

User Manual Easy-UPS™ On-Line SRV2KL-IN and SRV3KL-IN

Important Safety Information

SAVE THESE INSTRUCTIONS - This manual contains important instructions that should be followed during installation and maintenance of the Easy-UPS and batteries.

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it. The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

Product Handling Guidelines



<18 kg
<40 lb



18-32 kg
40-70 lb



32-55 kg
70-120 lb



>55 kg
>120 lb



Safety and General Information

Inspect the package contents upon receipt. Notify the carrier and dealer if there is any damage.

- This UPS is for indoor use only.
- Do not operate this UPS in direct sunlight, in contact with fluids, or where there is excessive dust or high humidity.
- Do not operate the UPS near open windows or doors.
- Be sure the air vents on the UPS are not blocked. Allow adequate space for proper ventilation.
Note: Allow a minimum of 20 cm clearance on both front and rear sides of the UPS.
- Environmental factors impact battery life. Elevated ambient temperatures, poor quality utility power, and frequent discharges will shorten battery life. Follow the battery manufacturer recommendations.
- Connect the UPS power cable directly to a wall outlet. Do not use surge protectors or extension cords.

Electrical safety

- When grounding cannot be verified, disconnect the equipment from the utility power outlet before installing or connecting to other equipment. Reconnect the power cord only after all connections are made.
- Connection to the branch circuit (mains) must be performed by a qualified electrician.
- The protective earth conductor for the UPS carries the leakage current from the load devices (computer equipment). An insulated ground conductor is to be installed as part of the branch circuit that supplies the UPS. The conductor must have the same size and insulation material as the grounded and ungrounded branch circuit supply conductors. The conductor will be green and with or without a yellow stripe.
- The grounding conductor is to be grounded to earth at the service equipment, or if supplied by a separately derived system, at the supply transformer or motor generator set.

Battery safety

- APC by Schneider Electric uses Sealed Maintenance-Free VRLA batteries. Under normal use and handling, there is no contact with the internal components of the batteries. Over charging, over heating or other misuse of batteries can result in leakage of battery electrolyte. Released electrolyte is toxic and may be harmful to the skin and eyes.
- Use tool with insulated handles.
- Wear rubber gloves and boots.
- Determine if battery is either intentionally or inadvertently grounded. Contact with any part of a grounded battery can result in electric shock or burns by high short-circuit current. The risk of such hazards can be reduced if grounds are removed during installation and maintenance by a skilled person.
- CAUTION: Before installing or replacing the batteries, remove jewelry such as wristwatches and rings.
High short circuit current through conductive materials could cause severe burns.
- CAUTION: Do not dispose of batteries in a fire. The batteries may explode.
- CAUTION: Do not open or mutilate batteries. Released material is harmful to the skin and eyes and may be toxic.

Radio Frequency Warning

This is a category C2 UPS product. In a residential environment, this product may cause radio interference, in such a case the user may be required to take additional measures.

Product Description

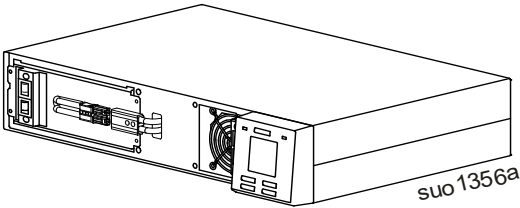
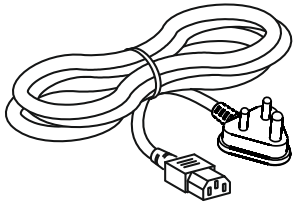
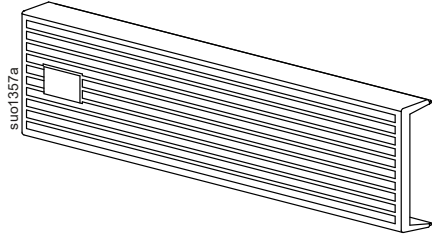
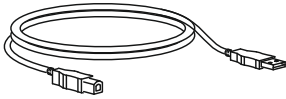
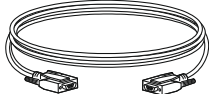

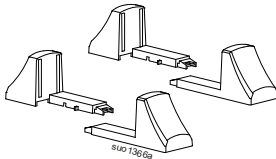
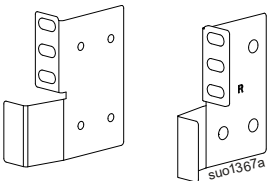



The APC by Schneider Electric Easy-UPS is a high performance, uninterruptible power supply (UPS). The Easy-UPS provides protection to electronic equipment from utility power blackouts, brownouts, sags, surges, small utility fluctuations and large disturbances. The Easy-UPS also provides battery backup power to connected equipment until utility power returns to normal levels or the batteries are fully discharged.

This user manual is available on the enclosed Documentation CD and on the APC by Schneider Electric Web site, www.apc.com.

Package Contents

Read the Safety Guide before installing the UPS.

The packaging is recyclable; save it for reuse or dispose of it properly.

<p>Easy-UPS</p>  <p>suo 1356a</p>	<p>Utility power cable</p> 	
<p>Front bezel</p>  <p>suo1357a</p>	<p>USB cable</p>  <p>Serial communication cable</p> 	
<p>User Manual</p> 	<p>Stabiliser brackets x2 pairs</p>  <p>suo 1356a</p>	<p>Rackmount bracket x1 pair</p>  <p>suo1357a</p>
<p>Software, User documentation CD</p> 	<p>Footstand screws x4</p> 	<p>Flat head screws x8</p> 

NOTE: The model and serial numbers are located on a small, rear panel label.

Optional Accessories

Refer to the APC by Schneider Electric Web site, www.apc.com, for available accessories.

Specifications

Environmental specifications

NOTICE

RISK OF EQUIPMENT DAMAGE

- UPS must be used indoors only.
- The installation location should be sturdy to withstand the weight of the UPS.
- Do not operate UPS where there is excessive dust or where the temperature or humidity are outside specified limits.

Failure to follow these instructions can result in equipment damage.

Temperature	Operating	0 °C to 40 °C at rated load 40 °C to 50 °C linearly derated to 80% of maximum load capacity
	Storage	-20 °C to 60 °C
Elevation	Operating	0-1,000 m: normal operation 1,000 - 3,000 m: The output power reduces @ 1% at an increased height of every 100m >3,000 m: UPS will not work
	Storage	0 - 15,000 m
Humidity		0 to 95% relative humidity, non-condensing
IP Rating		IP 20

Note: Charge the battery module atleast every six months during storage.

Physical specifications

	SRV2KL-IN	SRV3KL-IN
Dimensions with package Width x Height x Depth	550 mm x 218 mm x 700 mm (21.7 in x 8.6 in x 27.56 in)	570 mm x 228 mm x 794 mm (22.4 in x 9 in x 31.3 in)
Dimensions without package Width x Height x Depth	438 mm x 88 mm x 462 mm (17.2 in x 3.4 in x 18.2 in)	438 mm x 88 mm x 632 mm (17.2 in x 3.4 in x 24.9 in)
Weight with package	21 kg	32 kg
Weight without package	19 kg	28 kg

Input/Output specifications

		SRV2KL-IN	SRV3KL-IN
Input	Nominal input voltage	230 V AC nominal	
	Input frequency	40 - 70 Hz	
	Input voltage range (100% load)	160 V - 280 V	
	Input voltage range (50% load)	110 V - 280 V	
	Input power factor (100% load resistive load at nominal input voltage)	≥ 0.95 in online mode	
	Input protection	Thermal circuit breaker	
Output	UPS Capacity	2000 VA / 1600 W	3000 VA / 2400 W
	Nominal output voltage	230 V AC	
	Other programmable voltage	220 V AC, 240 V AC	
	Efficiency at rated load at 230V input	≥ 88%	≥ 90%
	Output voltage regulation	±1% static	
	Output voltage distortion	<ul style="list-style-type: none"> • 3% max. for full linear load • 6% max. for full RCD load (100% VA, 0.8 PF) • 15% for the last 60 seconds of the backup time 	
	Frequency - On battery	50 Hz ± 0.5% or 60 Hz ± 0.5%	
	Frequency - AC mode	50 Hz ± 3 Hz or 60 Hz ± 3 Hz	
	Crest factor	3:1	
	Waveform	Sinewave	
	Output connection	Refer to “Rear Panel Features” on page 14 for details.	
	Bypass	Internal	

Battery

CAUTION

RISK OF HYDROGEN SULPHIDE GAS AND EXCESSIVE SMOKE

- Replace the battery at least every 5 years.
- Replace the battery immediately when the UPS indicates battery replacement is necessary.
- Replace battery at the end of its service life.
- Replace batteries with the same number and type of batteries as originally installed in the equipment.
- Replace the battery immediately when the UPS indicates a battery over-temperature condition, or UPS internal over-temperature, or when there is evidence of electrolyte leakage. Power off the UPS, unplug it from the AC input, and disconnect the batteries. Do not operate the UPS until the batteries have been replaced.

Failure to follow these instructions could result in minor or moderate injury and equipment damage.

Note: The battery in the Easy-UPS is not user-replaceable. Contact APC by Schneider Electric Support for battery replacement.

	SRV2KL-IN	SRV3KL-IN
Configuration	Internal battery	
Type	Sealed maintenance free (SMF) 12 V, 9 Ah	
Battery bank voltage	48 V	72 V

Tower Installation

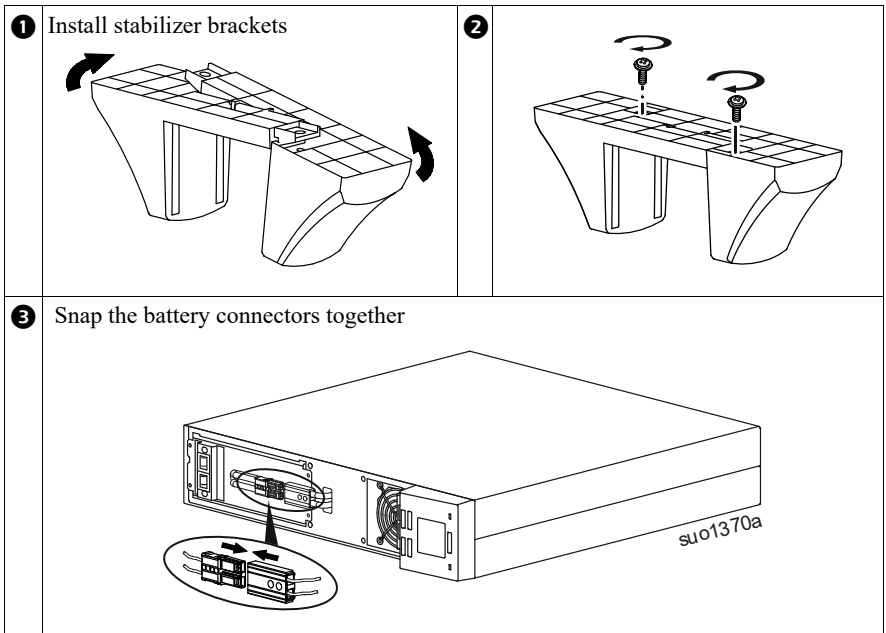
⚠ CAUTION

RISK OF FALLING EQUIPMENT

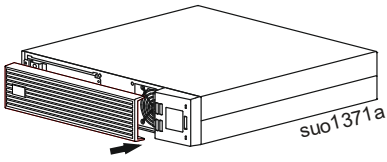
- The Easy-UPS is heavy.
- Always practice safe lifting techniques adequate for the weight of the equipment.
- Ensure that the stabilizer brackets are installed when the Easy-UPS is installed in the tower orientation.

Failure to follow these instructions can result in minor or moderate injury and equipment damage.

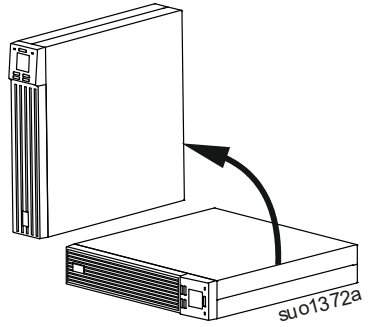
Note: Rotate the front panel display before commencing tower installation. Refer “Front Panel Display Rotation” on page 10 for details.



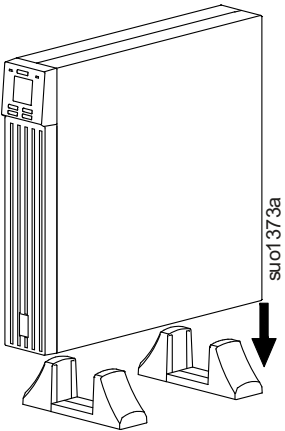
4 Install the front bezel



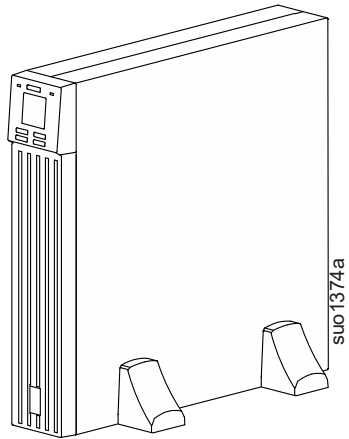
5



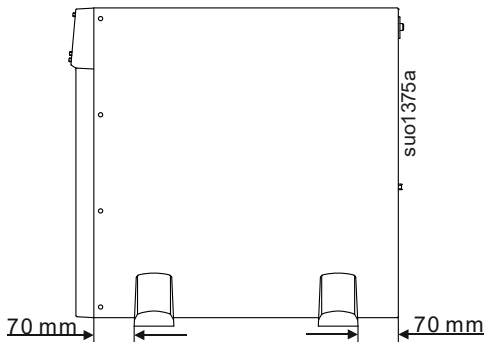
6



7

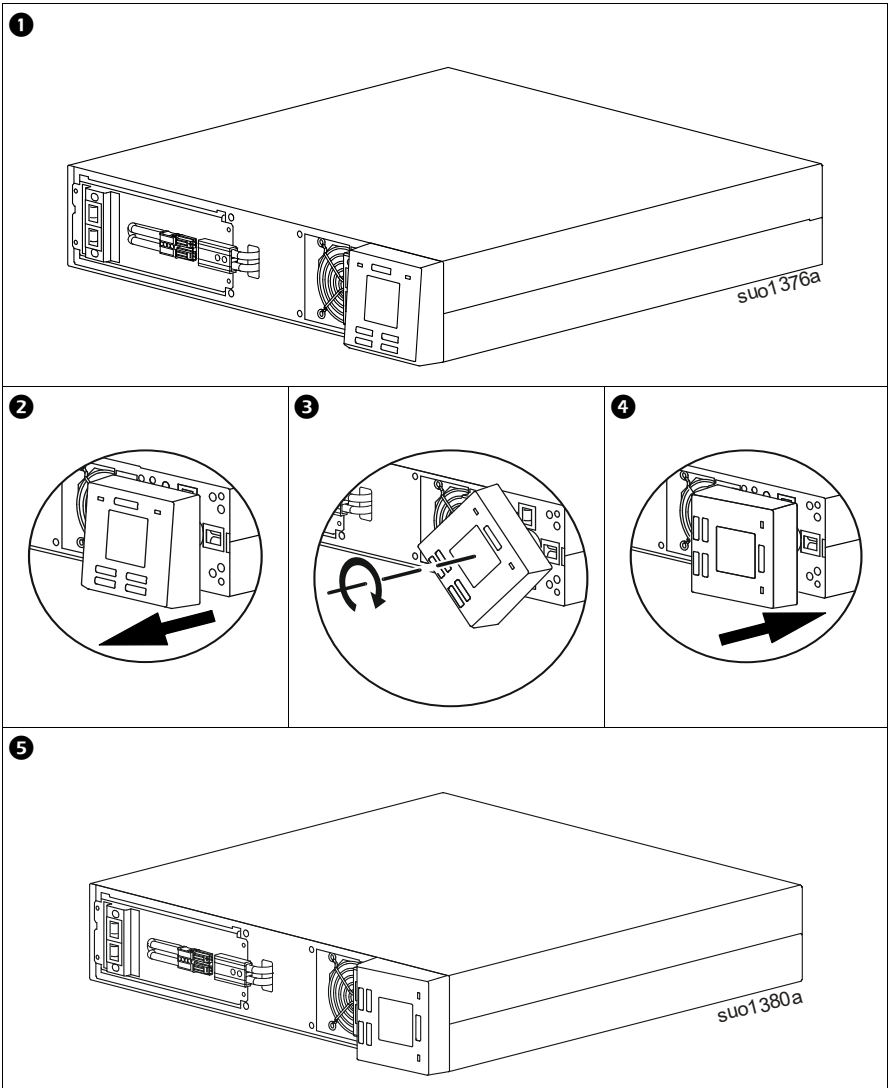


Note: Maintain approximately 70 mm distance from the edge of the unit, when installing the stabilizer brackets to the Easy-UPS.



Front Panel Display Rotation

Follow below steps to rotate the front panel display module.



Rack-Mount Installation

⚠ CAUTION

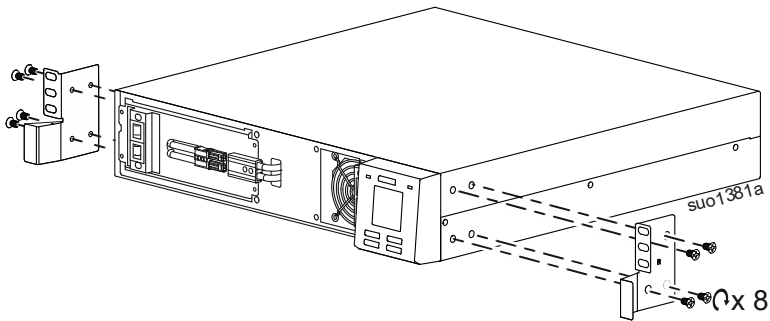
RISK OF FALLING EQUIPMENT

- The Easy-UPS is heavy.
- Always practice safe lifting techniques adequate for the weight of the equipment.
- Always use the recommended number of screws to secure brackets to the UPS.
- Given the heavy weight, the use of rack-mount brackets is mandatory during rack installation (guide with L-shaped support).
- Always install the UPS at the bottom of the rack.
- Secure the unit in the rack using all the screws supplied for the purpose.

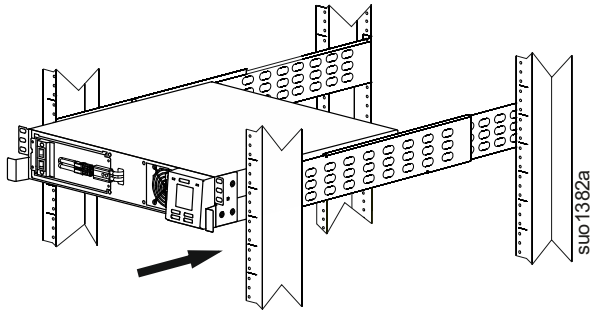
Failure to follow these instructions can result in minor or moderate injury

Optional Rail Kit accessory SRVRK1 available for purchase, to enable the installation of Easy-UPS in rack-mount configuration.

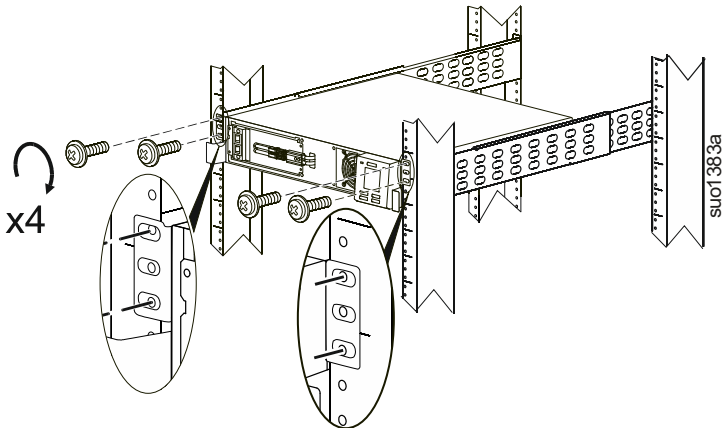
- 1 Install the rackmount brackets.



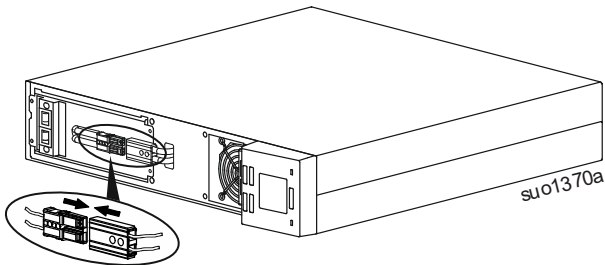
- 2 Lift the Easy-UPS module and slide it into rack enclosure.



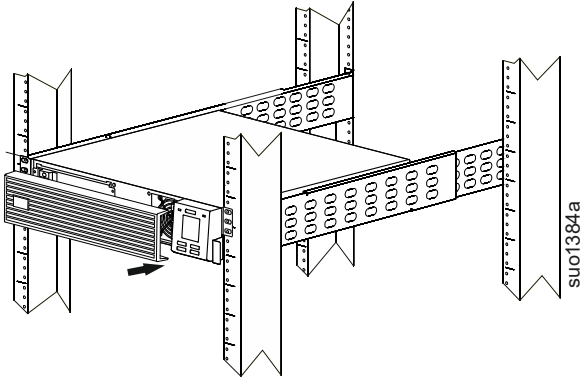
- 3 Secure the Easy-UPS module to the rack with screws, nuts and washers (not supplied).



- 4 Snap the battery connectors together.

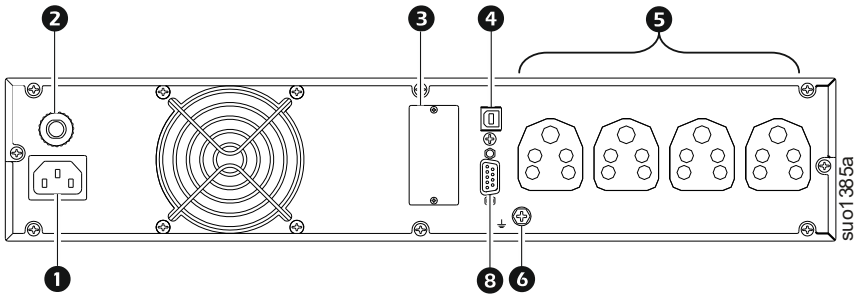


5 Install the front bezel.

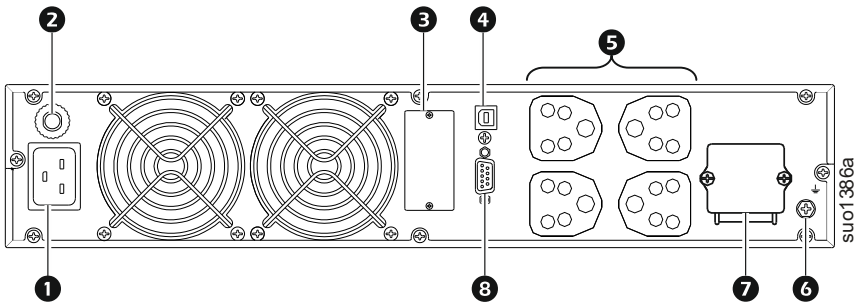


Rear Panel Features

SRV2KL-IN



SRV3KL-IN



1	Utility power cable connector
2	Input thermal circuit breaker RESET button
3	Intelligent card slot for management accessories
4	USB port
5	5 A battery backup outlets
6	Ground screw
7	16 A battery backup hardwire terminal block (applicable only for SRV3KL-IN)
8	Serial communication connector

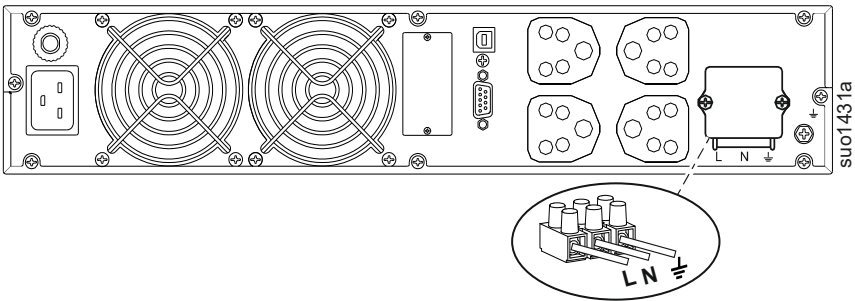
Output Hardwiring - SRV3KL-IN

⚠ CAUTION

RISK OF ELECTRIC SHOCK

- Adhere to all national and local electrical codes.
- All electrical work must be performed by a qualified electrician.
- Turn off all power to this equipment before working on the equipment.
- Switch the external circuit breaker off. Practice lockout/tagout procedures.
- Do not wear jewelry when working with electrical equipment.
- Select wire size and connectors according to national and local codes.

Failure to follow these instructions can result in moderate injury.



- Use 2.5 mm² gauge wire (not supplied).
1. Locate the cover of the 16 A battery backup hardwire terminal block on the rear panel of SRV3KL-IN.
 2. Remove the screws securing the cover and remove the cover.
 3. Connect the line, neutral and ground wires to the terminal block. Terminals are labeled for proper wire configuration.
 4. Replace and secure the cover using the screws removed in *step 2*.

Start Up

Connect equipment and input power to the Easy-UPS

CAUTION

HAZARD OF ELECTRIC SHOCK

- All electrical work must be performed by a qualified electrician.
- Turn off all power to this equipment before working on the equipment. Practice lockout/tagout procedures.
- Do not wear jewelry when working with electrical equipment.

Failure to follow these instructions can result in moderate injury.

1. Connect equipment either to the 5 A battery backup outlets or to the 16 A battery backup hardwire terminal block in the SRV3KL-IN Easy-UPS. For connecting equipment to the 16 A battery backup hardwire terminal block refer “Output Hardwiring - SRV3KL-IN” on page 15 for details. Avoid using extension cords.
2. Connect input utility power to the Easy-UPS.
3. Switch on the input utility power. The Easy-UPS display panel will illuminate when utility power is available.

Start the Easy-UPS

Press the POWER ON/OFF button located on the front panel of Easy-UPS. The **Status** LED will illuminate green.

- The battery charges to 90% capacity during the first five hours of normal operation.
- **Do not** expect full battery run capability during this initial charge period.

Cold start the Easy-UPS

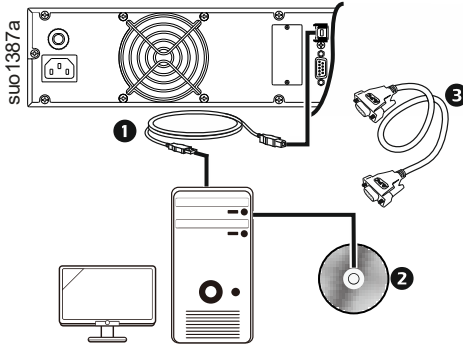
Use cold start feature to supply power to connected equipment from the Easy-UPS batteries.

Press the POWER ON/OFF button. The display panel will illuminate.

Press the POWER ON/OFF button again to supply battery power to the connected equipment.

Connect and install management software

Easy-UPS is provided with SchneiderUPS management software for unattended operating system shutdown, monitoring, control and energy reporting. The following diagram is a representation of a typical server installation.



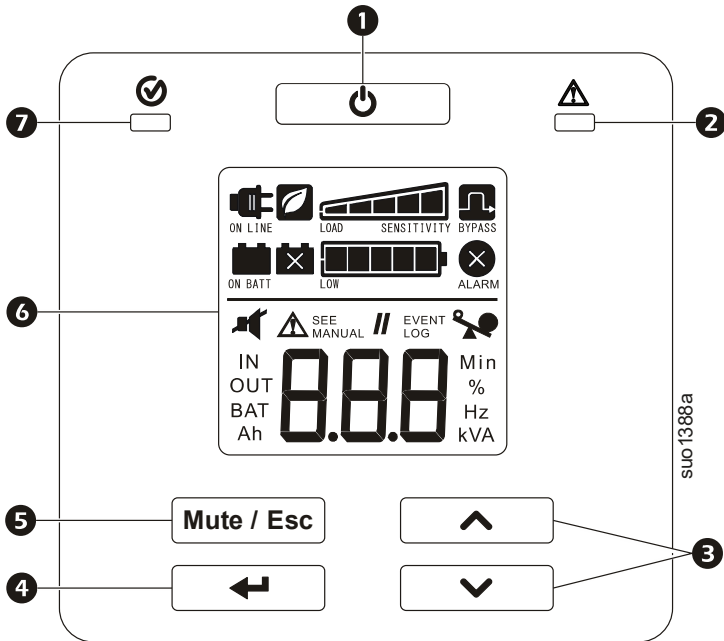
❶	Connect the USB cable from the rear of the Easy-UPS to the computer.
❷	Load the SchneiderUPS CD and follow the on-screen set-up instructions.
❸	A built-in serial port is also available for additional communication options with serial cable.

Additional communication options are available via the built-in intelligent card slot. Refer to the APC by Schneider Electric Web site, www.apc.com, for more information.

Operation

Front display panel features










Easy-UPS models are equipped with an intuitive and configurable LCD display. The display complements the software interface as they convey similar information and either may be used to configure the Easy-UPS settings.






1	POWER ON/OFF button	Press the POWER ON/OFF button to turn the Easy-UPS ON. Press and hold the POWER ON/OFF button until a beep is heard to turn the Easy-UPS off. Press the POWER ON/OFF button to reset alerts.
2	Alert LED	The Alert LED illuminates red when the Easy-UPS detects an error and blinks red for Easy-UPS notifications. Refer “Alerts and Notifications” on page 26 for details.
3	UP/DOWN ARROW button	Press the UP/DOWN ARROW button to scroll through the main menu options and display screens.
4	ENTER button	Press the ENTER button to enter the menu or to select a menu item/value during navigation.
5	MUTE/ESC button	Press the MUTE/ESC button: <ul style="list-style-type: none"> • To acknowledge audible alerts and suppress them temporarily. • To exit a sub menu and return to the main menu.

6	LCD Display	The display interface options are visible on this LCD screen. Press any button to activate LCD, if the display is not illuminated.
7	Status LED	<p>The Status LED illuminates green when the power is on. The LED indicates two different states of output power:</p> <ul style="list-style-type: none"> • Output off: LED blinks on and off. Press POWER ON/OFF button to turn the output power on. • Output on: LED illuminates green continuously.

Front display icons

	<p>On Line: The Easy-UPS is drawing utility power and performing double conversion to supply power to the connected equipment.</p>
	<p>On Battery: The Easy-UPS is supplying battery backup power to the connected equipment.</p>
	<p>Replace Battery: The battery is not connected securely or the battery is nearing the end of its service life and should be replaced.</p>
	<p>Bypass: The Easy-UPS is in bypass mode, sending utility power directly to connected equipment. Bypass mode operation is the result of an internal UPS event, an overload condition, or a user initiated command either through an accessory. Battery operation is not available while the Easy-UPS is in bypass mode. Refer “Alerts and Notifications” on page 26 for details. This icon in combination with Green Mode icon, indicates that the Easy-UPS is in green mode operation.</p>
	<p>System Alerts: An internal fault is detected. Refer “Alerts and Notifications” on page 26 for details.</p>
	<p>Overload: The equipment connected to the Easy-UPS is drawing more power than rated.</p>
	<p>Battery Charge: The battery charge level is indicated by the number of bar sections illuminated. When all five blocks are illuminated, the battery is fully charged. Each bar represents approximately 20% of the battery charge capacity.</p>
	<p>Load Level: The load percentage is indicated by the number of load bar sections illuminated. Each bar represents approximately 20% of the load.</p>
	<p>Mute: An illuminated line through the icon indicates that the audible alert is disabled.</p>

	Green Mode: An illuminated icon indicates that the unit is working in Green mode. The connected equipment is receiving the utility input directly as long as the input voltage and frequency are within the configured limits.
	Alert or notification: The Easy-UPS has detected an error or the Easy-UPS is in configuration mode. Refer “Alerts and Notifications” on page 26 for details.
	Event: The icon is illuminated when the user is viewing the event log.

Status Indicators

Audible Alert	Condition
Continuous beeps, every half second	Low Battery State - The battery is nearing its discharge state. The Easy-UPS is about to shutdown.
	Overload condition - The equipment connected to the Easy-UPS is drawing more power than rated.
4 beeps every 30 sec (first beep starts after 4 sec on battery)	On Battery State - The Easy-UPS is supplying battery backup power to the connected equipment.
Beeper continuously on	Alert State - Easy-UPS has detected an error. Refer “Alerts and Notifications” on page 26 for details.
Short beep every 2.5 sec	Battery disconnected.
Continuous short beeps for every half second for 1 minute, repeats every 5 hours	Bad battery (replace).
Two short beeps every 5 sec	Event Bypass State - Easy-UPS has detected an error. Connected equipment receives utility input power through the bypass relay.

Easy-UPS Display Parameters

Operational data displayed in the display panel is given in the table. Navigate using the UP/DOWN ARROW buttons.

Parameter	Units	Indicator Icons
Output voltage	V AC	OUT, V
Output frequency	Hz	OUT, Hz
Input voltage	V AC	IN, V
Input frequency	Hz	IN, Hz

Parameter	Units	Indicator Icons
State of battery charge	%	BAT, %
Battery voltage	V DC	BAT, V
Ambient temperature	° C	NUMBER, C
Remaining On Battery runtime	Minutes	BAT, Min
Load level in percentage (Maximum of Watts or VA)	%	OUT, %
Load level in kVA	kVA	OUT, kVA
Total Ah capacity of connected battery	Ah	BAT, Ah

Configuration

Easy-UPS settings




Configure Easy-UPS settings using the display interface. Refer “Configure Easy-UPS parameters” on page 23 to edit the parameters.









Function	Factory Default	User Selectable Options	Description
Output voltage	230 V AC	220, 230, 240 V AC	Allows the user to select output voltage while the Easy-UPS is operating online.
Audible alert	Enable	<ul style="list-style-type: none"> • Enable • Disable 	Easy-UPS will mute audible alerts when set to disable or when the display panel buttons are pressed.
Green mode/ high efficiency mode	Disabled	<ul style="list-style-type: none"> • Enable • Disable 	<p>When this mode is enabled, connected equipment receives utility input power through the bypass relay as long as input voltage is within the range of $\pm 5\%$ of configured output voltage and ± 3 Hz of configured output frequency. Inverter is turned off during this mode.</p> <p>If utility power input goes out of range, inverter is turned on and the load is transferred to online mode or battery mode.</p> <p>The power to the connected equipment may be interrupted up to 10 milliseconds.</p>

Function	Factory Default	User Selectable Options	Description
Minimum battery capacity to restart setting	0%	0%, 15%, 50%, 90%	Easy-UPS output will not be turned on until the battery is charged to a level such that it can provide the runtime configured by this setting. If configured to 0%, Easy-UPS output is turned on immediately after utility power returns.
Low battery state indication setting	2 min	2 min, 5 min, 7 min, 10 min	The Easy-UPS will emit an audible alarm when the actual run time reaches the limit set by the user. The audible alarm will emit only when the Easy-UPS is working in battery mode.

Advanced display navigation

The Easy-UPS display has three menu options. Press the ENTER button from the Home Screen to access these menu options. Use the UP/DOWN ARROW buttons to navigate between the menu options.

Menu option	Description
	<p>Show Event Log</p> <p>Use this menu option to see the Easy-UPS event log. The Easy-UPS records the last 10 events and displays the codes in this log.</p> <p>Press the ENTER button to see the log. Use the UP/DOWN ARROW buttons to see the logged events. The UP ARROW button navigates towards old events and the DOWN ARROW button navigates to new events.</p> <p>Every log entry has a numeric and textual event code.</p> <p>At the end of the log, the word “End” will be displayed.</p> <p>Press the MUTE/ESC button to return to the Home Screen.</p>
	<p>Configure the Easy-UPS</p> <p>Use this menu option to configure the Easy-UPS parameters.</p> <p>Press the ENTER button to see the configuration options.</p> <p>Refer “Configure Easy-UPS parameters” on page 23 for details.</p> <p>Press the MUTE/ESC button to return to the Home Screen.</p>
	<p>Show Easy-UPS information</p> <p>Use this menu option to see the Easy-UPS information.</p> <p>Press the ENTER button to see the rating of the Easy-UPS.</p> <p>Press the UP ARROW button to see the Easy-UPS firmware version.</p> <p>Press the MUTE/ESC button to return to the Home Screen.</p>

Menu option	Description
	<p>User Command to bypass Use this menu option to switch the Easy-UPS to bypass mode or bring the Easy-UPS to online mode from bypass mode. Press ENTER button:</p> <p> Put: Use to switch the Easy-UPS to bypass mode of operation. Note: Power to the connected equipment will drop, if the mains voltage is not within the threshold limits.</p> <p> Out: Bring the Easy-UPS out of bypass and restore clean power to the connected equipment.</p>
	<p>Execute Battery Self Test Use this menu option to conduct a self test and determine the battery status. Press the ENTER button to initiate the test. If the test command is accepted, the Easy-UPS will initiate a self test and will start a count down on the display. Display messages are shown at the end of the test.</p> <p> Test refused. The output is off or battery is not charged.</p> <p> Test not passed.</p> <p> Test passed.</p> <p> Test is aborted due to internal reasons.</p> <p>Press the MUTE/ESC button to return to the Home Screen.</p>

Configure Easy-UPS parameters

Follow the steps to configure parameters in the Easy-UPS:

1. Press the ENTER button.
2. Press the UP/DOWN ARROW buttons to navigate to “Set”.
3. Press the ENTER button.
4. Navigate through the parameters using the UP/DOWN ARROW buttons.
5. Press the ENTER button to edit a parameter. Icons start flashing to indicate the editing.
6. Press the UP/DOWN ARROW buttons to navigate between the options available for the selected parameter.

7. Press the ENTER button to select the option or MUTE/ESC button to abort the editing of current parameter. Flashing of icons stops after this.
8. Press the UP/DOWN ARROW buttons to navigate between parameters.
9. Press the MUTE/ESC button to exit menu navigation.

Troubleshooting

Use the table below to solve minor installation and operation problems. Refer to the APC by Schneider Electric Web site, www.apc.com for assistance with complex Easy-UPS problems.

Problem and/or Possible Cause	Solution
Easy-UPS will not turn ON when utility input is available or there is no power output	
The Easy-UPS is not turned on.	Press the POWER button to turn on the Easy-UPS.
The Easy-UPS is not connected to utility power supply.	Check that the power cable from the Easy-UPS to the utility power supply is securely connected at both ends.
Input thermal circuit breaker on the Easy-UPS is tripped.	Press the input thermal circuit breaker RESET button in the rear panel.
Easy-UPS, when connected to battery, is not supplying power to the connected equipment	
The Easy-UPS is not turned on.	If the Easy-UPS has shutdown (the display is not on), follow the “Cold start the Easy-UPS” on page 16 procedure.
The battery is not connected.	Connect battery to the Easy-UPS. Refer “Snap the battery connectors together.” on page 12 for details.
Low battery cut off. Easy-UPS may have discharged the battery due to utility power outage and turned the output off due to low battery condition.	Wait for the utility power to return and charge the battery. To turn on the output power after utility power returns, press POWER ON button.
Easy-UPS emits an audible beeping sound at long intervals	
The Easy-UPS is operating normally when running on battery.	The Easy-UPS is operating on battery. See the status of the Easy-UPS in the display panel.

Problem and/or Possible Cause	Solution
Alert LED is illuminated. The Easy-UPS displays an alert message and emits a constant beeping sound	
The Easy-UPS has detected an error.	Refer “Alerts and Notifications” on page 26 for details.
No audible sounds from Easy-UPS even when the Alert LED is illuminated	
Audible alert is disabled.	Change the Easy-UPS configuration to enable audible alerts.
Easy-UPS is not providing expected backup time	
The Easy-UPS battery is discharged due to a recent power outage.	The batteries require recharging after extended outages. Batteries can wear faster when put into service without proper recharging or when operated at elevated temperatures.
The battery is near the end of its service life.	If the battery is near the end of its service life, consider replacing the battery, even if the replace battery indicator is not illuminated.
Easy-UPS is not turning off	
POWER OFF button not pressed properly.	Press and hold the POWER OFF button until the beep is heard to power off the Easy-UPS.
Utility input power is available.	Easy-UPS logic power can not be turned off if utility input power is available. To turn off the Easy-UPS, turn off utility input power and press POWER OFF button. Release when a beep is heard.
Easy-UPS is in Bypass mode and the LED is not illuminated red	
Easy-UPS is in green mode.	Disable green mode if not desired.
Easy-UPS is configured to stay in the bypass mode.	Change the configuration to exit bypass mode.
Easy-UPS is in bypass mode even after over temperature alarm is cleared.	Wait for some time for the Easy-UPS to come back to online mode.

Problem and/or Possible Cause	Solution
The Easy-UPS has experienced an overload condition and transferred to bypass.	<p>Connected equipment exceeds the maximum load as defined in specifications.</p> <p>The alerts remain on until the overload condition is corrected. Disconnect nonessential equipment from the Easy-UPS to eliminate the overload condition.</p> <p>The Easy-UPS continues to supply power as long as it is in bypass mode and the circuit breaker does not trip. The Easy-UPS will not provide battery power in the event of a utility voltage interruption.</p>
Easy-UPS detected an error and transferred to bypass.	Refer “Alerts and Notifications” on page 26 for details.

Alerts and Notifications

Easy-UPS displays a text code and a numeric code on the display when it detects an error.

Alerts

Display code	Description	Solution
SC	Easy-UPS has experienced a short circuit at the output.	Check if there is any short circuit at the Easy-UPS output. Remove the short circuit and press POWER ON/OFF button to start the Easy-UPS.
OL	Easy-UPS is experiencing an overload condition.	Disconnect nonessential equipment from the Easy-UPS to eliminate the overload condition. Wait for the Easy-UPS to auto-recover.
DC	The Easy-UPS has detected a DC voltage error. Unit will try to auto-recover from this condition.	If the Easy-UPS does not recover automatically, contact APC by Schneider Electric.
Hot	Temperature of the unit is rising above the set limits.	Disconnect non-essential equipment from the Easy-UPS to reduce the Easy-UPS load. Ensure that ambient temperature is within limits. Ensure that adequate clearance is maintained.

Display code	Description	Solution
CH	Easy-UPS has detected a charger error.	Verify if there is any short circuit at the Easy-UPS battery terminal. Press POWER ON/OFF button to start the Easy-UPS.
Contact APC by Schneider Electric for all other alert codes.		

Notifications

Display code	Description	Solution
BD	Battery is not connected.	Connect battery to the Easy-UPS. Refer “Snap the battery connectors together.” on page 12 for details.

Service

If the unit requires service, do not return it to the dealer. Follow these steps:

1. Review the *Troubleshooting* section of the manual to eliminate common problems.
2. If the problem persists, contact APC by Schneider Electric Customer Support.
 - a. Note the model number and serial number and the date of purchase. The model and serial numbers are located on the rear panel of the unit and are available through the LCD display on select models.
 - b. Call APC by Schneider Electric Customer Support and a technician will attempt to solve the problem over the phone. If this is not possible, the technician will issue a Service Request Number.
 - c. If the unit is under warranty, the repairs are free.

An Authorised Service Representative will visit your location and try to resolve the issue.

Limited Factory Warranty

Schneider Electric IT Business India Private Ltd. (SEITBIPL), warrants its products to be free from defects in materials and workmanship for a period of two (2) years from the date of purchase. The SEITBIPL obligation under this warranty is limited to repairing or replacing, at its own sole option, any such defective products or parts thereof. Repair or replacement of a defective product or part thereof does not extend the original warranty period.

This warranty applies only to the original purchaser who must have properly registered the product within 10 days of purchase. Products may be registered online at warranty.apc.com or by mailing in the completed warranty registration card that is included with the documentation.

SEITBIPL shall not be liable under the warranty if its testing and examination disclose that the alleged defect in the product does not exist or was caused by end user or any third person misuse, negligence, improper installation, testing, operation or use of the product contrary to SEITBIPL recommendations or specifications. Further, SEITBIPL shall not be liable for defects resulting from: 1) unauthorized attempts to repair or modify the product, 2) incorrect or inadequate electrical voltage or connection, 3) inappropriate on site operation conditions, 4) Acts of God, 5) exposure to the elements, 6) theft. In no event shall SEITBIPL have any liability under this warranty for any product where the serial number has been altered, defaced, or removed, 7) normal wear resulting from frequent use.

EXCEPT AS SET FORTH ABOVE, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, APPLICABLE TO PRODUCTS SOLD, SERVICED OR FURNISHED UNDER THIS AGREEMENT OR IN CONNECTION HEREWITH.

SEITBIPL DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY, SATISFACTION AND FITNESS FOR A PARTICULAR PURPOSE.

SEITBIPL EXPRESS WARRANTIES WILL NOT BE ENLARGED, DIMINISHED, OR AFFECTED BY AND NO OBLIGATION OR LIABILITY WILL ARISE OUT OF, SEITBIPL RENDERING OF TECHNICAL OR OTHER ADVICE OR SERVICE IN CONNECTION WITH THE PRODUCTS.

THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES AND REMEDIES. THE WARRANTIES SET FORTH ABOVE CONSTITUTE SEITBIPL'S SOLE LIABILITY AND PURCHASER'S EXCLUSIVE REMEDY FOR ANY BREACH OF SUCH WARRANTIES. SEITBIPL WARRANTIES EXTEND ONLY TO ORIGINAL PURCHASER AND ARE NOT EXTENDED TO ANY THIRD PARTIES.

IN NO EVENT SHALL SEITBIPL, ITS OFFICERS, DIRECTORS, AFFILIATES OR EMPLOYEES BE LIABLE FOR ANY FORM OF INDIRECT, SPECIAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, ARISING OUT OF THE USE, SERVICE OR INSTALLATION OF THE PRODUCTS, WHETHER SUCH DAMAGES ARISE IN CONTRACT OR TORT, IRRESPECTIVE OF FAULT, NEGLIGENCE OR STRICT LIABILITY OR WHETHER SEITBIPL HAS BEEN ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH DAMAGES. SPECIFICALLY, SEITBIPL IS NOT LIABLE FOR ANY COSTS, SUCH AS LOST PROFITS OR REVENUE, WHETHER DIRECT OR INDIRECT, LOSS OF EQUIPMENT, LOSS OF USE OF EQUIPMENT, LOSS OF SOFTWARE, LOSS OF DATA, COSTS OF SUBSTITUANTS, CLAIMS BY THIRD PARTIES, OR OTHERWISE.

To obtain service under warranty you must call customer support. Customers with warranty claims issues may access the SEITBIPL worldwide customer support network through the SEITBIPL Web site: www.apc.com. Select your country from the country selection drop down menu. Open the Support tab at the top of the web page to obtain information for customer support in your region. Refer to the product user manual for more information on how to contact customer support.

APC by Schneider Electric Customer Support

Internet	http://www.apc.com/support
Toll Free	18001030011/18004194272
E-mail	indiainfo@apc.com