

EXHIBIT A

[Ref: RSP-100 2.4(a)]

" Product Description "

## 1. OUTLINE OF RC-8000

- \* RC-8000 is a remote control transmitter that is attached to RC-8001ST, an audio/video receiver.
- \* RC-R8000 can transmit both of RF (Radio Frequency) signal and IR (Infrared Ray) signal.
- \* When a key operation is made (including a joystick operation) or operation mode is selected by touching the LCD (Liquid Crystal Display) (10) panel, a control signal is transmitted with the code according to the selected operation.
- \* When pressing of a key is stopped, the transmitting is stopped. If pressing of a key is stopped in the middle of a frame of control signal, RC-8000 transmits a complete frame within 68 msec of the frame length, then stops transmitting.
- \* When a key operation is made, the LCD (Liquid Crystal Display) (10) displays the information according to the selected operation.

## 2. SPECIFICATION OF RF SECTION

Frequency	304.3 and 315.0 MHz
Number of channels	2
Channel spacing	10.7 MHz
Channel selection	Switching the Channel Switch (16) to change the RF oscillator frequency according to each SAW resonator.
Antenna	Internal wire antenna
Supply voltage	3 Vdc
Modulation format	Amplitude Shift Keying (ASK)

## 3. ACTIVE COMPONENT FUNCTION LIST

<u>Circuit Symbol</u>	<u>Device Number</u>	<u>Description</u>
Tr1	2SC4228	Transistor, Oscillator
Tr2	2SC4226	Transistor, RF Amplifier
Tr3	RN2306	Transistor, Modulator

#### 4. OPERATION OF EACH SECTION

<u>SECTION</u>	<u>DESCRIPTION</u>
(15) SAW resonator	Surface Acoustic Wave Resonator makes Oscillator (17) oscillation.
(16) Channel Switch	Switching the Channel Switch (16) to change the RF carrier frequency.
(17) Oscillator	Direct oscillation of RF carrier frequency of 304.3 or 315.0 MHz according to each SAW resonator.
(18) Modulator	Modulation of control signal with ASK.
(19) Amplifier	Amplification of RF signal.
(20) Low pass Filter	A passive low pass filter to eliminate uppers of undesired RF signal.
(21) High pass Filter	A passive high pass filter to eliminate lowers of undesired RF signal.
(22) Antenna	Radiation of RF signal on air

#### 5. OPERATION OF RF UNIT

- \* Oscillator (17) generates RF carrier frequency of 304.3 or 315.0 MHz according to each characteristics of SAW resonators (15) which can be selected by Channel Switch (16).
- \* Input of control data switches Modulator (18) and Amplifier (19) to be active, and vanishing of control data switches the circuits to be inactive.
- \* Modulator (18) modulates from the control data to the RF signal according to the frequency of RF carrier signal generated by Oscillator (17).
- \* Amplifier (19) amplifies the modulated signal.
- \* Low pass Filter (20) and High pass Filter (21) eliminates undesired part of RF modulated signal.
- \* The signal from High pass Filter (21) is radiated from Antenna (22) on air.