



A8891CPBNG6NA3

DATASHEET

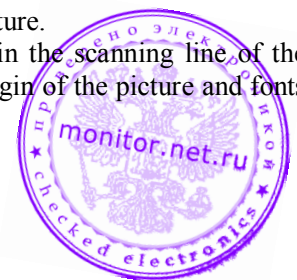
EAST KIT ELECTRONIC TECHNOLOGY (SHANGHAI) CO.,LTD



The **A8891CPBNG-6NA3** is an integrated circuit for a PAL/ NTSC/ SECAM TV. A MCU and a TV signal processor are integrated in a 64-pin shrink DIP package. The MCU contains 8-bit CPU which built in a program storage area (64Kbyte), an OSD front storage area (24Kbyte) and the One-Time PROM of vector table storage area (256byte). The TV signal processor contains PIF, SIF, Video, multi-standard chroma, Sync, RGB processors.

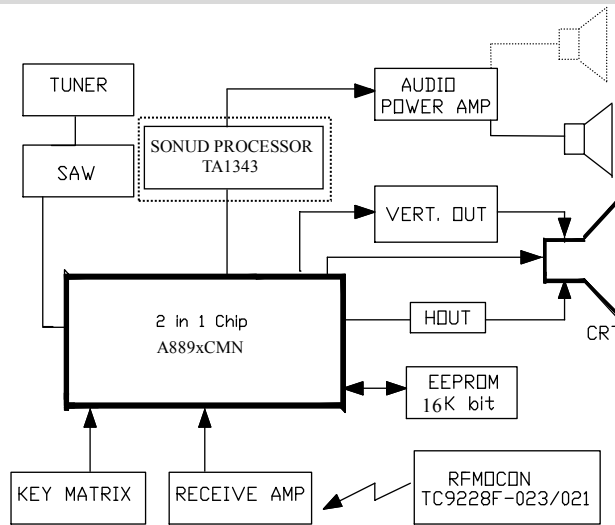
1. Main Features

- VS/ FS optional;
- Fancy half translucency menu with variety of colors and fonts;
- Language to be displayed can be selected among English, Russian, Turkish, French, Spanish, Vietnamese, Indonesian, Arabic and Persian.
- Number of position: 256
- Open/Close curtain when power On/Off ,
- LOGO display when switching on TV set and Blue background.
- Automatic Search Memory/Manual Search/ Manual Fine Tuning/ Skip function ;
- Clock/OFF-timer/ON-timer and sleep timer function (120min.)
- Sound: Treble, Bass, Balance & Super Woofer
- Selectable picture mode (MILD/ NATURE/ PERSONAL/ DYNAMIC/ MOVIE/ STANDARD)
- Selectable sound mode (NEWS/SURROUND OFF/ MUSIC/ THEATRE/ EXTEND1/ EXTEND2).
- AV status memory function
- Auto-Power-Off (If a vacant channel is tuned or TV broadcast for a day is finished, the TV will automatically turn off after about 15 minutes.)
- No-Signal-Mute (When the system receives a TV signal from the aerial input which does not contain a video signal, the sound will be muted. This No-Signal-Mute feature does not operate in the blue background OFF mode.
- Selectable screen size (STANDARD/WIDE/ZOOM)
- Child lock function (CHANNEL LOCK/TV LOCK/PANEL LOCK/VOLUME FIX.)
- Calendar function (1900-2099), Telephone book function
- Message function
- Quick View function
- Noise reduce and Black stretch function, to improve picture's quality.
- Game function
- Selectable IF Frequency (38MHz, 38.9MHz, 45.75MHz);
- Selectable color system (PAL, NTSC3.58, NTSC4.43,SECAM) /sound system (BG, BG2, DK, I, M)
- 2 AV Input or 1 AV Input, S-VHS Input, YUV Input, 1 AV output;
- Eye-care function: according to variety of environment brightness, auto-adjust all values of the picture.
- SVM (Scan Velocity Modulation) function: Catch the brightness component transformation in the scanning line of the picture signal, Modulate the Velocity of the transitional marginal signal, in order to make the margin of the picture and fonts more sharp and bright, layers clearly
- GEO function: adjust the incline of the picture incurred by geomagnetism
- X-Ray protection function
- Thermal resistance controllable function
- FM function
- Seven panel keys (P+, P-, V+, V-, TV/AV, MENU, POWER)



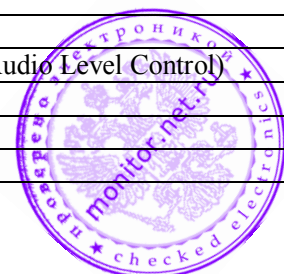
NOTE : Some item are optional.

2. System diagram



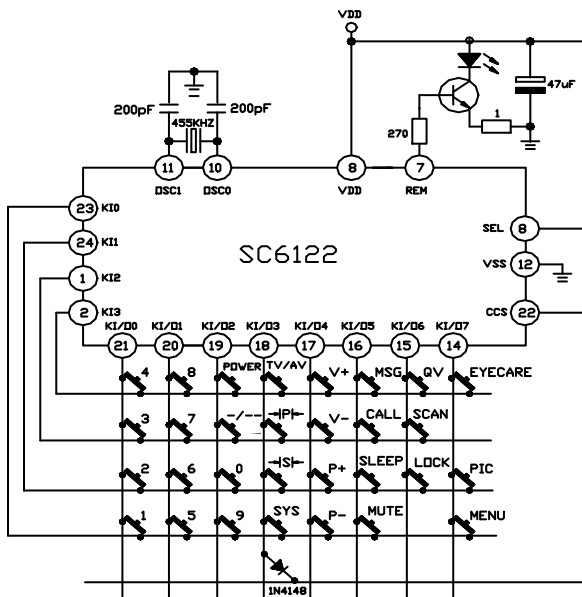
3. IC Pins' function

| N O. | Pin name | I/O | Function |
|------|--|-----|---|
| 1 | BAND1 (VS) / EYECARE or X-ray (FS) | I/O | BAND data output 1 (VS) / EYECARE or X-ray (FS) |
| 2 | BAND2 (VS) / Thermal resistance (FS) | Out | BAND data output 2 (VS) / Thermal resistance (FS) |
| 3 | KEY | I/O | Key input |
| 4 | VSS | - | GND connection |
| 5 | RESET | I/O | Reset signal input |
| 6 | XIN | In | 8 MHz oscillator connecting |
| 7 | XOUT | Out | 8 MHz oscillator connecting |
| 8 | TEST | In | GND connection |
| 9 | VDD | - | 5V power supply |
| 10 | VSS | - | GND connection |
| 11 | TV DEF AGND | - | GND yerminal for TV DEF block |
| 12 | FBP in | In | Input terminal for FBP |
| 13 | H out | Out | Output terminal for Horizontal driving pulse |
| 14 | HAFC 1 | - | Terminal to be connected capacitor for H AFC filter |
| 15 | V saw | - | Terminal to be connected capacitor to generate Vsaw signal |
| 16 | V out | Out | Output terminal for Vertical driving pulse |
| 17 | AVcc(8V) | - | Vcc terminal for DEF,RGB, Audio out and PIF out circuit |
| 18 | TV A GND | - | GND terminal for TV block |
| 19 | Cb in | In | Input terminal for Cb signal |
| 20 | Y in | In | Input terminal for Y signal |
| 21 | Cr in | In | Input terminal for Cr signal |
| 22 | Ext AU1 in | In | Input terminal for Audio1 signal 1 |
| 23 | C/V3 in | In | Input terminal for Chroma or Video signal3 |
| 24 | V2 in | In | Input terminal for Video signal2 |
| 25 | ALC Filter | In | Terminal to be connected capacitor for ALC(Audio Level Control) |
| 26 | V1 in | In | Input terminal for Video signal.(TV-IN) |
| 27 | ABCL | In | Input terminal for ABL/ACL control |
| 28 | AU out1(ATT) | Out | Output terminal 1 for Audio signal |



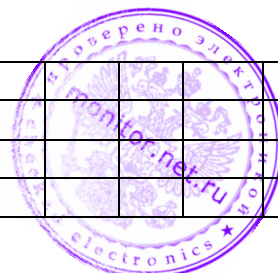
| | | | |
|----|------------------|-----|---|
| 29 | AU out2(ATT) | Out | Output terminal 2 for Audio signal |
| 30 | TV out/FM radio | Out | Output terminal for detected PIF signal or FM radio |
| 31 | AU out2 | Out | Output terminal for monitor out. |
| 32 | Ext AU2 in | In | Input terminal for External Audio signal 2 |
| 33 | H correct/SIF in | In | Input terminal for H correction and 2nd SIF |
| 34 | DC NF | Out | Terminal to be connected capacitor for DC Negative Feedback from SIF Det output |
| 35 | PIF PLL | - | Terminal to be connected with loop filter for PIF PLL. This terminal voltage is controlled PIF VCO frequency. |
| 36 | IF Vcc 5V | - | Vcc terminal for IF circuit. Supply 5V. |
| 37 | Reg Fil | - | Terminal to be connected capacitor for stabilizing internal bias. |
| 38 | AU out1 | | Output terminal for External Audio signal or TV audio signal selected by BUS(Audio SW) |
| 39 | IF AGC | - | Terminal to be connected with IF AGC filter. |
| 40 | IF GND | - | GND terminal for IF circuit. |
| 41 | IF in | In | Input terminals for IF signals. |
| 42 | IF in | In | Input terminals for IF signals. |
| 43 | RF AGC | | Output terminal for RF AGC control level. |
| 44 | Black Det | - | Terminal to be connected with Black Det filter for black stretch. |
| 45 | SVM/Monitor | | Output terminal for monitor function. Also output terminal for SVM signal selectable through IIC bus. |
| 46 | APC Filter | | Terminal to be connected with APC filter for chroma demodulation. |
| 47 | YC Vcc 5V | | Vcc terminal for Y/C circuit |
| 48 | SYNC OUTPUT | | SYNC output |
| 49 | DVCC | | Vcc terminal for digital block |
| 50 | R out | Out | Output terminal for R signal. |
| 51 | G out | Out | Output terminal for G signal. |
| 52 | B out | Out | Output terminal for B signal. |
| 53 | TV DGND | - | GND terminal for digital block. |
| 54 | up AGND | - | GND for Oscillator circuit |
| 55 | up AVDD | - | Vdd for Oscillator circuit Supply 5V |
| 56 | VIDEO1/2 | Out | TV=0,AV1=2.5V , AV2=5V |
| 57 | SDA1 | I/O | IIC-BUS SDA1 |
| 58 | SCL1 | I/O | IIC-BUS SCL1 |
| 59 | 50/60Hz control | I/O | 50/60Hz |
| 60 | VT/GEO(FS) | I/O | VS:VT output/FS: GEO |
| 61 | MUTE | I/O | MUTE |
| 62 | H.SYNC | I/O | Horizontal sync signal input |
| 63 | REMOTE | I/O | Remote controller signal input |
| 64 | POWER | I/O | Power control & Check, On=Hi-Z(input),Off=L(output) |

4. Remote Control



Remote Control

| | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|
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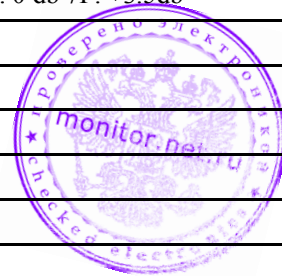


4. AV pins definition

| State | VIDEO1 | VIDEO2 | AUDIO1 | AUDIO2 |
|--|--------|--------|--------------|--------------|
| Independent MONO AV1/AV2 No S-Video | PIN24 | PIN23 | PIN22 | PIN32 |
| Independent MONO AV1/AV2 S-Video | PIN24 | PIN24 | PIN22 | PIN22 |
| Stereo AV | PIN24 | PIN24 | PIN22/ PIN32 | PIN22/ PIN32 |

5. I²C BUS Data

| No. | Item | Vol | E2P address | Bit | FUNCTIONS | State |
|-----|------|-----|----------------|---|--|---|
| 001 | OSD | 10 | 1d | | Adjust OSD horizontal position | |
| 002 | OPT | CE | 1e | Bit 7 | Mute of AV Switch Key | 0 : No use 1 : use |
| | | | | Bit 6 | Fjp_mute_process | 0:no volume down process before mute 1:Firstly volume reduced to zero, then mute |
| | | | | Bit 5 | Fjp_dvd_output(PIN56) | 0: DVD same as VIDEO1 1:DVD same as VIDEO2 (Mono and no S-video must set "0") |
| | | | | Bit 4 | Fjp_av_stereo | 0: AV mono 1: AV stereo |
| | | | | Bit 3 | Fjp_fm | 0:no FM 1: use FM |
| | | | | Bit 2 | Fjp_video2 | 0: no video2 1: use video2 |
| | | | | Bit 1 | Fjp_dvd | 0:no dvd 1: use dvd |
| | | | | Bit 0 | Fjp_s-video | 0:no s-vide 1: use s-video auto identify function (Stereo must set "1") |
| 003 | RCUT | 20 | 1f | Red Cut-off | ADD 08H(BIT0--BIT7) 00: -0.65v 80: 0v FF :0.65v | |
| 004 | GCUT | 20 | 20 | Green Cut-off | | |
| 005 | BCUT | 20 | 21 | Blue Cut-off | | |
| 006 | GDRV | 40 | 22 | Green Drive | ADD 0BH(BIT0--BIT6) 00: -5.5db 40: 0 db 7F: +3.5db | |
| 007 | BDRV | 40 | 23 | Blue Drive | | |
| 008 | CNTX | 7F | | To set the max contrast | | |
| 009 | BRTS | 00 | | To set the Subsidiary brightness | | |
| 010 | BRTC | 48 | | To set the center brightness | | |
| 011 | COLC | 40 | | To set the NTSC's centre Color | | |
| 012 | TNTC | 40 | | To set the NTSC's centre TINT | | |
| 013 | COLP | 00 | | To set the PAL's centre Color | | |
| 014 | COLS | 40 | | To set the SECAM's centre Color | | |
| 015 | COLD | 00 | | To set the DVD's centre Color | | |
| 016 | SCNT | 0A | | To set the Y-SUB Contrast (0:-3DB 8:0DB F:+3DB) | | |
| 017 | CNTC | 58 | | To set the centre contrast | | |



| | | | | | | | |
|-----------------|-------------|-------------|----|---|---|------------------------------|--------------------|
| 018 | CNTN | 00 | | To set the min contrast | | | |
| 019 | CNTD | 7F | | To set the DVD's max contrast | | | |
| 020 | BRTX | 35 | 30 | To set the max brightness | | | |
| 021 | BRTN | 25 | | To set the min brightness | | | |
| 022 | COLX | 35 | | To set the max Color | | | |
| 023 | ST3 | 20 | | To set the TV-3.58's centre sharpness | | | |
| 024 | SV3 | 25 | | To set the AV-3.58's centre sharpness | | | |
| 025 | ST4 | 15 | | To set the TV-4.43's centre sharpness | | | |
| 026 | SV4 | 25 | | To set the AV-4.43's centre sharpness | | | |
| 027 | SVD | 25 | | To set the DVD's centre sharpness | | | |
| 028 | ASSH | 07 | | To set the Asymmetric sharpness (0 : 0db 4: 5db 7 :8db) | | | |
| 029 | SHPX | 35 | | To set the max sharpness | | | |
| 030 | SHPN | 10 | | To set the min sharpness | | | |
| 031 | UVBK | 88 | | Bit7-4 U BLK ADJ | 0 : -22mV, Input DC | | |
| | | | | | 8 : 0mV | | |
| | | | | | F : 19mV, 2.75mV/dev | | |
| | | | | Bit3-0 V BLK ADJ | 0 : -22mV, Input DC | | |
| | | | | | 8 : 0mV | | |
| | | | | | F : 19mV, 2.75mV/dev | | |
| 032 | ABCL | E7 | | Bit 7 Fjp_rf_agc | 0: IF isn't mute while AV 1 : IF mute while AV (TV-ONLY must set "0") | | |
| | | | | Bit 6 Y Peak Limiter | 0 : Y peak limiter on,105IRE 1 : Y peak limiter off | | |
| | | | | Bit 5 | ACL STATR POINT | 00 : 0V | 01 : -0.2V |
| | | | | Bit4 | | 10 : -0.3V | 11 : -1.0V ACL OFF |
| | | | | Bit 3 | ABL START POINT | 00 : 0V | 01 : -0.2V |
| | | | | Bit 2 | | 10 : -0.30V | 11 : -0.4V |
| | | | | Bit 1 | ABL GAIN | 00 : -0.2V | 01 : -0.35V |
| Bit 0 | 10 : -0.5V | 11 : -0.65V | | | | | |
| 033 | DCBS | 24 | | Bit 7 C Trap Q_C Signal of Y signal | 0 : LOW | 1 : High | |
| | | | | Bit 6 Blanking switch | 0 : H , V blanking on | 1 : H,V blanking off | |
| | | | | Bit 5 Select Sync | 0 : TV sync | 1 : Monitor sync | |
| | | | | Bit 4 Fjp_rf_pwron | 0: AV status memory 1: only TV while power on | | |
| | | | | Bit3 | 00 : off | 01 : Y point 78IRE,Gain -6dB | |
| | | | | Bit 2 | | | 10 : 68IRE |
| | | | | Bit 1 VT Down of AFT when No Signal | 0: no use | 1: use | |
| Bit 0 Fpol_tint | 0 : Red ; | 1 : Green | | | | | |
| 034 | CLTB | a7 | | Chroma data (TV and sound is B/G) | | | |

| | | | | | | | |
|-----------|--------------|---|---|---------------------------------------|--------------------|---|---|
| | | | | Bit 7 | P/N ID | 0 : PAL/NTSC killer sensitivity, Normal 1 : LOW | |
| | | | | Bit 6 | Killer off | 0 : Normal 1 : Always killer off | |
| | | | | Bit 5 | N COMB | 0 : Off 1 : Color comb filter for NTSC. On | |
| | | | | Bit 4 | Demodulation Phase | 00 : PAL 10 : NTSC2 | 01 : NTSC1 11 : DVD |
| | | | | Bit 3 | | | |
| | | | | Bit 2,1,0 | Y Delay Time | 000 : 0ns 010 : 80ns 100 : 160ns 110 : 240ns | 001 : 40ns 011 : 120ns 101 : 200ns 111 : 280ns |
| 035 | CLTD | a7 | | Chroma data (TV and sound is I-D/K) | | | |
| | | | | Bit 7 | P/N ID | 0 : PAL/NTSC killer sensitivity, Normal 1 : LOW | |
| | | | | Bit 6 | Killer off | 0 : Normal 1 : Always killer off | |
| | | | | Bit 5 | N COMB | 0 : Off 1 : Color comb filter for NTSC. On | |
| | | | | Bit 4 | Demodulation Phase | 00 : PAL 10 : NTSC2 | 01 : NTSC1 11 : DVD |
| | | | | Bit 3 | | | |
| Bit 2,1,0 | Y Delay Time | 000 : 0ns 010 : 80ns 100 : 160ns 110 : 240ns | 001 : 40ns 011 : 120ns 101 : 200ns 111 : 280ns | | | | |
| 036 | CLTM | a3 | 40 | Chroma data (TV and sound is M) | | | |
| | | | | Bit 7 | P/N ID | 0 : PAL/NTSC killer sensitivity, Normal 1 : LOW | |
| | | | | Bit 6 | Killer off | 0 : Normal 1 : Always killer off | |
| | | | | Bit 5 | N COMB | 0 : Off 1 : Color comb filter for NTSC. On | |
| | | | | Bit 4 | Demodulation Phase | 00 : PAL 10 : NTSC2 | 01 : NTSC1 11 : DVD |
| | | | | Bit 3 | | | |
| Bit 2,1,0 | Y Delay Time | 000 : 0ns 010 : 80ns 100 : 160ns 110 : 240ns | 001 : 40ns 011 : 120ns 101 : 200ns 111 : 280ns | | | | |
| 037 | CLVO | a7 | | Chroma data (Video not DVD) | | | |
| | | | | Bit 7 | P/N ID | 0 : PAL/NTSC killer sensitivity, Normal 1 : LOW | |
| | | | | Bit 6 | Killer off | 0 : Normal 1 : Always killer off | |
| | | | | Bit 5 | N COMB | 0 : Off 1 : Color comb filter for NTSC. On | |

| | | | | | | |
|-----|------|----|---------------------|---------------------------------------|---|---|
| | | | Bit 4 | | 00 : PAL | 01 : NTSC1 |
| | | | Bit 3 | Demodulation Phase | 10 : NTSC2 | 11 : DVD |
| | | | Bit 2,1,0 | Y Delay Time | 000 : 0ns 010 : 80ns 100 : 160ns 110 : 240ns | 001 : 40ns 011 : 120ns 101 : 200ns 111 : 280ns |
| | | | Chroma data (DVD) | | | |
| | | | Bit 7 | P/N ID | 0 : PAL/NTSC killer sensitivity, Normal 1 : LOW | |
| | | | Bit 6 | Killer off | 0 : Normal | 1 : Always killer off |
| | | | Bit 5 | N COMB | 0 : Off 1 : Color comb filter for NTSC. On | |
| | | | Bit 4 | | 00 : PAL | 01 : NTSC1 |
| | | | Bit 3 | Demodulation Phase | 10 : NTSC2 | 11 : DVD |
| | | | Bit 2,1,0 | Y Delay Time | 000 : 0ns 010 : 80ns 100 : 160ns 110 : 240ns | 001 : 40ns 011 : 120ns 101 : 200ns 111 : 280ns |
| 039 | HPOS | 13 | | 50Hz HORIZONTAL PHASE | 00 : -3usec 10 : 0 1F : +3usec | |
| 040 | VP50 | 03 | | 50Hz VERTICAL PHASE (Must set ≤ 7) | 0 : V phase delay 0H F : 15H | |
| 041 | HIT | 1C | | 50Hz Vertical size | 00 : -47% 20 : 0% 3F : 47% | |
| 042 | HITZ | 10 | | 50HZ Zoom mode Vertical size | 00 : -47% 20 : 0% 3F : 47% | |
| 043 | HITW | 10 | | 50HZ Wide mode Vertical size | 00 : -47% 20 : 0% 3F : 47% | |
| 044 | VLIN | 1A | | 50HZ VERTICAL-LINEARILTY | 00 : -12% 10 : 0% 1F : 12% | |
| 045 | VSC | 08 | | 50HZ VERTICAL-S CORRECTION | 00 : +20% 1F : -20% | |
| 046 | HBOW | 04 | Bit2~0 | H BOW | -1us | 0us 1us |
| 047 | HPAR | 04 | Bit2~0 | H PAPER | -/+2us | 0us +/-2us |
| 048 | OV50 | 00 | | OSD Vertical position for 50Hz | | |
| 049 | HPS | 02 | | 60HZ HORIZONTAL PHASE | | |



| | | | | | | |
|---------|--|-----------------------------------|----------------|--|--|---|
| 050 | VP60 | 01 | | 60HZ VERTICAL PHASE (Must set≤ 7) | | |
| 051 | HITS | 01 | | 60HZ VERTICAL size | | |
| 052 | VLIS | 00 | | 60HZ VERTICAL-LINEARILTY | | |
| 053 | VSS | 01 | 50 | 60HZ VERTICAL-S CORRECTION | | |
| 054 | OV60 | 00 | | OSD Vertical position for 60Hz | | |
| 055 | GEOC | 32 | | Be used to adjust the center position of GEO control | | |
| 056 | SECD | 18 | | SECAM MODE | | |
| | | | | Bit6 | Select SECAM YS-SW mode | 0: Normal operation 1:SECAM black level alignment mode |
| | | | | Bit5 | select SECAM Ident mode | 0: H ID 1:H + V ID |
| | | | | Bit4 | select SECAM Bell filter bandwidth | 0: Bell filter 1: Boost mode |
| | | | | Bit3 | select SECAM Ident sensitivity | 0: Normal 1: Low |
| | | | | Bit2 | Fno_secam | 0: SECAM 1: SECAM inhibit |
| | | | | Bit1 Bit0 | select SECAM Gate Pulse phase | 00: Auto, normal 01: +200ns (delay) 10 : center 11: -200ns (forward) |
| 057 | SBY | 08 | | SECAM B-Y BLACK ADJUST | | |
| 058 | SRY | 08 | | SECAM R-Y BLACK ADJUST | | |
| 059 | AGC | 22 | | Adjust the RF-AGC 00 : IF mute 01 : 67dB 3F : 107dB | | |
| 060 | HAFC | 86 | | Data | Description | |
| | | | | | Blanking period | Picture period |
| | | | | Bit 6,7 | AFC GAIN (TV mode & weak signal , read Nois_bit4=0) | 00 : 1 1 |
| | | | | | | 01 : 4/3 1/3 |
| | | | | | | 10 : 2 1 |
| | | | | | | 11 : OFF OFF |
| | | | | Data | Description | |
| | | | | | Blanking period | Picture period |
| | | | | Bit 4,5 | AFC GAIN (TV mode & non-weak signal , read NOIS_Bit4=0) | 00 : 1 1 |
| | | | | | | 01 : 4/3 1/3 |
| | | | | | | 10 : 2 1 |
| | | | | | | 11 : OFF OFF |
| | | | | Data | Description | |
| | | | | | Blanking period | Picture period |
| | | | | Bit 3,2 | AFC GAIN (AV mode) | 00 : 1 1 |
| | | | | | | 01 : 4/3 1/3 |
| | | 10 : 2 1 | | | | |
| | | 11 : OFF OFF | | | | |
| Bit 1,0 | AFC GAIN (TV mode , read Nois_Bit4=1) | Data | Description | | | |
| | | Blanking period | Picture period | | | |

| | | | | | |
|-------|-------------|--------------------------|--------------------------|---|--|
| | | | | | 00 : 1 1 |
| | | | | | 01 : 4/3 1/3 |
| | | | | | 10 : 2 1 |
| | | | | | 11 : OFF OFF |
| 061 | NOIS | 0F | Bit4 | Face_fix | checking the description of HAFC |
| | | | Bit0-3 | Noise detection level control | 0-2:Do not use |
| | | | | | 3:S/N high |
| | | | | | F:S/N low |
| 062 | NDTC | 1F | | NOISE DET count (00~FF the larger the value, the more times the noise detection) | |
| 063 | V1 | 09 | | To set Volume 1% value | |
| 064 | V25 | 3D | | To set Volume 25% value | |
| 065 | V50 | 57 | | To set Volume 50% value | |
| 066 | V100 | 7F | | To set Volume max value | |
| 067 | ATTV | 70 | | To set the register of audio ATT while using ta1343n at TV or FM mode | |
| 068 | ATAV | 70 | | To set the register of audio ATT while using ta1343n at VIDEO or DVD mode | |
| 069 | BASC | 40 | 60 | To set bass center value | |
| 070 | TREC | 40 | | To set treble center value | |
| 071 | BALC | 3F | | To set balance center value | |
| 072 | WOFC | 39 | | To set woofer center value | |
| 073 | BASX | 72 | | To set bass max value | |
| 074 | TREX | 72 | | To set treble max value | |
| 075 | WOFX | 72 | | To set woofer max value | |
| 076 | EFF1 | 40 | Bit7 | No use | This bit must be zero |
| | | | Bit6 | ALS SW for ta1343n | 0:off 1: on |
| | | | Bit5-4 | ALS start point | 00:220[mv] 01:380[mv] 10:525[mv] 11:770[mv] |
| | | | Bit3 | No use | This bit must be zero |
| | | | Bit2 | Input attenuation | 0: 0 db 1: -5 db |
| | | | Bit1-0 | No use | This bit must be zero |
| 077 | EFF2 | 17 | Bit7 | Bass boost | 0: off 1: on |
| | | | Bit6 | No use | This bit should to be set zero |
| | | | Bit5-4 | Woofer LPF | 00:100[hz] 01:125[hz] 10:170[hz] 11:210[hz] |
| | | | Bit3 | No use | This bit must be zero |
| | | | Bit2-0 | surround effect level | 000:off 001:1 111:7 |
| 078 | MUTT | 00 | | Y-Mute time of soft start(00~FF the larger the value, the more time it takes) | |
| 079 | FLG0 | 46 | Bit 7 | vco adjust when position select | 0: enable 1: disable |
| | | | Bit 6 | Select f0 of chroma BPF | 00 : BPF (AV) |
| | | | Bit 5 | | 01 : TOF1 (F0=5MHZ) RF |
| | | | 10 : TOF2 (F0=6MHZ) RF | | |
| Bit 4 | BPF-SW | 11 : TOF3 (F0=7MHZ) RF | | | |
| | | | | | 0 : Normal, CVBS signal passes along BPF 1 : By pass, CVBS signal doesn't pass along BPF. |

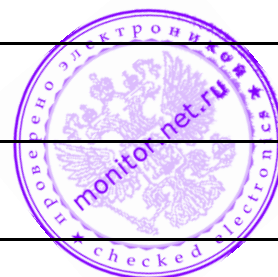
| | | | | | | |
|-------|-------|--|--------------------|--------------------------|---|-----------------------------|
| | | | Bit 3 | Fvcd_spot_killer | 0 : Off, 1 : If BB=1, RGB out is 110 IRE | |
| | | | Bit 2 | Nyquist Buzz cancel | 0 : Nyquist Buzz cancel, on 1 : off | |
| | | | Bit 1 | Fvcd_ver_freq | 0: Auto ,free-run depending on the frequency of the signal inputted before that 1: Auto, free run 50Hz | |
| | | | Bit 0 | Over mode | 0 : Normal 1 : PIF over modulation switch on | |
| 080 | FLG1 | 22 | Bit7 | OSD ABL | 0 : ABCL active for OSD 0 : inactive | |
| | | | Bit6 | No use(don't use it) | | |
| | | | Bit 5 | OSD CONTRAST | 00 : 95 IRE | 01 : 60 IRE |
| | | | Bit 4 | | 10 : 70 IRE | 11 : 80 IRE |
| | | | Bit 3 | Horizontal side blanking | 0 : Off 1 : On, 92% (FBP BLK off, then internal BLK only) | |
| | | | Bit 2 | No use | | |
| | | | Bit 1 | V ramp bias | 0 : power from Y/C VCC 1 : power from IC bus | |
| Bit 0 | CW SW | 0 : Off 1 : On CW output from "V1 IN (#26) "pin | | | | |
| 081 | SVM | 14 | Bit7 | No use | | |
| | | | Bit6 | Fjppanel_power | 0:panel power key is permitted while panel lock 1: panel power key is forbidden while panel lock | |
| | | | Bit5 | Fvcd_fm_band | 0: Normal | 1: Wide |
| | | | Bit4 | Fjppscreen | 0: no use | 1: use |
| | | | Bit3 | Fjppgeo_option(pin60) | 0:no use | 1: GEO control |
| | | | Bit2 | Mon/SVM | 0 : Function of #45, SVM out | 1 : Monitor out |
| | | | Bit 0,1 | SVM Delay | 00 : off ; 10 : -100ns ; | 01 : -120ns ; 11 : -80ns |
| 082 | VBLK | 00 | Bit 3,2 | V BLK BTM | 00 : 310H 263H | 01 : 306H 259H |
| | | | | | 10 : 304H 257H | 11 : 302H 255H |
| | | | Bit 1,0 | V BLK TOP | 00 : 23H 22H | 01 : 27H 26H |
| | | | | | 10 : 29H 28H | 11 : 31H 30H |
| 083 | VCEN | 25 | Vertical centering | | 00 : -20% | |
| | | | | | 20 : 0% | |
| | | | | | 3F : 20% | |
| 084 | UCOM | 10 | Bit 3,4 | C APC DATA | 00 : data 1-normal for black &white &NTSC | |
| | | | | | 01: Data 2 | |
| | | | | | 10:Data 3 for PAL | |
| | | | | | 11:the same as 10 | |

| | | | | | | |
|-------|-----------------------|--|----|---|-----------------------|--|
| | | | | bit2 | Set chroma APC | 0 : disable 1 : enable use Bit 3,4 data |
| | | | | Bit 1,0 | Internal ADC | 00 : GND 01 : R output 10 : B output 11 : Monitor RF AGC via ADC |
| 085 | PYNX | 33 | 70 | NORMAL H.SYNC MAX | | |
| 086 | PYNN | 11 | | NORMAL H.SYNC MIN | | |
| 087 | PYXS | 22 | | SEARCH H.SYNC MAX | | |
| 088 | PYNS | 1E | | SEARCH H.SYNC MIN | | |
| 089 | RCUTS | 00 | | FOR YCbCr R CUTOFF | | |
| 090 | GCUTS | 00 | | FOR YCbCr G CUTOFF | | |
| 091 | BCUTS | 00 | | FOR YCbCr B CUTOFF | | |
| 092 | GDRVS | 00 | | FOR YCbCr G DRIVE | | |
| 093 | BDRVS | 00 | | FOR YCbCr B DRIVE | | |
| 094 | AUSTP | 04 | | When Mute off, Vol. ATT up step number(the larger the value, the faster it recovers) | | |
| 095 | OPT2 | FD | | Bit7 | Fjpp_close_screen | 0 : no use ; 1 : use |
| | | | | Bit6 | Fjpp_open_screen | 0 : no use ; 1 : use |
| | | | | Bit5 | Fjpp_poschg_mute | 0:mute pin(pin61) output high voltage while changing pos 1:mute pin(pin61) doesn't output high voltage while changing pos |
| | | | | Bit4 | Fjpp_telephone | 0:no telephone book 1:use telephone book |
| | | | | Bit3 | Fjpp_mute_exmute | 0:mute pin(pin61) doesn't output high voltage at mute status 1:mute pin(pin61) output high voltage at mute status |
| | | | | Bit2 | Fjpp_av_nosignal_mute | 0:no mute for AV while no signal (in AV mode, blue background for 15minutues TV set will not automatically switch off) 1:mute for AV while no signal |
| | | | | Bit1 | Fjpp_uhf_port | 0 : p3 1: p2 |
| | | | | Bit0 | Fjpp_pwr_delay | 0:no delay for power on 1: 1s delay for power on |
| | | | | 096 | MOD0 | C4 |
| Bit 6 | 10 : BG 11 : DK | | | | | |
| Bit 5 | Fjpp_eyecare | 0 : no use 1 : use | | | | |
| Bit 4 | The algorithm of ASM. | 0: ASM doesn't judge Fhsync with case 4. 1 : ASM judge Fhsync with case 4 | | | | |
| Bit 3 | The algorithm of ASM. | 0 : ASM doesn't judge IFLOCK with case 4. 1 : ASM judge IF LOCK with case 4 | | | | |
| Bit 2 | Fjpp_message | 0 : no use ; 1 : use | | | | |

| | | | | | | |
|-----|------|----|----|---|---|--|
| | | | | Bit 1 | Fjpp_tuner_refresh | 0: no refresh 1: refresh the registers of FS tuner at the interval of 256ms |
| | | | | Bit 0 | Fjpp_bb_v_freq | 0:C_BB_V_FREQ_313H 1:C_BB_V_FREQ_312_5H |
| 097 | MOD1 | 87 | | Bit7 | Fjpp_extend_mode | 0:according to eff1 for extend mode 1: -5db |
| | | | | Bit6 | Fjpp_swoofer | 0: no woofer 1: use woofer |
| | | | | Bit5 | Fjpp_sound | 0: no ta1343n 1: use ta1343n |
| | | | | Bit4 | Sound System | 0: No use 1 : BG2 |
| | | | | Bit3 | | 0 : No use 1 : M |
| | | | | Bit2 | | 0 : No use 1 : DK |
| | | | | Bit1 | | 0 : No use 1 : I |
| | | | | Bit0 | | 0 : No use 1 : BG |
| 098 | MOD2 | 52 | | Bit7 | Fjpp_xray(PIN1) | 0: no xray 1: xray while FS |
| | | | | Bit6 | Fvmute_type | 0:Y mute only 1:RGB mute only |
| | | | | Bit5 | Fymute_use | 0:no mute while changing pos 1: mute while changing pos |
| | | | | Bit4 | Fjpp_50_60hz_control(PIN59) | 0: no use 1: 50/60hz control |
| | | | | Bit3 | Fjpp_thermal_resistance(PIN2) | 0: no thermal resistance 1: thermal resistance while FS |
| | | | | Bit2 | Fjpp_power_option | 0:Last power memory function 1:Standby state after power on |
| | | | | Bit1 | Fjpp_fs | 0: VS 1: FS |
| | | | | Bit0 | Fjpp_hotel_mode | 0: Normal 1:Hotel mode |
| 099 | OSDF | 53 | | OSD WIDTH (the larger the value, the smaller the OSD) | | |
| 100 | STBG | 08 | | Bit0,1,2,3 | S Trap f0 For B/G | 0000 : Sound-Trap Off 0001 : f0 Tuning Min 1111 : f0 Tuning Max |
| 101 | STI | 08 | 80 | Bit0,1,2,3 | S Trap f0 For I | 0000 : Sound-Trap Off 0001 : f0 Tuning Min 1111 : f0 Tuning Max |
| 102 | STDK | 0a | | Bit0,1,2,3 | S Trap f0 For DK | 0000 : Sound-Trap Off 0001 : f0 Tuning Min 1111 : f0 Tuning Max |
| 103 | STM | 08 | | Bit0,1,2,3 | S Trap f0 For M | 0000 : Sound-Trap Off 0001 : f0 Tuning Min 1111 : f0 Tuning Max |
| 104 | SSBG | | | Bit4~5 | S Trap Frequency response Control HP/LP For B/G | 00 : Off 01 : 1dB HPF |



| | | | | | |
|-----|------|----|--------|---|--|
| | | | | | 10 : -3dB LPF 11 : -2dB LPF |
| | | | Bit2~3 | S Trap Q. for B/G | 00 : Q=3 01 : Q=5 10 : Q=7(Recommended) 11 : Q=9 |
| | | | Bit1~0 | S Trap Group Delay Control for B/G | 00 : Off 01 : 60ns 10 : 90ns 11 : 120ns |
| 105 | SSI | 0c | Bit4~5 | S Trap Frequency response Control HP/LP For I | 00 : Off 01 : 1dB HPF 10 : -3dB LPF 11 : -2dB LPF |
| | | | Bit2~3 | S Trap Q. for I | 00 : Q=3 01 : Q=5 10 : Q=7(Recommended) 11 : Q=9 |
| | | | Bit1~0 | S Trap Group Delay Control for I | 00 : Off 01 : 60ns 10 : 90ns 11 : 120ns |
| 106 | SSDK | 0f | Bit4~5 | S Trap Frequency response Control HP/LP For DK | 00 : Off 01 : 1dB HPF 10 : -3dB LPF 11 : -2dB LPF |
| | | | Bit2~3 | S Trap Q. for DK | 00 : Q=3 01 : Q=5 10 : Q=7(Recommended) 11 : Q=9 |
| | | | Bit1~0 | S Trap Group Delay Control for DK | 00 : Off 01 : 60ns 10 : 90ns 11 : 120ns |
| 107 | SSM | 09 | Bit4~5 | S Trap Frequency response Control HP/LP For M | 00 : Off 01 : 1dB HPF 10 : -3dB LPF 11 : -2dB LPF |
| | | | Bit2~3 | S Trap Q. for M | 00 : Q=3 01 : Q=5 |



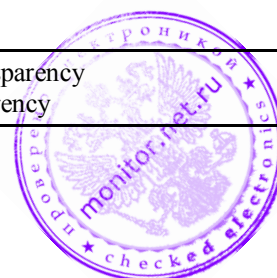
| | | | | | |
|-----|------|----|--|--|---|
| | | | | | 10 : Q=7(Recommended) 11 : Q=9 |
| | | | Bit1~0 | S Trap Group Delay Control for M | 00 : Off 01 : 60ns 10 : 90ns 11 : 120ns |
| 108 | SYNC | 02 | bit2 | H sync judgment | 0 : BUS, 1 : TC3 |
| | | | bit1 | Fvcd_sync_separation level | 0:40% 1: 50% |
| | | | bit0 | Sync slice level for weak signal | 0: Normal 1: Low |
| 109 | SYBN | 44 | Sync detection setting for BB On | | |
| | | | BIT6 | Reg.19H bit7 SY-DET-1 for 889x | Select the input IF signal level of Sync Lock detection. |
| | | | BIT5 | Reg.19H bit6 SY-DET-4 for 889x | 00010: 0dB 00011: 0dB |
| | | | BIT4 | Reg.19H bit5 0 for 889x | 10010: 0dB 10011: 0dB |
| | | | BIT3 | Reg.21H bit1 SY-DET-2 for 889x | 10001:-4dB 10000:-8dB weak signal |
| | | | BIT2 | Reg.21H bit0 SY-DET-3 for 889x | others: Do not use |
| | | | Bit1~0 | Sel sync check mode for BB on | 00:checking H-LOCK-1 flag(bit3 of r0) 01:checking H-LOCK-2 flag(bit4 of r1) 1X:checking VLOCK flag (bit7 of r1) |
| 110 | SYBF | 44 | Sync detection setting for BB Off | | |
| | | | BIT6 | Reg.19H bit7 SY-DET-1 for 889x | Select the input IF signal level of Sync Lock detection. |
| | | | BIT5 | Reg.19H bit6 SY-DET-4 for 889x | 00010: 0dB 00011: 0dB |
| | | | BIT4 | Reg.19H bit5 0 for 889x | 10010: 0dB 10011: 0dB |
| | | | BIT3 | Reg.21H bit1 SY-DET-2 for 889x | 10001:-4dB 10000:-8dB weak signal |
| | | | BIT2 | Reg.21H bit0 SY-DET-3 for 889x | others: Do not use |
| | | | Bit1~0 | Sel sync check mode for BB off | 00:checking H-LOCK-1 flag(bit3 of r0) 01:checking H-LOCK-2 flag(bit4 of r1) 1X:checking VLOCK flag (bit7 of r1) |
| 111 | SYSR | 44 | Sync detection setting for search/tuning | | |
| | | | BIT6 | Reg.19H bit7 SY-DET-1 for 889x | Select the input IF signal level of Sync Lock detection. |
| | | | BIT5 | Reg.19H bit6 SY-DET-4 for 889x | 00010: 0dB 00011: 0dB |
| | | | BIT4 | Reg.19H bit5 0 for 889x | 10010: 0dB 10011: 0dB |
| | | | BIT3 | Reg.21H bit1 SY-DET-2 for 889x | 10001:-4dB 10000:-8dB weak signal |
| | | | BIT2 | Reg.21H bit0 SY-DET-3 for 889x | others: Do not use |
| | | | Bit1~0 | Sel sync check mode for search/tuning | 00:checking H-LOCK-1 flag(bit3 of r0) 01:checking H-LOCK-2 flag(bit4 of r1) 1X:checking VLOCK flag (bit7 of r1) |
| 112 | BBCT | 04 | | Blue back hysteresis counter (BUS H sync detection) (the larger the value, the more times the | |



| | | | | | | |
|-----|------|----|--|-------------|--|---|
| | | | | detection) | | |
| 113 | VCD0 | 0E | | BIT6,7 | Audio Monitor Out | 00 : depend on Audio sw 01 : TV 10 : Mute 11 : Mute |
| | | | | BIT4,5 | C Trap MD | 00 : interlocking video sw 01 : as 00 10 : not interlocking C-trip off 11 : not interlock ctrip on |
| | | | | BIT3 | Halftone Gain | 0 : Main : OSD = 30% : 70% 1 : Main : OSD = 50% : 50% |
| | | | | BIT2 | U/V Switch | 0 : Cb/Cr, Cr input(#21)gain up,+3dB ; 1 : U/V |
| | | | | BIT1 | Sharpness f0 frequency | 0 : 2.75MHz 1 : 4MHz |
| | | | | BIT0 | Sync. skew switch | 0: off 1: sync skew detection on |
| 114 | VCD1 | 61 | | Bit7 | Fvcd_bell_f0 | 0:Center(Normal) 1:High |
| | | | | Bit6 | Fvcd_bell_q | 0:Low 1:High(Normal) |
| | | | | Bit4~5 | PIF detected output level trimming | 00 : 1.05Vp-p 01 : Do not use 10: 2.2Vp-p 11: Do not use |
| | | | | Bit2~3 | FM BPF | 00 : internal BPF mode 01 : not use 10 : not use 11 : external BPF mode |
| | | | | Bit0~1 | IF Freq | 00 : 38M 01 : 38.9 M 10 : 45.75 M 11 : Nouse |
| 115 | CCOR | 03 | | Bit7 | No use | |
| | | | | Bit6 | Italic enable specification register | 0: normal 1: italic |
| | | | | Bit5 | No use | |
| | | | | Bit4 | No use | |
| | | | | Bit0~3 | Set the color of unselected menu character | 000:BLACK 001:BLUE 010:GREEN 011:CYAN 100:RED 101: MAGENDA 110:YELLOW 111:WHITE |
| 116 | TCOR | 03 | | Bit7 | No use | |
| | | | | Bit6 | Italic enable specification register | 0: normal 1: italic |
| | | | | Bit5 | Underline enable specification register | 0:normal 1: underline |
| | | | | Bit4 | No use | |



| | | | | | |
|-----|------|----|--------|---|--|
| | | | Bit0~3 | Set the color of menu title | 000:BLACK 001:BLUE 010:GREEN 011:CYAN 100:RED 101: MAGENDA 110:YELLOW 111:WHITE |
| 117 | SCOR | 06 | Bit7 | No use | |
| | | | Bit6 | Italic enable specification register | 0: normal 1: italic |
| | | | Bit5 | No use | |
| | | | Bit4 | No use | |
| | | | Bit0~3 | | 000:BLACK 001:BLUE 010:GREEN 011:CYAN 100:RED 101: MAGENDA 110:YELLOW 111:WHITE |
| 118 | ACOR | 89 | Bit7 | Transparency enable register for menu area | 0: not assign half transparency 1: assign half transparency |
| | | | Bit4~6 | Background color for the menu area | 000:BLACK 001:BLUE 010:GREEN 011:CYAN 100:RED 101: MAGENDA 110:YELLOW 111:WHITE |
| | | | Bit3 | Transparency enable register for highlight area | 0: not assign half transparency 1: assign half transparency |
| | | | Bit0~2 | Background color for the highlight area | 000:BLACK 001:BLUE 010:GREEN 011:CYAN 100:RED 101: MAGENDA 110:YELLOW 111:WHITE |
| 119 | CALB | 89 | Bit7 | Transparency enable register for calendar area | 0: not assign half transparency 1: assign half transparency |
| | | | Bit4~6 | Background color for the calendar area | 000:BLACK 001:BLUE 010:GREEN 011:CYAN 100:RED 101: MAGENDA 110:YELLOW 111:WHITE |
| | | | Bit3 | Transparency enable register for week area | 0: not assign half transparency 1: assign half transparency |



| | | | | | | |
|-----|------|----|--|--------|---|---|
| | | | | Bit0~2 | Background color for the week area | 000:BLACK 001:BLUE 010:GREEN 011:CYAN 100:RED 101: MAGENDA 110:YELLOW 111:WHITE |
| 120 | CALC | 03 | | Bit0~3 | Set the character color of calendar | 000:BLACK 001:BLUE 010:GREEN 011:CYAN 100:RED 101: MAGENDA 110:YELLOW 111:WHITE |
| 121 | SOSP | 10 | | | Value bar/message/time display/CALL display/FM search bar's position adjustment | |
| 122 | CUSL | 08 | | | To set remote controller's custom code(low byte) | |
| 123 | CUSH | F7 | | | To set remote controller's custom code(high byte) | |
| 124 | FSAD | C0 | | | FS tuner address | |
| 125 | LANG | FF | | Bit7 | Fjp_arabic | 0: no use 1: use |
| | | | | Bit6 | Fjp_farsi | 0: no use 1: use |
| | | | | Bit5 | Fjp_indonesia | 0: no use 1: use |
| | | | | Bit4 | Fjp_vietnam | 0: no use 1: use |
| | | | | Bit3 | Fjp_spanish | 0: no use 1: use |
| | | | | Bit2 | Fjp_french | 0: no use 1: use |
| | | | | Bit1 | Fjp_turkish | 0: no use 1: use |
| | | | | Bit0 | Fjp_russian | 0: no use 1: use |
| 126 | VPL | F0 | | | Be used to adjust the x-ray protect voltage (the larger the value, he higher the protect voltage) | |
| 127 | VADJ | 00 | | | Be used to adjust the base input voltage of eye-care (the larger the value, the higher the base input voltage) | |
| 128 | SADJ | 07 | | | Be used to adjust the check speed of eye-care (the larger the value, the slower the check speed) | |
| 129 | LOGH | 00 | | | adjust the horizontal display position of logo | |
| 130 | LOGV | 0F | | | adjust the vertical display position of logo | |
| 131 | LOGO | 45 | | Bit6 | Fjp_logv_plus | 0: minus 1: plus |
| | | | | Bit5 | Fjp_logo_size | 0: middle 1: large |
| | | | | Bit4 | Fjp_logo_tvon | 0: no use 1: logo display while switching on TV set |
| | | | | Bit3 | Fjp_logo_nosignal | 0: no use 1: logo display while no signal |
| | | | | Bit0~2 | Set logo color | 000: black 001: blue 010: green 011: cyan 100: red 101: magenda 110: yellow 111: white |
| 132 | ERAS | A3 | | | Be used to adjust the time of thermal resistance control (the larger the value, the shorter the thermal resistance) | |

| | | | | | |
|-----|------|----|----|--------------|---|
| 133 | VOLM | 1E | A0 | | Be used to set the max volume of hotel mode |
| 134 | PVHH | 17 | A1 | Refer to "8" | Be used to set the start frequency of VHFH band of FS tuner(high byte)(the default data is for jinxin 38.9mhz fs tuner)(GDC and YUANLIU 1A) |
| 135 | PVHL | A5 | A2 | | Be used to set the start frequency of VHFH band of FS tuner(low byte)(GDC and YUANLIU 45) |
| 136 | PUHH | 3A | A3 | | Be used to set the start frequency of UHF band of FS tuner(high byte)(GDC and YUANLIU 3F) |
| 137 | PUHL | 45 | A4 | | Be used to set the start frequency of UHF band of FS tuner(low byte)(GDC and YUANLIU 45) |
| 138 | WTON | 7D | A5 | | Set delay time of power on (default data is 1s) (the larger the value, the longer the delay time) |
| 139 | WTOF | EF | A6 | | Set delay time of power off (default data is 1s)(the larger the value, the shorter the delay time) |

6. LOGO address and character (Use NO.5's S-PVOC key to enter)

1) LOGO address: Switch on LOGO address:445-454

Blue background with no signal LOGO address:455-464;

2) A~Z

| | | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Letter | A | B | C | D | E | F | G | H | I | J | K | L | M |
| Data | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 4A | 4B | 4C | 4D |

| | | | | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Letter | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| Data | 4E | 4F | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 5A |

3) a~z

| | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Letter | a | b | c | d | e | f | g | h | i | j | k | l | m |
| Data | 80-21 | 80-22 | 80-23 | 80-24 | 80-25 | 80-26 | 80-27 | 80-28 | 80-29 | 80-2A | 80-2B | 80-2C | 80-2D |

| | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Letter | n | o | p | q | r | s | t | u | v | w | x | y | z |
| Data | 80-2E | 80-2F | 80-30 | 80-31 | 80-32 | 80-33 | 80-34 | 80-35 | 80-36 | 80-37 | 80-38 | 80-39 | 80-3A |

4) 0~9

| | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|----|----|----|
| Number | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Data | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |

5) symbol

| | | | | | | | | | | |
|--------|----|----|----|----|----|----|----|-------|-------|----|
| symbol | : | , | . | _ | ? | & | / | (|) | - |
| data | 3A | 3B | 2E | 3D | 3E | 3F | 2F | 80-56 | 80-57 | 40 |

6) Space : 20 end : 00

demonstration for setting LOGO displayed "EASTKIT"

when switch on

LOGO address: 445~44B

LOGO data :45, 41, 53, 54, 4B, 49, 54

demonstration for setting LOGO displayed "eastkit"

no signal with blue background

LOGO address: 455~463

LOGO data :80,25,80,21,80,33,80,34,80,2B,80,29,80,34

7. Shopout's items

| | | | |
|------------------|--------------|---------------------|----------|
| Item | State | Item | state |
| Color system | AUTO | Screen mode | Standard |
| Channel position | 1 | Picture mode | Standard |
| Sound mode | SURROUND OFF | Video state | TV |
| FM channel | FM1 | AV Color system | AUTO |
| TINT | Centre | Bass/Treble/Woofers | 50 |

| | | | |
|----------------|--------|-----------------|--------|
| Balance | Centre | Volume | 15 |
| Timer | Clear | NR | ON |
| BLACK STRETEH | 2 | SVM | 2 |
| GEO | 00 | Calendar's date | 2006.9 |
| LOCK | OFF | Message | Clear |
| Telephone book | Clear | Blue background | ON |
| SKIP | OFF | -/-- | - |

8. FS tuner set and Calculate method

| IF | BIT | GDC | JINXIN |
|---------|------|-----|--------|
| 38.9MHz | PVHH | 1A | 17 |
| | PVHL | 45 | A5 |
| | PUHH | 3F | 3A |
| | PUHL | 45 | 45 |
| 38MHz | PVHH | 1A | 17 |
| | PVHL | 28 | 28 |
| | PUHH | 3F | 3A |
| | PUHL | 28 | 28 |

Calculate method:

Formula: 1) 38.0M:(Bands dividing point+38)*32 transfer to hex data;
 2) 38.9M: (Bands dividing point +38.9)*32 transfer to hex data;

Exemple: One of 38.9M GDC FS tuners: VHFL:48.25-168.25
 VHFH:175.25-463.25
 UHF :471.25-855.25

1:The L/H dividing point : $(168.25+175.25)/2=171.75$;
 the H/U dividing point : $(463.25+471.25)/2=467.75$;

2:Use the Formula 2) to the PVHH and PVHL's data.

$(171.75+38.9)*32 \approx 6740$ transfer to hex data:1A54

so get the data:PVHH:1A PVHL:54;

3:Same to get : PUHH:3F PUHL:54.



9. S-MODE

1) Cycle items of S-MODE

| | | | | | | |
|------|------|------|------|------|------|------|
| OSD | RCUT | GCUT | BCUT | GDRV | BDRV | BRTC |
| SCNT | HOPS | VP50 | HIT | HITZ | HITW | VLIN |
| VSC | HBOW | HPAR | OV50 | HPS | VP60 | HITS |
| VLIS | VSS | OV60 | SBY | SRY | AGC | V1 |
| V25 | V50 | V100 | LOGH | LOGV | | |

All BUS data is available directly in the S-mode except the 122CUSL/123CUSH

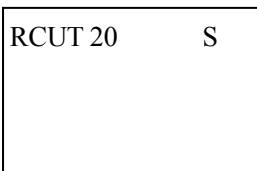
2) Enter into service mode by user's Remote

①press key of TV set to set volume into '00', hold this key ,and press key. "S" is displayed on the screen.(The TV set as been into Service-MODE)

b) Press key again. The 'S' disappear. Press "V-" key of TV set to set and hold this key ,then press key. "D" is displayed on the screen.(The TV set as been into Design-MODE)

②Press the key to enter the picture mune , then press number - - -

There will display 'S' on the screen of top right corner .(The TV set as been into S-MODE)



S-MODE is a item for service. Press **P+** or **P-** key to select the item you want to adjust ,and then press **V+** / **V-** key to adjust data.

3)In the S-mode,press the LOCK key to edit the LOGO

4) You need to exit S-MODE by pressing power key located in User's Remote after completing adjustment .

10. Design Data

| NO. | ITEM | DATA | REMARK | NO. | ITEM | DATA | REMARK |
|-----|------|------|--------------------------------------|-----|-------|------|---|
| 003 | RCUT | 20 | R CUT OFF | 072 | WOFC | 39 | WOFFER CENTER VALUE |
| 004 | GCUT | 20 | G CUT OFF | 073 | BASX | 72 | BASS MAX VALUE |
| 005 | BCUT | 20 | B CUT OFF | 074 | TREX | 72 | TREBLE CENTER VALUE |
| 006 | GDRV | 40 | G DRIVE | 075 | WOFX | 72 | WOFFER CENTER VALUE |
| 007 | BDRV | 40 | B DRIVE | 076 | EFF1 | 40 | SOUND EFFECT1 |
| 008 | CNTX | 7F | SUB CONTRAST MAX | 077 | EFF2 | 17 | SOUND EFFECT2 |
| 009 | BRTS | 00 | SUB BRIGHTNESS | 078 | MUTT | 00 | Y-Mute time of soft start |
| 010 | BRTC | 48 | SUB BRIGHT CENTER | 079 | FLG0 | 46 | FLAGS |
| 011 | COLC | 40 | SUB COLOR for NTSC | 080 | FLG1 | 20 | FLAGS(PF:20 / SS:22) |
| 012 | TNTC | 40 | SUB TINT CENTER | 081 | SVM | 14 | SVM |
| 013 | COLP | 00 | SUB COLOR for PAL | 082 | VBLK | 00 | V BLK Start/Stop |
| 014 | COLS | 40 | SECAM COLOR CENTER | 083 | VCEN | 32 | V CENTERING |
| 015 | COLD | 00 | DVD COLOR CENTER | 084 | UCOM | 10 | Miciom Control |
| 016 | SCNT | 0A | SUB CONTRAST | 085 | PYNX | 33 | NORMAL H.SYNC MAX |
| 017 | CNTC | 58 | SUB CONTRAST CENTER | 086 | PYNN | 11 | NORMAL H.SYNC MIN |
| 018 | CNTN | 00 | SUB CONTRAST MIN | 087 | PYXS | 22 | SEARCH H.SYNC MAX |
| 019 | CNTD | 7F | DVD CONTRAST MAX | 088 | PYNS | 1E | SEARCH H.SYNC MIN |
| 020 | BRTX | 35 | SUB BRIGHT MAX | 089 | RCUTS | 00 | FOR YCbCr R CUTOFF |
| 021 | BRTN | 25 | SUB BRIGHT MIN | 090 | GCUTS | 00 | FOR YCbCr G CUTOFF |
| 022 | COLX | 35 | SUB COLOR MAX | 091 | BCUTS | 00 | FOR YCbCr B CUTOFF |
| 023 | ST3 | 20 | TV—3.58 SHARP | 092 | GDRVS | 00 | FOR YCbCr G DRIVE |
| 024 | SV3 | 25 | AV—3.58 SHARP | 093 | BDRVS | 00 | FOR YCbCr B DRIVE |
| 025 | ST4 | 15 | TV—4.43 SHARP | 094 | AUSTP | 04 | AUDIO STEP |
| 026 | SV4 | 25 | AV—4.43 SHARP | 095 | OPT2 | FD | Option2 |
| 027 | SVD | 25 | DVD SHARP CENTER | 096 | MOD0 | C4 | MODE0 |
| 028 | ASSH | 07 | ASYMMETRY SHARP | 097 | MOD1 | 85 | MODE1(Sound System: DK/BG) |
| 029 | SHPX | 35 | SUB SHARP MAX | 098 | MOD2 | 60 | MODE2(VS TUNER) |
| 030 | SHPN | 10 | SUB SHARP MIN | 099 | OSDF | 53 | OSD WIDTH |
| 031 | UVBK | 88 | U/V BLK ADJ | 100 | STBG | 08 | S Trap f0 for BG |
| 032 | ABCL | E7 | ABL SYSTEM | 101 | STI | 08 | S Trap f0 for I |
| 033 | DCBS | 24 | A part of Video data in detail | 102 | STDK | 0A | S Trap f0 for DK |
| 034 | CLTB | A7 | Chroma data (TV mode&SOUND SYS=B/G) | 103 | STM | 08 | S Trap f0 for M |
| 035 | CLTD | A7 | Chroma data(TV mode&SOUND SYS=D/K) | 104 | SSBG | 07 | S Trap for BG |
| 036 | CLTM | A3 | Chroma data(TV mode&SOUND SYS=M) | 105 | SSI | 0C | S Trap for I |
| 037 | CLVO | A7 | Chroma data when VIDEO (not DVD)mode | 106 | SSDK | 0F | S Trap for DK |
| 038 | CLVD | 98 | The data when YUV mode&SOUND SYS=M | 107 | SSM | 09 | S Trap for M |
| 039 | HPOS | 0C | 50Hz HORIZONTAL PHASE | 108 | SYNC | 02 | SYNC |
| 040 | VP50 | 01 | 50Hz VERTICAL PHASE | 109 | SYBN | 44 | Sync detection setting for BB On |
| 041 | HIT | 1A | 50Hz VERTICAL AMPLITUDE | 110 | SYBF | 44 | Sync detection setting for BB Off |
| 042 | HITZ | 07 | Zoom VERTICAL AMPLITUDE | 111 | SYSR | 44 | Sync detection setting for search/tuning |
| 043 | HITW | 0E | Wide VERTICAL AMPLITUDE | 112 | BBCT | 04 | Blue back hysteresis counter (BUS H sync detection) |
| 044 | VLIN | 18 | 50Hz VERTICAL-LINEARILTY | 113 | VCD0 | 0E | VCD0 data |
| 045 | VSC | 10 | 50Hz VERTICAL-S CORRECTION | 114 | VCD1 | 60 | VCD1 data(IF:38MHz) |
| 046 | HBOW | 04 | H. BOW | 115 | CCOR | 03 | Set menu character's color |
| 047 | HPAR | 04 | H. PAR | 116 | TCOR | 03 | Set menu top character's color |
| 048 | OV50 | 0A | OSD Vertical position for 50Hz | 117 | SCOR | 06 | Set menu selected character's color |
| 049 | HPS | 04 | 60Hz HORIZONTAL PHASE | 118 | ACOR | 89 | Set menu's background color |
| 050 | VP60 | 00 | 60Hz VERTICAL PHASE | 119 | CALB | 89 | Menu color option |
| 051 | HITS | 01 | 60Hz VERTICAL AMPLITUDE | 120 | CALC | 03 | SET CALENDAR BACKGROUND COLOR |
| 052 | VLIS | FF | 60Hz VERTICAL-LINEARILTY | 121 | SOSP | 10 | Position OSD adjustment |

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TOSHIBA A8891CPBNG6NA3 INSTRUCTION

| | | | |
|-----|------|----|---|
| 053 | VSS | 01 | 60Hz VERTICAL-S CORRECTION |
| 054 | OV60 | 0A | OSD Vertical position for 60Hz |
| 055 | GEOC | 32 | Center position of GEO control |
| 056 | SECD | 18 | SECAM mode(SECAM use) |
| 057 | SBY | 08 | SECAM B-Y Black |
| 058 | SRY | 08 | SECAM R-Y Black |
| 059 | AGC | 22 | RF AGC |
| 060 | HAFC | 86 | AFC GAIN |
| 061 | NOIS | 0F | NOISE |
| 062 | NDTC | 1F | NOISE DET count (Weak -> Normal) |
| 063 | V1 | 09 | TV VOLUME 1% |
| 064 | V25 | 3D | TV VOLUME 25% |
| 065 | V50 | 57 | TV VOLUME 50% |
| 066 | V100 | 70 | TV VOLUME 100% |
| 067 | ATTV | 51 | To set the register of audio ATT while using ta1343n at TV or FM mode |
| 068 | ATAV | 64 | To set the register of audio ATT while using ta1343n at VIDEO or DVD mode |
| 069 | BASC | 38 | BASS CENTER VALUE |
| 070 | TREC | 40 | TREBLE CENTER VALUE |
| 071 | BALC | 3F | BALANCE CENTER VALUE |
| | | | |

| | | | |
|-----|------|----|--|
| 122 | CUSL | 08 | To set remote controller's custom code(low byte) |
| 123 | CUSH | F7 | To set remote controller's custom code(high byte) |
| 124 | FSAD | C0 | FS tuner address |
| 125 | LANG | 01 | Language select(ENGLISH/RUSSIAN) |
| 126 | VPL | F0 | Be used to adjust the xray protect voltage |
| 127 | VADJ | 00 | Be used to adjust the base input voltage of eyecare |
| 128 | SADJ | 07 | Be used to adjust the check speed of eyecare |
| 129 | LOGH | 00 | LOGO HORIZONTAL POSITION |
| 130 | LOGV | 0F | LOGO VERTICAL POSITION |
| 131 | LOGO | 45 | LOGO select |
| 132 | ERAS | A3 | Be used to adjust the time of thermal resistance control |
| 133 | VOLM | 1E | Be used to set the max volume of hotel mode |
| 134 | PVHH | 17 | Be used to set the start frequency of VHFH band of FS tuner(high byte) |
| 135 | PVHL | 48 | Be used to set the start frequency of VHFH band of FS tuner(low byte) |
| 136 | PUHH | 3A | Be used to set the start frequency of UHF band of FS tuner(high byte) |
| | | 48 | Be used to set the start frequency of UHF band of FS tuner(low byte) |
| 137 | PUHL | | |
| 138 | WTON | 7D | Turn on delay set |
| 139 | WOTF | EF | Turn off delay set |
| 001 | OSD | 10 | OSD POSITION ADJUSTMENT |
| 002 | OTP | D4 | OPTION |

