

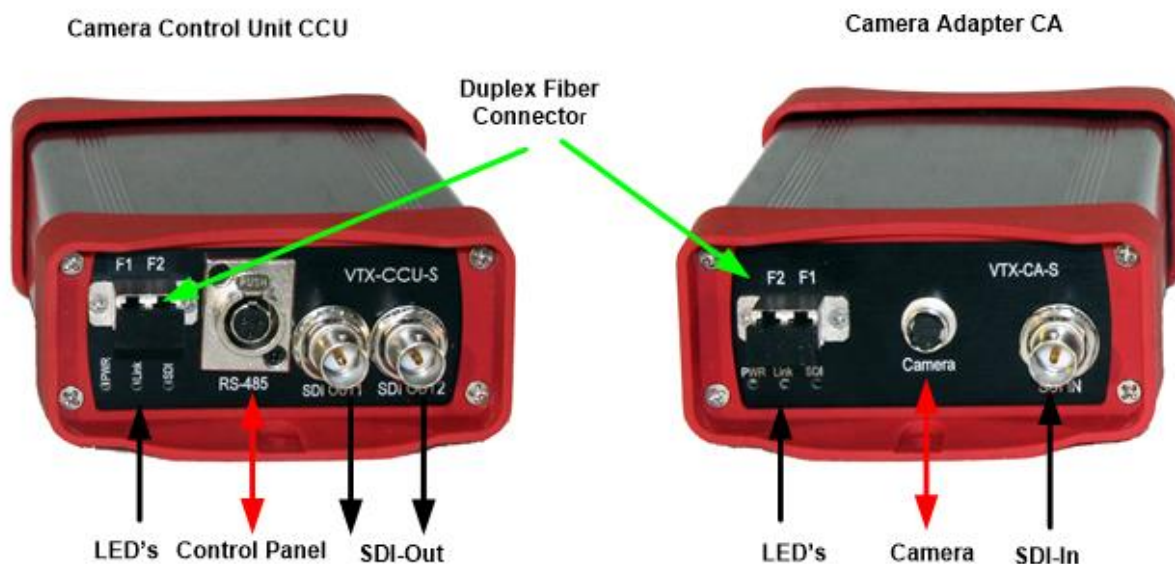
VTX-Atom CCU-S – Operating Manual

1- Introduction

The VTX-Atom CCU-S (Smart) from Vietex Media is the entry-level optical CCU for the Atom One cameras from Dream Chip Technologies (www.Atom-One.de). The target of this compact, bidirectional transceiver pair are Atom one in autonomous operation without genlock. It transports all formats of SDI-Signals from SD to HD, 3G, 6G and 12G as well as RS-485 control over 20km.

Because of the lightweight and compact design, all peripherals must be connected as external devices by special cables.

2- Connectivity:



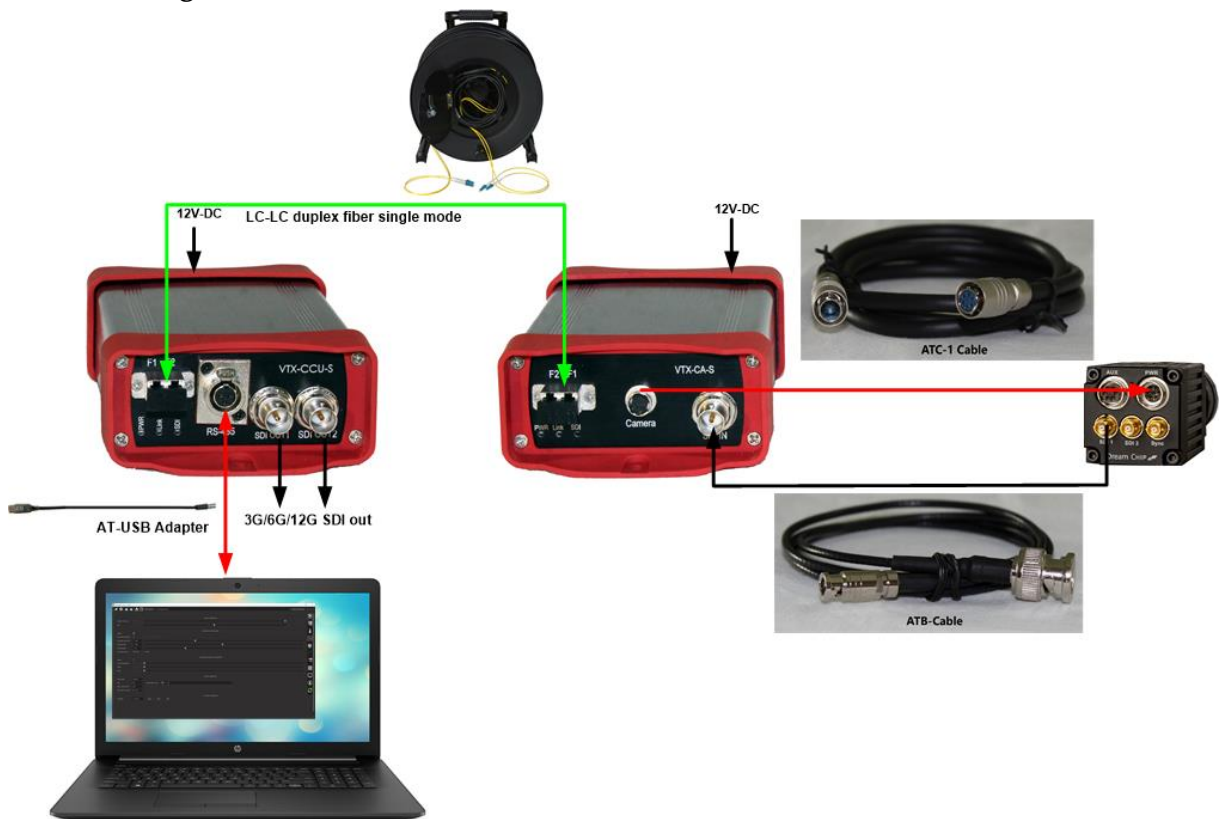
- Duplex Fiber connector: Single mode LC, max 20km
- LED's: Power, Fiber link, SDI
- RS-485 = Control Panel: ITT-Mini XLR 3pin: 1 = Data A, 2= Data B, 3 = GND
- Camera: Hirose HR10A- 7R-6S, 1= Data A, 2= Data B, 5=GND, 6 =12V
- SDI-In: BNC-75 Ohm, auto detect SD/ HD/ 3G/6G/12G
- SDI-out: BNC-75 Ohm, SD/HD/3G/6G/12G

3- Package content: Set incl.

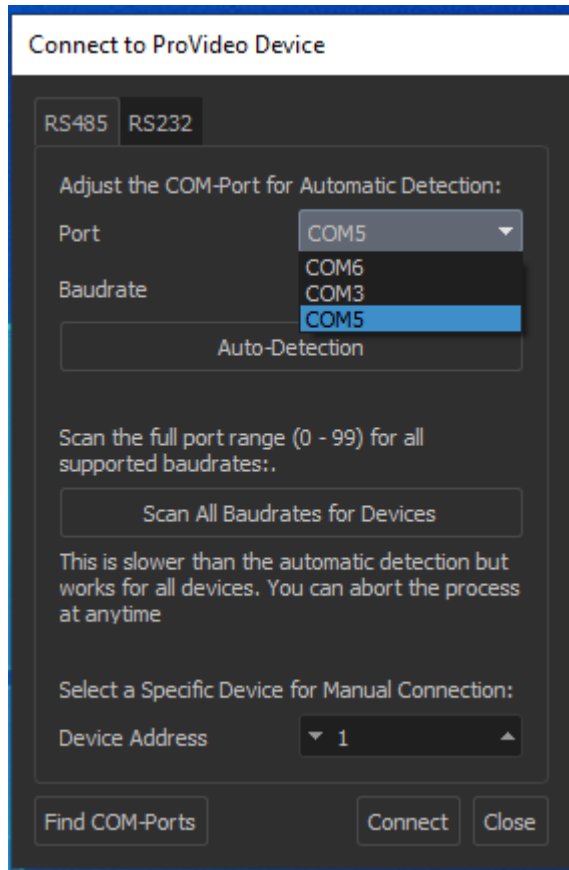
- CCU and CA in compact, shock and water protected (IP62) metal box
- 2 x Power supply 12V/2A
- Manual + Driver on SD-Chip



4- Initial Setting

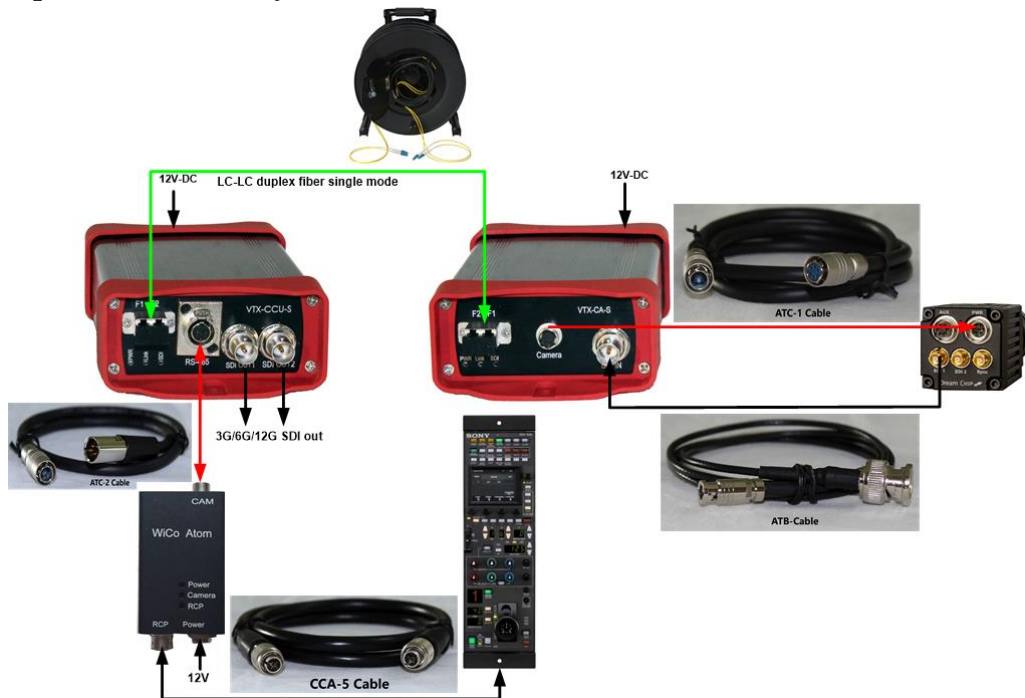


- Connect the CCU to the CA by fiber duplex single mode cable
- Atom one SDI Output to CA SDI-in by ATB cable
- Connect the Atom one camera to the CA by ATC-cable
- Feed 12V-from AC/DC adapters to both units
- All- LED's light on
- Install the USB-FTDI-driver to the laptop/PC
- Connect the AT-USB Adapter from PC to RS-485 receptacle
- Start Provideo Software from PC. Normaly: Autodection find the camera.
- If "Auto detection" failed, go to "Port", select the right port (5 instead 3 i.e). Set "Baudrate" to 115200". Set ID = 1 or 2, according to the camera. Go to "Connect"



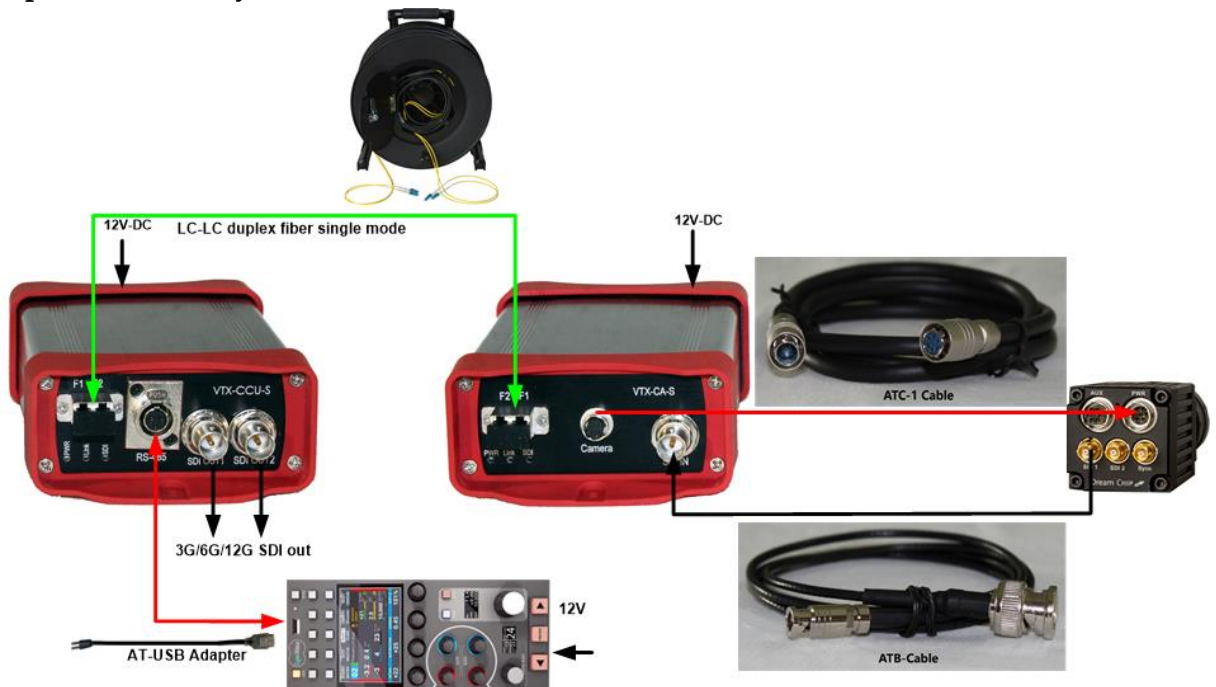
- After Provideo GUI opened, set the resolution HD,3G/6G ..12G
- Disable “Auto exposure configuration” and “Auto White balance” for using 3rd RCP: Sony, Skaarhoj, Cyanview ect. Save the setting to the internal memory.

5- Operation with Sony—RCP



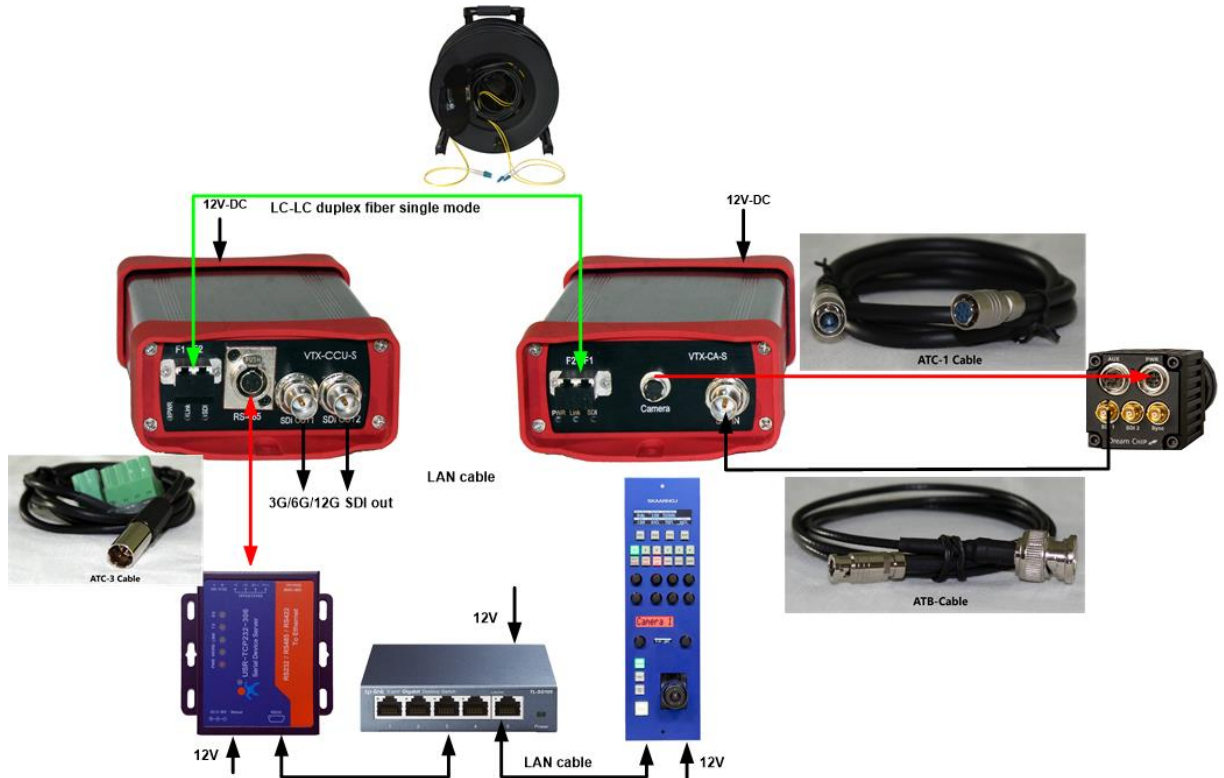
- After having disabled the “Auto exposure” and “White Balance” disconnect the AT-USB-Adapter and connect the Wico-Box to CCU by ATC-2 cable (6 pin Hirose male - 3pin ITT mini XLR male)
- Connect the Wico to Sony RCP by CCA-5 Cable (8pin-Hirose male-male)
- Power the Wico box by 12V-Adapter
- Activate the Sony-RC Panel

6- Operation with Cyanview RCP



- The Cyanview RCP communicate with Atom Onré cameras via his two USB-Ports. One CIO can serve 2 cameras (port 1 and 2)
- Connect the RCP to CCU-S by the AT-USB converter
- CIO to be powered by external 12V Adapters
- Change ethernet setting of the PC/Laptop and go to RCP –menu by LAN cable: (<http://10.192.18.26>) and set the camera and USB-port accordingly.
- RCP and CIO will log in together after 5sec.

7- Operation with Skaarhoj – RCP



- Skaarhoj RCP needs a network switch to communicate to the Ethernet-RS485 converter. The PoE capable switches can power both: RCP and converter. If not, all 3 devices have to be powered by the own 12V-adapters
- Both RCP and converter have to be configured in to the same IP-Range.
- Log in to RCP by SkaarhoiUpdater: <https://www.skaarhoj.com/support/firmware-updater/>
- Log-in to USR-TCP232-306: https://:192.168.07 (name= admin, PW=admin)
- Connect the Ethernet-RS-485 converter to CCU by the ATC3 cable (Terminal block – ITT mini XLR 3 pin male)

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Current Status | Local IP Config | Serial Port | Expand Function | Misc Config | Reboot

parameter

IP type: Static IP

Static IP: 192 . 168 . 2 . 230

Submask: 255 . 255 . 255 . 0

Gateway: 192 . 168 . 0 . 1

DNS Server: 208 . 67 . 222 . 222

Save Cancel

Help

- **IP type:** StaticIP or DHCP
- **StaticIP:** Module's static ip
- **Submask:** usually 255.255.255.0
- **Gateway:** Usually router's ip address
- **DNS IP:**

SKAARHOJ Main **IP Config** Serial Monitor

IP Configuration

Use DHCP Enable

IP Address 192.168.10.99 ✓

Subnet Mask 255.255.255.0 ✓

Gateway 192.168.10.1 ✓

DNS Server 192.168.10.1 ✓

Device Cores

Dream Chip ATOM One 192.168.10.230 ✓ Enable

Cancel Save Settings

IP- address setting for both: RCP and converter

Firmware Version: V4018 中文

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Current Status | Local IP Config | Serial Port | Expand Function | Misc Config | Reboot

parameter

Baud Rate: 115200 bps

Data Size: 8 bit

Parity: None

Stop Bits: 1 bit

Local Port Number: 5000 (0~65535)

Remote Port Number: 8234 (1~65535)

Work Mode: TCP Server

Remote Server Addr: 192.168.0.201 [192.168.0.201]

RESET:

LINK:

INDEX:

Similar RFC2217:

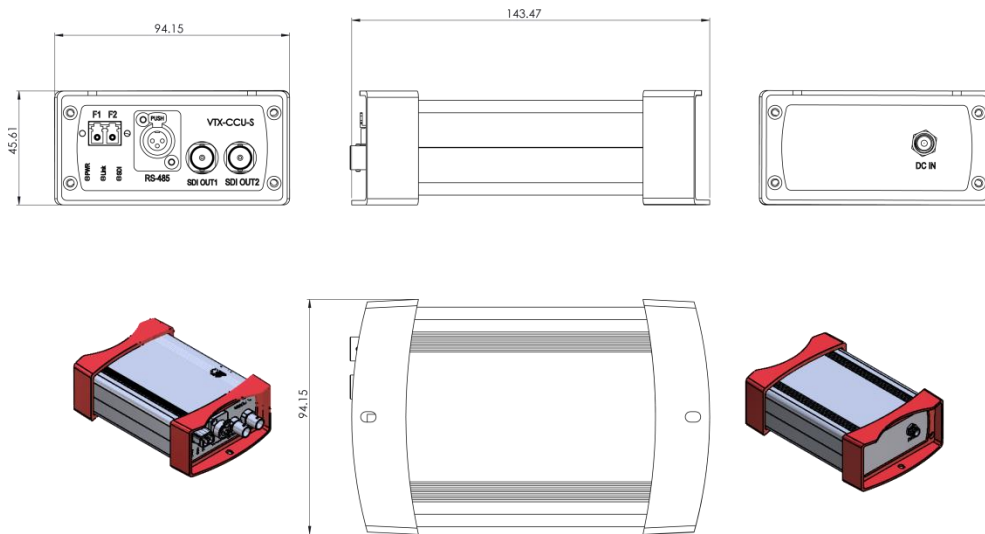
Save Cancel

Help

- **HTTPD URL:** Module add GET/POST and HTTP/1.1 in URL automatically according to user's setting.
- **HTTPD Packet Header:** Module add HOST automatically according to user's setting. Add "Content Length" automatically in POST mode.

Serial Port setting of converter: TCP-Server mode with local port no.5000

8- Mechanical size



9- Technical Specs.

VTX-Atom Camera Adapter Smart (VTX-CA-S)	
I/O Connectors	
Fiber	Dual LC-Duplex Singel mode
SDI-In: Autodetect HD/3G/6G/12G	1 x BNC SMPTE ST-2082, ST-2081 424M, 344M, 292M, 259M, DVB-ASI,
Camera connector	1 x 6pin Hirose: RS-485 half duplex, 12 V-DC,
Power	Lockable connector 12V-DC, Power depending on the PSU
General	
Body Size	143 mm x 94,5 mm x 45 mm LxWxD
Weight	0,2 kg
Power Consumption	Approx. 3,6W (without camera)
Operating temperature	0°C to 45°C (32°F to 112°F)
VTX-Atom Camera Control Unit Smart (VTX-CCU-S)	
I/O Connectors	
Fiber	Dual LC-Duplex Singel mode
12G SDI-Out	2 x BNC SMPTE ST-2082, ST-2081 424M, 344M, 292M, 259M, DVB-ASI,
Remote Control	Mini XLR 3pin for RS-485 half duplex
Power	Lockable connector 12V-DC, Power depending on the PSU
General	
Size	143 mm x 94,5 mm x 45 mm LxWxD
Weight	0,2 kg
Power Consumption	3,6W
Operating temperature	0°C to 45°C (32°F to 112°F)
System Optical Budget	
TX-Output power	- 4 dBm
RX- Sensitivity	- 18 dBm
Fiber distance	20km