CE
0476

User's Manual

Subject: Compressible Limb Therapy System

Model: DVT-7700

- Keep this user's manual where you can easily find after reading it.
- Warranty is included in this user's manual
- Caution : Make sure to read this user's manual if you want to keep the Product in a good condition.
- This is a medical device.

Wonjin Mulsan Co., Ltd.
www.wonjininc.net

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1. Product introduction

Product details	
Product Name	Compressible Limb Therapy System
Model Name	DVT-7700
Dimension(mm)	198×264×200mm
Rated Voltage	AC 100~240V 50/60Hz
Maximum power consumption	30VA
Operation time	100 hour
Maximum Pressure for Foot	110-140mmHg ±20%
Maximum Pressure for Calf/Thigh	30-60mmHg ±20%

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② Manufacturer : WONJIN MULSAN CO., LTD.
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2. Indications use and contradictions

Prevention(Required to use after consultation with doctor)

- Lymph edema
- DVT[Deep vein thrombosis]
  PE[Pneumatic embolism]
- Varicose therapy and prevention

Side effects

Consult with doctor if a user is as below.

- Using medical electronic implant device (artificial heart)
- A person who is in pulmonary edema, heart disease, vein cancer, high blood pressure, high fever.
- A person who have skin disease such as skin burn, dermatitis, bedsore, purulent disease, malignant tumor and etc.
- A person who took skin surgery (skin graft) on the part of use.
- A person who has blood vessel disease such as series artery hardening or other angina, cardiac infarction and etc.
- Cases the suspected blood clot presence.
- Not contact parts of physical deformity or pins inserted.
  (artificial joint, beads, metal, and so on.)
- Right after the operation as a varicose veins.
- Recovering patients since after the surgery, pregnant woman, children.
- In the case of increasing of pain after use this machine.

3. Cautions

– This is for user safety and prevention against the property damage.
Please read it carefully prior to using the product.

Warning

If instruction is not followed, the user may die or cause serious damages.

Cautions

If instruction is not followed, the user may cause injuries or incur financial loss.

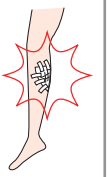
	Manufacturer		Serial Number		Caution
	Date of Manufacturer		Temperature Limitation		Operating Instructions
	Pushing prohibited		Humidity Limit		Follow the instructions for use
	Sitting prohibited		General prohibition sign		Keep dry
	Stepping prohibited		This means not to take the device apart		Type BF Applied part
	Authorised representative in the European community		This means to unplug the power cord.		General warning sign
	KIWA CERMET (NB no. 0476)		General mandatory action sign		Please do not throw any electrical equipment (including hose marked with this symbol in your bin)

- ▶ This device is used only hospital.
- ▶ Patients should wear clothes before wearing cuffs.
- ▶ Operator-enabled : This device should be used by professional, trained personnel.
- ▶ Environment : This device can be used in the hospital and should not be for users in the any environment outside of a professional healthcare facility.

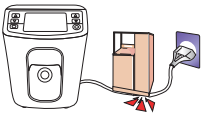
Warning

Please avoid same time with medical equipments for artificial life preservation, installation style medical equipments like electrocardiograph etc.
Please avoid to user's the device to whom in too high blood pressure or obstacle in blood circulation.

Do not use this product if you are experiencing inflammation, an infection, pain of unknown origin, or bleeding [Internal or external] at near the site of application.

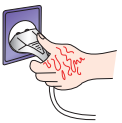


Do not place the heavy things on the power cord. Also, do not press it with a table or a chair.
(It may. Cause an electric shock, an electric leakage, or fire.)



Do not soak the device in the water because it is an electrical product.

When plugging or un plugging the power cord from the wall outlet, please remove moisture from hands. (It may cause the electric shock, electric leakage or fire.)



Check up the suitable voltage to be used and use the device. (The user may be burned, get shocked or be injured.)

Please use after wearing underwear or sportswear not to touch directly in skin with the cuffs or pad.

Do not use the device if you feel pain or make you feel uncomfortable. Stop the use immediately.
Be careful when you zip up the cuff.
Clothes, hair or skin may get stuck in the zipper.

Try not to drop the device on the floor because it might be much vibration or shock on it. (The device may be damaged.)

Do not use by purpose except massage.
Keep infants and children away from this device due to the risk of electric shock or other injuries.

⚠ Cautions

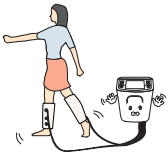
Do not use it in an environment with too much electromagnetic wave.
It may cause damage to the device and/or cause malfunctioning.

Do not store the garments near a stove, cigarette or other heat generating device as this is a fire hazard.
Do not store the garments near needles, scissors or other sharp objects as they may damage the garments.

Be careful that water or other substance cannot be inserted inside of the device.

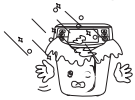
If this device should malfunction or fail to operate, do not attempt to open, repair, or disassemble the main unit or this device. (It may lead to a risk or fire, electric shock, or injury to the user.)

While using this product, remain stationary and do not attempt to walk or move arround.



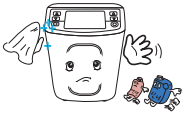
Use the device within 20 minutes when using it once. (At first, start from 5 minutes, and increase the time slowly consudering your physical strength. "If you use it continuously for a long time, it may have a reverse effect on you")

If you have not used the device for a long time, or if you wise to use it in cold areas.
* The device may not operate normally. In this case, use the device after operating it three or four times at the strength of Low-Medium-High in regular sequence.



Keep the product out of the direct rays of the sun or heating equipments including gas stove.
It may cause the product modification or discoloration.

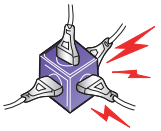
When cleaning the product, wipe off with a dry cloth without any chemical substance or detergent.
It may cause the product external damage such as discoloration and peeling off.



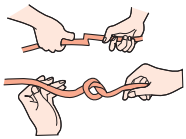
Please dispose the product according to the waste procedure. It may cause the environmental pollution.

Cautions

Please use the exclusive power outlet and do not plug several cords at once.
It may cause the fire, electric shock or other injuries.



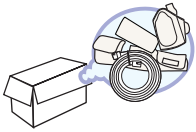
Be careful about air hose not to be twisted or bent.



Do not keep the device at too low temperature in winter time. It may be hardened and damaged

Do not machine wash the cuffs or submerge them in water. The cuffs may be gently wiped with a moistened towel or cloth. If necessary, a mild detergent may be used.

If you wish to keep the device for a long time, place it in its box.



4. Purpose of use, Name of Each Parts

① Purpose of use

Compressible Limb Therapy System is a pneumatic pressure treatment system That repeats expansion sleeves to help blood circulation and prevent blood clots or clogs.

② Name of Each Parts

[Main Body]

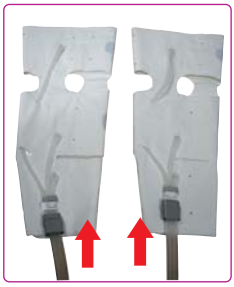
Thigh cuffs (L, M, S)	Calf cuffs (L, M, S)	Foot cuff
Air hose (ch1)	Air hose (ch2)	Power Cord

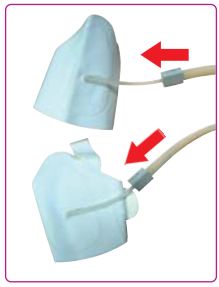
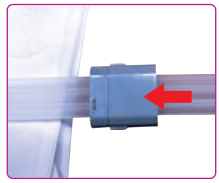
NO	NAME	EXPLANATION
1	Power Switch	ON/OFF
2	LCD Windows	It shows the device settings
3	Adjustment Button	It operates the device, changes the settings and saves information.
4	Air Outlet	Connector that connects hose and cuff

5. Preparation before use

① Select proper cuff or pad to put.

② Connect double or single hose with below picture.



③ Put cuff or pqad to use if conjunction was ended.

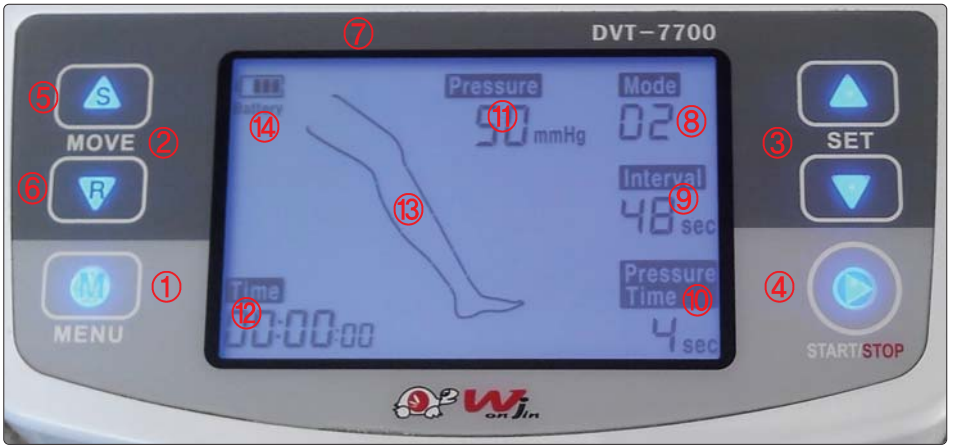
- Spread the legs and cuffs is used.

④ The body lay on the bed and walk.

⑤ Is connected. Body and the air hose.

6. How to use

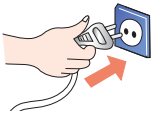
Explanation



NO	NAME	EXPLANATION
1	Menu	It brings out the menu.
2	Move	It lets you choose around among the options. (Mode, Pressure Time, Interval, Time, Pressure(mmHg))
3	Set	It lets you choose a value.
4	Start/Stop	It operates and stops the device.
5	Save	It saves the current state (press down on the button for 10 seconds)
6	Reset	It brings back to the initial state (press down on the button for 10 seconds)
7	LCD Windows	It shows the current setting and operation state.
8	Mode	Mode selection. A(A1, A2, A3) = Auto B(B1, B2, B3) = Manual C1 = Manual D(D1, D2) = Manual
9	Interval	Interval level selection. (18, 24, 30, 36, 42, 48, 54, 60)sec
10	Pressure Time	Pressurization timely selection. (4, 5, 6, 7, 8, 9)sec
11	Pressure (mmHg)	Increase the pressure which is set. (unit : 30~60, 110~140mmHg) B MODE : Manual setting(Thigh/Calf) 30, 40, 50, 60mmHg C MODE : Manual setting(Foot) 120, 130, 140mmHg D MODE : Manual setting(Thigh/Calf, Foot) 30~60mmHg, 120~140mmHg
12	Time(min)	Operation time is displayed. (99:59:59s)
13	Leg picture	Icon that shows the operation state.

How to use

① Insert the power plug into the outlet.
- Check the voltage before use.



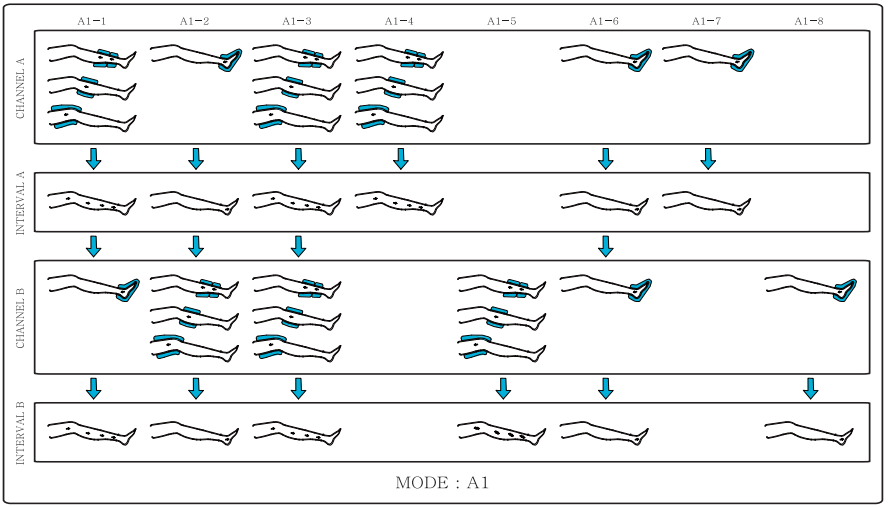
② Turn on the power button.
- Press the power button on"ON"

③ Menu selection (If changed by the user)
a. If you want to use the basic setting, move to #④

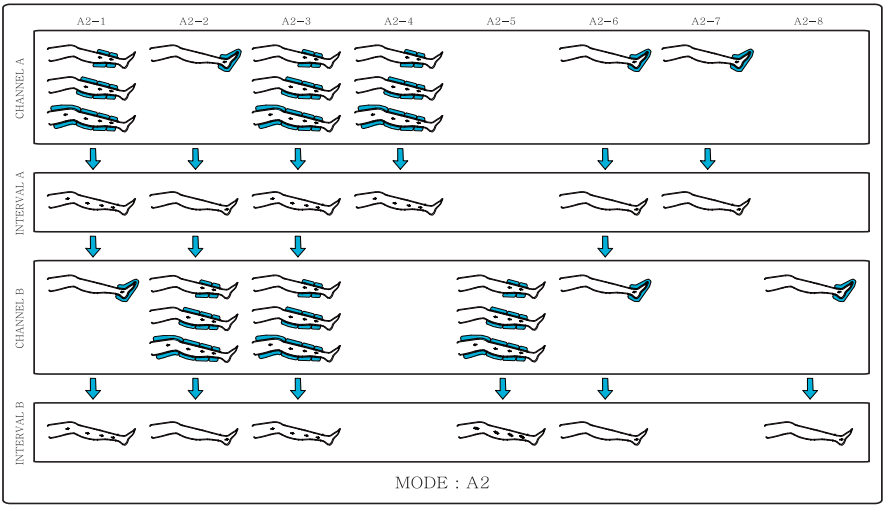
b. Press MENU to change to customer setting.
c. Move to Menu to be changed using the MOVE button. - Refer to the 12page
d. Change the value using SET button. Of you want to choose something else, repeat the steps c & d.
e. If you have set the setting, press MENU button to get out of the setting change.
f. If you want to use the current customer setting again later, press down on the save button for 10 seconds to save. (If you press button on Reset for 10 seconds, it goes back to the basic setting). If you want to use the setting but don't want to save it, move down to g.
g. Move down to #④

-Order of pressure is applied to the cuff depending on the mode operating-
-auto mode- (1cycle: 60s

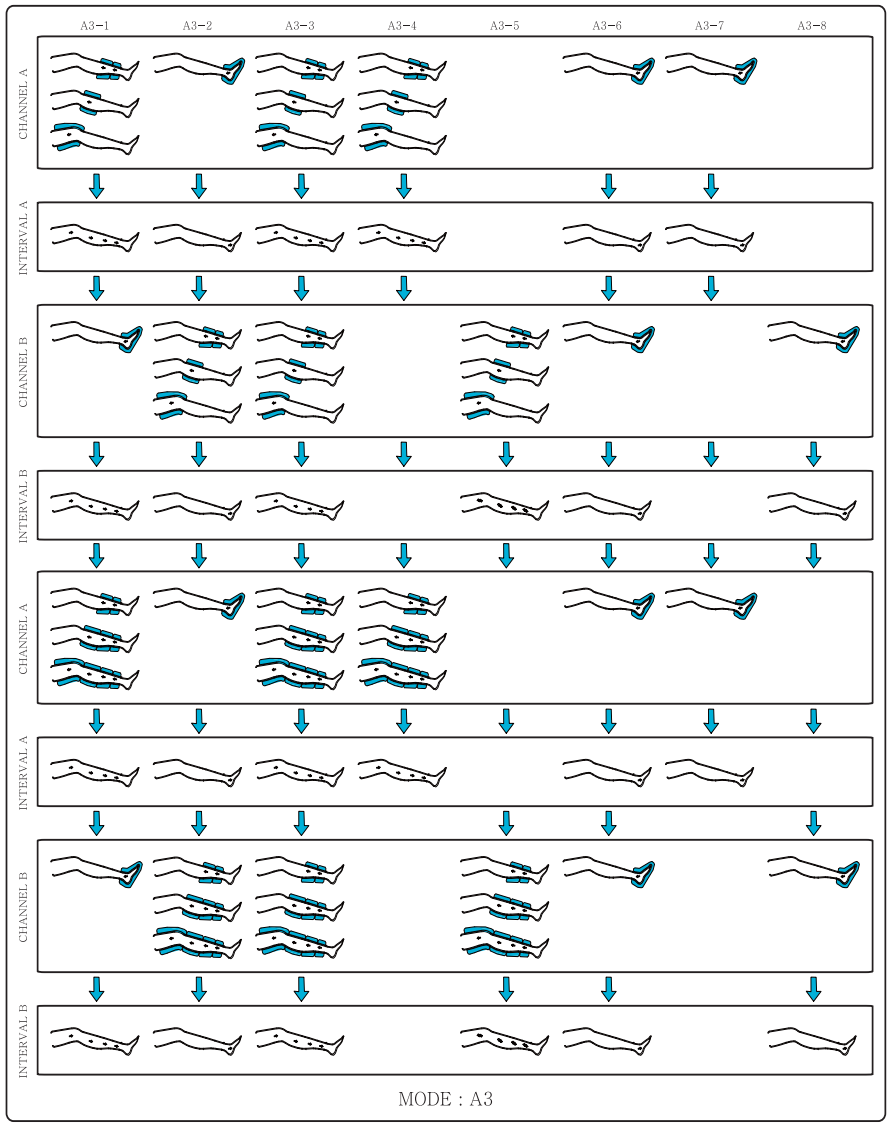
Fixed set						
Pressure	50mmHg	40mmHg	30mmHg	130mmHg	0mmHg	0mmHg
Interval	–	–	–	–	45sec	55sec
Pressuer Time	5sec	5sec	5sec	5sec	–	–



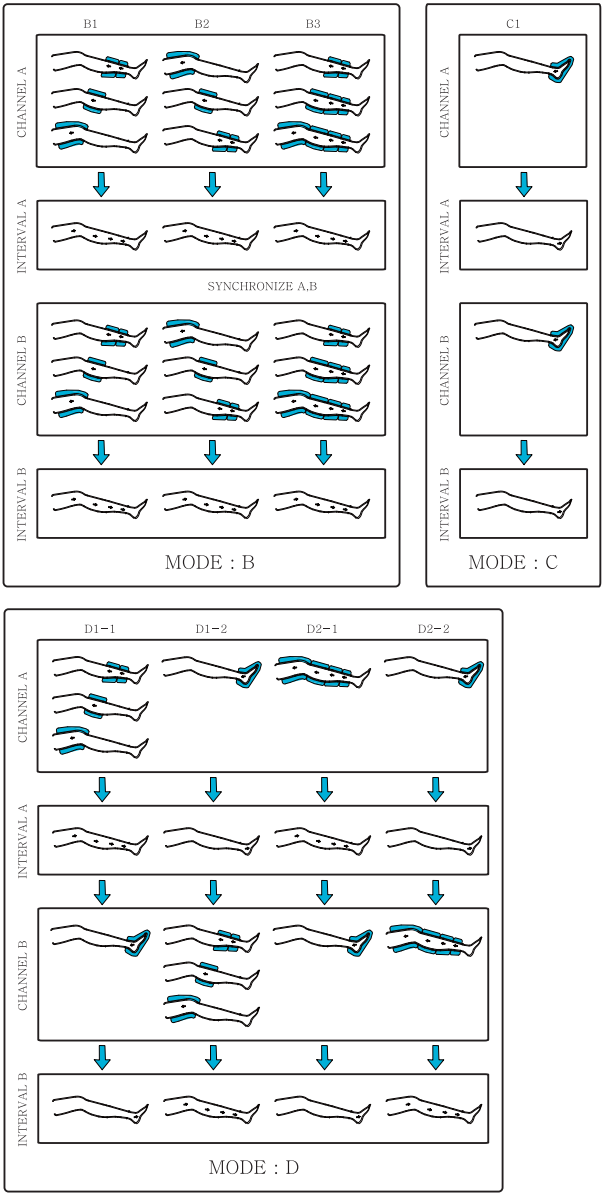
MODE : A1



MODE : A2

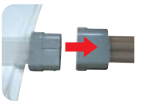
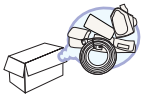

A3-1
A3-2
A3-3
A3-4
A3-5
A3-6
A3-7
A3-8
CHANNEL A
INTERVAL A
CHANNEL B
INTERVAL B
CHANNEL A
INTERVAL A
CHANNEL B
INTERVAL B

MODE : A3


B1
B2
B3
CHANNEL A
INTERVAL A
SYNCHRONIZE A,B
CHANNEL B
INTERVAL B
MODE : B
C1
CHANNEL A
INTERVAL A
CHANNEL B
INTERVAL B
MODE : C
D1-1
D1-2
D2-1
D2-2
CHANNEL A
INTERVAL A
CHANNEL B
INTERVAL B
MODE : D

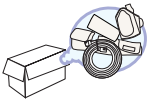
④ Operate the device by pressing down on start/stop. –The device stops working automatically if the set time is ended.	

When closing the Use

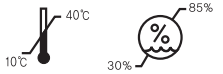
If the air comes out of the cuff, remove the cuff and unplug the power cord.	Remove the hose connector from the main part. [Caution] When you are unplugging the power cord or hose connector, hold the plug not the cord.
Remove the hose connector that is connected to cuff (pad) 	Keep the main part and accessories in the box after use. 

7. Custody and Management

All cuffs are not being repaired as consumption goods. Always be careful.

Do not keep the cuff near radiator, fire, needles, Scissors and other sharp objects.	Do not keep it in humid places.
Do not put the cuffs in the washing machine. Clean it with wet gauze.	Do not keep it in cold places. It may freeze.
Keep it in the original box for prolonged storage. 	

Environments for its operation and custody

Operation : Temperature 10~40℃, Humidity 30~85%, pressure 700~1060hpa 

8. Temporary action taken

Situations	What to check fors
If the device is not working	– Check if the device is plugged in. – Press ON (ON/OFF switch) – Check if the power cord is malfunctioning. (Check for the voltage). – Check if timer switch is set.
If it sounds like air is coming out	– Check if hose or hose connector is damaged. – Check is hose connector is completely plugged in. – Check if hose is bent or pressed down.
If cuff and waist pad do not get inflated or have no pressure	– Check if hose connector is connected appropriately. – Check if hose is bent or pressed down by heavy objects. – Check is hose is bent or pressed down. – Check if hose connector is plugged into the air injection nozzle until clicking sound.
If air keeps going into the cuff and it sounds like air keeps coming out of it	– Check where the air is coming from (which part of cuff) If you cannot spot where the air is coming from, turn off the device and try to operate again. Boot cuff and each pad are accessories

9. Label

CE 0476	Compressible Limb Therapy System		
	MODEL NAME	DVT-7700	
RATED SUPPLY VOLT	AC100~240V	SUPPLY FREQUENCY	50/60Hz
POWER CONSUMPTION	30VA	MAXIMUM PRESSURE	30~60mmHg 110~140mHg±20%
SN			
	Wonjin Mulsan Co., Ltd. Tel : 82-32-816-0552 Fax : 82-32-816-0557 2F, 89, Geomdan-ro, Seo-gu, Incheon, Korea WONJIN MULSAN CO. LTD. MADE IN KOREA		
EC REP	I.A.C.E.R srl Via Sandro pertini 24/A 30030 Martellago(VE), Italy		

WARRANTY

Name of Products	Compressible Limb Therapy System	**Model**	DVT-7700
Date of Purchase		**Serial No.**	
Agent of Purchase		**Warranty Period**	Body:1 Year Cuffs(Consumption Goods); 3Months(Work Place)

About Our Service

This is a product that we, WONJIN MULSAN Co., Ltd. manufactured though its own strict quality management and inspections process after obtaining the permission and approval of the Korean Food and Drug Administration and the Safety Authentication System for Electrical Good. WONJIN MULSAN Co., Ltd. Will provide parts list or maintenance instructions manual of products or more information to perform maintenance or repair the system.

EMC(Electro- Magnetic- Compatibility)

These products are satisfied with EMC standard requirements. Please follow below instructions for the special caution of EMC.

- It will affect the performance of devices for the decline of durability of equipment or the emission of electromagnetic if clients do not follow manufacturer's instructions.
- It will affect normal operation in medical devices by using mobile or communication equipments. The clients need to check normal operation in medical devices before using these equipments.
- Please contact to engineers at WONJIN MULSAN Co., Ltd. In South Korea if you want to know more about EMC.

Paid Services

Please be careful about the fact that the service fee will be charged even within the warranty period if the consumer requests the service due to his/her carelessness or if no defects are found in it.

In case of faults due to the consumer's mistake (When the faults occur due to consumer's carelessness or wrong repair)

- When the fault occurs due to the wrong use for the electrical capacity.
- When the fault occurs because the consumer has fallen down the device during the transfer after installation.
- When the fault occurs because the consumer has used the consumption and optional goods that we did not designated.
- When the fault occurs because other companies' repairman has repaired the product concerned
- When the fault occurs because the consumer has used the product in the prohibited area(outdoors) or beyond the original use, because the consumer has disassembled, alternated and repaired at his/her discretion.
- When the consumer has not abide by the matters that require attention in this instruction manual (Please red the matters that require attention carefully.)

Other cases

- In case of natural disasters (fire, damage from sea wind, flood damage, thunder, lightening, earthquake, etc.)
- Where the consumption goods are used up or their warranty period has already lapsed.
- You need to use authorized parts or supplies which are provided by manufacturer Otherwise, it might be the reason of trouble or accident.

Manufacturer: Wonjin Mulsan, Co., Ltd.
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