Instruction Manual

01M-IM VER.1.1 2024/01/22

Raphael 707

(Premium Chiropractic Table)



CONTENTS

0	Outlook		01
02	Safety Information O1. Safety Sign O2. Caution and Warning O3. Prohibition O4. Necessary Performance	05. 06.	Environment Condition Packing and Transportation Waste Disposal
03	Product Informat 01. Specifications 02. Appearance 03. Components(Parts)	04.	Main parts Indication Label
04	How To Use 01. Power On 02. How to Use Roll Paper 03. Elevation 04. Seat Angle Adjustment	06. 07.	Length Adjustment Drop Intensity Adjustment Emergency Button Emergency Hand Switch Touch Screen
05	Maintenance 01. Check and Inspection 02. Repair and Replacement		

Outlook

Name

Orthopedic Adjustment Equipment

Model

R707 - K

Purpose of use

Adjust human body to correct and right position

Permission No.

18-4785

Characteristics

This equipment is to correct human body into a normal position and has 5 different mattresses(cervical, lumbar, pelvic, ankle, armrest) with touch screen to control operation, switches, levers, etc. Main functions like elevation, drops, traction, flexion can be controlled by touch screen. With foot switch (*option), elevation and cocking can be controlled. Also, safety function like emergency stop and 'back to the original position' are adopted for patient's protection.



Safety Information

Safety Sign

Sign	Explanation
<u> </u>	Caution : Can be causes of light electric shock, damage, malfunction.
Ţ <u>i</u>	Refer to the Instruction Manual : Offer additional information in the enclosed document (recommended)
(3)	Refer to the Instruction Manual : Accomplish offered information in the enclosed document (safety signal)
†	Electric Protection : B type embedded part



CAUTION

Use after reading the instruction manual well.



CAUTION

Don't allow patient to sit on or lean on the front part and rear part of the equipment.



CAUTION

Explain fully to patient regarding instant noise when dropping and cocking.



CAUTION

When patient or equipment has problem or malfunction, stop immediately the equipment and make adequate measures.

It can be used by patients over 100 kg for up to 2 min and should be reused after 18 min of rest.



CAUTION

Only experienced professional must use the equipment operation under doctor's prescription and supervision.



CAUTION

Do not remodel the equipment randomly.

Safety Information

Caution and Warning



CAUTION

Be careful next requirements after use

- Unplug when you don't use the equipment for a long time.
- Make adequate check and ask repair technician (manufacturer) when malfunction occurs.

CAUTION

Be careful next requirements when install the equipment.

- Install when you can remove cord easily.
- Install in the waterless area
- Do not install in the high humidity, high temperature, direct sunlight or dusty area where bad influence doesn't happen.
- Be careful of safety conditions like slope, vibration, shock (including transportation).
- Do not install where chemicals storage place or where gas doesn't occur.
- Be careful of frequency and rated voltage.
- Connect ground connection right.
- Install where interference by other medical device, like electronic wave, doesn't influence.
- Please install and use an automatic voltage regulator during high voltage fluctuation.

CAUTION

Be careful next requirements before use the equipment.

- Check all code connection is exact and safe.
- Be sure the ground connection is fully connected.
- Be fully careful of common use which leads to overcurrent easily and brings danger.
- Be careful where ground is flat, make table level.
- Check emergency button's condition.
 (Equipment doesn't operated when it's pressed)
- Please use this table after touching the conductive material, such as a metallic handle part with a head cushion, when static electricity shock in the human body is created.





Safety Information

Prohibition

Prohibit the equipment use next persons or patients.

- ① malignant tumor
- 2 pregnant women
- ③ fracture, joint problem
- 4 blood pressure problem 5 cardiac disorder

(7) abdomen area when menstruation

- 6 injury ® polio patient

Necessary Performance

There's no necessary performance decided through individual standard, clinical function and risk assessment.

Environment Condition

Temperature Range : (10 ~ 40) ℃ Humidity Range: (20 ~ 75) %

Packing and Transportation

We packed this equipment for the most suitable condition to transport. When you move or transport this equipment randomly, it may bring damage to the equipment. When you need to move or transport the equipment, please ask our sales department or the point of purchase.

Waste Disposal

Follow relevant region's disposal rule.

SECTION		SPECIFICATIONS		
Size(mm)	length 1,760~2,280mm	ength 1,760~2,280mm × width 670mm × height 830~1,130mm(±100mm)		
Rating	220V~, 60Hz, 260VA			
Weight(kg)		approx 135kg		
Max. Permittable Weight(kg)		approx 150kg		
Electric Classification		1		
Embedded Part Type		B type embedded part		
Operation Type	Rest for	10 minutes after Max. 30 Cycles		
IP Environment Code	fo	pot switch(option) : IPX1		
Touch Screen	10inches, 284 x 163 (24VDC, 250mA)			
Software Name and Version	Raphael-707-V1.0			
	cervical mattress	-23.5°(bottom) ~ 17.8°(top) (±5°)		
Angle(°)	cervical mattress	14°(left) ~ 14°(right) (±5°)		
Angle()	pelvic mattress	flexion: 0°(top) ~ -22.4°(bottom) (±5°)		
	pervic mattress	22°(left) ~ 22°(right) (±5°)		
	traction	0 ~ 100mm (±20mm)		
Size(mm)	cervical handle	0 ~ 240mm (±20mm)		
	ankle mattress	0 ~ 280mm (±50mm)		
Packing Unit	SET			
**Setting value of flexion and traction is like below				
SECTION STEP STEP 2 3	STEP STEP STEP STEP STEP STEP STEP STEP	STEP STEP <th< td=""></th<>		
	11.3° 13.9° 16.7° 19.5° 2			
TRACTION 6.25 12.5 mm 12.5 mm		43.8 50 56.3 62.5 mm mm mm mm 93.8 100 mm		



No.	Name	Function
01	Cervical Mattress	supports patient's head
02	Lumar Mattress	supports patient's lumbar
03	Pelvic Mattress	supports patient's pelvic
04	Ankle Mattress	supports patient's ankle
05	Armrest Mattress	supports patient's arm
06	Cervical Handle	patient or doctor can grab on
07	length Adjustable Lever (Cervical Handle)	adjusts length of cervical handle
08	Tension Adjustable Knob (Cervical))	a knob which can adjust drop strength of cervical mattress
09	Tension Adjustable Knob (Lumbar)	a knob which can adjust drop strength of lumbar mattress
10	Tension Adjustable Knob (Pelvic)	a knob which can adjust drop strength of pelvic mattress
11	Angle Adjustable Lever (cervical)	a lever which can adjust left-right angle and can fix of cervical mattress
12	Angle Adjustable Lever (Pelvic)	a lever which can adjust left-right angle and can fix of pelvic mattress
13	Length Adjustable Lever (Ankle)	a lever which can adjust length of ankle mattress
14	Height Adjustable Lever (Armrest)	a lever which can adjust height of armrest mattress
15	Height Adjustable Lever (Cervical)	a lever which can adjust height of cervical mattress



No.	Name	Function
16	Protection Case	a case which protects frame and interior
17	Column	a motor which adjust table height
18	DP Swich	a swich which can adjust elevation of the table
19	Drop on / off Swich	a swich to turn the drop on and off
20	Emergency Button	a button which patient can cut the power of the table for himself
21	Hand Switch	a switch which patient can make table into the original position
22	Paper Roll Holder	a paper holder that covers the cervical mattress
23	Ankle Belt	a belt which fixes patient's ankle
24	Flexion Rod	a rod which adjusts left and right angle of pelvic mattress
25	Traction Fix Rod (option)	a rod which fixes patient's body when traction

Components(Parts)



Touch Screen

Usage device control

Size L380 × W470 × H870~1.430mm

Weight 11.8kg



Hand Switch

Usage original positioning of device

Size L52 × W89 × H15mm

Weight 50g



Emergency Button

Usage device power block and stop

Size Ø40mm



DP Switch

Usage device height control

Size L180 × W140mm



Foot Switch1(option)

Usage device height control

Size L180 × W140 × H20mm

Weight 960g



Foot Switch2(option)

Usage semi-auto cocking control

Size $L64 \times W110 \times H35mm$

Weight 300g

Main Parts

Name	Certification	Rating or Material characteristics
Power Cord	&	below 450/750V vinyl chloride insulation cable
Power Plug		250V~,10A
Connector		250V~,10A
SMPS		24V 8,4A
Noise Filter	<u>IEC</u>	250V~ 6A/40°C, 50/60Hz
Column	<u>IEC</u>	24V
Touch Screen	CE	32Bit RISC CPU(ARM926EJ-S Core) – 400MHz

Indication Label

01M 영일엠

Product Name : Orthopedic table

Model Number : R707-K

SN: R707-K220607 : 06-24-22 Voltage: 220/230 V, 50/60 Hz Power Consumption: 400 VA Safe Working Load: 150 Kg

: YOUNG IL M CO., LTD.

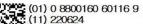
7F Starwood plaza, 400, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-Do, Republic of KOREA

TEL: +82-70-4630-8888



Tower Business Centre 2nd Flr. Tower Street Swatar, BKR 4013 Malta





(21) R707-K220607

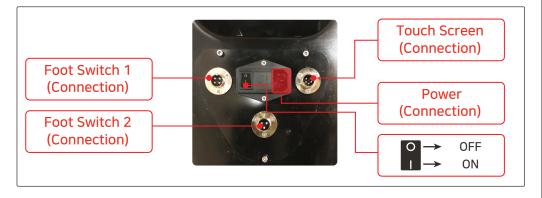






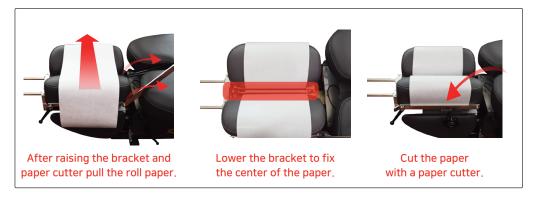
Power On

- Connect power cord with 220V Socket.
- Check cable connection of power cord, touch screen cord and foot swich(option) on the center of base part.
- Turn on Power.



2 Roll Paper Set-Up

- 1. Pull the edge of roll paper.
- 2. Fix roll paper with bracket among cervical mattress.
- 3. Cut roll paper with embedded cutter and fix it simultaneously.



3 Elevation

- Adjust convenient height for doctor's adequate treatment with DP switch and foot switch. (option)
- Refer to the article "14.How to set each touch screen function" when you adjust elevation with touch screen.







Ascending

Descending



Foot Switch 1

Ascending

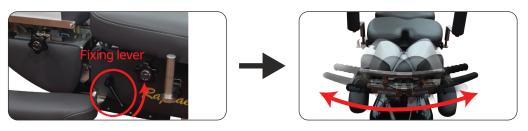
Descending

4 Mattress Angle Adjustment





- Pulling angle adjustment lever for cervical mattress, adjust up and down angle and then release lever.



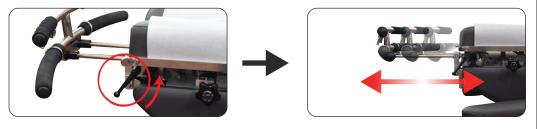
- Release a lever under cervical mattress, adjust left and right angle and then rotate lever towards the head side to fix.

4 Mattress Angle Adjustment

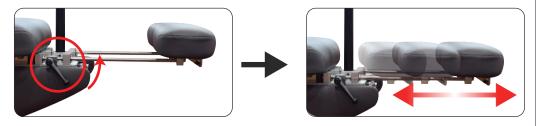


- Turn lever towards the foot side to release, adjust left and right ang leand then rotate lever towards to head.

5 Length Adjustment



- Turn the lever under cervical mattress towards the foot side to release, adjust handle length and then turn the lever towards the head side.



- Turn the lever between pelvic mattress and ankle mattress towards the foot side to release, adjust ankle mattress and then turn the lever towards the head to fix.

6 Drop intensity adjustment







- Adjust drop tension with knobs.

Mattress Height Adjustment





- Up height lever for cervical mattress, adjust up and down height and then down lever.





- Pulling height adjustment lever for armrest mattress, adjust up and down height and then release lever.

8 Drop On&off Switch





- When the button is pressed, the drop function is turned on, Press the button again to turn off the drop function.

9 Emergency Button / Emergency Hand Switch







- Push the emergency button to block power and to stop device operation. After using, turn the button to the arrow direction to clear power block.
- When you push the emergency hand switch, the traction and flexion operation becomes to the original position.

8 Touch Screen

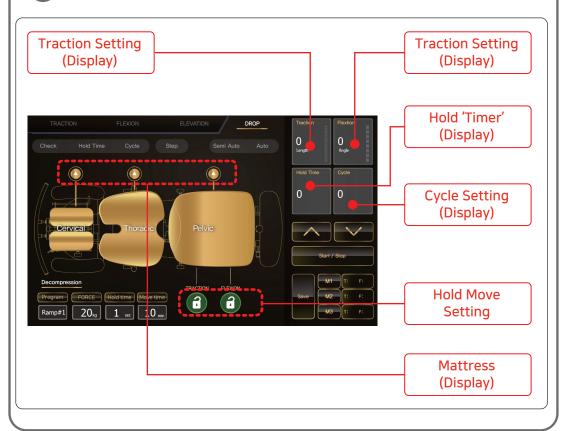
- When you touch the 'PLAY' icon in the initial screen, it turns to control screen.



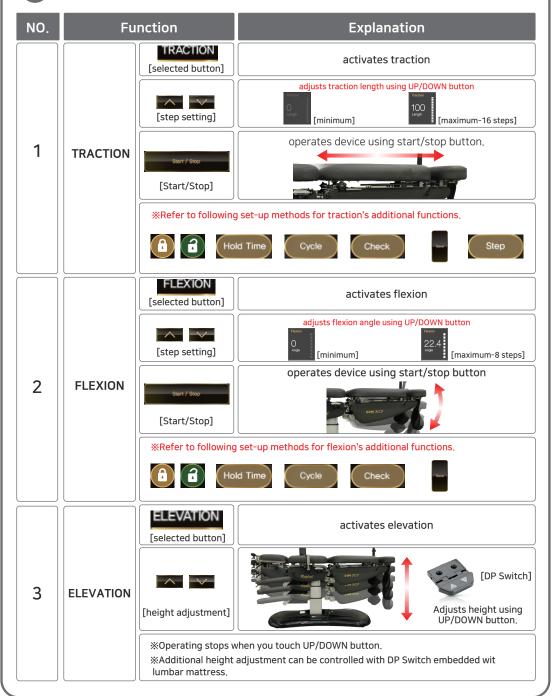


(Initial Screen)

(Control Screen)

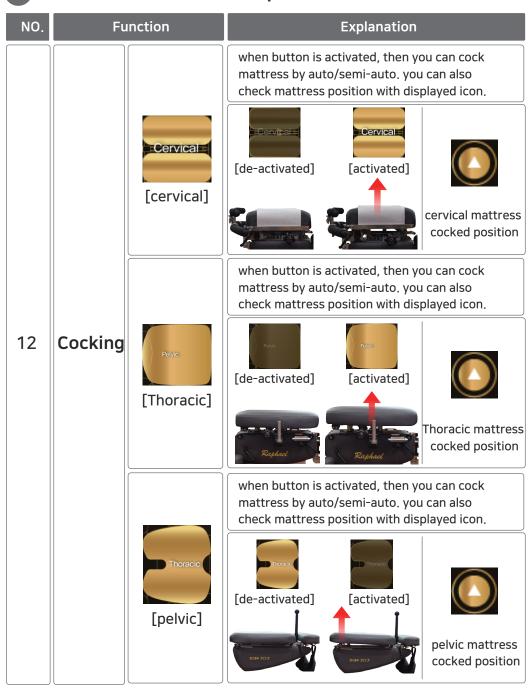


NO.	Button	Function	Explanation
01	TRACTION	TRACTION	a pelvic mattress moves to pull patient's body in a certain interval
02	FLEXION	FLEXION	pelvic mattress moves up and down
03		Hold Move	hold either traction or flexion function
04	Hold Time	Hold Time	maintain set-up time when traction and flexion operated
05	Cycle	Cycle	set the operation cycle
06	ELEVATION	ELEVATION	adjust device height
07	Check	Check	check traction and flexion step to set up adequate length and angle of mattress
80	Semi Auto	Semi Auto	set up dropped mattress with semi-auto cocking (operated with extra foot switch)
09	Save	Save	memorizes steps and cycles of device operation
10	Step	Step	length extension from minimum stage to maximum stage one by one
11	- Cervical	Cervical Mattress Cocking	activates cervical mattress cocking
12	meate	Thoracic Mattress Cocking	activates lumbar mattress cocking
13	PENG	Pelvic Mattress Cocking	activates pelvic mattress cocking
14	Start / Stop	Start / Stop	control device operation
15	^ V	UP/DOWN	controls operation cycles, fixation mode select, height adjustment and set steps
16	M1 M2 M3	Save & Import	save and import of set-up function button when you're using memory function



Touch Screen and an explanation				
NO.	Function		Explanation	
4	start stop	Start/Stop [start/stop]	start/stop button to operate device. When you push button, functions will be started. When you push one more, then device stops.	
		[selected button]	activates hold function	
5	Hold		using UP/DOWN button, you can select either traction of flexion hold.	
5	mode	[function setting]	[traction hold] [flexion hold]	
			raction fix setting : only flexion operates lexion fix setting : only traction operates	
		Hold Time [selected button]	activates hold	
6	Hold Time		maintain holding time using UP/DOWN button (unit : sec)	
0		[time setting]	1 FOLD TIME 0 50 [min. sec.] [max. sec.]	
			vice function moves to the set stage stops for a rtain time of setting and then operates again	
		Cycle [selected button]	activates cycle	
7	Operation Cycle		sets cycles using UP/DOWN button (unit : cycle)	
		[cycle setting]	0 30 [min.] [max.]	
8	Check	Check [selected button]	activates check function **move to traction, flexion setting steps and stops	

NO.	Function		Explanation	
		[selected button]	activates memory function	
9	Memory	M1 M2 M3 [save]	After setting by functions, save setting value among M1, M2, M3 button [Memory1] [Memory2] [Memory3]	
		T: F: [display]	The saved settings are displayed. *It is displayed in steps.	
		Step [selected button]	activates step function	
10	Step	Step Cycle to adjust traction steps and	activates counter button, uses UP/DOWN button to adjust traction steps and cycles [setting]	
			nly for traction function, length extends one step from minimum to maximum steps	
	Cocking Method	Semi Auto	touch 'Semi Auto' button to select cocking method (auto/semi-auto)	
11		[selected button]	Semi Auto [activated] [de-activated]	
Select		foc	n cock dropped mattress by semi-auto using of switch for cocking. can cock automatically the dropped mattress.	



Maintenance

Check and Inspection

Check and inspect the device following standards for safe usage and patient protection.

Check List	Check Contents	Cycle
Cable Connection	check the cable is connected normally	once/day
Emergency Button	check the emergency button status (pushed or not pushed) device doesn't operated when emergency button is pushed	once/day
Part Drop	part loss or drop around device	once/week
Outlook	check overall device outlook	once/month
Touch Screen	check individual button's function	once/month
Toden Screen	check all button's function	once/month
Tension Adjustment	check tension strong/weak adjustment and quality	once/month

^{*}Please ask solution to purchasing depot or manufacturer's sales department when malfunction occurs.

Repair and Replacement

- We don't have any parts for customers or users can repair by himself of R707-P table.
 Only service staff or authorized company(or person) can repair it.
- When power cable has got damaged, remove it to prevent danger like electric shock and fire. And replace with a new cable with same specifications.
- Our company doesn't have responsibilities the risk of replacing cable with unmatched specification. We recommend to replace with new cable from our company.

Washing and Sterilization

- Clean with soft fabric. Wipe smoothly.
- Washing liquid is prohibited for the safety of device, patient and user. But only in inevitable occasion, a little water on the fabric can be used to clean except for power part.

Technical Support

• Please ask purchasing depot or manufacturer for technical support and information.

Raphael 707

SERVICE CENTER

Office Hours: 9:00 am ~ 7:00 pm UTC/GMT +9 (Monday through Friday)

Global Sales

Telephone: 82-70-4630-8888 Email Sales: 01md@01m.co.kr

