UHD X TS

USER MANUAL

TROUBLE SHOOTER series :
Conversion, Measurement & Pattern Generator

Bridge UHD X_TS UHD Format Conversion with Measurement

DIGITAL FORECAST
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HDLive™ Kalypso Bridge" Bridge"X TS

SUMMARY

Bridge UHD X TS is UHD Multi-Platform Signal Converter with Measurement and Test Pattern Generator.
Bridge UHD X_TS can be effectively used in the installation and maintenance service of video and audio signal. Very handy but powerful functions of Bridge UHD X_TS series enables to conveniently check a variety of signal status through 7" LCD touch screen from video display up to SDI EYE monitor and Cable conditions.

FEATURE

- UHD Up / Down / Cross / Scan Converter
- UHD/FHD Standard Video / Audio signal supported (SDI, HDMI, OPTIC)
- EYE monitoring Measurement for SDI signal (720p, 1080i, 1080p, 2160p)
- Test Pattern Generator : 9 types provided & 4K video play
- Playing user video Files using SDCARD
- Input/output testing possible through LOOP test mode
- SDI signal integrity check (Loss, CRC)
- HDMI signal integrity check (Loss, Resolution, HDCP)
- Audio Level Monitoring (up to 8 channels)
- 7" Touch Screen LCD (1024x600)
- V-mount Mounting Plate



APPLICATION



OPERATING ENVIRONMENT

Supply Power	+ 12 VDC
Power Consumption	40 Watts (Maximum: 45Watts)
Operation temperature	0℃ ~ 70℃
humidity	0% ~ 95% RH, Non-condensing

COMPONENTS : UHD X_TS







- 1pc x Hard case
- 1pc x Bridge UHD X_TS : Product
- 1pc x Universal Power Supply
- 1pc x AC cable

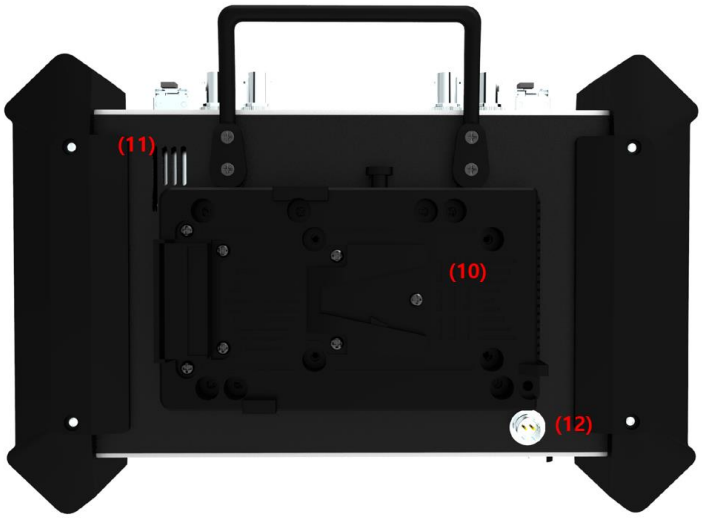
INTERFACE / CONNECTION







(1) Input Port Group
(2) Output Port Group
(3) Menu Jog
(4) POWER S/W
(5) POWER Connector A
(6) Service Port
(7) Config DIP S/W
(8) SDCARD
(9) Service USB



(10) V-Mount Holder
(11) Speaker
(12) POWER Connector B

LCD SPECIFICATION

- Size: 7.0 Inch
- Resolution : 1024 x 600
- Display Area : 150mm(W) x 90(H)

VIDEO STANDARDS

- HDMI v2.0 format Support
- Multi-rate SDI format Support (Up to 12G)
- Video format : 720P(24/25/30/50/59.94/60)

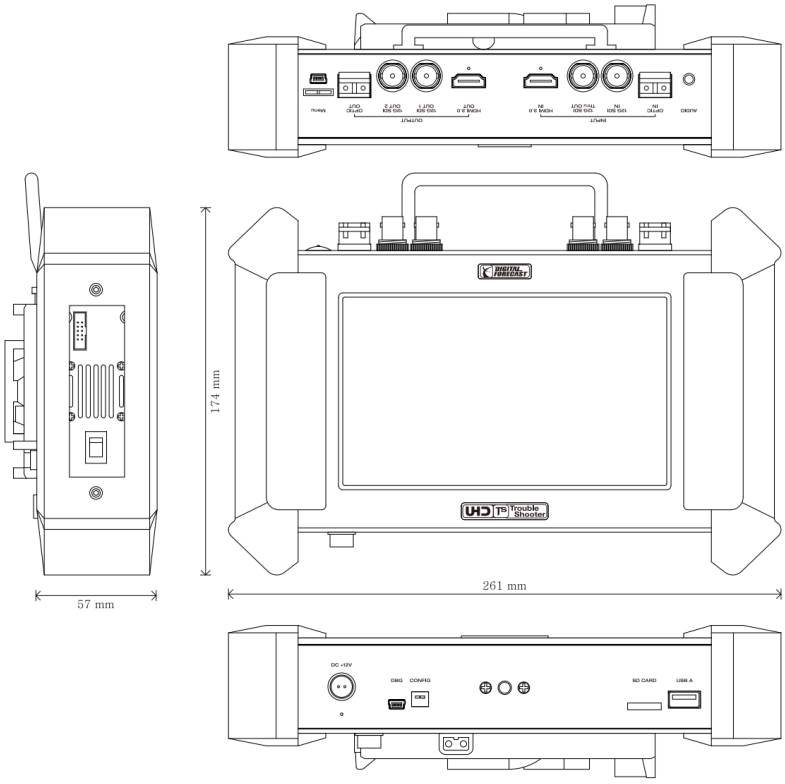
  1080i(50/59.94/60)

  1080p(23.98/24/25/29.97/30/psf24/50/59.94/60)

  2160p(23.98/24/25/29.97/30/50/59.94/60)

  4096x2160p(23.98/24/25/29.97/30/50/59.94/60)

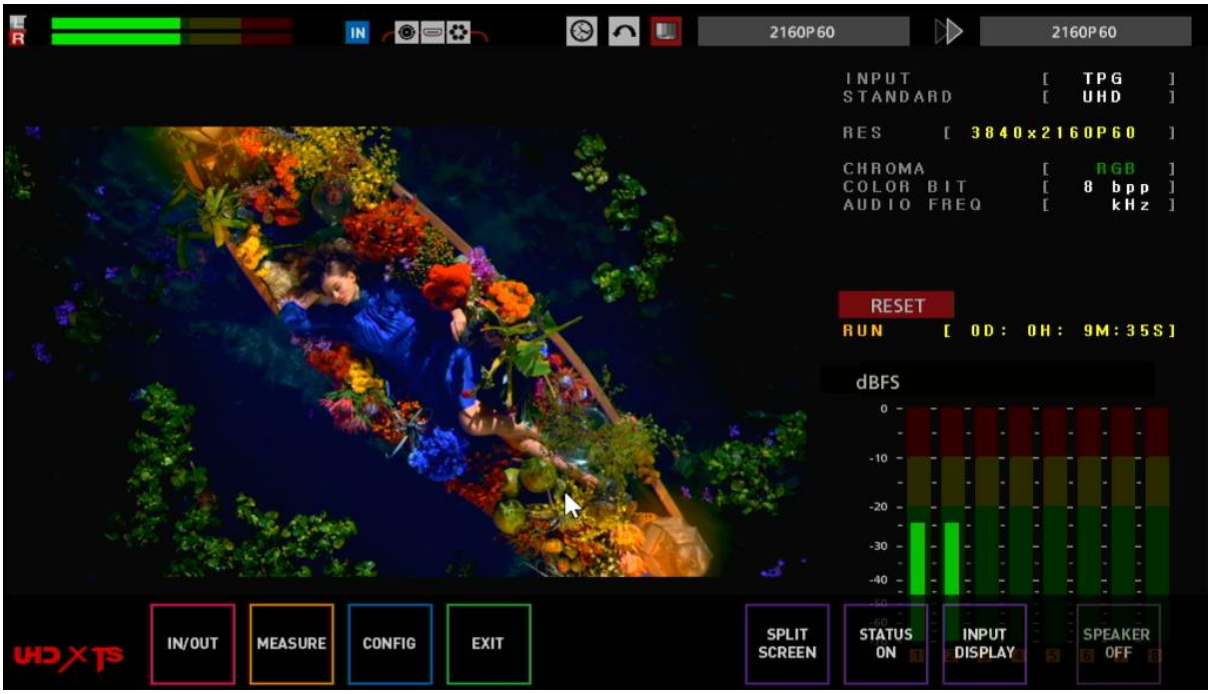
DIMENSION / WEIGHT



W261xL174xH57m³

/ 1,635g

MAIN MENU

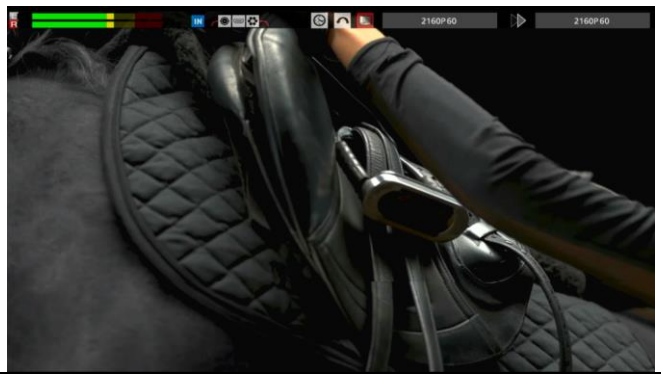
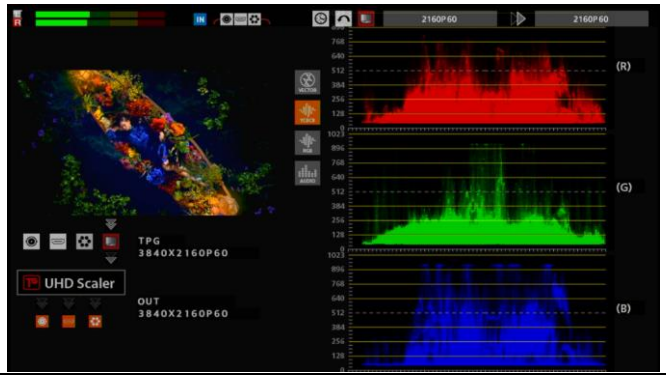




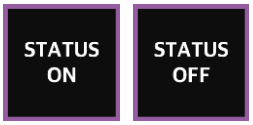
① IN/OUT	Selects the Input signal type, Output Resolution/Frame Rate, and Test Pattern Generator & SDCARD.
② MEASURE	Selects the monitoring of Waveform, Audio Level, Vector Scope, Eye monitor with Error Count.
③ CONFIG	Adjusts the LCD Brightness, LCD Contrast, Audio Volume, LCD Auto Sleep.
④ EXIT	Saves the setting, and goes out of Main Menu
⑤ FULL/SPLIT /QUAD	Selects whether to display as Full Screen Mode(Video) or Split Screen Mode (Video/Measurements), Quad View Mode
⑥ STATUS	Selects whether to display Status Icons on the top row.
⑦ IN/OUT Disp	Does the LCD screen show input signals or output signals.
⑧ SPEAKER	Speaker output ON/OFF.

FULL/SPLIT/QUAD SCREEN



FULL SCREEN MODE	Displays the video on the whole screen. 
SPLIT SCREEN MODE	Displays the video on the left area while the measuring elements are shown on the right area. 
Quad SCREEN MODE	Displays the video on the left small area while the Big measuring elements are shown on the right area. 

STATUS ON/OFF

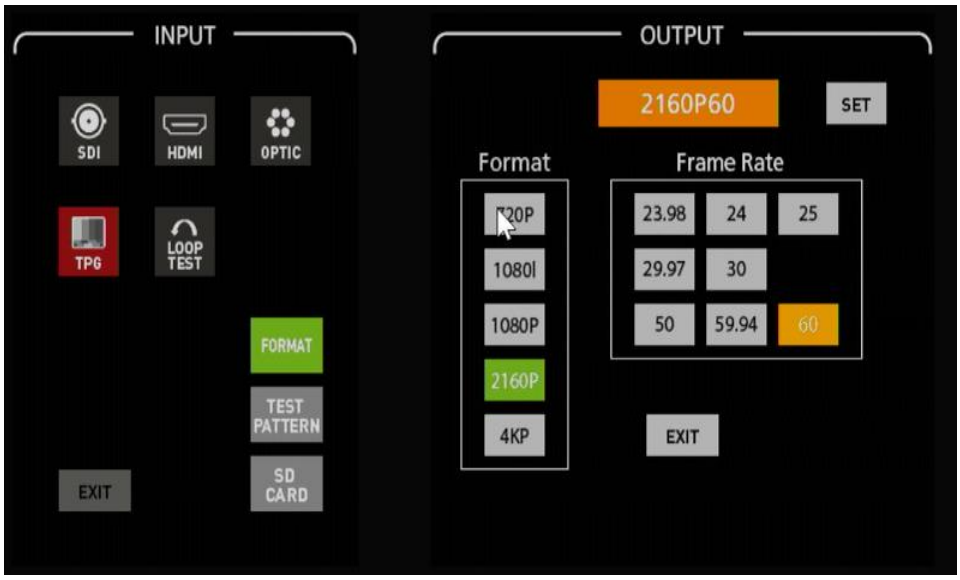




STATUS ICONS	
Audio Level Bar	Shows the Audio Signal Level Bar of Group 1 : Channel 1, 2 - L/R signal.
Input Status	Indicates Input SDI/HDMI/OPTIC H/W status.
Auto Sleep Mode	Indicates the activation/deactivation of Auto Sleep Mode.
LOOP Test Mode	Indicates Loop test mode in which input and output are operated separately.
Input Source Type	Indicates the type of Input Signal : SDI, HDMI, OPTIC, Pattern
Input Resolution /Frame Rate	Indicates the Resolution/Frame Rate of Input Signal
Output Resolution /Frame Rate	Indicates the Resolution/Frame Rate of Output Signal

SUB MENU

IN/OUT 



INPUT : Selects an input among SDI, HDMI, OPTIC, TPG(Test Pattern),

FORMAT : Output Format Setting Menu

TEST PATTEERN : Test Pattern Setting Menu

SDCARD : SDCARD playlist settings menu

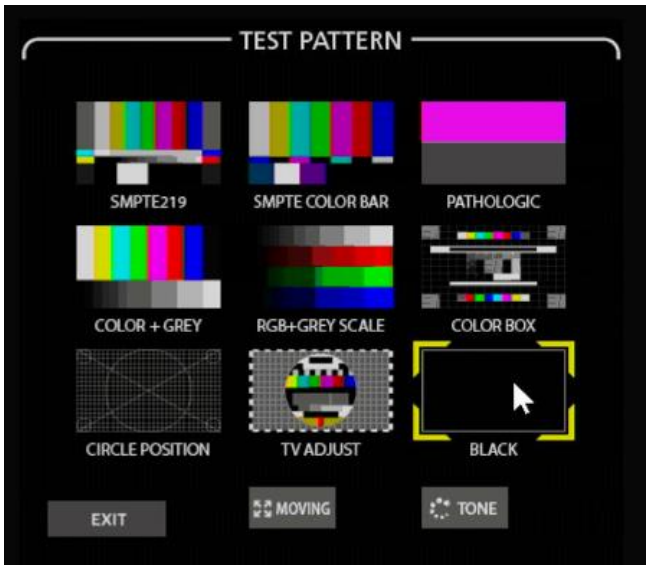
OUTPUT : Sets an output resolution
the setting is done, "SET" button should be selected to apply.

1. Format : Output format settings (720p/1080i/1080p/2160p/4kp)
2. Frame Rate : Output Frame Rate Setting (8 Type)

⇨ When you select Format and Frame Rate, the output resolution is displayed in orange.

⇨ Press the Set button to change the output resolution.

Test Pattern



TEST PATTERN : Choose from a total of 9 different types of test patterns

MOVING : Display moving boxes together

TOMN : Audio Tone signal output

SET OUTPUT

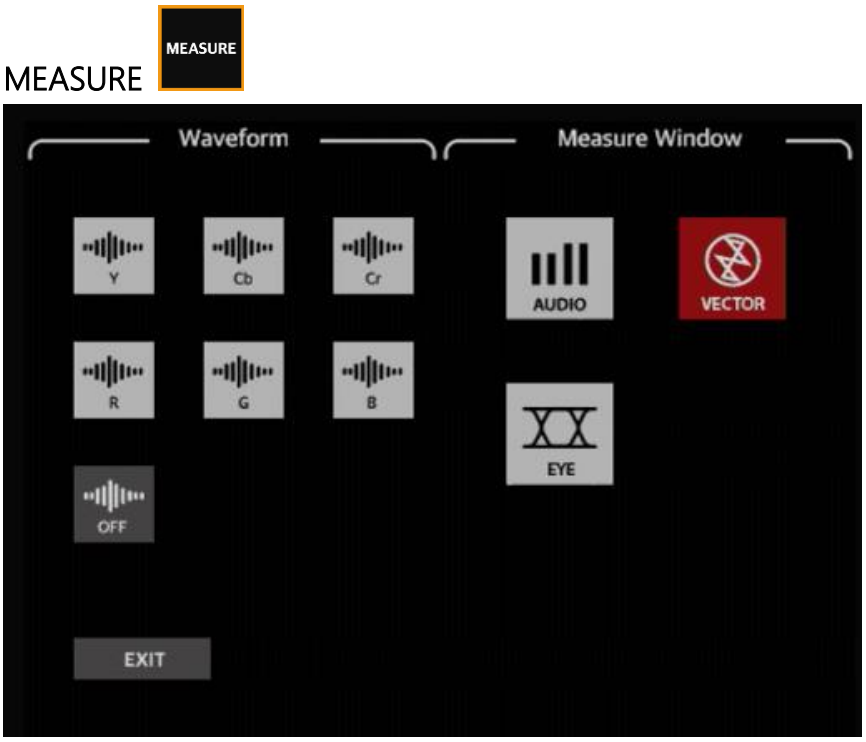


SDCARD PLAYLIST : Select from video playlist in SDCARD

ALL : Automatically plays the entire playlist

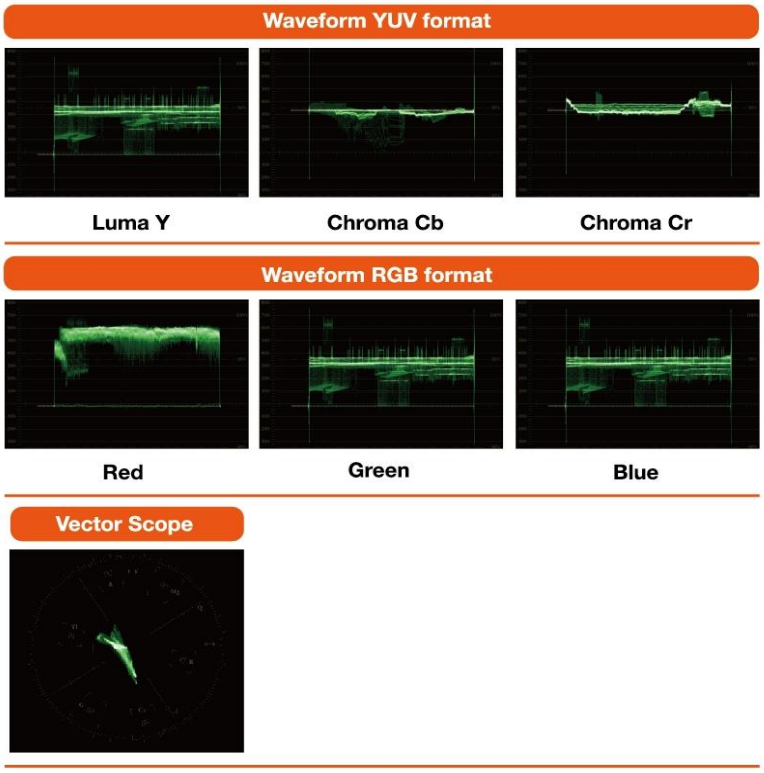
RELOAD : Update changes to SDCARD

MEASURE



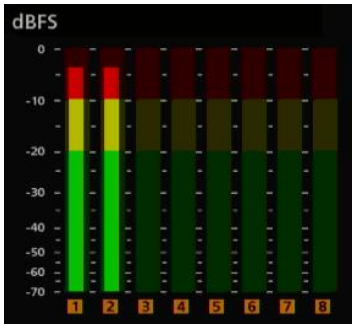
Waveform

Measure Window



1) Audio Level Display

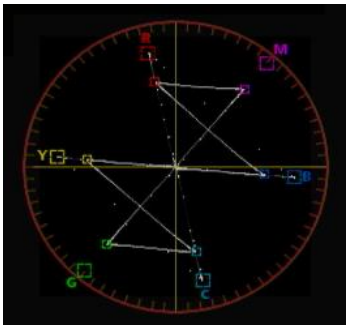
- Up to 8 channel monitoring of Input source.



Indicated as dBFS reference

2) Vector Scope

Displays the Vector Scope



3) Cable Length

- Indicates an input SDI cable length



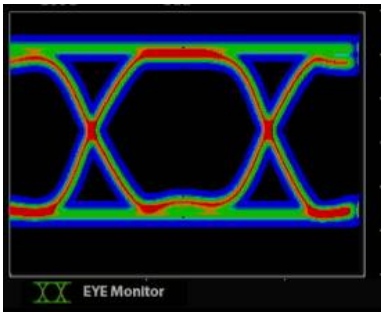
0~39m	40~79m	80m~
Short	Normal	Long



Color Gauge Bar indicates the increase of a possibility of error occurrence pursuant to a long distance (used for a parameter, Does NOT indicates the cable condition itself)

% (Caution) Cable length may vary depending on SDI rate and cable condition.
(The current standard is CANARAE 5.5CUHD cable)

4) EYE monitor



- This is EYE monitoring of the physical layer of the SDI signal.
- You can check the stability of the signal by looking at EYE Opening.

INFORMATION PANEL (SDI input)



(1) Input Information : Indicates Input source signal type

(2) STAMDARD : Standards according to signal type

(3) Resolution : Indicates Input signal resolution & frame rate

(4) SDI Payload : In case of SDI input signal, 352M data is displayed, which is the PAYLOAD value.

(5) Loss Count : Indicates the count of the relevant error occurrence

(6) Loss/CRC error Reset : LOSS/CRC error count reset

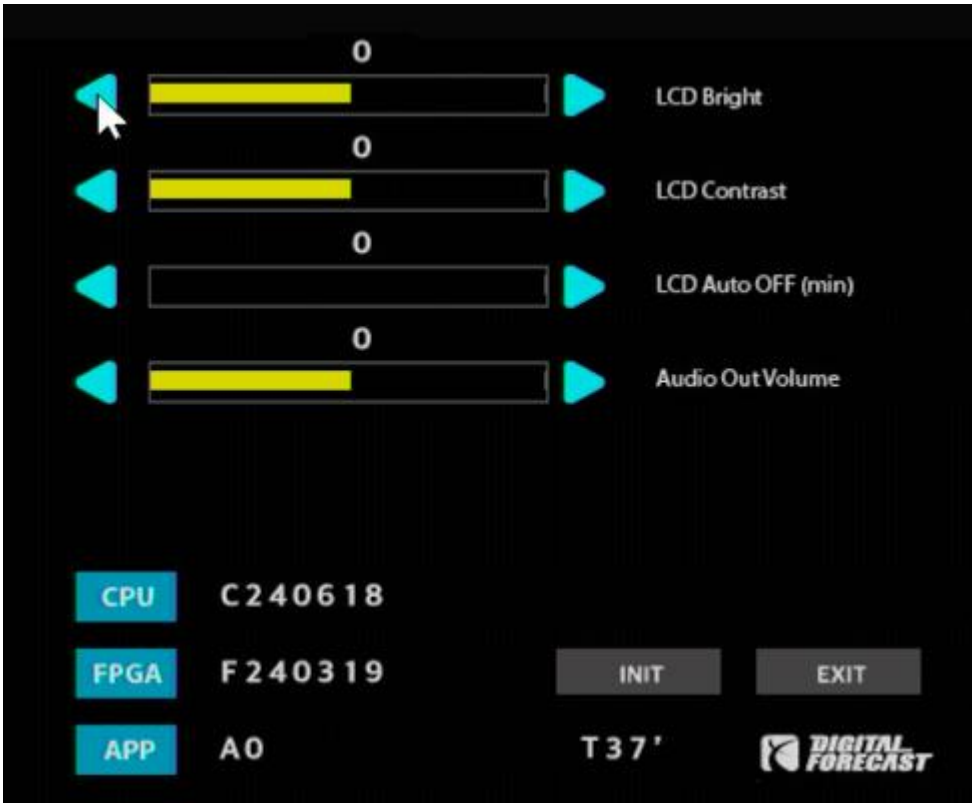
(7) Run Time : Indicates the total elapsed operating time as Day/Hour/Min/Sec.

HDMI : STATUS INFORMATION.



CHROMA	:	Indicates HDMI Input Chroma Type
COLOR Bit	:	Indicates HDMI color bit
HDCP	:	Shows the status of HDCP
AUD Freq	:	Shows the Audio sampling frequency

CONFIG 



LCD Bright	Adjusts the brightness of LCD Touch Screen
LCD Contrast	Adjusts the Contrast of LCD Touch Screen
Auto OFF(min)	Sets the time(minute) for the Sleep Mode of LCD Touch Screen. After the set time, the LCD is automatically turned off for energy saving.
Audio Out Volume	Speaker & audio output volume adjustment
F/W Info	Indicates CPU/FPGA/APP F/W version .

SDCARD / How to Use

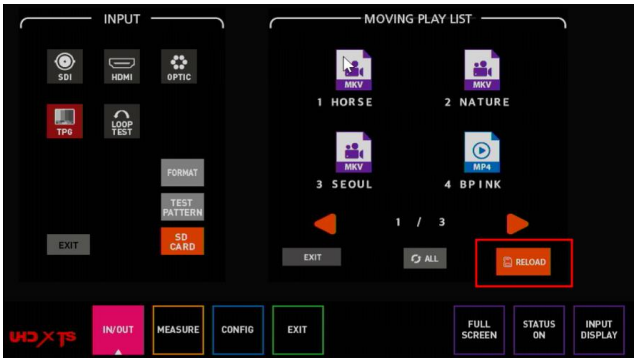
- If the user wants to use the video by putting it in the SDCARD, please set it in the following steps.



1. Remove the SDCARD mounted on UHD X_TS.
2. Connect SDCARD to PC
3. SDCARD folder structure is as follows



4. Copy the video to the video folder ₩dfcast₩media folder.
5. When SDCARD data copying is complete, insert SDCARD into UHD X_TS.
6. When you press the IN/OUT menu -> SDCARD -> RELOAD button, a new play list is updated.



% caution

1. SDCARD format uses FAT32 and NTSF format.
   If it is a different format, it may not be recognized.
2. The name of the video file must be in English and should not exceed 15 characters.
3. You can insert as many videos as you want within the SDCARD capacity limit, but the maximum number of files is limited to 30.
4. Supported codecs are H.264, H.265(hevc), VP8, VP9, AV1 (MKV, MP4 , AVI file)
5. Videos with less than 60 frames or videos with damaged data may not play or may be interrupted.

WARRANTY

- 2 years from the purchase date

Authorized Distributor of Digital Forecast Co., Ltd. located in South Korea.

(signature)

DATE . . .

DIGITAL FORECAST Co., Ltd.

Bridge" Bridge"M Bridge"RS Bridge"X Bridge" UHD

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