MANUAL PART NUMBER: 400-0377-001

DA1957CT

1-IN, 4-OUT CAT-5

DISTRIBUTION AMPLIFIER

USER'S GUIDE

≡ALTINEX

SIGNAL MANAGEMENT SOLUTIONS

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TABLE OF CONTENTS

ALTINEX

SIGNAL MANAGEMENT SOLUTIONS

PRECAUTIONS / SAFETY WARNINGS 1

Please read this manual carefully before using your **DA1957CT** Distribution Amplifier. Keep this manual handy for future reference. These safety instructions are to ensure the long life of your **DA1957CT** and to prevent fire and shock hazard. Please read them carefully and heed all warnings.

1.1 GENERAL

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

1.2 INSTALLATION

- For best results, place the **DA1957CT** Distribution Amplifier on a flat, level surface in a dry area away from dust and moisture.

- To prevent fire or shock, do not expose this unit to rain or moisture. Do not place the **DA1957CT** Distribution Amplifier 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 **DA1957CT** Distribution Amplifier carefully. Dropping or jarring can damage internal components.

- To turn off the main power, be sure to remove the adapter from the wall. The power outlet socket should be installed as near to the equipment as possible, and should be easily accessible.

- Do not pull the adapter or any cable that is attached to the **DA1957CT** Distribution Amplifier.

- If the **DA1957CT** Distribution Amplifier is not used for an extended period, disconnect the adapter from the wall to avoid fire, shock, and loss of power.

1.3 CLEANING

- Unplug the **DA1957CT** power adapter before cleaning. Clean surfaces 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.

1.4 FCC / CE 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.

DA1957CT
CAT-5 DISTRIBUTION AMPLIFER

The **DA1957CT** is a 1-in 4-out CAT-5 distribution amplifier designed to connect a single Altinex CAT-5 Transmitter to as many as four Altinex CAT-5 Receivers. The **DA1957CT** will pass computer video and audio signals from the transmitter over twisted pair (RJ-45) type cable.

A typical setup allows a single computer's video and audio sources to be connected to up to four CAT-5 receivers. In turn, each receiver connects to a video monitor, projector etc… and/or an audio device such as speakers or an amplifier.

Altinex compatible transmitters and receivers include the DA1930CT VGA+AUDIO to CAT5 Transmitter and the DA1931CT VGA+AUDIO CAT-5 Receiver.

The **DA1957CT** is capable of equalizing the attenuation effects of long cable runs up to 400 feet depending upon the type and quality of cable being used. Additionally, there is a Signal Detect feature which shows when an input signal is present.

FEATURES/ DESCRIPTION	DA1957CT
GENERAL	
Inputs	1
Input Connector	RJ-45
Outputs	4
Output Connectors	RJ-45
Compatibility	VGA thru UXGA, Stereo Audio, C-Video, S-Video

Table 1. **DA1957CT** General

MECHANICAL	DA1957CT
Material	0.1" Al
Finish	Gray
Top Panel	Lexan
Height (inches)	1.0in (25mm)
Width (inches)	4.3in (109mm)
Depth (inches)	3.0in (76mm)
Weight (pounds)	0.42lbs (0.19kg)
Ship Weight (pounds)	0.84bs (0.38kg)
T° Operating	10°C-35°C
T° Maximum	50°C
Humidity	90% non-condensing
MTBF (calculations)	40,000 hrs

Table 2. **DA1957CT** Mechanical

ELECTRICAL	DA1957CT
Input Video Signal	
CAT-5/6 Twisted Pair Input	Video/Sync/Audio Signals Altinex Standard
Impedance	50 Ohms
Output Video Signals	
CAT-5/6 Twisted Pair Output	Video/Sync/Audio Signals Altinex Standard
Impedance	50 Ohms
Power	
External Adapter (included)	9V DC, 500mA

Table 3. **DA1957CT** Electrical
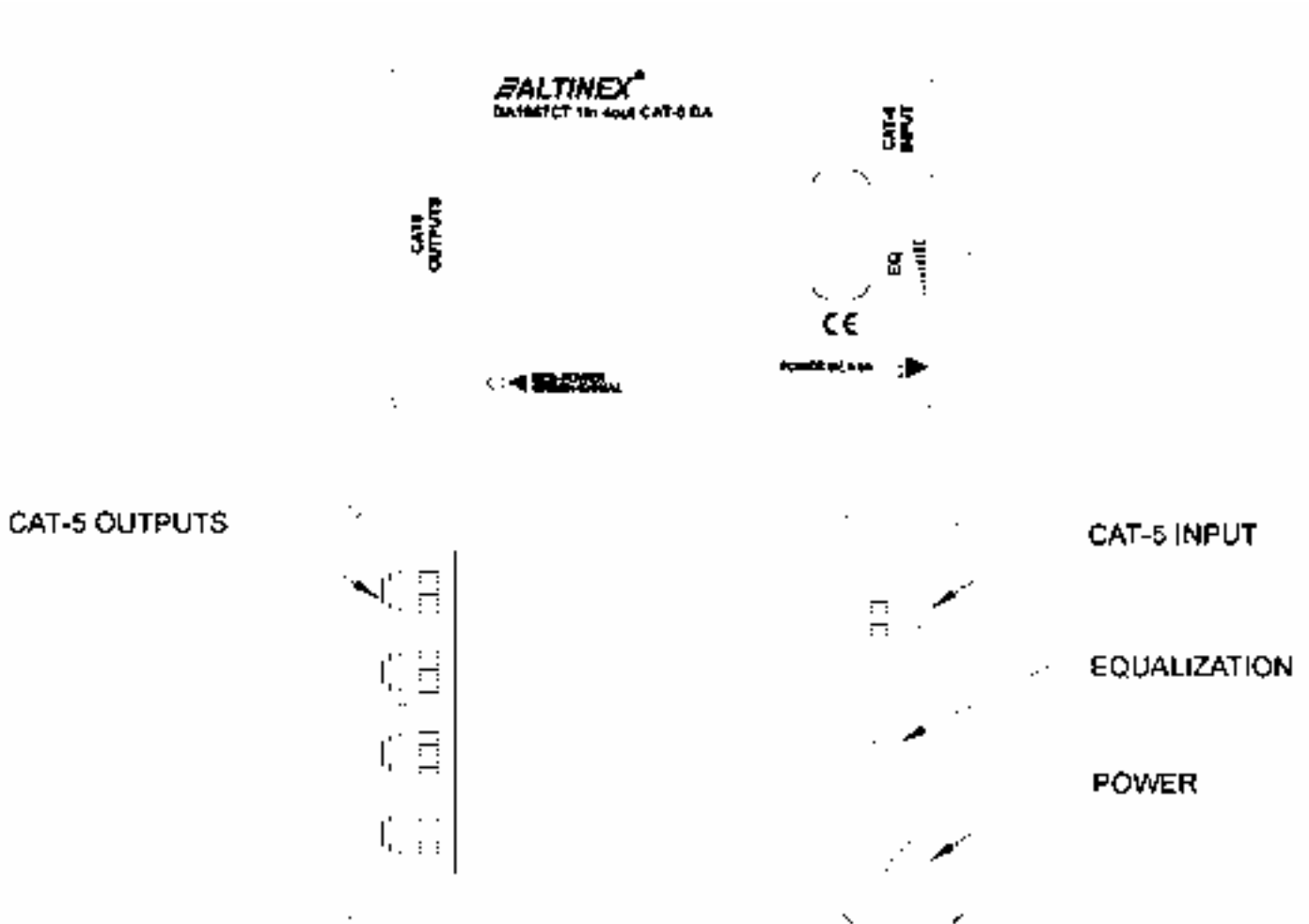
PRODUCT DESCRIPTION 4

CAT-5 OUTPUTS

CAT-5 INPUT

EQUALIZATION

POWER

4

APPLICATION DIAGRAMS   5

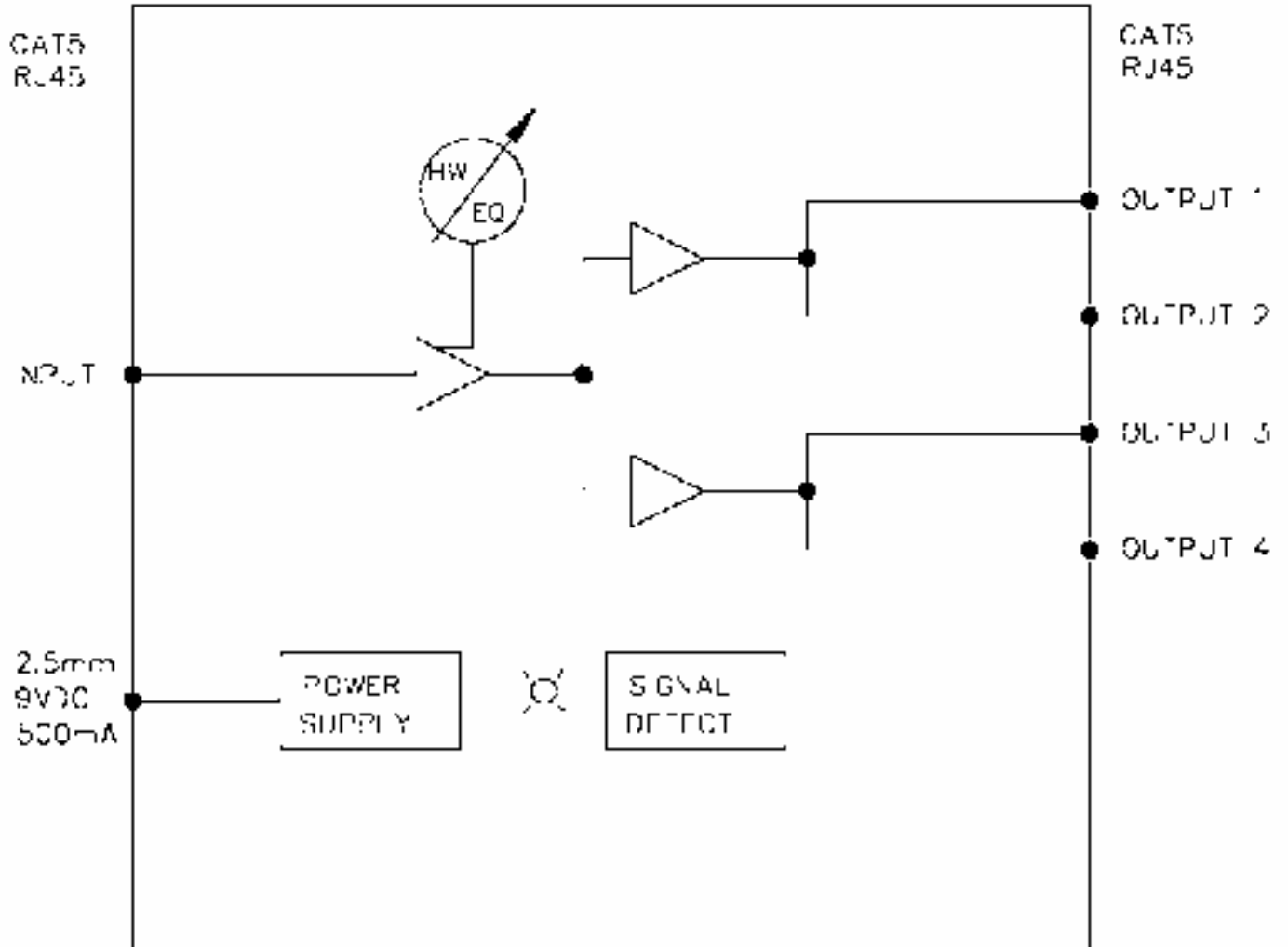**DIAGRAM 1: TYPICAL SETUP**
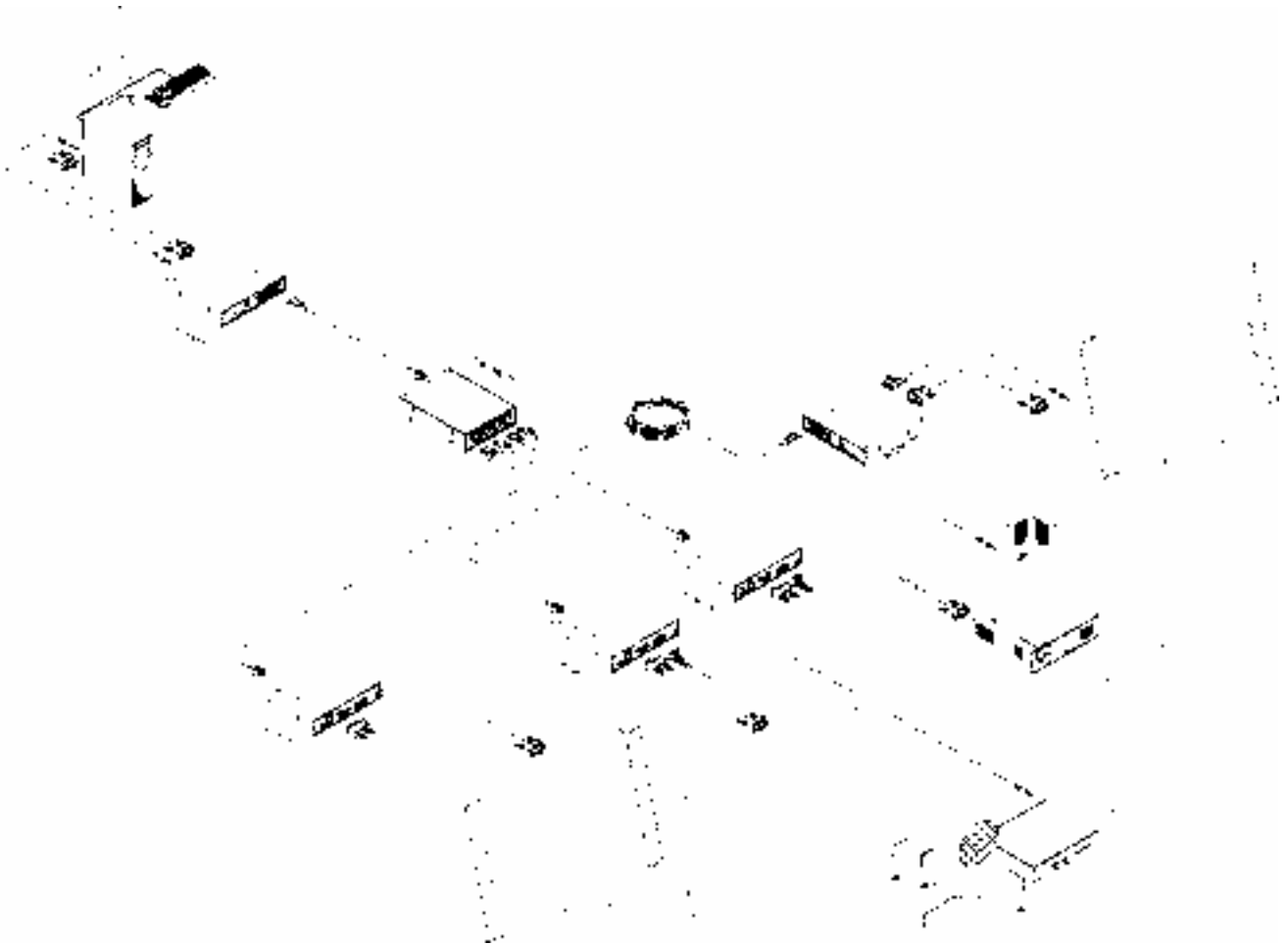
DIAGRAM 2: INTERNAL VIEW

INSTALLING YOUR DA1957CT   6

Step 1. Determine the best location for the **DA1957CT**.

Step 2. Connect the adapter to the unit and plug it into the power outlet. The power indicator LED on the front panel will light. This indicates that the unit is operational.

Step 3. Connect a cable from the CAT-5 Transmitter to the Input connector on the **DA1957CT**.

Step 4. Connect one to four of the **DA1957CT** output channels to CAT-5 Receivers. The receiving devices (monitors, projectors, speakers…) should be connected to the CAT-5 Receivers per their User Guides.

Step 5. Adjust the equalization settings for the best image quality.

OPERATION   7

The **DA1957CT** will operate successfully as long as cables are attached properly and other technical specifications are followed. The only adjustment on the **DA1957CT** is for Video Equalization and only needs to be made at the time of installation.

The equalization knob is a single turn adjustment. At minimum (fully CCW), the arrow points to the 7 o'clock position and at maximum (fully CW) it points to the 5 o'clock position.

Video Equalization is provided to fine tune the displayed image on the remote display. Typically, for short cable runs the equalization will be set to near minimum. Cable lengths up to 400 feet will require near maximum equalization.

TROUBLESHOOTING GUIDE   8

We have carefully tested the supplied **DA1957CT** unit and have found no problems; however, we would like to offer the following suggestions:

8.1 LED IS NOT RED

The LED should be ON and RED when power is applied and there is no video signal present. If the LED is ON and GREEN, the unit is receiving power and a SYNC signal.

Cause 1: No AC power.

Solution: Verify the adapter is plugged into a working AC outlet, and that the outlet has power. It is best to use only the Altinex provided power adapter.

Cause 2: Adapter is not plugged into DA1957CT.

Solution: Verify the DC power plug coming from the AC adapter is plugged all the way into the **DA1957CT**.

Cause 3: The DA1957CT has a problem.

Solution: If there is AC power to the adapter and the LED still does not turn on, the **DA1957CT** or the power adapter may require service. Call ALTINEX at (714) 990-2300.

8.2 LED IS NOT GREEN

Cause 1: There is no power.

Solution: Disconnect the video input from the **DA1957CT** and verify the LED is ON and RED indicating power is present. Reconnect the computer's video output. If the LED is still not GREEN, see Cause 2.

Cause 2: There is no Sync signal.

Solution 1: Verify the computer output is operating correctly by connecting it directly to a local monitor. If the display is good, see Solution 2.

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Solution 2: Verify the transmitter and receiver are operating correctly by connecting them directly to each other, bypassing the DA1957CT. If the display is good, see Solution 3.

Solution 3: Reconnect the DA1957CT. If the POWER/SIGNAL LED is still ON and RED with the signal present, call ALTINEX at (714) 990-2300.

8.3 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 AUDIO GAIN on the transmitter toward maximum. If there is still no sound present, 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 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.

8.4 NO REMOTE IMAGE

Cause 1:   **The source has a problem.**

Solution: Check the image on the local monitor and verify the quality is good. If the local image is good, see Cause 2.

Cause 2:   **Video equalization required.**

Solution: Adjust the VIDEO EQUALIZATION on the **DA1957CT**. Long cable runs may require adjustment. In general, cable runs less then 50 feet require little or no video equalization and should be set to minimum. Cable runs of 400 feet will require near maximum equalization. If there is still no image, see Cause 3.

Cause 3:   **No signal.**

Solution: If the DA1957CT's POWER/SIGNAL LED is ON and GREEN and there is still no image, call Altinex at (714) 990-2300.

8.5 REMOTE IMAGE QUALITY IS POOR

Cause 1:   **The source has a problem.**

Solution: Check the image on a local monitor and verify the quality is good. If the local image is good, see Cause 2.

Cause 2:   **Video equalization required.**

Solution: Adjust the VIDEO EQUALIZATION on the DA1957CT. If the image is still not correct, call ALTINEX at (714) 990-2300.

ALTINEX POLICY   9

9.1 LIMITED WARRANTY/RETURN POLICY

Please see the Altinex website at www.altinex.com for details on warranty and return policy.

9.2 CONTACT INFORMATION

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