4 Specification

Supply Voltage	DC 12V ± 20%
Power	≤ 6W
Weight	2Kg
Receiving Controlling Mode	RS485/RS422/RS232/ Manchester/Bi-phase
Receiving Baud Rate(RS485/232/422)	4800/9600/19200/38400 BPS
Receiving Baud Rate (MANCHESTER/BI-PHASE)	32KBPS
Transmitting Mode	Coaxial Video
Farthest Transmitting Distance (0.5mm twisted pair cable)	300m
Environmental Temperature	−20℃～+60℃
Dimensions	482x 160x 48.5(mm)

User Manual

AD3016 Coaxial Converter

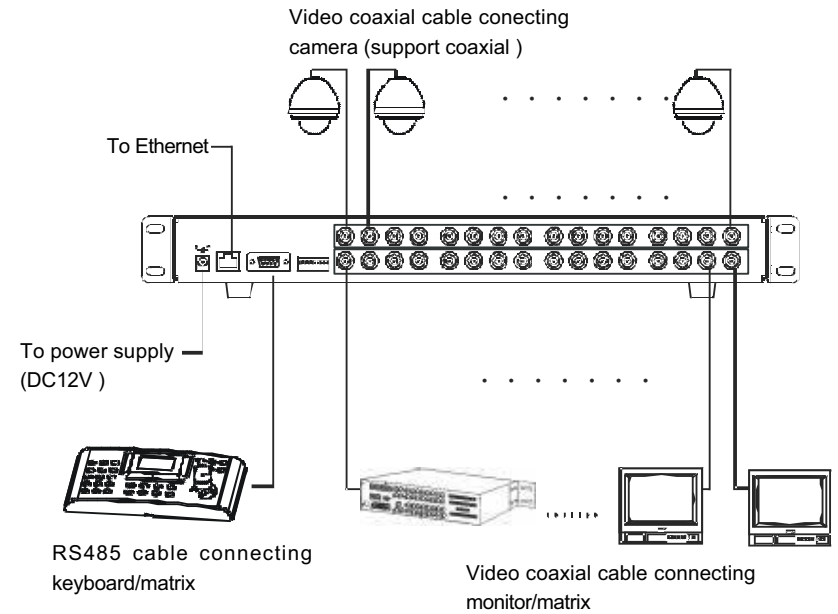ⓘ **Before use the product, please read this manual carefully.**

Contents

3   Accessories

DC12V Power Spply	1 pc
Terminal	1 pc
User Manual	1 set
Warranty Card	1 pc

4   Installation diagram

Video coaxial cable conecting camera (support coaxial)

To Ethernet

To power supply (DC12V)

RS485 cable connecting keyboard/matrix

Video coaxial cable connecting monitor/matrix

2.7 Baud rate setting is only applied to interface RS232,RS485/RS422.

Baud rate	Switch Number 7	8
4800bps		
9600bps	O	
19200bps		O
38400bps	O	O

2.8 B1-B4 of SW2 are used for the setting of control protocol,B5-B8 are reserved for factory.

Protocol	Switch number 1	2	3	4
FACTORY				
PELCO	O			
VCL		O		
MOLYNX	O	O		
VICON			O	
DIAMOND	O		O	
KALATEL		O	O	
HUNDA	O	O	O	
PHILIPS				O
PHILIPS_1	O			O
AMERICAN DINAMIX		O		O
PANASONIC	O	O		O
SANYO			O	O
KDEC	O		O	O

Note:PHILIPS-1 is a kind of PHILIPS protocol with stop codes.

Note: Any of re-set by changing the DIP switches setting will not be effective unless power on again.

2.9 120 Ω terminal jumper

- JP8: RS422 RX/RS485 bus 120 Ω terminal jumper switch
- JP9: Manchester/Bi-phase bus 120 Ω terminal resistance switch
- JP10: RS422_TX bus 120 Ω terminal jumper switch

1 Brief introduction

AD3016 coaxial converter is another newly developed converter with high performances, multi-function and extendibility following AD300 one-channel coaxial converter.With built-in high performance CPU module and Ethernet ports,it can execute the quick transfer of single distributor control data to interior coaxial vieo modules.
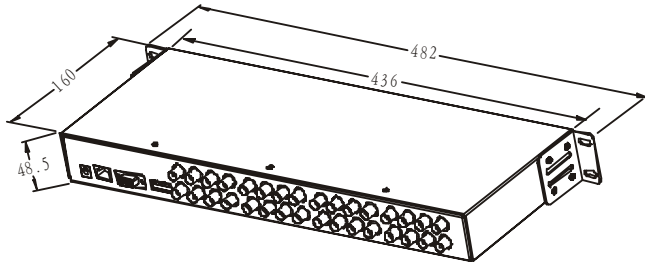
Every distributor can has up to 16 ports to distribute 16 front end device address.The system allows 16 distributors parallel working to support 16×16 =256 front end devices.

2 Main features

- 6 coaxial ports (BNC),support receiving and transmitting.
- Control input port: RS232,RS485/RS422,MANCHESTER/BI-PHASE and Ethernet.
- Support multi-protocol input through DIP settings,such as:PELCO-D,PELCO-P,MOLYNX, VICON,DIAMOND,KALATEL,HUNDA,VCL,PHILIPS,AMERICAN DYNAMICS,PANASONIC,and SAE.
- Support 4800bps,9600bps,19200bps and 38400bps while receiving control signals of RS485,RS232 and RS422.
- Communication port with 120 Ω resistance jumper
- 400 W video thunder proof

3 Installation Guide

1. Dimensions (mm)

2. Ports and general settings

2.1 Power supply: DC+12V/500mA

2.2 Video Input BNC: Conneted with dome camera Video output

2.3 Video output: connected with monitor or matrix

2.4 Communication port: (Magnified diagram)

Pin	Function Description
①	RS422_RX+/RS485+
②	RS232_TX
③	RS232_RX
④	B(Manchester/Bi-phase)
⑤	GND
⑥	RX422_RX-/RS485-
⑦	RS422_TX+
⑧	RS422_TX-
⑨	W(Manchester/Bi-phase)

2.5 Ethernet port

2.6 DIP SW1: Every distributor can has up to 16 ports to distribute 16 front end device address. The system allows 16 distributors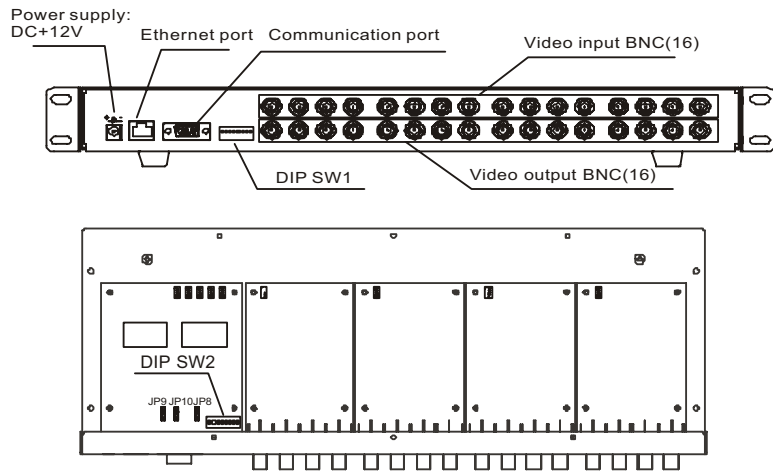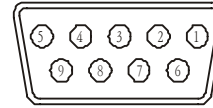 parallel working to support 16 x 16 front end devices.ID numbers must be assigned to every distributor,the ID number is configured by B1-B4 of SW1.B5-B6 are reserved by factory.

Distributor Number	Switch number				Address range
	1	2	3	4	
-					Distributor 1, Address range 1-16
2	○				Distributor 2, Address range 17-32
3		○			Distributor 3, Address range 33-48
4	○	○			Distributor 4, Address range49-64
5			○		Distributor 5, Address range 65-80
6	○		○		Distributor 6, Address range 81-96
7		○	○		Distributor 7, Address range 97-112
8	○	○	○		Distributor 8, Address range 113-128
9				○	Distributor 9, Address range 129-144
10	○			○	Distributor 10, Address range 145-160
11		○		○	Distributor 11, Address range 161-176
12	○	○		○	Distributor 12, Address range 177-192
13			○	○	Distributor 13, Address range 193-208
14	○		○	○	Distributor 14, Address range 209-224
15		○	○	○	Distributor 15, Address range 225-240
16	○	○	○	○	Distributor 16, Address range 241-254

2.7 Baud Rate Setting(B7,B8 of SW1)