û	ù
CODE	142	143	144	145	146	147	148	149	150	151
CHAR	ÿ	Ö	Ü	¢	£	¥	ö	*f*	á	í
CODE	152	153	154	155	156	157	158	159	160	161
CHAR	ó	ú	ñ	Ñ			¿			½
CODE	162	163	164	165	166	167	168	169	170	171
CHAR	¼	α	ß	μ	ø					
CODE	172	224	225	230	237					
CHAR			Double							
CODE			999							

Initial Clear

CAUTION: **Do not share this information with unauthorized users.** **Distribute the special S-Mode key only to those you may want to perform this function.**

The initial clear function allows you to exit any register activity and return to a beginning or cleared state.   Any transaction that is in progress will be exited and totals for that transaction will not be updated.
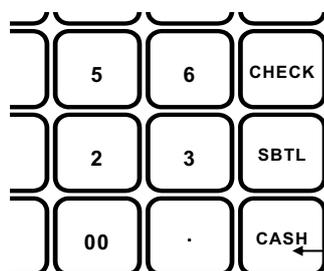
Here are some reasons you may want to perform an initial clear:

- The register is in an unknown state, and you wish to exit the current program or transaction without following normal procedures.

- You have performed a function that includes a compulsory activity, such as validating or printing, and you wish to bypass the compulsory activity.

- An initial clear may be necessary as part of servicing, or troubleshooting an SER-7000 register or system.

Perform this procedure only as necessary.   Contact your SAM4S dealer first if you have questions about operating or programming your SER-7000.

To Perform an Initial Clear:

1. Turn the power switch located on the right side of the register to the OFF position.
2. Turn the control lock to the **PGM** position.
3. Press and hold the key position where the **CASH** key is located on the default keyboard layout.
4. While continuing to hold the **CASH** key, turn the power switch to the ON position.
5. The message "SIGN ON REQUIRED" will display when the initial clear is complete.

TO INITIALIZE:

Press and hold this key position during power-up in PGM mode.

Specifications

Item	Description
Battery	• Type: Ni-MH, 3.6V 70mAh • Charging Time: 24 Hours • Life: 3 Years
Data Storage	60 Days (When battery is fully charged)

Interface Serial
(RS-232C 1-4)
	• Flow Control:
	   1. DTR / DSR : H/W Flow Control
	   2. XON / XOFF : S/W Flow Control
	• Baud Rate: 1200 / 2400 / 4800 / 9600 / 19200 Bps
	• Voltage Supply: VCC(+5V/200mA) supplies at RS-232C#1.

Interface Serial (IRC)	• Mode : Ethernet • Speed : 10MBps Same as RS-485 Communication Method
Printer	• Model: STM-210 • Printing Speed: 50 mm / Sec (13.3 Line / Sec)
Auto Cutter	• Type: Guillotine • Cutting Method: 1 Point Partial Cutting
Display	• Operator Display: LCD (192*64 Dots) • Customer Display: VFD (10 Digits)
Key Board	• Flat Rubber Key (SER-7000): 160 Key • Raised Key (SER-7040): 90Key
Power Consumption	• Approx. 28W (Regularity)
Power Requirement	AC 120V 60Hz, 230V 50Hz
Environment Condition	• Temperature: $0℃ \sim 45℃$ • Humidity: 30% ~ 80% RH
Weight	Approximately 17Kg (Box Packing)
Dimensions (mm)	• 400(W) $\times$ 450(L) $\times$ 305(H)

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