

TVlogic

4K Cross Converter

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Product Overview

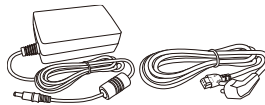
Feature

- **12G SDI Input and Output**
 - Support HD, 3G Level A/B, 6G, 12G
- **HDMI 2.0a Input and Output**
 - Support up to 3840x2160@60p
- **Dual Scaler Included**
 - Support SDI and HDMI outputs with independent resolutions
 - Convert resolutions and frame rates
- **Cross Conversion**
 - SDI to HDMI, HDMI to SDI
- **LCD Preview and Touch Control**
 - Monitor inputs and outputs
 - Graphic User Interface and Touch Control
- **Built-In Web Server**
 - Monitor and control Inputs and Outputs settings
 - Firmware Update

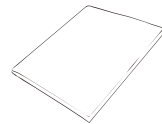
Package



4K Cross Converter



Adaptor & Power Code

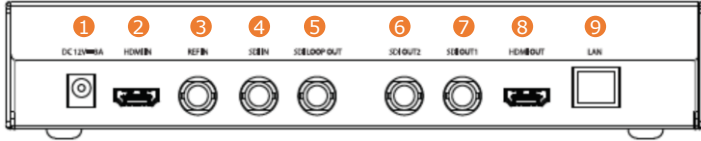


User's Manual

Getting Started

Introduction

Rear



- 1 DC Power IN** Connect the supplied DC Adapter (+12V/3.5A)
- 2 HDMI IN** Connect HDMI 2.0 type A Cable to the HDMI Source (Video Player etc.)
- 3 REF IN**
- 4 SDI IN** Connect 12G SDI Cable to the SDI Source (SDI Camera etc.)
- 5 SDI LOOP OUT** Reclocked output of SDI IN signal to the SDI Rx (SDI Monitor etc.)
- 6 SDI OUT2** Up / down scaled SDI Output signal
- 7 SDI OUT1** Connect 12G SDI Cable to SDI Rx Device
- 8 HDMI OUT** Up/down scaled HDMI Output signal.
- Connect HDMI Cable to HDMI Rx Device.
- 9 Ethernet** Connect Ethernet 10/100Mbps cable to the switching Hub/Router.

Top



Front



LCD Layout



SDI IN



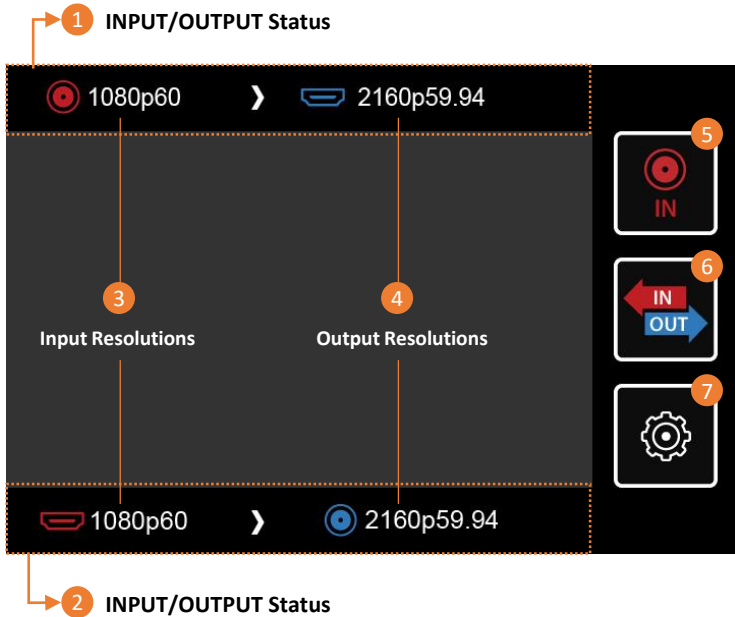
HDMI IN



SDI OUT

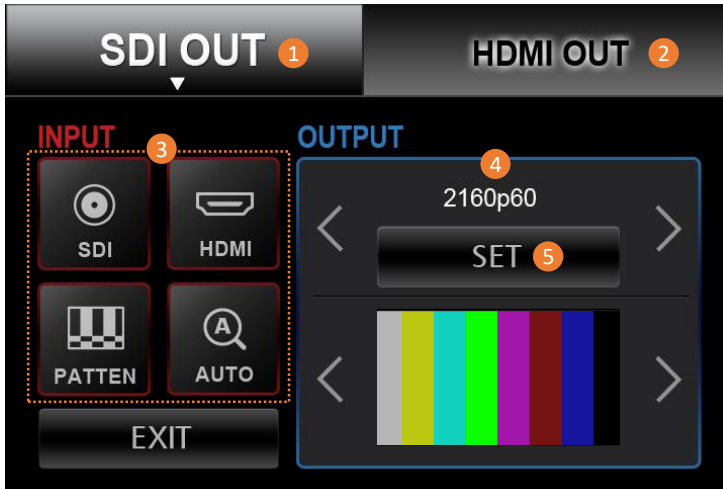


HDMI OUT



- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> ① INPUT/OUTPUT Status ② INPUT/OUTPUT Status ③ Input Resolutions ④ Output Resolutions ⑤ IN/OUT Preview Selection ⑥ IN/OUT Setup ⑦ System Settings | <p>Top GUI shows HDMI Output related settings.</p> <p>Bottom GUI shows SDI Output related settings.</p> <p>Show the resolutions of input signals</p> <p>Show the resolutions of output signals</p> <p>Rotate source of preview video from [SDI IN], [HDMI IN], [SDI OUT] and [HDMI OUT].</p> <p>Show IN/OUT setup GUI.</p> <p>Show System-wide settings GUI.</p> |
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IN/OUT Setup



Output Selection

- ① **SDI OUT** Select to change SDI OUT settings
- ② **HDMI OUT** Select to change HDMI OUT settings

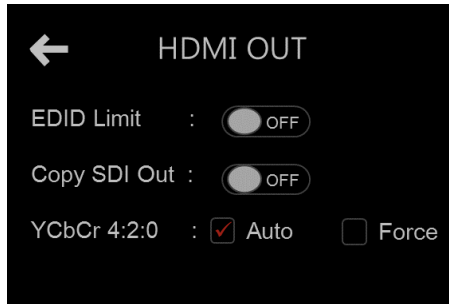
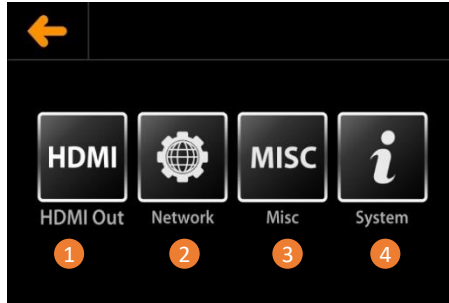
Input Selection

- ③ Select one of 4 Input Sources, [SDI], [HDMI], [PATTERN] and [AUTO]
 - If you select [AUTO], available input source will be selected automatically.
 - Priority is SDI > HDMI > PATTERN. If there is no SDI input, then try HDMI input.
 - If Both SDI and HDMI inputs are not available, PATTERN will be selected automatically.

Resolution Selection

- ④ Select one of resolutions by pressing [<] and [>] buttons.
- ⑤ **SET** By pressing [Set] Button, Settings will be applied.

System Settings



1 HDMI Out

- EDID Limit :** ON : Limit Resolutions according to capability of HDMI TV connected
OFF : Enable all Resolutions up to 2160p60
- Copy SDI Out :** ON : Change resolutions on SDI and HDMI OUTs simultaneously
OFF : Change resolutions on SDI and HDMI OUTs independently
- YCbCr 4:2:0 :** Select YCbCr 4:2:0 or 4:2:2 mode when Outputting 4KP60
Auto : Depend on TV capability by reading EDID
Force : YCbCr 4:2:0 mode selected

System Settings

2 Network

← NETWORK Apply

Configure : DHCP Static

IP Address : 192.168.100.152

Subnet : 255.255.255.0

Gateway : 192.168.100.1

DHCP : Network assigns IP address automatically
Manual : User can assign IP address manually

3 MISC

← MISC

Auto Hide : OFF

Show Times(s) : - 5 +

Transparency : - 1 +

Genlock Source : Reference ▾

Auto Hide :

ON : Main Menu will disappear after show time
 OFF : Main Menu will show and stay

Transparency :

Change transparency of GUI

4 System

← SYSTEM

Model : Ct

SW Version : 1.09

FPGA Version : 20161106

MAC Address : 00:11:A9:6D:C0:00

Show Model Name, SW Version, FPGA Version and MAC address

Operation Modes

Operation Mode

SDI IN -> HDMI OUT, SDI OUT

SDI signal can be converted to HDMI and SDI signals.

Input SDI signals can be up or down scaled to outputs.

Output resolutions for HDMI and SDI can be set independently.



HDMI IN -> HDMI OUT, SDI OUT

HDMI signal can be converted to HDMI and SDI signals.

Input HDMI signals can be up or down scaled to outputs.

Output resolutions for HDMI and SDI can be set independently.



Operation Mode

HDMI IN, SDI IN -> HDMI OUT, SDI OUT

This mode works as a two separate scaler.

HDMI input signal can be up or down scaled to HDMI output.

SDI input signal can be up or down scaled to SDI output.

SDI and HDMI paths are working independently.



SDI IN, HDMI IN -> HDMI OUT, SDI OUT

This mode works as a two separate scaler. Signal paths are crossed.

HDMI input signal can be up or down scaled to SDI output.

SDI input signal can be up or down scaled to HDMI output.

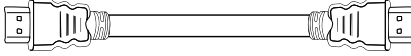
Two separate video paths are working independently.



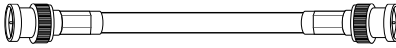
Setting Up

Preparations

Cable



High Speed HDMI Cable



SDI Cable



LAN Cable

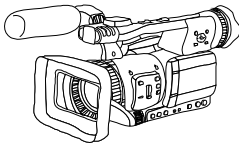
Devices



4K Cross Converter



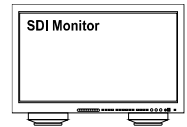
HDMI Source
(PC, BDP, OTT etc)



SDI Source(SDI Camera etc)



HDMI Sink (HDMI 4K TV etc)



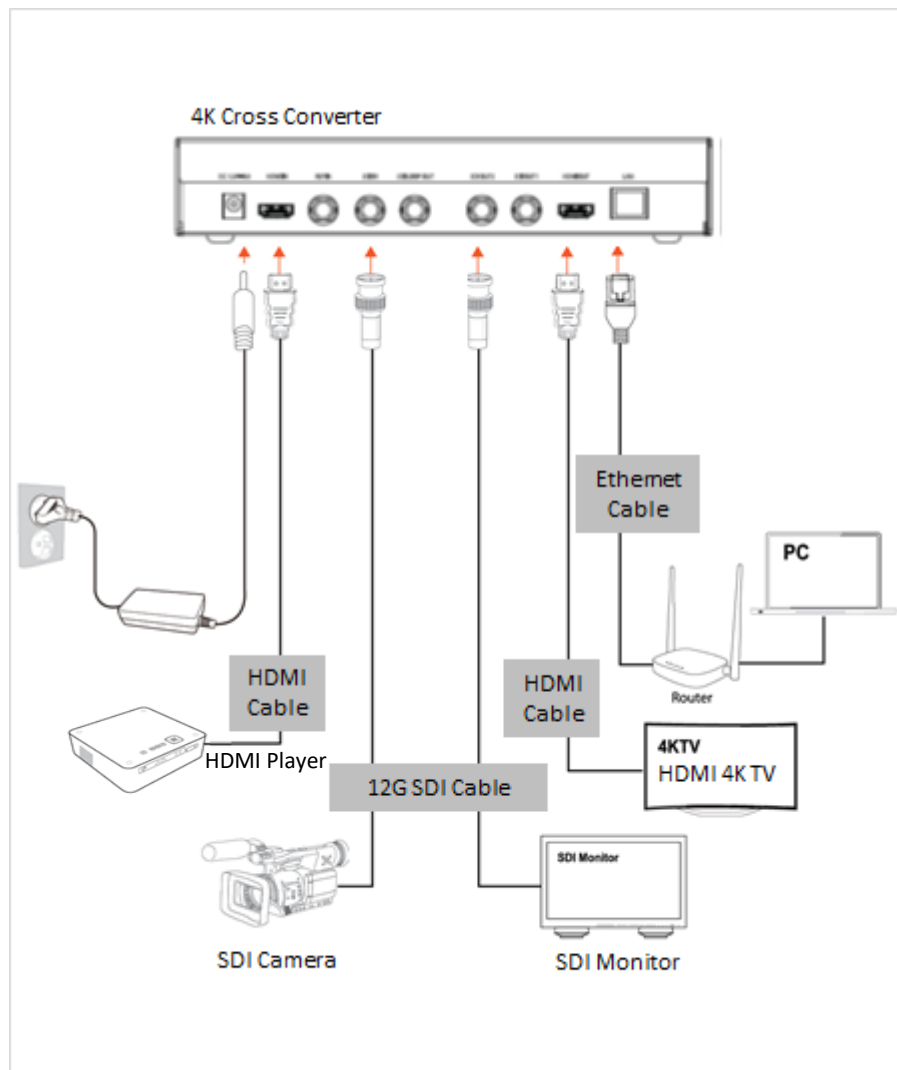
SDI Sink (SDI Monitor etc)

ETC



Adaptor & Power Code

Connections

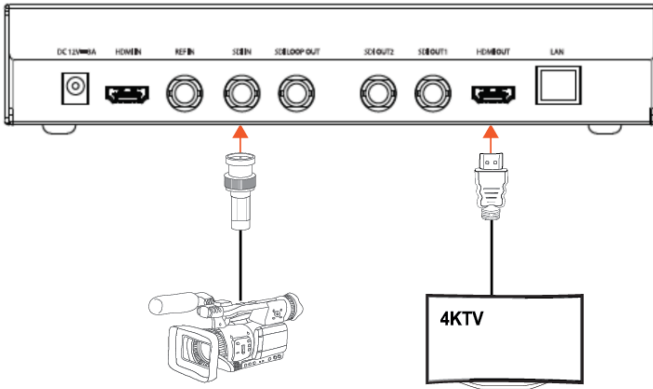


Usage Example

SDI to HDMI Conversions

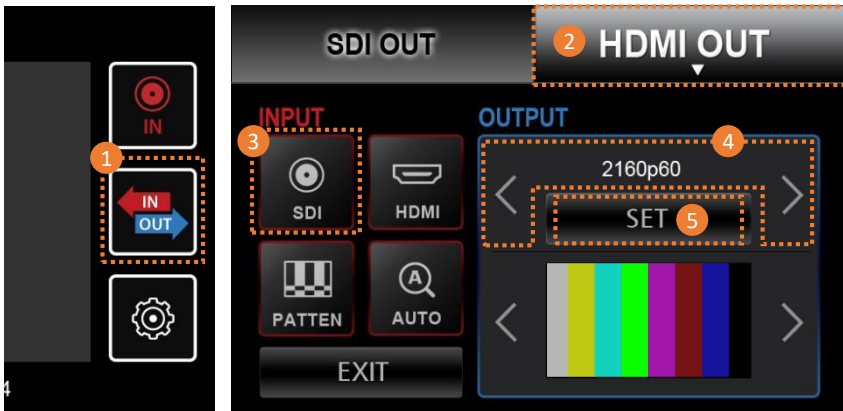
Cable Connection

- (1) Connect SDI Source and SDI Input of Converter
- (2) Connect HDMI Out of Converter with HDMI TV



Software Setup

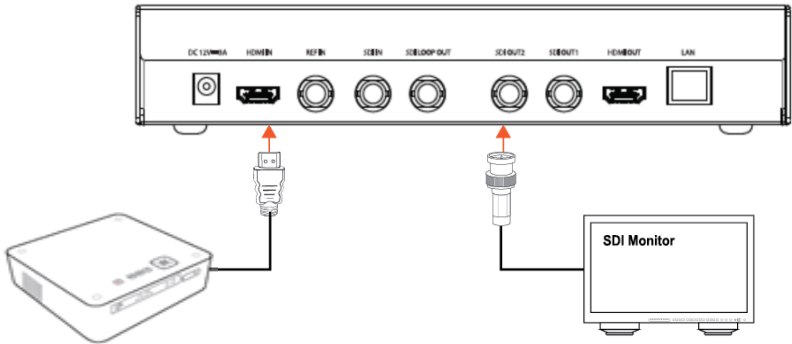
IN/OUT >> HDMI OUTPUT >> INPUT SDI Selection >> Resolution Selection >> Set



HDMI to SDI Conversions

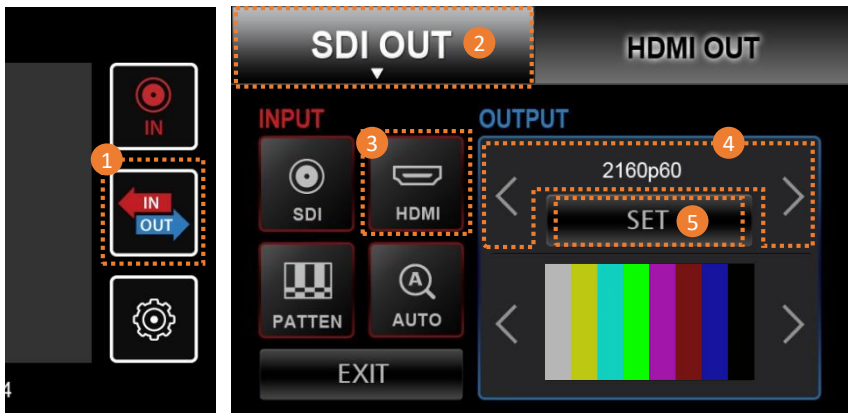
Cable Connection

- (1) Connect HDMI Source and HDMI IN of Converter
- (2) Connect SDI OUT of Converter and SDI Monitor



Software Setup

IN/OUT >> SDI OUTPUT >> INPUT HDMI Selection >> Resolution Selection >> Set



Specification

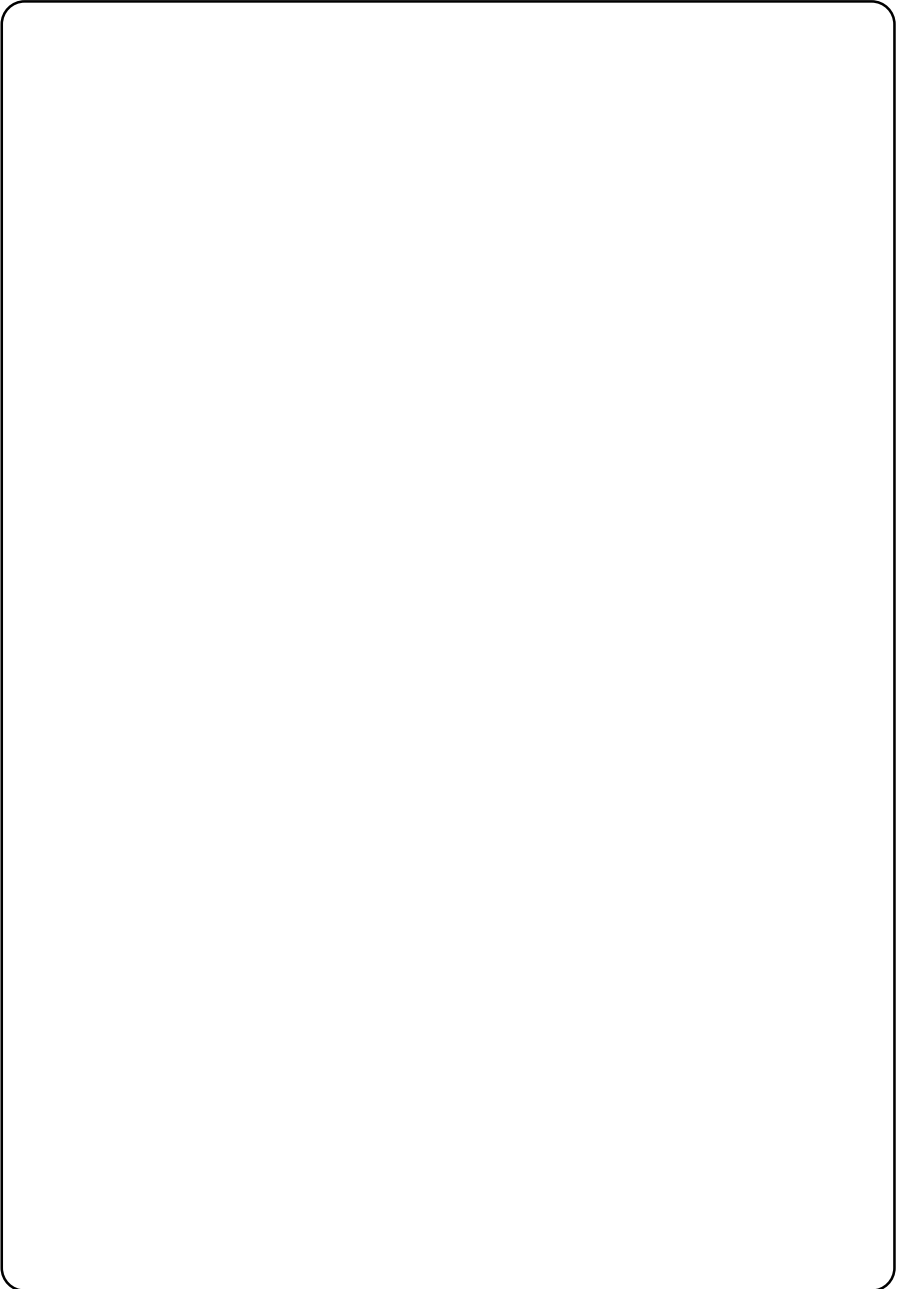
Specification for S/W

Item	Spec	Notes
Resolutions	720p, 1080i, 1080p, 2160p	
Frame Rate	23.98, 24, 25, 29.97, 30, 50, 59.94, 60	
Up/Down Scaling	Any Resolution -> Any Resolution	
Frame Rate Conversion	Any Rate -> Any Rate	
Firmware Upgrade	Yes	Built-in Web Server using Ethernet
Preview Monitoring	Yes	Front 2.7" LCD
Status Monitoring	Yes	- Built-in Web Server - Front LCD
Control	Yes	- Built-in Web Server - Front LCD GUI - 9 x buttons

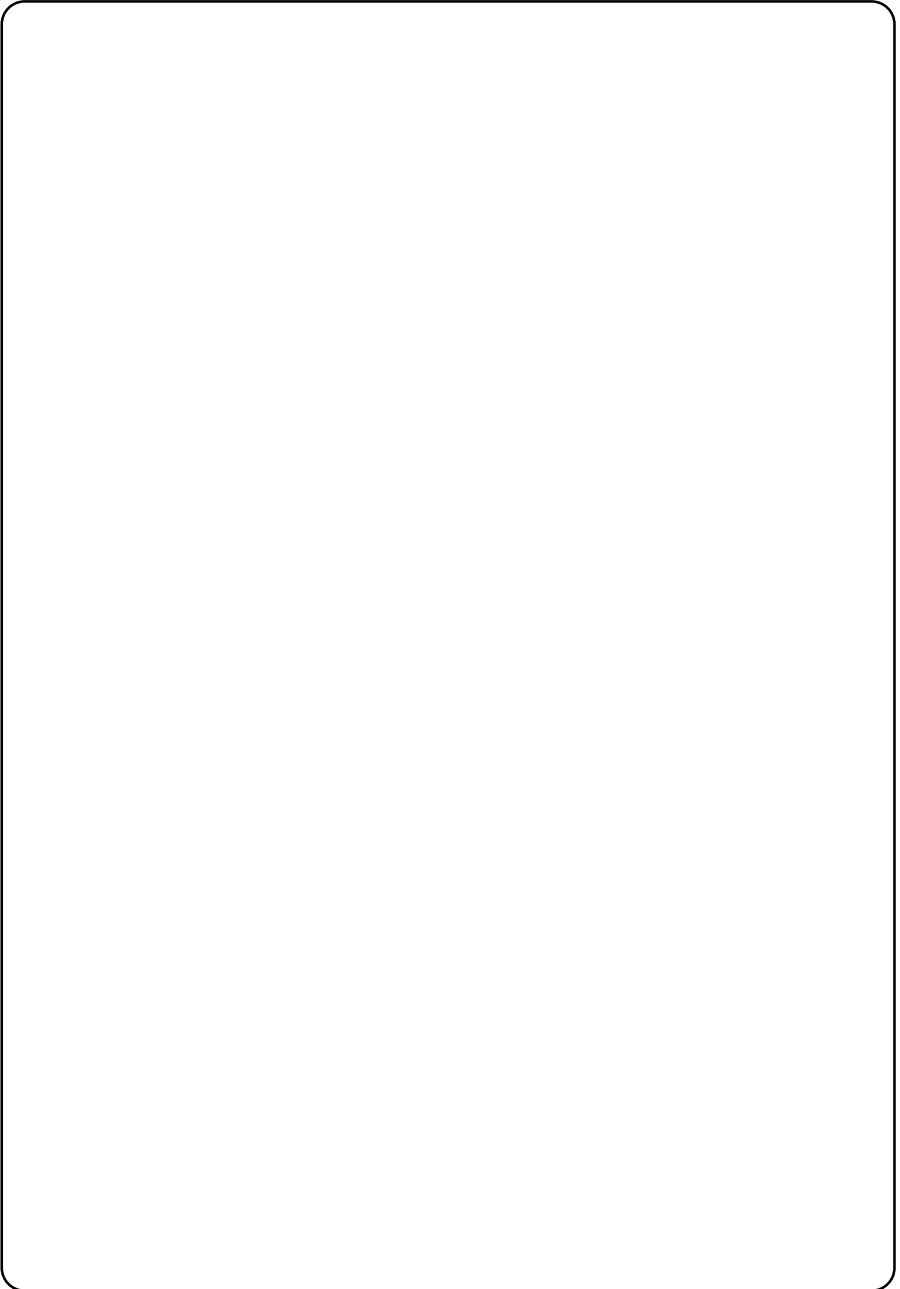
Specification for H/W

Item		Type	Q'ty	Spec
Input	SDI	BNC	1	12G SDI
	HDMI	A	1	HDMI 2.0a
Output	SDI	BNC	2	12G SDI
	SDI Loop Out	BNC	1	12G SDI
	HDMI	A	1	HDMI 2.0a
UI		LCD + Touch	1	2.7" LCD + Capacitive Touch 9 x Front Menu Buttons
		Buttons	9	
Network		Ethernet RJ45	1	10/100Mbps
Power		DC-Jack	1	12V / 3.5A

MEMO



MEMO



TVlogic

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FOR MORE INFORMATION PLEASE VISIT : <http://www.tvlogic.tv>

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