

MANUAL PART NUMBER: 400-0447-003

DS801-201/202

WALL-MOUNT INTERFACE WITH TWISTED PAIR (TP) OUTPUT USER'S GUIDE





SIGNAL MANAGEMENT SOLUTIONS®

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SPECIAL APPLICATION

PRECAUTIONS / SAFETY WARNINGS

Please read this manual carefully before using your **DS801-201/202**. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **DS801-201/202** and to prevent fire and shock hazards. Please read them carefully and heed all warnings.

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1.1 GENERAL

 Qualified ALTINEX service personnel or their authorized representatives must perform all service.

1.2 INSTALLATION

- To prevent fire or shock, do not expose this unit to water or moisture. Do not place the **DS801-201/202** in direct sunlight, near heaters or heat-radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Handle the **DS801-201/202** carefully. Dropping or jarring can damage the unit.
- Do not pull the cables that are attached to the **DS801-201/202.**

1.3 CLEANING

• Clean only with a dry cloth. Never use strong detergents or solvents such as alcohol or thinner. Do not use a wet cloth or water to clean the unit. Do not open the unit to clean.

1.4 FCC NOTICE

• This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

- This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- Any changes or modifications to the unit not expressly approved by ALTINEX, Inc. could void the user's authority to operate the equipment.

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ABOUT YOUR DS801-201/202

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DS801-201/202 WALL MOUNT VIDEO + AUDIO TO TWISTED PAIR (UTP) TRANSMITTER

The **DS801-201/202** provides a means of transmitting computer video and audio signals over Twisted Pair-type (CAT-5/6) cable when used together with an ALTINEX UTP receiver, such as the **DS801-111.** Video equalization allows for transmission over cable lengths up to 400 ft (122 m). The **DS801-202** provides for snap-in connectors that may be used to route various computer video, audio, and control signals.

The **DS801-201** is designed to mount into a standard 2-gang outlet box and the **DS801-202** into a standard 3-gang outlet box. The **DS801-201/202** offers a female 15-pin HD input with the native Plug & Play compatibility and the 3.5 mm Stereo Audio jack is used for audio input. The female TP main output provides distributed drive to the UTP cable. The signal detect feature shows when a signal is present. The **DS801-201/202** also offers a buffered Local Output for both video and audio. The front panel provides an attractive finish for the audio/video inputs and local outputs.

The latest generation of Twisted Pair devices uses an innovative, patented technology* developed by ALTINEX. The new signal processing technology allows transmitting and receiving fully equalized computer video signals, stereo, and audio signals over long distances. The maximum distance at full UGXA resolution is 400 ft (122 m) between devices and may reach up to 750 ft (230 m) at VGA resolution.

* US Patent 7,065,190

TECHNICAL SPECIFICATIONS

FEATURES/ DESCRIPTION	DS801-201/202	
GENERAL		
Inputs		
RGBHV/YPbPr	15-pin HD female	
Stereo Audio	3.5mm female	
Power	2-pin terminal block	
Output		
RGBHV/YPbPr	15-pin HD female	
Stereo Audio	3.5mm female	
Video+ Stereo Audio	RJ-45 female	
Compatibility		
Signal types	ALTINEX – UTP Standard for TP Series	
Signal resolutions	VGA through UXGA or 480p, 567p, 720p, 1080i	

Table 1. DS801-201/202 General

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MECHANICAL	DS801-201/202	
DS801-201 Inside Wall Dimensions		
Height	2.60 in (66 mm)	
Width	3.52 in (90 mm)	
Depth	1.28 in (33 mm)	
DS801-202 Inside Wall Dimensions		
Height	2.60 in (66 mm)	
Width	5.40 in (137 mm)	
Depth**	1.28 in (33 mm)	
Front Panel (wall surface)*		
Width - DS801-201	4.56 in (116 mm)	
Width - DS801-202	6.38 in (162 mm)	
Height - DS801-201/202	4.50 in (114 mm)	
Weight		
DS801-201	0.338 lb (0.153 kg)	
DS801-202	0.387 lb (0.176 kg)	
Material		
Housing	0.032" Aluminum	
Front Panel	0.080" Aluminum	
Miscellaneous		
T° Operating	10°C-50°C	
T° Maximum	75°C	
Humidity	90% non- condensing	
MTBF (calc.)	38,000 hrs	

Table 2. DS801-201/202 Mechanical

ELECTRICAL	DS801-201/202
Input	
Video Analog Signal	1.0 Vp-p max.
Video Sync Level	TTL
Audio Signal Level	1.0 Vp-p max.
Output	
Video+ Stereo Audio	ALTINEX – UTP Standard for TP Series
Power	
9 VDC	3.6 Watts

Table 3. DS801-201/202 Electrical

- * The front panel uses the standard faceplate mounting holes on the outlet box.
- ** The dimensions provided are for the base unit only. The snap-in depths may vary.

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SPECIAL APPLICATION

DESCRIPTION OF DS801-201/202

DS801-201 DESCRIPTION



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BACK VIEW

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DS801-202 DESCRIPTION



BACK VIEW



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APPLICATION DIAGRAMS

DIAGRAM 1: TYPICAL SETUP



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DIAGRAM 2: INTERNAL VIEW



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INSTALLING YOUR DS801-201/202

- Step 1. Determine the best location for the DS801-201/202 and TP Receiver. Where possible, locate the DS801-201/202 as close to the video source as possible and the receiver as close to the receiving component as feasible.
- Step 2. Apply power to the 2-pin terminal block on the rear of the DS801-201/202.
 - NOTE: The power supply should provide 9 VDC and be capable of supplying 500 mA.
- **Step 3.** The Power LED should be on and red.
- Step 4. Connect the video and audio sources to the input of the DS801-201/202 using high quality cables.
- **Step 5.** The Power LED should change from red to green indicating a signal is present.
- Step 6. Connect a local monitor and speakers to the local outputs on the DS801-201/202. These connections are not required for proper operation of the transmitter, but are provided for convenience.
- Step 7. Run a UTP-type (CAT-5/CAT-5e) cable from the 4TP OUTPUT on the rear of the DS801-201/202 Transmitter to the 4TP INPUT on the TP Receiver.
 - NOTE: Ensure good signal transmission by routing the cable so as to avoid any sharp angles, creases, or bends.
- Step 8. Connect the TP Receiver per its installation instructions. In the case of the DS801-111, when the TP signal from the DS801-201/202 is applied, the Power LED will turn from red to green.
- Step 9. Connect the receiver video and audio outputs to their respective display and amplifying devices.
- Step 10. The units are now operational.

OPERATION

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The **DS801-201/202** requires no adjustments for normal operation. Once connected and the equalization set, the **DS801-201/202** will work trouble-free with no user intervention. Depending on the TP receiver, cable lengths between units should be 400 ft (122 m) or less.

TROUBLESHOOTING GUIDE

We have carefully tested and have found no problems in the supplied **DS801-201/202.** However, we would like to offer suggestions for the following:

8.1 NO DISPLAY

Cause 1: The source has a problem.

Solution: Check the source and make sure there is a signal present and all source connections are correct. If the source is working and there is still no display, see Cause 2.

Cause 2: The path has a problem.

- Solution: Connect the transmitter directly to the receiver using a short UTP patch cable. If the image is good, there is a problem with the cable. Otherwise, see Cause 3.
- Cause 3: Cable connections are incorrect.
- Solution: Make sure that cables are properly connected. Also, make sure that the continuity and wiring are good. If there is still no display present, see Cause 4.
- Cause 4: Video equalization required.
- Solution: Adjust the VIDEO EQUALIZATION on the transmitter. Long cable runs may require adjustments to near maximum.

In general, cable runs less than 50 ft (15 m) require little or no video equalization and should be set to minimum. Cable runs up to 400 ft (122 m) will require near maximum equalization on the receiver.

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Cause 5: The display has a problem.

Solution: Make sure the display has power and is turned on. If there is still no display, please call ALTINEX at (714) 990-2300.

8.2 NO SOUND

- Cause 1: The source has a problem.
- Solution: Check the source and make sure that there is a signal present and all source connections are correct. If the source is working and there is still no sound, see Cause 2.
- Cause 2: The volume is too low.
- Solution: Increase the gain at the source toward maximum. If there is still no sound present, see Cause 3.
- Cause 3: Cable connections are incorrect.
- Solution: Make sure that the cables are properly connected and that the continuity and wiring are good. If there is still no sound, see Cause 4.
- Cause 4: The receiving device has a problem.
- Solution: Make sure the receiving device has power and is turned on. If there is still no sound, please call ALTINEX at (714) 990-2300.

ALTINEX POLICIES

9.1 LIMITED WARRANTY/RETURN POLICIES

Please see the ALTINEX website at <u>www.altinex.com</u> for details on warranty and return policies.

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SIGNAL MANAGEMENT

9.2 CONTACT INFORMATION

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