

AIFA TECHNOLOGY CORP.

230 BAIDER 2ND RD., FONG SHAN CITY,
KAOHSIUNG HSIEN, TAIWAN, R.O.C.
TEL: 886-7-7434157 FAX: 886-7-7412190
<http://www.aifa.com.tw> E-mail: aifa@aifa.com.tw

APPROVAL SHEET

CUSTOMER NAME: Neuros Technology International, LLC

Sunying Electronics Co., Ltd.

DESCRIPTION: OSD RC & TV URC

MODEL NO.: R3

DATE: July 11, 2006

CUSTOMER'S MODEL NO.: R3

CUSTOMER'S PARTS NO.: _____

SIGNATURE :

Gopher Lee 7.12.06

R3 OSD REMOTE CONTROL SPECIFICATION



CUSTOMER MODEL NO. / TITLE OSD REMOTE CONTROL	SPECIFICATION NO. R3	PAGE: 1 OF 6 DATE: July 11 , 2006
<p>1. Scope</p> <p>This specification is applied to the specified infrared ray wireless remote control unit.</p> <p>2. Appearance and structure</p> <p>2-1 Appearance</p> <p>Appearance shall comply with the specified sample, if any.</p> <p>2-1-1 The specification shall comply with the applicable drawing, and also there shall be no remarkable irregular color, warp, sink mark, flash, scratch, deformation and dirt on the body.</p> <p>2-1-2 Color and form of characters shall comply with the artwork or color samples.</p> <p>2-1-3 All printing shall be made clearly without any blot.</p> <p>2-2 Dimensions and structure</p> <p>Dimensions and structure shall comply with the applicable drawing.</p>		

R3 OSD REMOTE CONTROL SPECIFICATION



CUSTOMER MODEL NO. / TITLE
OSD REMOTE CONTROL

SPECIFICATION NO.
R3

PAGE: 2 OF 6
DATE: July 11 , 2006

3. Characteristics

3-1 Measurement Voltage : 3 Volt.

3-2 Measurement Temperature : $25^{\circ}\text{C} \pm 10^{\circ}\text{C}$

3-3 Measurement humidity : $65 \% \pm 5 \% \text{RH}$

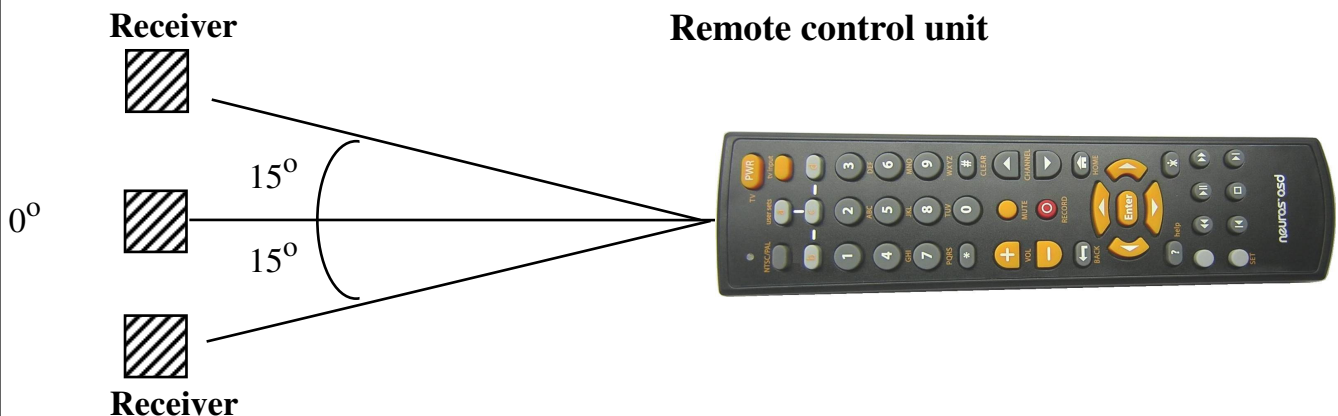
3-4 Resonator : $3.58\text{MHZ} \pm 0.3\%$

3-5 Operational Frequency : OSD : 40 KHZ TV: 38KHZ

3-6 Distance & direction :





3-6-1 Horizontal (Battery voltage: 3 volt)

Distance: More than 8 M.



R3 OSD REMOTE CONTROL SPECIFICATION



CUSTOMER MODEL NO. / TITLE OSD REMOTE CONTROL	SPECIFICATION NO. R3	PAGE: 3 OF 6 DATE: July 11 , 2006
<p>3-6-2 Vertical (Battery voltage : 3 volt) Distance: More than 8 M.</p> <div><div><div>Receiver</div><div></div><div>10°</div><div></div><div>10°</div><div></div><div>Receiver</div></div><div><div>Remote control unit</div><div></div></div></div>		
<p>4. Low Voltage Testing : 2.5 Volt</p> <p>Distance Should be 2 M when Voltage go down to 2.5 Volt.</p>		

R3 OSD REMOTE CONTROL SPECIFICATION



CUSTOMER MODEL NO. / TITLE
OSD REMOTE CONTROL

SPECIFICATION NO.
R3

PAGE: 4 OF 6
DATE: July 11 , 2006



PANTONE NUMBER

* Rubber Key

- 1.Dark Gray:Pantone Cool Gray 11C
- 2.Light Gray:Pantone Cool Gray 6C
- 3.Orange:Pantone Orange144C
- 4.Red:Pantone Red 032C

* Silkscreen on Rubber Key

- 1.Orange:Pantone Orange144C
- 2.Light Gray:Pantone Cool Gray 2C

* Nameplate

- 1.Black:Pantone Process Black C
- 2.Orange:Pantone Orange144C
- 3.Silver:Pantone 877C

* Plastic case

Top, Bottom, Battery case : Black color

PART NAME: Pantone Colors

PART NO.: R3

R3 OSD REMOTE CONTROL SPECIFICATION



CUSTOMER MODEL NO. / TITLE
OSD REMOTE CONTROL

SPECIFICATION NO.
R3

PAGE: 5 OF 6
DATE: July 11 , 2006



BUTTON	Default Key Code	Optional Key Code
PAL/NTSC	A2	A8
RESET1	A4	70
RESET2	A6	72
RESET3	AA	74
RESET4	AC	76
1	00	00
2	80	80
3	40	40
4	C0	C0
5	20	20
6	A0	A0
7	60	60
8	E0	E0
9	10	10
0	90	90
*	5C	78
#	D0	7A
CH+	08	32
CH-	88	34
RECORD	B8	36
BACK	3A	3A
HOME	3C	3C
UP	42	3E
LEFT	46	44
RIGHT	86	4A
DOWN	C2	4C
ENTER	4E	4E
HELP	52	52
XIM	56	56
DISP	5E	5E
REWIND	D8	64
PLAY-PAUSE	58	66
FAST-FORWARD	38	68
TRACK BACK	6A	6A
STOP	18	6C
TRACK FORWAD	98	6E

PART NAME: KEY CODE

PART NO.: R3

R3 OSD REMOTE CONTROL SPECIFICATION

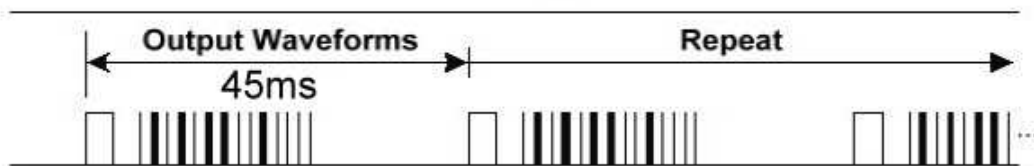
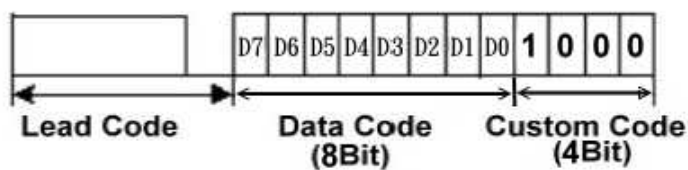


CUSTOMER MODEL NO. / TITLE
OSD REMOTE CONTROL

SPECIFICATION NO.
R3

PAGE: 6 OF 6
DATE: July 11, 2006

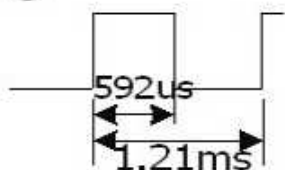
SONY VCR FORMAT



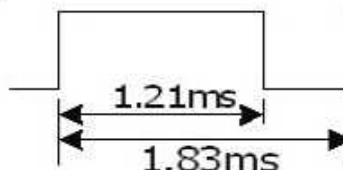
↓ Output Waveforms ↘ Repeat Code



0



1



Carrier = 40KHz

PART NAME: IR Protocols

PART NO.: R3

R3 Setup Instruction

Normal Controls setting

Switch 2 general functions of Neuros remote control (Default & Optional).

<1> Hold "SET" key first, then press "HOME" key, LED light up for 2 seconds.

<2> In these 2 seconds, press "ENTER" key, LED flashes 5 times to indicate code was switched successfully.

If "ENTER" was not pressed, LED shall go off automatically in 2 seconds and no change made to the code.

TV Code Setting Mode

<1> Hold down "SET" key and "PWR" key, when LED light up, release both keys.

<2> Enter 3 digit brand codes, LED flashes 5 times to indicate code set successfully.

<3> Test your equipment. The setting is completed if it can work.

<4> Repeat step <1>-<3> if function not correct or function keys not complete.

(The LED will flash 5 times then off when the setting accomplished ; LED will light continuously when code setting error or the codes don't exist.) Remote control still maintains the setting mode. (You may continue to enter other 3 digit brand code to accomplish the setting)

You can press "SET" key to exit the setting mode if you don't want to setup after press the "SET"+"PWR" into the setting mode.

TV Auto Search Mode

<1> Point the remote control at the device you want to control.

<2> Hold down "SET" key and "PWR" key, LED light up, release both keys, press "PWR" key again, LED will blink and into the auto search mode. (The Auto Search will run a circuit codes to finish the action if not press any key to exit it.)

<3> When TV can be turned on or off, press any key within 1~2 seconds to exit. (The present code will be stayed)

<4> Repeat step <1>-<3> if function keys not complete.

TV Semi-Automatic Search Mode

<1> Hold down "SET" key and "PWR" key, LED light up then release both keys.

Press "VOL+" or "VOL-" to send out the codes signal in one by one.

Press "VOL+" to send the code signal forward. (To increase one code when press one time)

Press "VOL-" to send the code signal rewind. (To reduce one code when press one time)

Press "SET" key when you find the correct code or want to exit the mode.

<2> When TV can be turned on or off, press "SET" key to exit.

(The present code will be stayed)

<3> Repeat step <1>-<2> if function keys not complete.

TV Code Number Display

<1> Hold down "SET" key and press the number key "1","2","3" to display the present 3 digit code.

<2> Hold down "SET" key and press the key "1" (Centesimal digit code)

Hold down "SET" key and press the key "2" (Decimal digit code)

Hold down "SET" key and press the key "3" (Unit digit code)

The LED will blink.

No blink = 0 , Blink 1 time = 1 , Blink 2 times = 2 , Blink 3 times = 3

Ex: If the Code is "068",

"SET" + "1" = No Blink, "SET" + "2" = Blink 6 times, "SET" + "3" = Blink 8 times

TV Learning Mode

<1>Learning Function

There are 5 function keys (POWER,MUTE,TV/INPUT,VOL+,VOL-) can learn.

- A. Hold down "SET" key for 3 seconds until the LED light up, then release the "SET" key.
- B. Press "PWR" key, the LED will blink once and LED light continuously.
- C. Press and release the key that you want to learn, the LED start to blink and into the "waiting learning mode".(The LED will blink for 20 seconds, if not receive any signal form the original remote control, the "waiting learning mode" will exit and back to the learning mode.)
- D. Place the original remote control IR head to head with the Neuros remote control. Keep the two remote controls about 5mm away from each other. Hold down the key of original remote control that you want to learn. When the LED light continuously, then release the key. It means learning is successful, if not, LED will continue to blink.
- E. Repeat the step C to D, you can continue to learn other function keys from the original remote control after the first learning is successful. Press the "SET" key to exit the learning mode if you finish the learning and want exit.
- F. The key signal will replace to the new signal when you learn again on the same key.
- G. The learned signal will be saved at code "999". You can setup other code and then set "999" back when you want to use the key function that you learned.

- H. These 5 function keys (POWER, MUTE, TV/INPUT, VOL+, VOL-) will send the learned signal when the learning is successful. If not then these 5 keys will send the signal of original brand code.

<2> Clear all the learned key function

- A. Hold down the “SET” key for 3 seconds until LED light up then release the “SET” key.
- B. Press the “SET” key at once. LED will blink once.
- C. Press the “PWR” key at once. LED will blink 3 times then off.
It means the learned signal of these 5 learning keys will be cleared.

<3> Clear one of the learned key function

- A. Hold down the “SET” key for 3 seconds until LED light up
- B. Press the key at once which you want to clear, LED will blink once.
- C. If you want to continue to clear other learned key function, don't release the “SET” key, repeat step **B** to clear the other keys.
- D. Release the “SET” key to exit the clearance mode, and LED off.

Note:

- A. There are 5 function keys (POWER, MUTE, TV/INPUT, VOL+, VOL-) of TV controls, and 1 key for “SET” key, the other 36 function keys are Neuros remote control general function keys (SONY VCR function keys). Total 42 keys.
- B. LED will blink 3 times when the battery put in the first time.
- C. Any time a button other than the “SET” button is pressed, LED will blink as long as the button message is sending out.
- D. When press and hold the key, it will repeatedly to send out the signals.
- E. The RC will exit the setup mode (**Normal controls setting mode**) when user don't press any key within 2 seconds.
- F. The RC will exit the setup mode (**TV Code setting mode & TV Semi-Automatic Search Mode**) when user don't press any key within 10 seconds.
- G. The RC will exit the setup mode (**TV Learning Mode**) when user don't press any key within 20 seconds.

- H. In URC TV mode function key:
(POWER, MUTE, TV/INPUT, VOL+, VOL-) repeatedly send out signals if press continue.
- I. In after learning mode learned key (When learn in standard format):
(POWER, MUTE, TV/INPUT, VOL+, VOL-) repeatedly send out signals if press continue.
- J. In after learning mode learned key (When learn in not standard format):
(POWER, MUTE, TV/INPUT) only send 1 time signal in every press button and even press continues, (VOL+, VOL-) repeatedly send out signals in every 37ms~130ms (Signal => Delay 37ms~130ms => Signal => Delay 37ms~130ms) if press continues.
- K. In R3 normal keys: The RC will go into sleep mode and stop to send out signal if the key hold over then 10 seconds.
- L. In TV URC or learning function keys: The RC will go into sleep mode and stop to send out signal if the key hold over then 8~30 seconds(90%),30~67 seconds (10%).