

EXHIBIT B

[FCC Ref. 2.1033(b)(4)]

"Description of Circuit Functions"

## 1. OUTLINE OF RC-R0911

- \* RC-R0911 is a remote control transmitter that is attached to VR-4090 and VR-4080, an audio/video receiver.
- \* RC-R0911 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, RC-R0911 transmits a complete frame within 108 msec of the frame length, then stops transmitting.
- \* When a key operation is made, the LCD (Liquid Crystal Display) (8) panel displays the information according to the selected operation.

## 2. SPECIFICATION OF RF SECTION

Frequency	422, 425 and 428 MHz
Number of channels	3
Channel spacing	3 MHz
Channel selection	Switching the Channel Switch (10) to change the RF oscillator frequency according to each SAW resonator.
Transmitting power	< -14.8 dBm
Data rate	2400 baud
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>
(9) SAW resonator	Surface Acoustic Wave Resonator makes Oscillator (11) oscillation.
(10) Channel Switch	Switching the Channel Switch (10) to change the RF carrier frequency.
(11) Oscillator	Direct oscillation of RF carrier frequency of 422, 425 or 428 MHz according to each SAW resonator (9).
(12) Modulator	Modulation of control signal with ASK
(13) Amplifier	Amplification of RF signal
(14) Low pass Filter	A passive low pass filter to eliminate uppers of undesired RF signal.
(15) High pass Filter	A passive high pass filter to eliminate lowers of undesired RF signal.
(16) Antenna	Radiation of RF signal on air

#### 5. OPERATION OF RF UNIT

- \* Oscillator (11) generates RF carrier frequency of 422, 425 or 428 MHz according to each characteristics of SAW resonators (9) which can be selected by Channel Switch (10).
- \* Input of control data switches Modulator (12) and Amplifier (13) to be active, and vanishing of control data switches the circuits to be inactive.
- \* Modulator (12) modulates from the control data to the RF signal according to the frequency of RF carrier signal generated by Oscillator (11).
- \* Amplifier (13) amplifies the modulated signal.
- \* Low pass Filter (14) and High pass Filter (15) eliminates undesired part of RF modulated signal.
- \* The signal from High pass Filter (15) is radiated from Antenna (16) on air.