Operation Manual / User's Guide

Uninterruptible Power Systems

Model:

DL3115-300jL
DL3115-420jL
DL3115-500jL
DL3115-650jL

UC-AL1U-0112-U80

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Introduction

Thank you for purchasing a DL3115-series Uninterruptible Power System. DL3115-series Uninterruptible Power System (UPS) protects your computer and network system from power supply problems, such as power failures due to natural disasters, inadvertent accidents, and construction work. To ensure safe operation of the DL3115-series UPS and protect your valuable information, read the entire user's guide before you attempt to use the UPS. In particular, incorrect installation methods or improper battery handling can be dangerous and sometimes results in fire or injury. You must observe the safety precautions and use the UPS correctly. After you read this User's Guide, keep it stored in an accessible location for easy reference.

NOTICE

①Reproducing part or all of the contents of this User's Guide without permission is prohibited.
②The contents of this User's Guide are subject to change without prior notice.
③All possible measures were taken in preparing this User's Guide. However, should you find an error, omission, or questionable point, please contact your Fuji Electric representative.
④Fuji assumes no liability for the direct or indirect results of UPS operation regardless of statement 3, above.

Checking the Package Contents

First, open the box and check the contents. Contact your vendor if any item is missing.

UPS	1
Special communication cable	1
CD-ROM (Power Management Software)	1
Warranty card (Japanese)	1
User's Guide (this guide)	1

Important Information for Safe Operation

1 Safety Precautions

The UPS and this User's Guide provide precautions that must be followed to ensure safe operation of the UPS and to prevent danger to the user and damage to property. Read and thoroughly understand this User's Guide before you attempt to use the UPS to ensure correct operation. Store this User's Guide in a location where it can be accessed for easy reference.

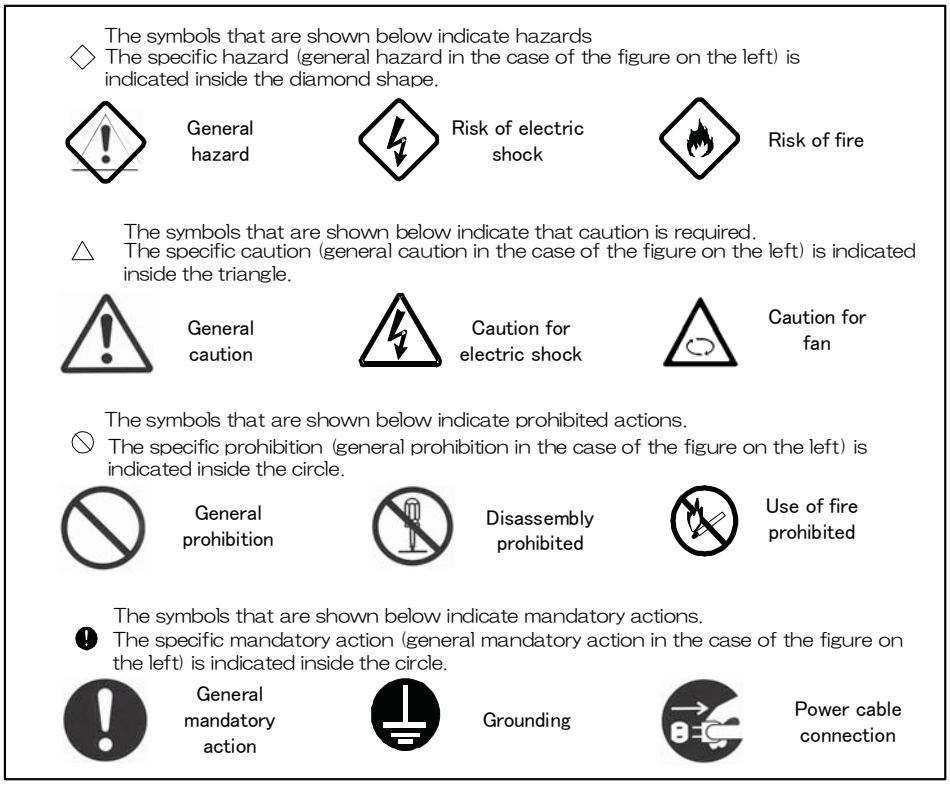
- **Safety Precaution Symbols and Definitions**

Safety precautions in this User's Guide are classified as warnings or cautions.

 WARNING	Indicates that incorrect handling can cause a hazardous situation that could result in death or severe injury.
 CAUTION	Indicates that incorrect handling can cause a hazardous situation that could result in moderate or minor injury or property damage.

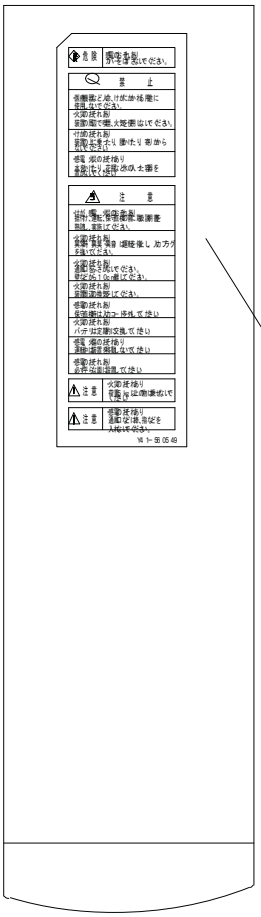
Depending on the conditions, serious results can occur even when precautions that are classified as cautions are not observed.
In either case, precautions are important and must always be observed.

- **Symbol Definitions**



2 Warning Label Contents and Position

（後面）



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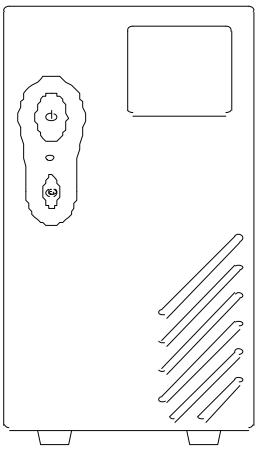

前面

⚠ 危険	感電のおそれあり カバーをはずさないでください。

禁　止
・医療機器など人命、けがにかかわる用途に使用しないでください。
・火災のおそれあり 装置の周辺で喫煙、火気を使用しないでください。
・けがのおそれあり 装置の上に乗ったり、腰かけたり、寄りかからないでください。
・感電、火災のおそれあり 水をかけたり、花瓶など水の入った容器を置かないでください。

⚠ 注　意
・けが、感電、火災のおそれあり 据付け、運転、保守点検の前に取扱説明書を熟読し、実施してください。
・火災のおそれあり 異常時（異臭・異音）は運転を停止し、入力プラグを抜いてください。
・火災のおそれあり 通風口をふさがないでください。 壁などから10cm離してください。
・火災のおそれあり 装置周辺の換気をしてください。
・感電のおそれあり 保守点検時は入力コードを外してください。
・火災のおそれあり バッテリは定期的に交換してください。
・感電、火傷のおそれあり 運転中は装置を移動しないでください。
・感電のおそれあり 必ず平らな面に設置してください。

⚠ 注意	・火災のおそれあり 荷重5kg以上の物は乗せないでください。
⚠ 注意	・感電のおそれあり 通風口などに棒、指などを入れないでください。

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3 Precautions for Correct Use

Safety Measures

You must read the precautions that are provide here to operate the UPS safely and correctly. Operation of the UPS without regard for the precautions can result not only in UPS failure, but also in death, injury, burns, electric shock, and personnel accidents, as well as fire and damage to surrounding equipment.

Intended Uses of the Uninterruptible Power Supply

The UPS was developed for use in business applications in normal offices.
Therefore, do not use it for applications such as the following.

①Use for medical devices on which human life depends, such as operating room devices, dialysis equipment, and incubators.
②Use for aircraft, trains, or other transportation means that can pose bodily harm.
③Use in vehicles or on ships where the UPS would be directly subjected to vibration or shock.
④Use in computer systems that are important to society or public functions.
⑤Use in equipment for which the above restrictions apply.

Consult your Fuji Electric representative before you use the UPS in any applications with the above loads. Special considerations are required for operation, maintenance, and management, such as for system redundancy, for equipment that significantly affects the maintenance of public functions or for equipment that involves personal safety.
The specifications of the UPS are for use in Japan. Consult you Fuji Electric representative for use outside of Japan.
Using a UPS with Japanese specifications outside of Japan can result in smoke or fire due to different voltage and application environments.

Potential Risks of the UPS

Here, "potential risks" refers to possible effects on the human body or life due to characteristics of the UPS.
The UPS poses the following risks.

- Electric shock
- Fire due to short circuit or heat generation

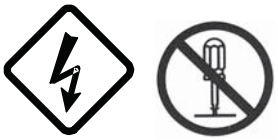
Effects of Electromagnetic Waves Emitted from the UPS

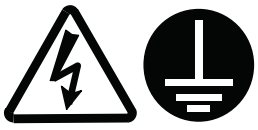
The UPS emits electromagnetic waves due to its operating principles, in the same was as normal computers and other equipment.
With present technology, it is impossible to completely block electromagnetic waves from being emitted from the UPS.
In particular, using the UPS in the vicinity of a device for which remote control is performed using radio waves can cause the device to operate incorrectly.
Be sure to implement measures, such as electromagnetic shielding, if the UPS is used near such devices.

Precautions for Correct Use and Handling

Read and thoroughly understand this User's Guide to ensure correct operation. If you sense any danger, turn off the On/Off Button ⏻ on the front panel, turn off the power supply to the UPS, and then remove the input power cable plug from the outlet. If the input power distribution panel breaker is tripped or the input power cable is removed while the On/Off Button ⏻ is turned on, the backup operation will be performed in the same way as for a power failure.

Precautions for Correct Use

WARNING	
	• Do not use the UPS in locations subject to flammable gas or combustible materials. If sparks occur, these substances can ignite or explode. • Do not place the battery of the UPS in a fire. Doing so can cause the battery to explode or rupture.
	• Do not attempt to disassemble, repair, or modify the UPS. Attempting to disassemble, repair, or modify the UPS can result in incorrect operation, as well as electric shock or fire.

CAUTION	
	• Electric shock is possible when cleaning the UPS. Therefore, turn off the On/Off Button ⏻ on the front panel of the UPS, turn off the power supply to the UPS, and then remove the input power cable. • When inserting or removing the input power cable, turn off the On/Off Button ⏻ on the front panel of the UPS to stop the UPS, and then insert or remove the cable. Always hold onto the plug to insert or remove the cable. Pulling the cable can result in fire or electric shock due to cable damage. • Do not remove or insert the input power cable with wet hands. Doing so can result in electric shock. • If there is lightning, do not touch the UPS, including the cables. Doing so can result in electric shock if lightning strikes.
	• For safety, the UPS must be grounded to a resistance of 100 Ω or less. Failure to perform grounding can result in electric shock. • Do not connect the input power cable of the UPS to an outlet that is also grounded to other equipment that consumes a large amount of power. Doing so can result in incorrect operation or failure.

CAUTION

- Do not block the air vents on the UPS. An abnormal increase in the internal temperature of the UPS can result in incorrect operation, failure, or fire.
- Do not leave the UPS in a location where it is subject to heat from direct sunlight or heat-generating devices. Doing so can result in fire due to failure, damage, or deterioration caused by heat.
- Do not connect the UPS to an outlet to which many other devices are connected. Doing so can result in fire due to overheating of the outlet.
- Do not install the UPS in a location that cannot be connected to an outlet with only the input power cable (i.e., do not use an extension cable). Using a power cable that does not match the power supply specifications of the UPS can result in fire due to overheating of the power cable.
- The UPS is designed for use under circumstance of 100VAC, 50/60Hz. Using any other power supply voltage will result in failure, fire, or electric shock.
- Do not bend the cables connected to the UPS past their natural bending radii, bundle the cables, place objects on the cables, or let them be lodged between other objects. Doing so can result in electric shock or fire due to damage to the cables.
- Do not use the UPS if the cables are not completely connected. Doing so can result in electric shock or fire due to short circuit or heat generation.
- Do not let the outlet, cables, or connectors on the back of the UPS become wet with water or other liquids. Doing so can result in electric shock or fire.
- Do not insert foreign objects into the UPS. Inserting foreign objects, such as metal or combustible items, can result in electric shock or fire due to short circuit of internal components. If a foreign object enters the UPS, turn off the On/Off Button ⏻ on the front panel of the UPS to stop the UPS, remove the power cable, and then contact your vendor.
- Do not install the UPS in locations subject to excessive dust. Dust accumulation can result in electric shock or fire due to short circuit of internal components.
- Do not use the UPS in locations subject to saline or corrosive gas. Doing so can result in electric shock or fire due to short circuit or degradation of internal components.

- The UPS is heavy. Hold the UPS securely when lifting it. Lifting the UPS improperly can cause back injury or result in injury from dropping the UPS.

- Do not step on the UPS or place objects on it. The UPS can fall over, fall, or break.
- Do not install the UPS in an unstable location. Doing so can result in injuries from the UPS falling over.

- If an abnormal sound or odor or any other abnormality occurs while using the UPS, immediately turn off the On/Off Button ⏻ on the front panel of the UPS to stop the UPS and then remove the power cable plug from the outlet. Stop using the UPS, and then contact your vendor.

4 Maintenance Precautions

Battery Replacement and Disposal

The UPS uses a battery as a backup for short-term power failures.
The battery contains lead and diluted sulfuric acid. The following precautions must be observed.

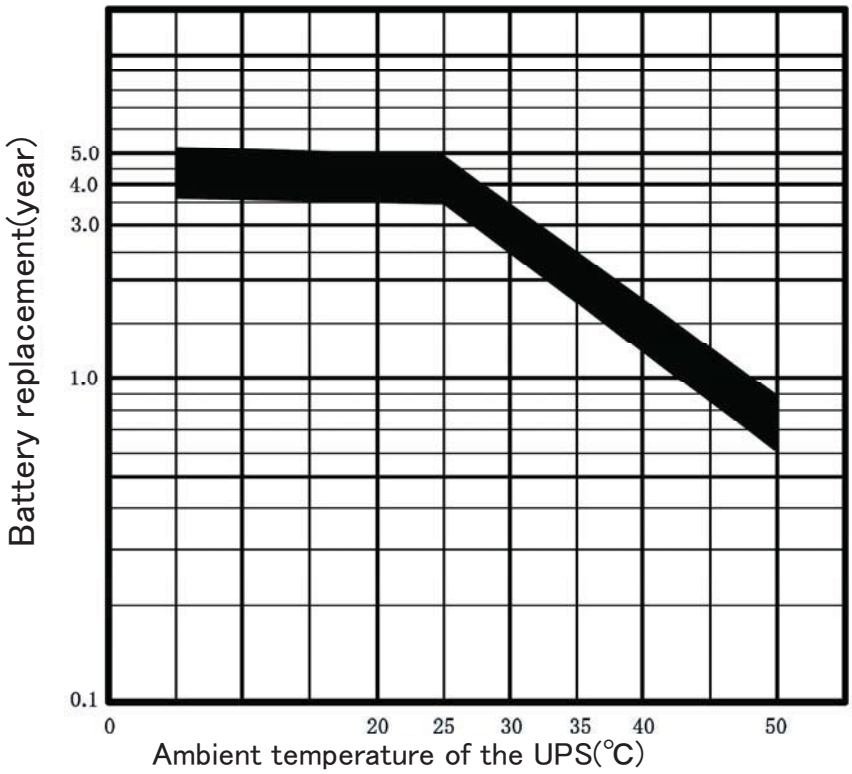
CAUTION

- The battery replacement period is 3 to 4.5 years for normal use (at an ambient operating temperature of 25°C).Periodically replace the battery.Earlier replacement is recommended due to shortened service life if the operating temperature exceeds 25°C or if the battery is frequently discharged.

Ambient operating temperature	Expected battery life	When to replace batteries
25℃	3.5 to 5 years	3 to 4.5 years
30℃	2.5 to 3.5 years	2 to 3 years
40℃	1.3 to 1.8 years	0.7 to 1.3 years

Battery Replacement Period

The service life of the battery greatly depends on the installation environment of the UPS. To ensure safe operation, replace the battery according to the operating environment.



This service life indication of the battery conforms to user guidelines (JEM-TR204: 2001).

CAUTION

- Liquid can leak due to degradation of the battery container if the UPS is used for an extended period without replacing the battery. Leaked liquid contains sulfuric acid and can cause smoke or fire. Leaked liquid can cause burns or loss of sight if it comes into contact with your skin or eyes. If leaked liquid comes into contact with your skin or eyes, immediately flush with running water and consult a physician.

The battery must be properly disposed of as industrial waste subject to special control as stipulated by the Waste Disposal and Public Cleaning Law.
Contact your vendor.

To ensure safety, the battery must be replaced by a person with experience in and with sufficient knowledge of electrical work. Before replacing the battery, read and thoroughly understand this User's Guide and follow the safety precautions.

UPS Modification and Repair Prohibited

CAUTION

- The UPS contains high-voltage components. Any attempt to replace the battery by anyone other than maintenance personnel or opening the cover of the UPS will invalidate the warranty, and can result in electric shock or other accidents.

5 Other Precautions

Precautions on Transferring or Selling the UPS

If the UPS is assigned or sold to a third party, assign or sell all of the items that were included with the UPS.

UPS Warranty

A certificate of warranty is included with the UPS. The certificate of warranty is provided to you with specified items entered by your vendor. Check the items that were entered by your vendor and keep the certificate of warranty in a safe place. If UPS failure occurs during the warranty period, repair will be performed based on the items entered on the certificate of warranty. For repair after the warranty period, consult your vendor. Refer to the certificate of warranty for details. If the specified items were not entered by your vendor, repair or replacement will be performed for a fee regardless of whether the product is within the warranty period.

Content

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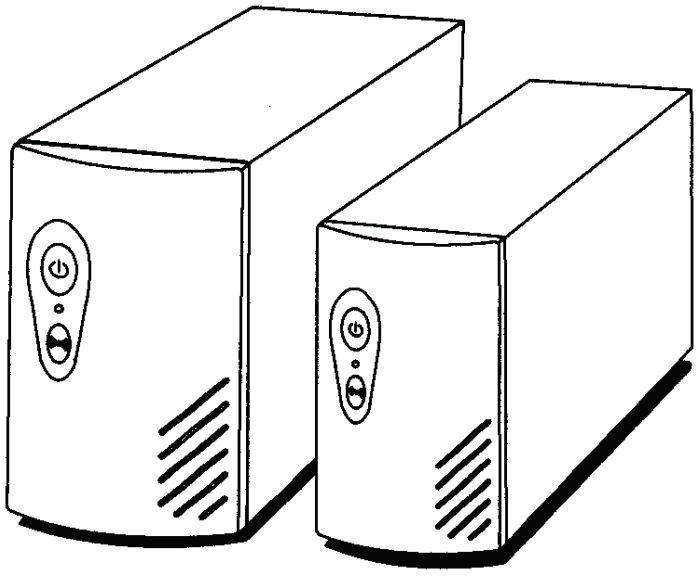
Chpter 1 UPS Overview

The DL3115-series Uninterruptible Power Systm (UPS) protects computers from three basic power supply problems: power failures, power sags, and power surges.
Power supply problems, such as power failures, can result in loss of data when doing computer work. They can also corrupt crucial data and damage hardware. This can result in the loss of hours of productivity and expensive repairs.
The DL3115-series UPS protects your computer and data from such power supply problems.
In addition, the DL3115-series UPS comes with Power Management Software, which is indispensable for data protection, and a communications cable.

Features of the DL3115-series UPS

- The compact design enables saving space and simple installation of the UPS.
- An alarm provides notification of problems.



650VA 300VA/420VA/500VA

Figure 1-1 DL3115-series UPS

Chpter2 Installation

2-1 Checking the Package Contents

When you open the UPS package, check that all the accessories are included and that the UPS and accessories are not damaged. If the UPS is damaged, keep the shipping carton, packing materials, and shipment documentation, and immediately contact your vendor. Do not operate the UPS if it is damaged.

2-2 Installing the UPS

Select an appropriate location for installing the UPS.
Install the UPS on a level surface.
Provide ventilation space for the UPS as shown in Figure 2-1.
Do not install the UPS in the following locations.

- Locations subject to direct sunlight.
- Locations subject to high temperature or high humidity. (It is recommended to control the ambient temperature within a range of 10°C to 25°C to maintain the battery service life.)
- Locations subject to strong vibration or shock.
- Locations subject to saline or corrosive gas.
- Locations with an incline (i.e., not level).
- Locations near wireless devices. (Noise can enter the wireless device.)
- Locations subject to excessive dust.

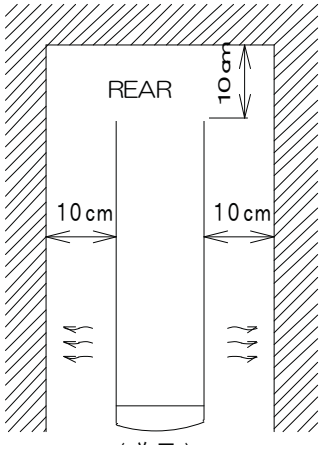


Figure 2-1 UPS Viewed from the Top

CAUTION
• Do not remove the input power cable plug when the UPS is operating. The UPS will become disconnected from the safety ground. • Do not sit or step on the UPS or use it as a stepstool.

Chpter 3 Operating and Setting Procedures

3-1 Connecting the Devices to Protect

Insert the power cable plugs of the devices to back up into the UPS output receptacles.

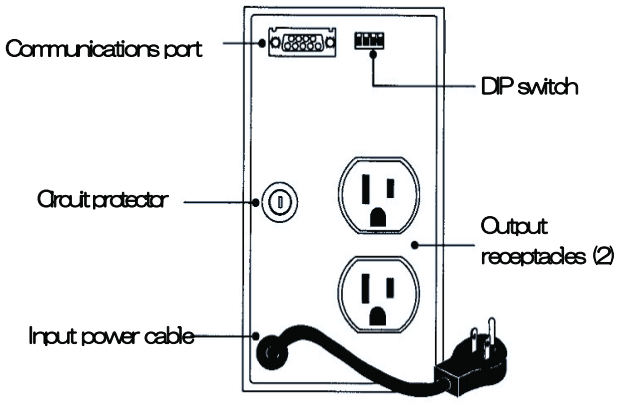


Figure 3-1 300VA/420VA/500VA Rear Panel

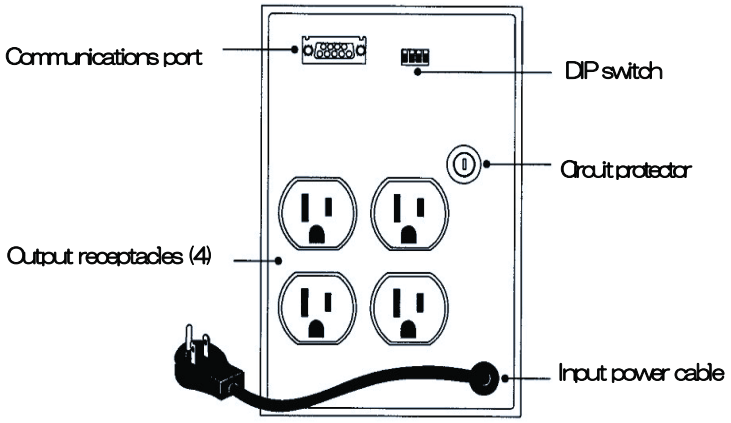


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Figure 3-2 650VA Rear Panel

3-2 Operating the UPS

To operate the UPS, insert the UPS plug into a power supply outlet, and then press the On/Off Button⏻ on the front panel (see Figure 3-3). The UPS will start operation when the button is pressed. Then, the Power On Indicator will light, and power supply from the output receptacles will start. If a power failure occurs in this status, the UPS will start the backup operation.

3-3 Stopping the UPS

To stop the UPS, press the On/Off Button⏻ on the front panel while the Power On Indicator is lit. The Power On Indicator will turn off, and power supply from the output receptacles will stop. To completely stop the UPS, remove the UPS plug from the power supply outlet.

3-4 Charging the UPS Battery

Battery charging is performed while the UPS plug is inserted into the power supply outlet whether the UPS is operating or stopped.

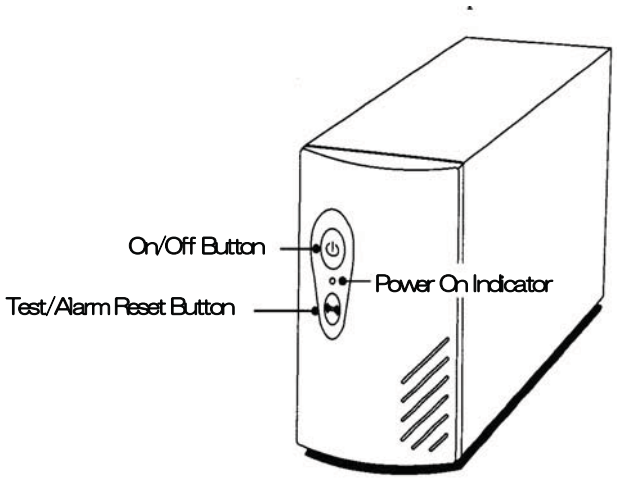

Figure 3-3 DL3115-series UPS Front Panel

	・The UPS is a backup power supply specifically for computers and similar devices (i.e., capacitor input rectifier circuits). Due to the high level of power required by the heater, do not connect a laser printer to the UPS. Also, do not use the UPS for transformers, inductors, or motors. These and other winding loads will damage the UPS. ・When not using the UPS and turning off the input power supply to the UPS, always turn off the On/Off Button⏻ on the front panel.

3-5 Setting the DIP Switch

The DIP switch (see Figure 3-4 and Figure 3-5) on the rear panel of the UPS is used to set the output voltage and the input detection voltage range that triggers the backup operation.

1. The UPS must be completely stopped. Press the On/Off Button ⏻ on the front panel to stop the UPS, and then remove the UPS plug. (If the UPS is not completely stopped, the changes to the settings will not be enabled.)
2. Set the DIP switch according to the switch settings that are given in Table 3-1 and Table 3-2.
3. Insert the UPS plug into an outlet or another power supply, and then press the On/Off Button ⏻ to start the UPS.

Figure 3-4 UPS Rear Panel

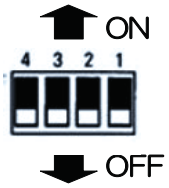

Figure 3-5 DIP Switch Details

Table 3-1. DIP Switch Pin 1 and 2 Settings

Output voltage during backup	DIPswitch1	DIPwitch2
92V	ON	OFF
100V*	OFF	OFF
106V	OFF	ON
Do not set	ON	ON

*Default setting.

Table 3-2. DIP Switch Pin 3 and 4 Settings

Power failure detection value	DIPswitch3	DIPswitch4
80V/117V	ON	OFF
85V/117V*	OFF	OFF
90V/117V	OFF	ON
Do not set.	ON	ON

*Default setting.

3-6 Communications Port Settings

To establish communications between the UPS and a computer, connect the UPS communications port to the computer using the communications cable that came with the UPS.

When the communications cable is connected, communications with the UPS can be performed using the Power Management Software. If a power supply error occurs, the Power Management Software will safely shut down the operating system of the computer. For information about the functions of the Power Management Software, refer to the user's manual of the Power Management Software.

For details on the communications port configuration, refer to Table 3-3.

	To prevent damage to user devices, use only the supplied communications cable to connect to the communications port (see Table 3-3). Using a commercially available communications cable can damage your computer.

Table 3-3. Communications Port Configuration

Pin	Signal name	Signal direction	Signal specifications	Remarks
1	UPS shutdown signal	Receive	RS-232C high-level signal: 0.4s min.	The UPS stops when this signal is received during the backup operation.
2	Low-battery signal	Send	Contact signal: 15V, 10mA	Closes to warn that the battery voltage is low.
3	Power failure signal	Send	Contact signal: 15V, 10mA	Closes when an AC input power failure occurs.
4	Logic ground	—	—	—
5	Low-battery signal	Send	RS232C low-level signal	
6	Power failure signal	Send	RS232C high-level signal	
7	Not used.	—	—	—
8	Not used.	—	—	—
9	Chassis ground	—	—	Connected to pin 4.

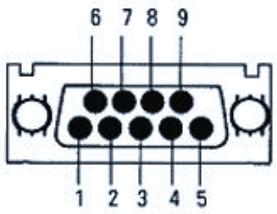

Figure 3-6 Communications Port

Chpter4 UPS Maintenance

This UPS uses lead batteries. Lead batteries are a valuable resource and can be recycled. Recycle discarded batteries after replacement and when the UPS is disposed of.

4-1 UPS and Battery Care

Keep the surroundings of the UPS clean and free of dust. If the surroundings are excessively dusty, clean around the system with a vacuum cleaner. Operation in a high-temperature environment will shorten the service life of the battery. Therefore, maintain an ambient temperature of 25°C max. for the UPS.

4-2 Storing the UPS and Battery

If you store the UPS for a long period of time, recharge the battery at least every 6 months by plugging the UPS into a power outlet. The UPS will be charged to 90% in approximately 12 hours. It is recommended that the batteries charge for 24 hours before operation after long-term storage.

4-3 When to Replace Batteries

Consult your vendor for information on battery replacement.

As a general guide, the battery must normally be replaced after approximately 3 to 4.5 years. If the operating environment temperature exceeds 25°C or the backup operation is frequently performed, the battery service life will be shorter than the estimated time given above. In this case, we recommend that you have the battery replaced

4-4 Manual Battery Test

Press the Test/Alarm Reset Button (((o))) for 3 seconds to start the battery test. After approximately 10 seconds, the UPS will automatically perform the backup operation for 15 s and to test the battery performance. If there is a problem with the battery, the UPS will return to normal operation and an alarm will sound. For more information, refer to Troubleshooting on page 11.

Note : If the UPS is used when the battery has exceeded its service life, the backup operation may not be performed when a power failure occurs, and other unforeseen problems can result. It is recommended to replace the battery early.

4-5 Recycling the UPS and Battery

Contact your vendor for information on recycling the UPS and battery.

Chpter5 Specifications

5-1 Model Specifications

Table 5-1. Model Specifications Table

UPS Model			DL3115 300jL	DL3115 420jL	DL3115 500jL	DL3115 650jL
Nominal Output Capacity			300VA/180W	420VA/252W	500VA/300W	650VA/400W
Operating Method			Stand-by UPS (Offline topology)			
Cooling Method			Convection cooling			
Nominal Input/Output Voltage			100V			
AC Input	Connection		Input power cable (1.8m) with 5-15P receptacle			
	Phases and wires		Single-phase, two-wire (with ground)			
	Voltage Range		85 to 117V			
	Frequency		50/60±3Hz			
	Required Capacity of AC input		400VA	500VA	600VA	720VA
AC Output	Nominal Current		3.0A	4.2A	5.0A	6.5A
	Backup Operation	Nominal Voltage	92V, 100V (default), or 106V: selectable.			
		Voltage Accuracy	Nominal voltage ±5V, −10% with low battery			
		Frequency	50/60±1Hz			
		Waveform	Rectangular step wave			
		Overload	10sec until 120% overload			
	Commercial Power Supply	Voltage	85 to 117V			
		Frequency	50/60±3Hz			
		Waveform	Same as input waveform			
		Overload	180sec until 120% overload			
	Power Failure Switchover Time		10ms (60Hz) /12ms (50Hz)			
	Connection		Two 5-15R receptacles			Four 5-15R receptacles
Battery	Battery Type		sealed lead battery			
	Battery Life Expectancy ※1		3.5 to 5 years (with UPS in ambient temperature of 25°C)			
	Battery Capacity/Number		One 7.2Ah, 12VDC battery			Two 12Ah, 6VDC batteries
	Backup Time (New Product Value)		9min	5min	3.5min	5min
	Maximum Backup Time ※2		30min			
	Charging Time		Approximately 12 h (to 90% charged)			
Others	Ambient Temperature		0 to 40°C			
	Relative Humidity		10% to 90% (with no condensation)			
	Audible Noise		<40dB(A)			
	Dimensions (WxHxD) including rubber feet		86×155×323mm			117×163×356mm
	Weight		5.5kg			7.5kg
Standards	Safety Standard		UL1778			
	EMC		VCCI Class B			

※1 The service life indication of the battery conforms to user guidelines (JEM-TR204: 2001).

※2 Operation with backup time that exceeds 30 minutes will affect the battery charging time, backup time, and battery service life. A maximum backup time is therefore specified.

5-2 Battery Backup Time

Table 5-2.. Battery Backup Time Table (Minutes)

Load Level	UPS Model			
VA/Watts	DL3115 300jL	DL3115 420jL	DL3115 500jL	DL3115 650jL
150VA/90W	20	21	22	27
200VA/120W	13	14	15	23
300VA/180W	9	10	11	15
350VA/210W		6	7	13
420VA/252W		5	6	10
500VA/300W			3.5	8
600VA/360W				6
650VA/400W				5

Note : All backup times are typical values. The actual times vary with the load configuration, ambient temperature, and battery usage conditions

Chpter6 Troubleshooting

6-1 Alarm and UPS Status

The UPS is equipped with an alarm to provide notification of problems.
If a problem occurs, the UPS will sound an alarm using different patterns depending on the nature of the problem. Refer to Table 6-1 and Table 6-2 for information on the alarms and how to remove the causes of the alarms.

6-2 Stopping the Alarm

Press the Test/Alarm Reset Button to stop the alarm. The alarm will sound again if a new problem occurs. The alarm will not stop if the UPS fails or the battery capacity level is low.

Table 6-1. Troubleshooting 1

UPS Status	Possible Cause	Action
The Power On Indicator is not lit. The UPS does not operate.	The input power cable is not connected to the power supply outlet.	Insert the input power cable of the UPS into a suitable power supply outlet.
	Commercial power is not being supplied to the power supply outlet.	Check that commercial power is being supplied to the power supply outlet.
Normal commercial power is being supplied, but the UPS does not operate.	The circuit protector is tripped or the battery fuse is blown.	Press the On/Off Button on the UPS to stop it. Next, reset the circuit protector. If the circuit protector trips frequently, there may be an overload. Therefore, reduce the load. If the UPS still fails to operate, the internal battery fuse may be blown. Consult your vendor.
	The battery voltage is low after long-term storage or long-term disuse after discharge.	Consult your vendor.
The UPS does not perform backup for the expected period of time.	The battery capacity may be low for the following reasons. ・Long-term storage ・Frequent power failures ・End of battery service life	Insert the UPS plug into a power supply outlet and charge the battery for 24 hours. Once charging is completed, press the Test/Alarm Reset Button for 3 seconds. If an alarm sounds as a result of the manual battery test, the battery capacity is low. The battery must be replaced. Consult your vendor.

Table 6-2. Troubleshooting 2

Alarm Patterns	Possible Cause	Action
The UPS outputs one alarm sound every 4 seconds.	Commercial power is not being supplied to the power supply outlet.	The UPS is providing power to the user's equipment with the internal battery. To conserve the battery in the case of a long power failure, save your work and shut down the computer.
	The backup operation is being performed due to the input voltage being too high or too low.	Refer to Setting the DIP Switch on page 5 to increase the input voltage range and check operation. （First, check to see if the device to back up will operate at the minimum set voltage.）
The UPS outputs one alarm sound every 1 second.	The remaining battery capacity is low.	The remaining battery capacity is 2 to 5 minutes (depending on the device size and charge status). Save your work and turn off the power supply to the load. The alarm cannot be stopped.
The UPS outputs three alarm sounds every 20 seconds.	The UPS is on standby to check for battery errors.	Press the Test/Alarm Reset Button to perform a manual battery test. If the criteria is exceeded, the UPS will perform a second battery check after four hours to make a final judgment.. This alarm will continue to sound until the second check is performed. If the alarm stops after four hours, no action is required. If the alarm changes to three alarm sounds every 5 seconds, perform the instructions given in the next item. The second battery check will be canceled if the Test/Alarm Reset Button is pressed during the alarm.
The UPS outputs three alarm sounds every 5 seconds.	There is a problem with the battery.	The battery must be replaced. Consult your vendor.
The UPS outputs one alarm sound every 0.5 seconds.	The load level exceeds the nominal UPS capacity (110% min. load) or there is a problem with the load.	Decrease the UPS load.
The UPS alarm sounds continuously.	The UPS failed.	Save your work and turn off the power supply to the load. Stop the UPS. Contact your vendor.

Chpter７ Warranty and After-sales Service

7-1 Warranty card (Japanese)

A certificate of warranty (written in Japanese) is included with the UPS. Check the contents of the certificate of warranty and that the specified items are entered, and keep the certificate in a safe place.
The warranty period is one year from the date of purchase.

7-2 After-sales Service

For information about after-sales service for the UPS, contact your vendor.

Repairs during Warranty Period

Repair or replacement will be performed based on the contents given in the certificate of warranty. Refer to the certificate of warranty for details. Provide the following information when making an inquiry.

① Model name : DL3115 300jL (example)
② Warranty number : Listed on the certificate of warranty.
③ Date of purchase : Listed on the certificate of warranty.
④ Symptoms of failure or problem : Describe in as much detail as possible.

Repairs after Warranty Period

If repair will maintain the functionality of the UPS, repair will be provided for a charge as desired.

The latest product information and information on the nearest sales locations are provided on the Fuji Electric website. (Japanese)

http://www.fujielectric.co.jp/products/power_supply/