# XVID3B-1G2 FPV Analog Video System

## New Version 2020

**To work from 15-40Km**

**Range max. 100Km**

- Analog Video
- Visualize instrumental F16
- Exlusive XLRS instruments
- Interprets Mavlink data
- Configurable Pages
- Frequency 1.2Ghz
- RF Power up to 1W
- 8 Video Channels

### Vehicles

DRONES, UAV, MULTIROTORS, RPAS, VANT, UAV, AIRCRAFT, HELICOPTERS, UUV, UGV, ROV, USV, ASV, CARS, BOATS, ROBOTS...

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# XVID3B-1G2 FPV Analog Video System

Video Transmitter
XOSD3B-1G2

Video Receiver
RXVID3-1G2

*Professional analog video system prepared for all types of FPV applications with 1000mW RF Power in 1.2Ghz to work between 15-40Km (LOS) and with a maximum range of 100km or more depending configuration and antennas.*

## Version 3 B

*The new video system version 3B, facilitates your work, transportation and assembly. It is ready for use and has been designed with your needs in mind as a professional.*

*XOSD3B, new improved video transmitter with 1W power RF and OSD integrated.*
*RXVID3, Autonomous Diversity Video Receiver of high sensitivity mounted and connected in directional antenna.*
*New and improved plastic box easily removable from the video antenna.*
*Ready for use, it doesn't need adaptations. Ready to fast install on tripod.*
*Robust new suitcase for safety transport, video receiver and antennas.*

*Optional tripod with its carrying case ready to quickly mount video system.*

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# XVID3B-1G2 FPV Analog Video System

## Protective Transport Suitcase

*Robust new suitcase for safely transport the video receiver and antennas! Ready to fast install.*

*IP67 certificate, waterproof and strong made of ABS, it offers high resistance and durability against shocks and impacts to transported devices.*

*Thanks to the adaptable foam of EPP, that is a high resilience material that helps absorb pressure and vibrations, the products is fully protected and motionless.*

*It has an extendable handle for facilitate transport.*

## Tripod and Transport Bag

*Optionally you can purchase this tripod with T-Bar which is specifically adapted to place several types of RC and Video antennas quickly, ready to install (Plug & Play).*

*It is mechanically prepared and with accessories to install antennas, it can support up to 25Kg of load, it is extensible up to 2.70m, it folds easily.*

*The tripod can be easily transported with the supplied carrying bag. With internal padding to protect against bumps in daily work.*

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# XVID3B-1G2 FPV Analog Video System

## RXVID3-1G2

*Analog video receiver with two internal modules simultaneous video receivers in 1.2Ghz with 8 video channels and battery with autonomy of 8-10h approx.*

*Also has a 5.8Ghz short range video transmitter to view the video in wireless mode with one or more video glasses or video FPV monitors with 5.8Ghz receiver, you can get ranges of 25m to 100m or more depending on the antenna.*

*Diversity mode: RXVID3 has two antenna inputs and internally selects the best video signal reception from the two receiver modules.*

*You can install in the receiver (No.1) a directional antenna for long range and in receiver (No.2) an omnidirectional antenna for nearby flights, in this way you will get a good combination of antennas and good video signal for short and long range.*

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# XVID3B-1G2 FPV Analog Video System

## XOSD3B-1G2 | OSD with analog video transmitter 1.2Ghz 1W

Video transmitter of 1.2Ghz, 1W with 8 video channels and inputs for 2 video cameras with PAL format.

OSD presents graphics, icons and W/B texts on the screen, superposing the objects on the analog video.

It is mainly oriented for the visualization of the instruments of an aircraft and flight data on planes, helicopters and radio control systems FPV, UAV, robots, vigilance...

Displaying the data of the XLRS radio link and the instruments using the Mavlink telemetry of the autopilot, flight data, alarms, battery status, video channel, selected camera, OSD brightness, etc.

Interprets Mavlink data packets of Pixhawk autopilot or autopilots compatibles with Mavlink protocol.

**Prepared for redundancy and control of 4 cameras:**
Can use 2 XOSD connected through RCBus, control 4 video cameras and display 2 simultaneously.

**Control XOSD functions from XLRS Transmitters:**
Connect XOSD throught RCBus port to RX XLRS and from the TX XLRS you can change some parameters of XOSD.
Change Page, TX Video Channel, Select Camera, Brightness Level, Volume...

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# RXVID3-1G2 Analog Video Receiver

*Video Diversity Receiver + Video Transmitter*
*RX 1.2Ghz / TX 5.8Ghz 10mW*

## SPECIFICATIONS VIDEO RECEIVER:

**Video Receivers:** 2, Diversity.

**Frequency:** 1.2Ghz.

**Sensitivity:** -95 dBm.

**Channels:** 8.
**Ch1:** 1080Mhz | **Ch2:** 1120Mhz | **Ch3:** 1160Mhz
**Ch4:** 1200Mhz | **Ch5:** 1240Mhz | **Ch6:** 1280Mhz
**Ch7:** 1320Mhz | **Ch8:** 1360Mhz

## SPECIFICATIONS VIDEO TRANSMITTER:

**Frequency:** 5.8Ghz.

**Potency:** 10mW (+10dB).

**Channels:** 8.
**Ch1:** 5733Mhz | **Ch2:** 5752Mhz | **Ch3:** 5771Mhz
**Ch4:** 5790Mhz | **Ch5:** 5809Mhz | **Ch6:** 5828Mhz
**Ch7:** 5847Mhz | **Ch8:** 5866Mhz

## INTERNAL BATTERY:

**Voltage:** 3.7V. 4.2V Full load.

**Capacity:** 5000mAh.

**Cells:** 1 cell 3.7V/5Ah.

**Type:** Lithium polymer.

**Duration:** 9-10h.

**Battery Charge:** 1A, USB (Micro-B).

Protected against over current.

Protected against excess load.
Automatic disconnection.

Protected against excessive discharge.
Automatic disconnection.

Sound warning and low battery display.

Automatic shutdown by software in case of very low battery.

## FEATURES:

**Video Receivers (1.2Ghz):** 2.

**Video Transmitter (5.8Ghz):** 1.

**Bluetooth:** 1.

**Display OLED:** 1.

**Encoder with push button** (Control menu).

**RCBUS:** Serial Comunication.

**Output Audio /Video:** 2 (MiniJack 3.5mm).

**Switch ON/OFF.**

**Red Leds:**
1, RX1 (1.2Ghz)
1, RX2 (1.2Ghz)
1, TX1 (5.8Ghz)

**Blue led:** 1, Bluetooth.

**Connector Antenas:** 3, SMA-Female.

**Working Temperature:** 10ºC ~ +55ºC (CPU).

**Connectivity:** RC, RCBus.

**Upgradable & Configurable:** DMDStudio Soft.

**Dimensions:** 96 x 90mm x 41mm.

**Weight:** 335g.

**Box:** Plastic and methacrylate.

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* Consult regulations in your country. Not for use in UE.

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# XOSD3B-1G2 Analog Video Transmitter

***On Screen Display + Video Transmitter***

***1.2Ghz / 1000mW / 4Ch RC / 1 Port MAVLINK Telemetry / 2 INP Camera***

## SPECIFICATIONS VIDEO TRANSMITTER:

**Format & Resolution:** Analog video (PAL).
625-Lines (576i).
25 Frames per second.
50 Fields per second.

**Frequency:** 1.2Ghz.

**Potency:** 1000mW (+30dB).

**Potency (Opt.):** 100mW (+20dB with att. 10dB).

**Channels:** 8.
**Ch1:** 1080Mhz | **Ch2:** 1120Mhz | **Ch3:** 1160Mhz
**Ch4:** 1200Mhz | **Ch5:** 1240Mhz | **Ch6:** 1280Mhz
**Ch7:** 1320Mhz | **Ch8:** 1360Mhz

**Voltage:** 8-18Vcc (Port "PWR")
5V. Min 4.5V. Max 6Vcc (To feed the RC channels)

**Consumption:** Standby 50mA.
Max. 750mA.

**Working Temperature:** 10ºC ~ +85ºC (CPU).

**Ambient Temperature:** -10ºC to +50ºC.

**Connectivity:** RC, RCBus.

**Upgradable & Configurable:** DMDStudio Soft.
To configure, you need an RX XLRS or use a TTL 3.3V to USB converter.

**Dimensions:** 82,26 x 37,71mm x 39,52mm.

**Weight:** 72g.

**Box:** Plastic and fiber base 2mm.

## FEATURES:

**RC Channels:** 4 (Only work with RX XLRS).

**RCBUS:** 2 (To RX XLRS or 2nd XOSD).

**Input Cameras:** 2 (Format: PAL)
(Use same power as the XOSD, it can be 8-18V).

**Input Mavlink Telemetry:** 1 (Port CH4/MAV).

**Antenna Connector:** SMA-Female.

**Microphone.**

**Thermostat with Fan.**

**Red Led:** 1, Synchronism.

**Blue Leds:** 2, CAM1 & CAM2.

**Pages:** 3, Selectables and configurables.

**Character sizes:** 3, 64x32 | 41x32 | 31x32.

**Configurable Alarms:** Yes.

**Units of measure:** Metric or Imperials.

**Instruments:**
**POWER:** Batteries, Voltage, RPM, etc.
**FLIGHT:** GPS, Flight Time, etc.
**NAVEGATION:** Distance, Course, etc.
**XLRS:** RSSI, Noise Level, etc.

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# XVID3B-1G2 FPV Analog Video System

## CONTENT

1- XOSD3B-1G2. OSD + Video Transmitter 1.2Ghz 1000mW.

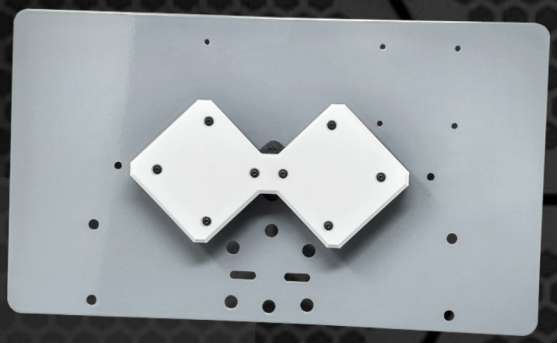
1- RXVID3-1G2. Video Diversity Receiver 1.2Ghz + Video Transmitter 5.8Ghz 10mW.

1- DCDC38/5RC. DCDC Adjustable step down module, INP 4-38V, OUT 1.25-32V (Adjuntable), Out current 5A.

1- BQ12. Biquad antenna 1.2Ghz 9dBi.

2- ANTGSM12. Omnidirectional Antennas 1.2Ghz 5dBi.

1- ANTGSM58. Omnidirectional Antenna 5.8Ghz 5dBi.



## ACCESSORIES

1- LAT05M_SMAH/SMAM. Cable SMA-Female to SMA-Male, 500mm.

1- LAT20MSMAFNM. Cable SMA-Male to Connector N-Male, 200mm.

1- CABLE_PX4_XOSD. Cable Pixhawk for XOSD.

1- CABLE_SERVO_HH. Cable Servo RC Female to Female.

1- CABLE_USB/MICROUSB. Cable USB-A Male to Micro USB-B Male, 2m.

1- CABLE_JRCA. Cable Audio Stereo MiniJack 3.5M to RCA Male.

1- Clamp U-Bolt piece.

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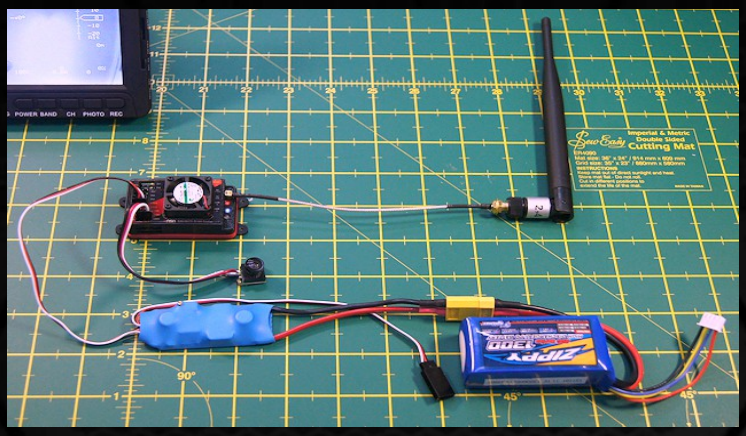
# XVID3B

Manuals & more information



## XVID3 Manual:

Manual RXVID3.

Manual XOSD3B.

Firts steps (Quick Guide).

XLRS connection diagrams.

## DMDStudio Manual:

## Learn more about:

Control from XLRS Transmitters or PC and servos in XOSD.
Connection and configuration XLRS system (RX and XOSD) with Pixhawk and Mission Planner.
Configuration control XOSD commands from XLRS transmitters.
Servo configuration XOSD.
Range Analog video.
FAQs, Analog video.

* Consult regulations in your country. Not for use in UE.

* The information and images shown in this datasheet, are only referential and may differ from the final product.

* The ranges shown are estimates and in optimal conditions.

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