



CREATOR[®]

CREATOR CORPORATION (CHINA)







Video Converter User's Manual

V1.0 Version


The meaning of symbols

■ Safety instructions

For your safe and correct use of equipments, we use a lot of symbols on the equipments and in the manuals, demonstrating the risk of body hurt or possible damage to property for the user or others. Indications and their meanings are as follow. Please make sure to correctly understand these instructions before reading the manual.

	This is A level product, which may cause radio interference in the living environment. In this case, users may need to take the feasible measures to get around the interference.
	Remind users that the dangerous voltage without insulation occurring within the equipment may cause people suffer from shock
	CE certification means that the product has reached the directive safety requirements defined by the European Union. Users can be assured about the use of it
	SGS certification means that the product has reached the quality inspection standards proposed by the world's largest SGS.
	This product passed the ISO9001 international quality certification (certification body: TUV Rheinland, Germany).
	Warning: in order to avoid electrical shock, do not open the machine cover, nor is the useless part allowed to be placed in the box. Please contact the qualified service personnel.

■ General information instructions

	It lists the factors leading to the unsuccessful operation or set and the relevant information to pay attention to
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Important note



Warning

In order to ensure the reliable performance of the equipment and the safety of the user, please observe the following matters during the process of installation, use and maintenance:

The matters needing attention of installation

◆ Please do not use this product in the following places: the place of dust, soot and electric conductivity dust, corrosive gas, combustible gas; the place exposed to high temperature, condensation, wind and rain; the occasion of vibration and impact. Electric shock, fire, wrong operation can lead to damage and deterioration to the product, either;

◆ In processing the screw holes and wiring, make sure that metal scraps and wire head will not fall into the shaft of controller, as it could cause a fire, fault, or incorrect operation;

◆ When the installation work is over, it should be assured there is nothing on the ventilated face, including packaging items like dust paper. Otherwise this may cause a fire, fault, incorrect operation for the cooling is not free,;

◆ Should avoid wiring and inserting cable plug in charged state, otherwise it is easy to cause the shock, or electrical damage;

◆ The installation and wiring should be strong and reliable, contact undesirable may lead to false action;

◆ For a serious interference in applications, should choose shield cable as the high frequency signal input or output cable, so as to improve the anti-jamming ability of the system.

Attention in the wiring

◆ Only after cutting down all external power source, can install, wiring operation begin, or it may cause electric shock or equipment damage;

◆ This product grounds by the grounding wires. To avoid electric shocks, grounding wires

and the earth must be linked together. before the connection of input or output terminal, please make sure this product is correctly grounded;

◆ Immediately remove all other things after the wiring installation. Please cover the terminals of the products cover before electrification so as to avoid cause electric shock;

Matters needing attention during operation and maintenance

◆ Please do not touch terminals in a current state, or it may cause a shock, incorrect operation;

◆ Please do cleaning and terminal tighten work after turning off the power supply. These operations can lead to electric shock in a current state;

◆ Please do the connection or dismantle work of the communication signal cable, the expansion module cable or control unit cable after turning off the power supply, or it may cause damage to the equipment, incorrect operation;

◆ Please do not dismantle the equipment, avoid damaging the internal electrical component;

◆ Should be sure to read the manual, fully confirm the safety, only after that can do program changes, commissioning, start and stop operation;

Matters needing attention in discarding product

◆ Electrolytic explosion: the burning of electrolytic capacitor on circuit boards may lead to explosion;

◆ Please collect and process according to the classification, do not put into life garbage:

◆ Please process it as industrial waste, or according to the local environmental protection regulations.

Preface

Video Converter User's Manual mainly introduces the operation methods of VCER-101I CV,DVI.VCER-101I YC,DVI.VCER-101I YUV,DVI.VCER-101I RGB,DVI.VCER-101I VGA,DVI.VCER-101I SDI,DVI.VCER-101I DVI,RGB.VCER-101I DVI,VGA.VCER-101I DP,DVI, their main performance parameters and common fault solutions.

This manual is only used as user instruction, not for a repair service usage. The functions or related parameters may be changed since the date of issue, please inquire the supplemental information from CREATOR Electronics or local distributors.

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Chapter 1 Overview

CREATOR video converter can provide users with single application video format conversion, and also to provide extension application of input or output device for the system integration. It is an indispensable part of the large multi-purpose system.

CREATOR Video Converter supports various video conversions. It has CV, YC, YUV, RGB, VGA, SDI, DVI, DP and other video formats, compact and simple, plug-and-play.

1.1 Product Type

- 1) VCER-101I CV,DVI CV to DVI converter
- 2) VCER-101I YC,DVI YC to DVI converter
- 3) VCER-101I YUV,DVI YUV to DVI converter
- 4) VCER-101I RGB,DVI RGB to DVI converter
- 5) VCER-101I VGA,DVI VGA to DVI converter
- 6) VCER-101I SDI,DVI SDI to DVI converter
- 7) VCER-101I DVI,RGB DVI to DVI converter
- 8) VCER-101I DVI,VGA DVI to DVI converter
- 9) VCER-101I DP,DVI DP to DVI converter

1.2 Features

- ◆ Video signal bandwidth: 165MHz;
- ◆ Output up to DVI 1.0 video standard;
- ◆ Support 4:4:4 and 4:2:2 sampling frequency;
- ◆ Support for color space conversion;
- ◆ Deinterlacing processing, effectively eliminate flicker to make the image more clear and stable;
- ◆ Video processing with gamma correction;
- ◆ Supports a variety of input, output resolution, as follows:

CV, YC format signal input Video Converter supports NTSC , PAL , SECAM formats;

VGA, RGB, DVI format signal input and output video converter supports resolution:

1024X768@60Hz;1280X720@60Hz;
1280X800@60Hz;1280X1024@60Hz;
1366X768@60Hz;1400X1050@60Hz;
1440X900@60Hz;1600X900@60Hz;
1680X1200@60Hz;1680X1050@60Hz;
1920X1080@60Hz.

YUV format signal input and output Video Converter supports resolution:

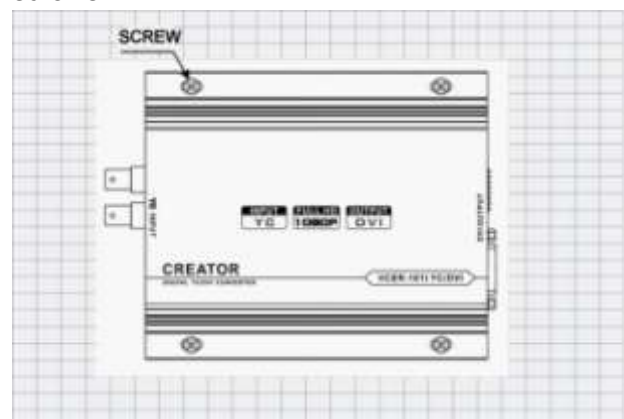
480i,NTSC	576i,PAL
480P,NTSC	576P,PAL
720P,NTSC	1080i,NTSC

CR-VCER 101I SDI , DVI supports input formats SD SDI , HD SDI;

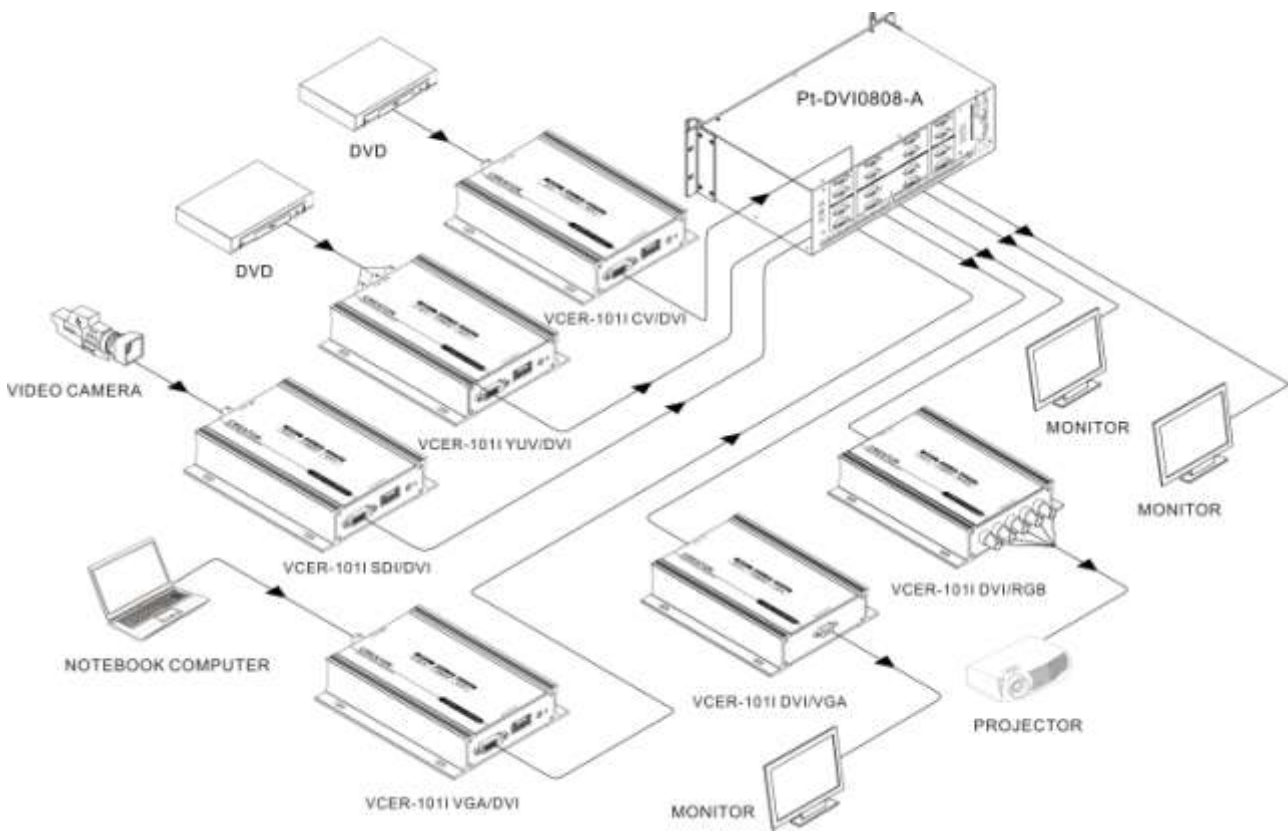
CR-VCER 101I DP , DVI supports input format DISPLAY PORT 1.1a;

1.3 Host Installation

CREATOR video converter has small size, light weight, and can be easily installed in any place, for example the installation diagram below, the video converter is mounted on the wall with 4PCS screws.



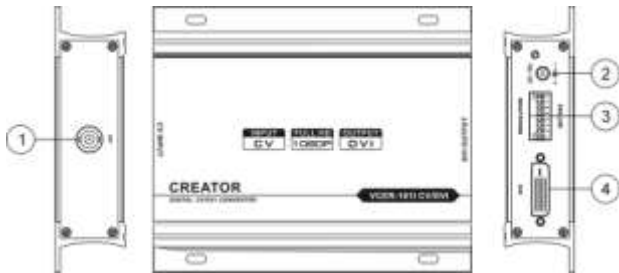
1.4 The Overview Diagram of System Connection



Chapter II Hardware Description

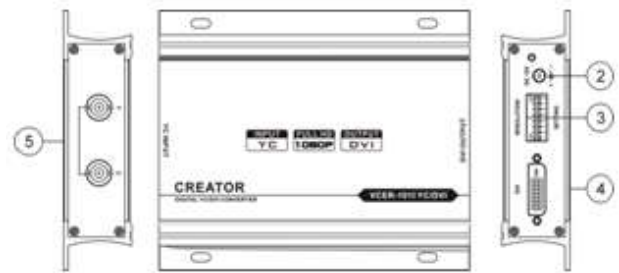
2.1 Panel Features

VCER-101I CV,DVI:



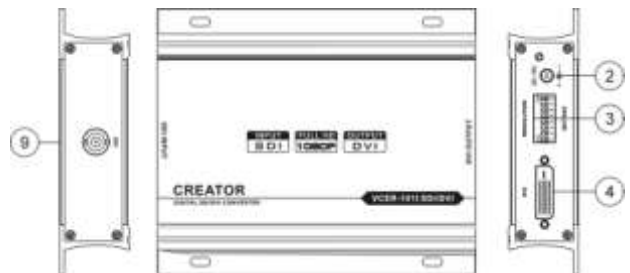
VCER-101I VGA,DVI:

VCER-101I YC,DVI:



VCER-101I SDI,DVI:

VCER-101I YUV,DVI:

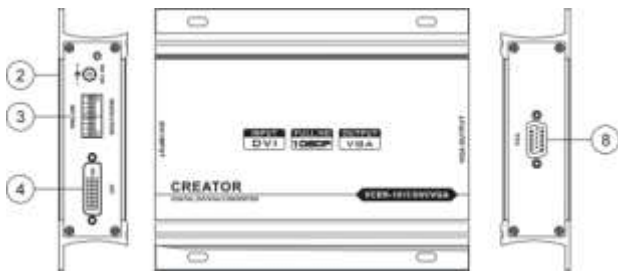


VCER-101I DVI,RGB:

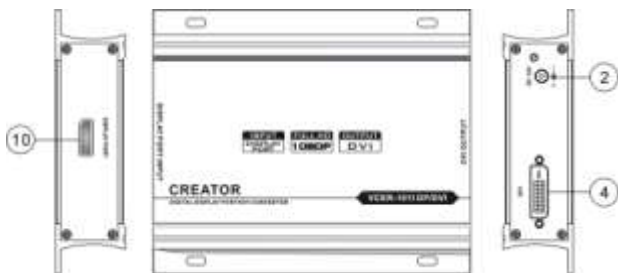
VCER-101I RGB,DVI:



VCER-101I DVI,VGA:



CR-VCER 101I DP,DVI:



① CV - CV video input port

BNC connectors are adopted for connecting DVD players, video cameras and other video source peripherals.

② DC 12V - input port of the system power

The system power support DC 12V input.

③ RESOLUTION - DIP switch

8 DIP switch is for resolution settings of video converter output.

④DVI - DVI video input , output port

DVI-D interfaces to connect peripherals like DVI HD video signal source, such as PC, monitor, projector with DVI interface.

⑤ Y C - Y C video input port

BNC interface can be connected to video signal source such as a DVD player.

⑥ Y Pb , Cb Pr , Cr - YUV video input , output port

BNC interface, YUV component signal input , output, connect the video signal source peripheral devices, such as DVD players, high definition video player, display, etc.

⑦ R G B H V - RGB video input , output port

BNC interface, RGB component signal input ,

output, connect the video signal source peripheral devices, such as PC, high-definition video player, projector, etc.

⑧ VGA - VGA video input , output port

DB-15 connector, connect the VGA video signal source peripherals, such as PC with VGA interface, etc.

⑨ SDI - SDI video input port

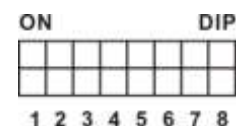
BNC interface, connected to the HD video source peripherals with BNC interface, such as high-definition cameras.

⑩ The DISPLAY PORT - DISPLAY PORT video input port

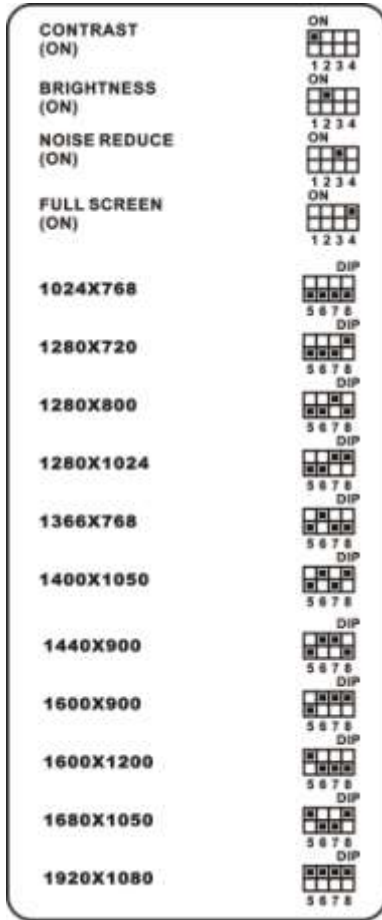
DP-A interfaces, connected to the HD video source peripherals, such as PC, HD player with DP interfaces.

2.2 DIP switch description

DIP switch has 8 DIP keys, each key represents a value, two system nodes per key, press DIP key pulled or disconnect can set the corresponding parameters. The following are DIP key values: (specific to the machine at the bottom of the screen):

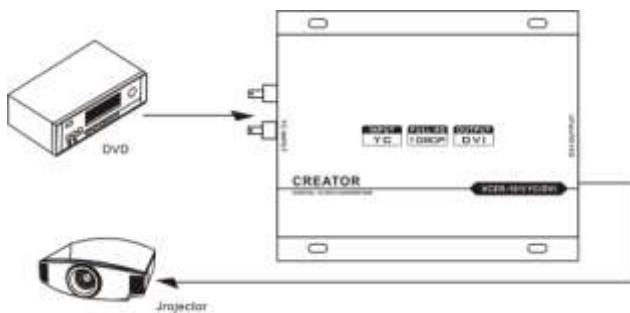


DIP switch diagram



2.3 Connection Diagram

Now choose the CR-VCER 101I YC , DVI connection as an example, other models' connection are similar to it, the connection illustrated as follows:



Chapter III Technical Parameters

Parameter type	VCER-1011 CV,DVI	VCER-1011 YC,DVI	VCER-1011 YUV,DVI	VCER-1011 RGB,DVI	VCER-1011 VGA,DVI
Video Input					
Signal Type	1 Composite video	1 Channel S-VIDEO	1 Channel YCbCr,YPbPr	An analog computer video	An analog computer video
Connector	1BNC plug	2 BNC plugs	3 BNC plugs	5 BNC plugs	1 DB15 connector
Signal level	1VPP(standard value),0.7VPP-1.6VPP(min , max)	Y Component 1VPP, C component 0.3VPP	Y Component 1VPP, U, V component 0.3VPP	RGB Components 0.7VPP, HV ingredients 4.0VPP	RGB Components 0.7VPP, HV ingredients 4.0VPP
Impedance	75Ω	75Ω	75Ω	75Ω	75Ω
Video output					
Signal Type	1 Single link DVI-D	1 Single link DVI-D	1 Single link DVI-D	1 Single link DVI-D	1 Single link DVI-D
Connector	1 DVI-D socket	1 DVI-D socket	1 DVI-D socket	1 DVI-D socket	1 DVI-D socket
Signal level	T.M.D.S	T.M.D.S	T.M.D.S	T.M.D.S	T.M.D.S
Impedance	Differential 100Ω	Differential 100Ω	Differential 100Ω	Differential 100Ω	Differential 100Ω
General Specifications					
External Power Supply	100-240V~0.5A ,50-60Hz:to 12V DC,1.5A Modulated				
Temperature Humidity	Storage:-40~+70℃ ,10%~90%,Noncondensing Work::0~+50℃ ,10%~90%,Noncondensing				
Shape	Metal.36mmX 135mmX 162mm				
Weight	About 546g	About 550g	About 554g	About 570g	About 534g

Parameter type	VCER-1011 SDI,DVI	VCER-1011 DVI,RGB	VCER-1011 DVI,VGA	VCER-1011 DP,DVI
Video Input				
Signal Type	1Channel SDI	1Single link DVI-D	1 Single link DVI-D	1 Channel DUAL-MODE DISPLAY PORT
Connector	1 BNC plug	1DVI-D plug	1DVI-D plug	1 DP plug
Signal level	0.8VPP	T.M.D.S	T.M.D.S	DP++
Impedance	75Ω	Differential 100Ω	Differential 100Ω	
Video output				
Signal Type	1 Single link DVI-D	An analog computer video	An analog computer video	1 single link DVI

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Connector	1 DVI-D plug	5 BNC plug	1 DB15 plug	1 DVI-D plug
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Signal level	T.M.D.S	RGB component 0.7VPP.HV component 4.0VPP	RGB. component 0.7VPP.HV component 4.0VPP	T.M.D.S
Impedance	Differential 100Ω	75Ω	75Ω	Differential 100Ω
General Specifications				
External Power supply	100-240V~0.5A ,50-60Hz:to12V DC,1.5A, Modulated			
Temperature	Storage:-40~+70℃,10%~90%,Noncondensing			
Humidity	Work:0~+50℃,10%~90%,Noncondensing			
Shape	Metal,36mmX 135mmX 162mm			
Weight	About 553g	About 570g	About 534g	About 530g

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