

< Application modification >

EXHIBIT A

[Ref: RSP-100 2.4(a)]

" Product Description "

## 1. OUTLINE OF RM-SRX9010J

- \* RM-SRX9010J is a remote control transmitter that is attached to RX-9010VBK an audio/video receiver.
- \* RM-SRX9010J can transmit both of RF (Radio Frequency) signal and IR (Infrared Ray) signal at the same time.
- \* When a key operation is made, 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, RM-SRX9010J transmits a complete frame within 46 msec of the frame length, then stops transmitting.
- \* When a key operation is made, the LCD (Liquid Crystal Display) (7) panel displays the information according to the selected operation.

## 2. SPECIFICATION OF RF SECTION

Frequency	433.92 MHz
Number of channels	1
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>
(8) SAW resonator	Surface Acoustic Wave Resonator makes Oscillator (9) oscillation.
(9) Oscillator	Direct oscillation of RF carrier frequency of 433.92MHz according to each SAW resonator (8).
(10) Modulator	Modulation of control signal with ASK
(11) Amplifier	Amplification of RF signal
(12) Low pass Filter	A passive low pass filter to eliminate uppers of undesired RF signal.
(13) High pass Filter	A passive high pass filter to eliminate lowers of undesired RF signal.
(14) Antenna	Radiation of RF signal on air

#### 5. OPERATION OF RF UNIT

- \* Oscillator (9) generates RF carrier frequency of 433.92MHz according characteristics of SAW resonator (8).
- \* Input of control data switches Modulator (10) and Amplifier (11) to be active, and vanishing of control data switches the circuits to be inactive.
- \* Modulator (10) modulates from the control data to the RF signal according to the frequency of RF carrier signal generated by Oscillator (9).
- \* Amplifier (11) amplifies the modulated signal.
- \* Low pass Filter (12) and High pass Filter (13) eliminates undesired part of RF modulated signal.
- \* The signal from High pass Filter (13) is radiated from Antenna (14) on air.