

| Item | UE5-A Chassis - Write commands (RS232)                     |                  | File name                            | __ WRITE COMMANDS_LCD UE5-A_RS232.xls  |
|------|--|------------------|--------------------------------------|--|
|      | Function: RS232 Write commands list for Menu UE5-A chassis |                  |                                      |  |
| #    | MENU   | SECTION          | WRITE COMMAND                        | DESCRIPTION  |
|      | OTHER FUNCTION   | POWER            | CF_POWER_%1[CR]                      | ON,OFF   |
|      |  |                  | C00[CR]                              | POWER ON   |
|      |  |                  | C01[CR]                              | POWER OFF  |
|      |  |                  | C03[CR]                              | Power ON/OFF (toggle)  |
|      |  | INPUT            | CF_INPUT_%1[CR]                      | DTV,ATV,AV1,AV2,HDMI1,HDMI2,HDM3,PC,UP,DN<br>UP:ATV→AV1→AV2→HDMI1→HDMI2→HDMI3→PC→DTV→ATV<br>DN:PC→HDMI3→HDMI2→HDMI1→AV2→AV1→ATV→DTV→PC             |
|      |  |                  | C22[CR]                              | Input (DTV→ATV→AV1→AV2→HDMI1→HDMI2→HDMI3→PC→DTV)   |
|      |  | INFO ATV         | CF_ATV_INFO_%1[CR]→CF_ATVINFO_%1[CR] | ON,OFF   |
|      |  | INFO DTV         | CF_DTV_INFO_%1[CR]→CF_DTVINFO_%1[CR] | ON,OFF   |
|      |  | PROGRAM ATV      | CF_ATV_CHAN_%1[CR]→CF_ATVCHAN_%1[CR] | 001-100, UP,DN   |
|      |  | PROGRAM DTV      | CF_DTV_CHAN_%1[CR]→CF_DTVCHAN_%1[CR] | 000-999, UP,DN   |
|      |  | SPORTS MODE      | CF_SPORTS_%1[CR]                     | OFF,FOOTBALL,WINTER,MARINE,INDOOR,UP,DN<br>UP:FOOTBALL→WINTER→MARINE→INDOOR→OFF→FOOTBALL<br>DN:OFF→INDOOR→MARINE→WINTER→FOOTBALL→OFF               |
|      |  | STILL            | CF_STILL_%1[CR]                      | ON,OFF,UP,DN   |
|      |  | COLOUR SYSTEM    | CF_CSYS_%1[CR]                       | AUTO,PAL,SECAM   |
|      |  | SOUND SYSTEM     | CF_SSYS_%1[CR]                       | BG,DK,I  |
|      |  | SKIP             | CF_SKIP_%1[CR]                       | %1: ON,OFF   |
|      |  | PROGRAM SWAP     | C28[CR]                              | --   |
|      | PICTURE  | PICTURE MODE     | CF_PICTURE_%1[CR]                    | PERSONAL,STANDARD,VIVID,DYNAMIC,SOFT,UP,DN<br>UP:PERSONAL→STANDARD→VIVID→DYNAMIC→SOFT→PERSONAL<br>DN:PERSONAL→SOFT→DYNAMIC→VIVID→STANDARD→PERSONAL |
|      |  |                  | C30[CR]                              | Toggle: PERSONAL,STANDARD,VIVID,DYNAMIC,SOFT   |
|      |  | CONTRAST         | CF_CONT_%1[CR]                       | 000-100,UP,DN  |
|      |  | BRIGHTNESS       | CF_BRIGHT_%1[CR]                     | 000-100,UP,DN  |
|      |  | COLOUR           | CF_COLOUR_%1[CR]                     | 000-100,UP,DN  |
|      |  | SHARPNESS        | CF_SHARP_%1[CR]                      | 000-100,UP,DN  |
|      |  | TINT             | CF_TINT_%1[CR]                       | 000-100,UP,DN  |
|      |  | COLOUR TEMP      | CF_CLRTEMP_%1[CR]                    | NORMAL,WARM,COLD, PERSONAL   |
|      |  | RED              | CF_RED_%1[CR]                        | 000-100, UP,DN   |
|      |  | GREEN            | CF_GREEN_%1[CR]                      | 000-100, UP,DN   |
|      |  | BLUE             | CF_BLUE_%1[CR]                       | 000-100, UP,DN   |
|      |  | WIDE             | CF_WIDE_%1[CR]                       | 16:9, 4:3, AUTO(onlyDTV),ZOOM1, ZOOM2, UP,DN<br>UP:4:3→AUTO(onlyDTV)→ZOOM1→ZOOM2→16:9→4:3<br>DN:ZOOM2→ZOOM1→AUTO(onlyDTV)→4:3→16:9→ZOOM2           |
|      |  | NOISE REDUCTION  | CF_NR_%1[CR]                         | OFF,LOW,NORMAL,HIGH,AUTO   |
|      |  | DYNAMIC AI       | CF_DYNAL_%1[CR]                      | ON,OFF   |
|      |  | DYNAMIC CONTRAST | CF_DYNCONT_%1[CR]                    | ON,OFF   |
|      |  | PC SETUP         | C40[CR]                              | --   |
|      |  |                  | CF_HPOS_%1[CR]                       | 000-100,UP,DN  |
|      |  |                  | CF_VPOS_%1[CR]                       | 000-100,UP,DN  |
|      | CF_SIZE_%1[CR]   |                  | (-30)-30,UP,DN                       |  |
|      |  | CF_PHASE_%1[CR]  | 000-100,UP,DN                        |  |
|      | SOUND  | SOUND MODE       | CF_SOUND_1%[CR]                      | STANDARD, MUSIC, THEATER, NEWS, PERSONAL<br>UP:STANDARD→MUSIC→THEATER→NEWS→PERSONAL→STANDARD<br>DN:STANDARD→PERSONAL→NEWS→THEATER→MUSIC→STANDARD   |
|      |  | TREBLE           | CF_TREBLE_1%[CR]                     | 000-100,UP,DN  |
|      |  | BASS             | CF_BASS_1%[CR]                       | 000-100,UP,DN  |
|      |  | BALANCE          | CF_BALANCE_1%[CR]                    | 000-100,UP,DN  |
|      |  | AUTO VOLUME      | CF_AUTOVOL_1%[CR]                    | ON,OFF   |
|      |  | SURROUND         | CF_SURR_1%[CR]                       | ON,OFF   |
|      |  | BASS EXPANDER    | CF_BASSEXP_1%[CR]                    | ON,OFF   |
|      |  | VOLUME ADJUST    | CF_VOLUME_%1[CR]                     | 000-100,UP,DN  |
|      | MUTE   | CF_MUTE_%1[CR]   | ON,OFF                               |  |

| #        | MENU                | SECTION            | WRITE COMMAND  | DESCRIPTION   |          |               |
|----------|---------------------|--------------------|--|---|----------|---------------|
|          | SETUP               | MENU               | CF_MENU_%1[CR]   | ON,OFF  |          |               |
|          |                     | ECO                | CF_ECO_%1[CR]  | ON,OFF,SENSOR   |          |               |
|          |                     | ILLUMINATION       | CF_ILLMNT_%1[CR]                                       | LIGHT,DARK  |          |               |
|          |                     | SPDIF              | CF_SPDIF_%1[CR]  | AUTO,PCM  |          |               |
|          |                     | AUDIO PREFERENCE   | CF_AUDIOPREF_%1[CR]                                    | MPEG,DOLBY  |          |               |
|          |                     | OPERATING MODE     | CF_OPMODE_%1[CR]                                       | STANDARD,STORE  |          |               |
|          |                     | OSD DURATION       | CF_OSDDURATION_%1[CR]                                  | 005SEC-010SEC-015SEC-020SEC-025SEC-030SEC-060SEC,UP,DN  |          |               |
|          |                     | AUTO UPDATE        | CF_UPDATE_%1[CR]                                       | %1 : ON,OFF   |          |               |
|          |                     | AUTO UPDATE TIME   | CF_UPDATE_TIME_%1_%2[CR]<br>-->CF_UPDATETIME_%1_%2[CR] | %1 : 00-23 %2 : 00-59   |          |               |
|          | LOCK                | ENTER PASSWORD     | CF_EP_%1[CR]   | 4 DIGITS NUMERIC  |          |               |
|          |                     | LOCK SYSTEM        | CF_LOCKSYS_%1[CR]                                      | ON,OFF  |          |               |
|          |                     | CHANGE PASSWORD    | CF_CHGPW_%1_%2[CR]                                     | %1 : NEW PASSWORD (4 DIGIT NUMERIC), %2 : CONFIRM NEW PASSWORD (4 DIGIT NUMERIC)  |          |               |
|          |                     | PARENTAL GUIDANCE  | CF_PARGUID_%1  | ALL, G, PG, M, MA, AV, R, NO  |          |               |
|          | TIMER               | CURRENT TIME       | CF_CLOCK_%1_%2_%3_%4_%5[CR]                            | %1:Date (01-31); %2:Month (01-12); %3:Year (2000-2100); %4:Hour (00-23); %5:Minute (00-59)  |          |               |
|          |                     | OFF TIMER          | CF_OFFTIMER_%1_%2_%3[CR]                               | %1:Repeat (OFF, ONCE, EVERYDAY, <del>MON-FRI, MON-SAT, SAT-SUN</del> ->MON2FRI, MON2SAT, SAT2SUN, SUN); %2:Hour (00-23); %3:Minute (00-59)  |          |               |
|          |                     | ON TIMER           | CF_ONTIMER_%1_%2_%3_%4_%5_%6[CR]                       | %1:Activate (OFF, ONCE, EVERYDAY, <del>MON-FRI, MON-SAT, SAT-SUN</del> ->MON2FRI, MON2SAT, SAT2SUN, SUN); %2:Hour (00-23); %3:Minute (00-59); %4:Volume (000-100); %5:Mode (DTV, ATV, AV1,AV2,HDMI1, <del>HDMI2, HDMI3</del> , PC); %6:Program (DTV, ATV) |          |               |
|          |                     | SLEEP TIMER        | CF_SLEEPTIMER_%1[CR]                                   | OFF, 10MIN, 20MIN, 30MIN, 60MIN, 90MIN, 120MIN, 180MIN, 240MIN.   |          |               |
|          |                     | TIME ZONE          | CF_TIMEZONE_%1[CR]                                     | SA, NT, NSW, VIC, QL, TASM, WA  |          |               |
|          |                     | DAYLIGHT SAVING    | CR_DAYLIGHT_%1[CR]                                     | ON, OFF   |          |               |
|          | DEALER MODE         | VOLUME LOCK        | CF_VOLUMELOCK_%1[CR]                                   | ON,OFF  |          |               |
|          |                     | TUNING LOCK        | CF_TUNINGLOCK_%1[CR]                                   | ON,OFF  |          |               |
|          |                     | START MODE         | CF_STARTMODE_%1[CR]                                    | OFF,DTV,ATV,AV1,AV2,HDMI1,HDMI2,HDMI3,PC<br>UP:OFF->DTV->ATV->AV1->AV2->HDMI1->HDMI2->HDMI3->PC<br>DN:OFF->PC->HDMI3->HDMI2->HDMI1->AV2->AV1->ATV->DTV  |          |               |
|          |                     | OSD                | CF_OSD_%1[CR]  | ON,OFF  |          |               |
|          |                     | RC                 | CF_RC_%1[CR]   | <del>SEPERATE</del> -->SEPARATE, PROHIBIT, NORMAL   |          |               |
|          |                     | AC POWER MODE      | CF_ACPOWERMODE_%1[CR]                                  | ON,STANDBY,LAST   |          |               |
|          |                     | MUSIC MODE SETUP   | CF_MUSICPOS1_%1[CR]                                    | POS1 : 001-100, UP, DN  |          |               |
|          |                     |                    | CF_MUSICPOS2_%1[CR]                                    | POS2 : 001-100, UP, DN  |          |               |
|          |                     |                    | CF_MUSICPOS3_%1[CR]                                    | POS3 : 001-100, UP, DN  |          |               |
|          |                     |                    | CF_MUSICPOS4_%1[CR]                                    | POS4 : 001-100, UP, DN  |          |               |
|          | CF_MUSICPOS5_%1[CR] |                    | POS5 : 001-100, UP, DN                                 |   |          |               |
|          | NO SIGNAL OFF       | CF_NOSIGNAL_%1[CR] | ENABLE, DISABLE  |   |          |               |
|          | BAUD RATE           | CF_BAUDRATE_%1[CR] | TV baud rate change : 9600-19200                       |   |          |               |
|          | RESET               | C93[CR]            | RESET  |   |          |               |
|          | No                  | Date               | Contents   | Remarks   |          |               |
| Revision |                     |                    |  |   |          |               |
|          |                     |                    |  |   |          |               |
|          |                     |                    |  |   |          |               |
|          |                     |                    |  |   |          |               |
|          |                     |                    | Issued Date  | 25-Mar-2009   | Planning | Hilda Purnama |

Delete the SPACE between HDMI and number

| Item | UE5-A Chassis - Write commands (RS232)                    |                  | File name                          | __ READ COMMANDS_LCD UE5-A_RS232.xls     |
|------|---|------------------|------------------------------------|--|
|      | Function: RS232 Read commands list for Menu UE5-A chassis |                  |                                    |  |
| #    | MENU  | SECTION          | READ COMMAND                       | DESCRIPTION                              |
|      | OTHER FUNCTION  | POWER            | CR_STATUS[CR]                      | ON,OFF(Standby)                          |
|      |   |                  | CR0[CR]                            | Power: ON , STANDBY                      |
|      |   | INPUT            | CR_INPUT[CR]                       | DTV,ATV,AV1,AV2,HDMI 1,HDMI 2,HDMI 3, PC |
|      |   |                  | CR1[CR]                            | DTV,ATV,AV1,AV2,HDMI 1,HDMI 2,HDMI 3, PC |
|      |   | SIGNAL           | CR_SIGNAL[CR]                      | ON, OFF                                  |
|      |   | PROGRAM ATV      | CR_ATV_CHAN[CR] --> CR_ATVCHAN[CR] | 001-100                                  |
|      |   | PROGRAM DTV      | CR_DTV_CHAN[CR] -->CR_DTVCHAN[CR]  | 000-999                                  |
|      |   | SPORTS MODE      | CR_SPORTS[CR]                      | OFF,FOOTBALL,WINTER,MARINE,INDOOR        |
|      | STILL   | CR_STILL[CR]     | ON,OFF                             |  |
|      | TV SETTING  | COLOUR SYSTEM    | CR_CSYS[CR]                        | AUTO,PAL,SECAM                           |
|      |   | SOUND SYSTEM     | CR_SSYS[CR]                        | BG,DK,I                                  |
|      |   | SKIP             | CR_SKIP[CR]                        | ON,OFF                                   |
|      | PICTURE   | PICTURE MODE     | CR_PICTURE[CR]                     | PERSONAL,STANDARD,VIVID,DYNAMIC,SOFT     |
|      |   | CONTRAST         | CR_CONT[CR]                        | 000-100                                  |
|      |   | BRIGHTNESS       | CR_BRIGHT[CR]                      | 000-100                                  |
|      |   | COLOUR           | CR_COLOUR[CR]                      | 000-100                                  |
|      |   | SHARPNESS        | CR_SHARP[CR]                       | 000-100                                  |
|      |   | TINT             | CR_TINT[CR]                        | 000-100,UP,DN                            |
|      |   | COLOUR TEMP      | CR_CLRTEMP[CR]                     | NORMAL,WARM,COLD,PERSONAL                |
|      |   | RED              | CR_RED[CR]                         | 000-100                                  |
|      |   | GREEN            | CR_GREEN[CR]                       | 000-100                                  |
|      |   | BLUE             | CR_BLUE[CR]                        | 000-100                                  |
|      |   | WIDE             | CR_WIDE[CR]                        | AUTO, 4:3, 16:9, ZOOM1, ZOOM2,           |
|      |   | NOISE REDUCTION  | CR_NR[CR]                          | OFF,LOW,NORMAL,AUTO,HIGH                 |
|      |   | DYNAMIC AI       | CR_DYNAI[CR]                       | ON,OFF                                   |
|      |   | DYNAMIC CONTRAST | CR_DYNCONT[CR]                     | ON,OFF                                   |
|      |   | PC Setup         | CR_HPOS[CR]                        | 000-100                                  |
|      |   |                  | CR_VPOS[CR]                        | 000-100                                  |
|      | CR_SIZE[CR]   |                  | (-30)-30                           |  |
|      | CR_PHASE[CR]  |                  | 000-100                            |  |
|      | SOUND   | SOUND MODE       | CR_SOUND[CR]                       | STANDARD, MUSIC, THEATER, NEWS, PERSONAL |
|      |   | TREBLE           | CR_TREBLE[CR]                      | 000-100                                  |
|      |   | BASS             | CR_BASS[CR]                        | 000-100                                  |
|      |   | BALANCE          | CR_BALANCE[CR]                     | 000-100                                  |
|      |   | AUTO VOLUME      | CR_AUTOVOL[CR]                     | ON,OFF                                   |
|      |   | SURROUND         | CR_SURR[CR]                        | ON,OFF                                   |
|      |   | BASS EXPANDER    | CR_BASSEXP[CR]                     | ON,OFF                                   |
|      |   | VOLUME ADJUST    | CR_VOLUME[CR]                      | 000-100                                  |
|      |   | MUTE             | CR_MUTE[CR]                        | ON,OFF                                   |
|      |   | AUDIO STATUS     | CR_SOUNDMD[CR]                     | MONO, STEREO (ATV Only)                  |

| # | MENU             | SECTION           | READ COMMAND                           | DESCRIPTION   |
|---|------------------|-------------------|--|---|
|   | SETUP            | MENU              | CR_MENU[CR]                            | ON,OFF  |
|   |                  | ECO               | CR_ECO[CR]                             | ON,OFF,SENSOR   |
|   |                  | ILLUMINATION      | CR_ILLMNT[CR]                          | LIGHT,DARK  |
|   |                  | SPDIF             | CR_SPDIF[CR]                           | AUTO, PCM   |
|   |                  | AUDIO PREFERENCE  | CR_AUDIOPREF[CR]                       | MPEG, DOLBY   |
|   |                  | OPERATING MODE    | CF_OPMODE[CR]                          | STANDARD, STORE   |
|   |                  | OSD DURATION      | CR_OSDDURATION[CR]                     | 005, 010, 015, 020, 025, 030, 060   |
|   |                  | AUTO UPDATE       | CR_UPDATE[CR]                          | ON,OFF  |
|   |                  | AUTO UPDATE TIME  | CR_UPDATE_TIME[CR]-->CR_UPDATETIME[CR] | 00:00-23:59   |
|   | LOCK             | PASSWORD          | CR_EP[CR]                              | 4 DIGITS NUMERIC  |
|   |                  | LOCK SYSTEM       | CR_LOCKSYS[CR]                         | ON,OFF  |
|   |                  | PARENTAL GUIDANCE | CR_PARGUID[CR]                         | ALL , G , PG , M, MA , AV , R , NO  |
|   | TIMER            | CURRENT TIME      | CR_CLOCK[CR]                           | Date (01-31); Month (01-12); Year (2000-2100); Hour (00-23); Minute (00-59)   |
|   |                  | OFF TIMER         | CR_OFFTIMER[CR]                        | Repeat (OFF, ONCE, EVERYDAY, MON-FRI, MON-SAT, SAT-SUN, SUN); Hour (00-23); Minute (00-59)  |
|   |                  | ON TIMER          | CR_ONTIMER[CR]                         | Activate (OFF, ONCE, EVERYDAY, MON-FRI, MON-SAT, SAT-SUN, SUN); Hour (00-23); Minute (00-59); Volume (000-100); Mode (DTV, ATV, AV1,AV2,HDMI 1, HDMI 2, HDMI 3, PC); Program (DTV, ATV) |
|   |                  | SLEEP TIMER       | CR_SLEEPTIMER[CR]                      | OFF, 10MIN, 20MIN, 30MIN, 60MIN, 90MIN, 120MIN, 180MIN, 240MIN.   |
|   |                  | DAYLIGHT SAVING   | CR_DAYLIGHT[CR]                        | ON, OFF   |
|   |                  | TIME ZONE         | CR_TIMEZONE[CR]                        | SA+9.5 , NT+9.5 , NSW+10 , VIC+10 , QL+10 , TASM+10 , WA+8  |
|   | DEALER MODE      | VOLUME LOCK       | CR_VOLUMELOCK[CR]                      | ON,OFF  |
|   |                  | TUNING LOCK       | CR_TUNINGLOCK[CR]                      | ON,OFF  |
|   |                  | START MODE        | CR_STARTMODE[CR]                       | OFF,ATV,AV1,AV2,HDMI1,HDMI2,HDMI3,PC  |
|   |                  | OSD               | CR_OSD[CR]                             | ON,OFF  |
|   |                  | RC                | CR_RC[CR]                              | NORMAL,PROHIBIT,SEPARATE  |
|   |                  | AC POWER MODE     | CR_ACPOWERMODE[CR]                     | ON,STANDBY,LAST   |
|   |                  | MUSIC MODE SETUP  | CR_MUSICPOS1[CR]                       | 001-100   |
|   |                  |                   | CR_MUSICPOS2[CR]                       | 001-100   |
|   |                  |                   | CR_MUSICPOS3[CR]                       | 001-100   |
|   |                  |                   | CR_MUSICPOS4[CR]                       | 001-100   |
|   | CR_MUSICPOS5[CR] |                   | 001-100                                |   |
|   | NO SIGNAL OFF    | CR_NOSIGNAL[CR]   | ENABLE, DISABLE                        |   |
|   | BAUD RATE        | CR_BAUDRATE[CR]   | TV baud rate change : 9600-19200       |   |

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|          |  | No | Date | Contents | Remarks |             |             |          |
|----------|--|----|------|----------|---------|-------------|-------------|----------|
| Revision |  |    |      |          |         |             |             |          |
|          |  |    |      |          |         |             |             |          |
|          |  |    |      |          |         |             |             |          |
|          |  |    |      |          |         | Issued Date | 24-Mar-2009 | Planning |