

# Service Manual

## Portable CD Player



### SL-SX470P

Colour

S.....Silver Type



## Specifications

### I Audio (CD-DA)

Sampling frequency:	44.1 kHz
No. of channels:	2 (left and right, stereo)
Frequency response:	20 Hz to 20,000 Hz (+ 0dB ~ -3.6dB)
Headphone output level:	RMS max. 8mW + 8mW / 16 Ω (adjustable)

### I Pickup

Light source:	Semiconductor laser
Wavelength:	780 nm

### I MP3

Supported bit-rates (Supports variable bit rates):	32 kbps to 320 kbps (128 kbps is recommended)
Supported sampling frequency:	48 kHz / 44.1 kHz / 32 kHz
Maximum number of items (total no. of albums and tracks):	999
(maximum no. of albums):	500
Maximum album levels:	100

### I General

Operational temperature range:	0 ° C-40 ° C (32 ° F-104 ° F)
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### Play time:

Using on a flat stable surface at 25 ° C (77 ° F), EQ is off, Hold is on, Anti-skip is on POS 1 (CD-DA), recommended bit rate (MP3: 128 kbps), and the Digital Re-master is off (MP3). Play times are in hours and approximate.

### Batteries used:

2 alkaline batteries;	MP3 disc....75h CD-DA disc....33h
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- The play time may be less depending on the operating conditions.
- Play time will be considerably reduced when playing CD-RW.

<b>Dimensions (WxHxD):</b>	138.6mmx24.4mmx138.6mm (5 <sup>14</sup> / <sub>32</sub> " x 3 <sup>1</sup> / <sub>32</sub> " x 5 <sup>14</sup> / <sub>32</sub> " )
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<b>Mass:</b>	206g(7.3oz) (with batteries) 159g(5.6oz) (without batteries)
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### Note:

Specifications are subject to change without notice.  
Mass and dimensions are approximate.

### Note on CD-R and CD-RW:

(CD-DA/MP3 only)  
For CD-DA format, use a music disc and finalize\* it after recording.  
The unit may not be able to play some discs due to the condition of the recording.

\* A process performed after recording that enables CD-R / CD-RW players to play audio CD-R and CD-RW.

# Panasonic

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**⚠ WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

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## 1 Precaution of Laser Diode

### CAUTION:

This unit utilizes a class 1 laser. Invisible laser radiation is emitted from the pickup lens when the unit is turned on:

1. Do not look directly into the pickup lens.
2. Do not use optical instruments to look at the pickup lens.
3. Do not adjust the preset variable resistor on the optical pickup.
4. Do not disassemble the optical pickup unit.
5. If the optical pickup is replaced, use the manufactures specified replacement pickup only.
6. Use of control or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

## 2 Accessories

- Stereo headphones(L0BAD0000177).....1 pc.

## 3 Schematic Diagram

### 3.1. Schematic Diagram Notes

**Note:**

IS201:	Open switch.
IS202:	Rest switch in "OFF" position. (It turns "ON" when optical pickup comes to innermost periphery.)
IS310:	Hold (HOLD) switch in "OFF" position.
IS801:	Play/pause ( ▶ /    ) switch.
IS802:	Stop/Turn off ( ■ ) switch.
IS803, 807:	Skip/search/ Album skip ( ◀◀ , ▶▶ ) switch.
IS804:	Program play/ Digital Re-master/ Anti-skip mode selection (MEMO) switch.
IS805, 809:	Volume control (VOL+,VOL -) switch.
IS806:	Sound quality selection (EQ) switch.
IS808:	Play mode/ Album mode selection (PLAY MODE) switch.

- Components identified by △ mark have special characteristics important for safety.
- When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.
- The supply part number is described alone in the replacement parts.

• Signal line

•  : Positive voltage line.

•  : Playback signal line.

- The voltage value and waveforms are the reference voltage of this measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of GND terminal (DC IN Jack). Accordingly, there may arise some errors in the voltage values and waveforms depending upon the internal impedance of the tester or measuring unit.

Measurement conditions:

\* ( ) .....CD playback mode (Test disc 1kHz, L+R, 0dB)

\* No mark .....CD stop mode

**Caution!!**

- IC and LSI are sensitive to static electricity.
- Secondary trouble can be prevented by taking care during repair.
- Cover the parts boxes made of plastics with aluminum foil.
- Ground the soldering iron.
- Put a conductive mat on the work table.
- Do not touch the pins of IC or LSI with fingers directly.







## 4 Replacement Parts List

**Note:**

- All parts are supplied by ASPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	RKK0171-W	BATTERY COVER	1	
A1	LOBAD0000177	STEREO HEADPHONES	1	
A1-1	RFX1364	EAR PAD	2	
A2	RQT8252-P	O/I BOOK	1	English

