

VTC AccuMic™

User's Guide

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Gentner VTC AccuMic User's Guide Gentner Part No. 800-156-110 April 2001 (Rev. 1.1)

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Introduction

Thank you for choosing Gentner's VTC AccuMic™—a high quality accessory for video, Internet, and PC conferencing systems.

The VTC AccuMic uses three innovative microphone technologies to produce superior audio clarity: AGC (automatic gain control) with noise suppression, VTM™ (Voice Tracking Microphone) 360-degree dynamic audio pickup, and AEC (acoustic echo cancellation), which removes echo and eliminates clipped speech.

This user's guide outlines the installation and use of your VTC AccuMic. If, after reading it, you should have questions on installation, set up, or operation, please contact Gentner technical support at one of the numbers listed below.

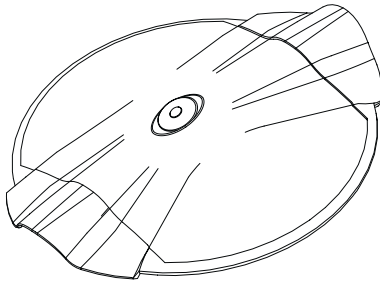
Enjoy your VTC AccuMic!

Technical Support

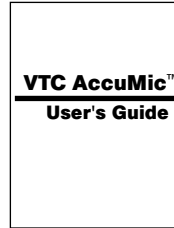
Telephone: 1.800.283.5936 (USA) or
1.801.974.3760
Fax: 1.801.974.3638
E-mail: tech2@gentner.com
Web site: www.gentner.com

Sales and Customer Service

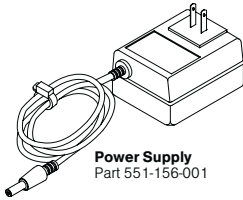
Telephone: 1.800.945.7730 (USA) or
1.801.975.7200
Fax: 1.800.933.5107 (USA) or
1.801.977.0087



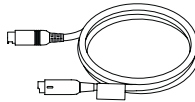
VTC AccuMic
Part 910-156-110



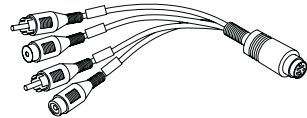
User's Guide
Part 800-156-110 Rev. 1.0



Power Supply
Part 551-156-001



25' Mini-Din Connector Cable
Part 830-000-042



4-Way Breakout Cable
Part 830-000-043

Unpacking

As you unpack your VTC AccuMic, verify that you have received the following parts.

- VTC AccuMic User's Guide
- VTC AccuMic pad
- 25-foot mini-din connector cable— one end has a 9-pin connector and the other end has an 8-pin connector
- I/O adapter with mini-din 8-pin on one end and a 4-way breakout cable on the other end
- Power supply
- Product Warranty Registration card

Product Registration

Please register your VTC AccuMic. When your product is properly registered, we are better able to serve you should you require technical assistance or desire to receive upgrade or new product information.

Please locate the serial number on the bottom of the unit and do one of the following:

- Fill out and send in the product registration card in this user's guide
- Visit our Web site and fill out the product registration form at www.gentner.com/register
- Call 1.800.753.1464



Gentner Communications is not responsible for product damage incurred during shipment. You must make claims directly with the carrier. Inspect your shipment carefully for obvious signs of damage. If the shipment appears damaged, retain the original boxes and packing material for inspection by the carrier. Contact your carrier immediately.

Preparing for Setup

To ensure the best performance from your VTC AccuMic, follow these setup tips:

- Put your VTC AccuMic on a desk or table in the middle of your conference area. Participants should be within a 10 foot radius.
- Consult your videoconferencing manual or telecommunications administrator to determine the audio input and output options.
- VTC AccuMic works with line level audio support.

Safety Instructions

This section lists important safety instructions that you should read and understand before setting up and using your VTC AccuMic.

Caring for your VTC AccuMic

- Follow all warnings and instructions marked on your VTC AccuMic.
- Unplug your VTC AccuMic from the wall outlet before cleaning.
- Do not use liquid or aerosol cleaners. Use a damp cloth moistened with water to clean the outside of your VTC AccuMic pad and power supply.

Choosing a location

- Do not use your VTC AccuMic near water. For example, do not use it near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool.
- Do not place your VTC AccuMic on an unstable cart, stand, or table. Your VTC AccuMic could fall, causing it to be seriously damaged.

Electrical considerations

- Do not allow anything to rest on the cords and cables connected to your VTC AccuMic.
- Do not put your VTC AccuMic where the cords can be walked on.
- Do not overload wall outlets and extension cords, as this can result in the risk of fire or electric shock.
- Never push objects of any kind into the openings on your VTC AccuMic pad or power supply. Objects may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock.
- Never spill liquid of any kind on your VTC AccuMic.

- To reduce the risk of electric shock, do not disassemble your VTC AccuMic pad or power supply. Send it to Gentner when repair work or service is required. Opening or removing covers may expose you to dangerous voltage or other risks. Incorrect reassembly can cause electric shock when you next use your VTC AccuMic.

- Avoid using your VTC AccuMic during an electrical storm. There can be a remote risk of electric shock from lightning.

When to repair your VTC AccuMic

Unplug your VTC AccuMic from the wall outlet and return it to Gentner if any of the following conditions occur:

- The power supply cord is damaged or frayed.
- Liquid has been spilled into your VTC AccuMic pad or power supply.



Do not attempt to service the power supply yourself. It must be serviced by Gentner.

- Your VTC AccuMic does not operate normally when you follow the operating instructions.

- Your VTC AccuMic has been dropped or damaged.

- Your VTC AccuMic exhibits a distinct change in performance.

Power supply service

- Use only the power supply that comes with your VTC AccuMic. If you have any questions call Gentner at 1.800.283.5936.

Returning a Product

Your Gentner product is warranted against defects in quality and workmanship for one year after the date of the original invoice. For a period of one year, Gentner will repair or replace your product at its discretion. Please see the warranty information at the back of this user's guide for more information.



You must call Gentner for a Return Authorization (RA) number before you ship your product.

To return a product:

1. Call Gentner Technical Support at 1.800.283.5936 or 1.801.974.3760. Describe the problem you are having to the representative. If your problem cannot be solved over the phone, Gentner will issue an RA number.
2. Pack your product with all its parts in the original box or in proper packaging so that the product incurs no further damage in transit.
3. Include your return shipping address inside the box with your product. We cannot ship to a PO box.

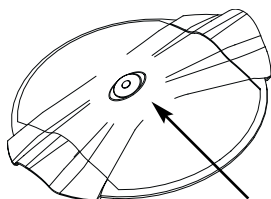
4. Write the RA prominently on the outside of the box.

5. Ship packages prepaid only to:

Gentner Communications
Attention: Repair RA #xxxx
1825 Research Way
Salt Lake City, Utah 84119

Gentner Communications is not responsible for shipping charges.

Controls & Connections



Mute

The blue button mutes the microphone. The illuminating LEDs track the direction of your voice, letting you know you're being heard at the distant location.



9-Pin



8-Pin

Connections

The 9-pin Receptor connects to a video codec. The 8-pin Receptor enables you to connect an additional VTC AccuMic using a mini-din cable.

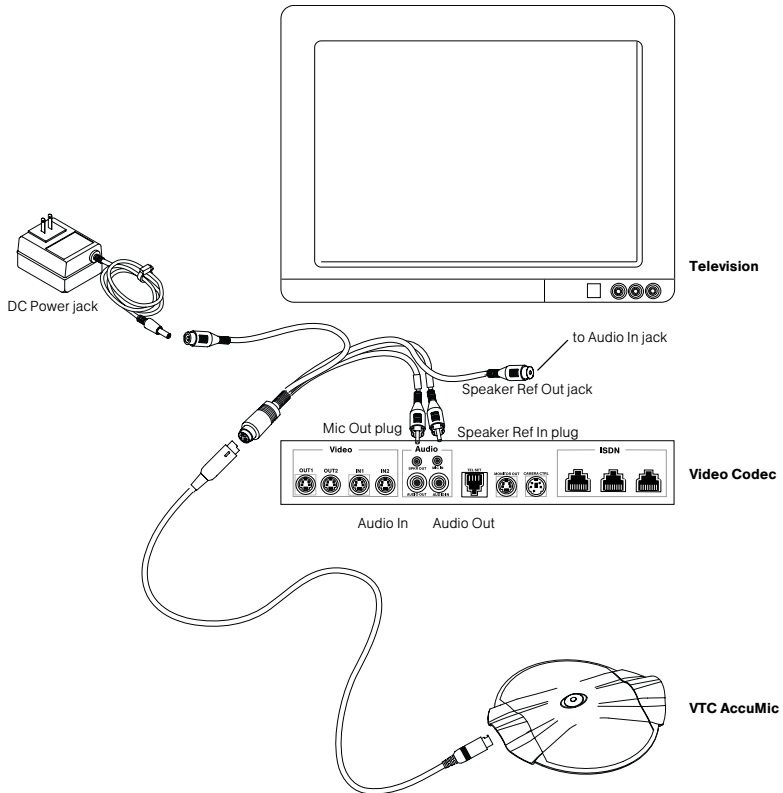
Connecting Your VTC AccuMic

The VTC AccuMic is a versatile component of your conferencing system and easily connects to most video codecs at the line level audio input and output as shown in the table below.

If your video codec has internal echo cancellation, you should disable it before using the VTC AccuMic. Please refer to your video codec manual for instructions.

Model Name	Line Level	3.5mm	Model Name	Line Level	3.5mm
CTG			SONY		
SM-01	Y		PCS1500	Y	
SM-02	Y		TANDBERG		
BNI			Vision 600	Y	
Large Group Conference Phone	Y		Vision 770	Y	
Medium Group RollAbout	Y		Vision 800	Y	
Person Desktop WorkStation	Y		Vision 2500	Y	
GENTNER			Vision 5000	Y	
APV200	Y		Vision 6000	Y	
APV200-IP	Y		Vision 7000	Y	
INTEL			Vision 2500 Portable	Y	
Intel Team Station	see PictureTel	(exclusive Dist.)	Vision 5000 Portable	Y	
Intel Video System 500	see PictureTel	(exclusive Dist.)	Vision 6000 Portable	Y	
PICTURETEL			Codec 1000	Y	
Intel Team Station	Y		Codec 2500	Y	
Concorde 4500 & System 4000ZX	Y		Codec 5000	Y	
Venue 2000 Model 50	Y		Codec 6000	Y	
Venue 2000 Model 30	Y		Health Care System III	Y	
PictureTel 760	Y		VBRICK		
Intel ProShare Video System 500		Y	Vbrick 1000 series	Y	
Live 200		Y	Vbrick 2000 series	Y	
Zydacron OnWAN for Win95		Y	Vbrick 3000 series	Y	
Zydacron OnWAN 250	Y		VCON		
LiveLAN		Y	Cruiser 384		Y
PictureTel 550		Y	Mediacconnect 6000	Y	
POLYCOM			VTEL		
View Station FX	Y		TC 1000	Y	
VS 4000	Y		TC 2000	Y	
View Station MP	Y		HS 2000	Y	
View Station V,35	Y		LC 5000	Y	
Video View Station	Y		WG 500		Y
View Station DCP 512	Y		SmartStation		Y
View Station SP	Y		SetTop 250	Y	
H. 323 128	Y				
RSI					
Video Flyer	Y				
Media Pro	Y				

Connecting to a Video Codec Unit



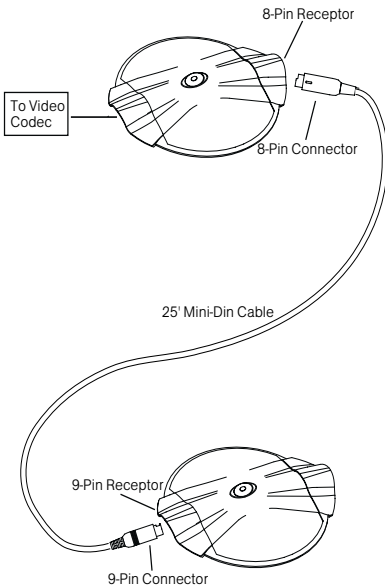
1. Connect the 9-pin end of the mini-din cable to the 9-pin receptor on the VTC AccuMic.
2. Connect the 8-pin end of the mini-din cable to the 8-pin receptor on the 4-way breakout cable.
3. Connect the DC Power jack to the Power Supply plug.
4. Connect the Speaker Ref In plug to the video codec's Audio Out jack
5. Connect the Mic Out plug to the video codec's Audio In jack.
6. Using an RCA audio cable (not included), connect the Speaker Ref Out jack to the television's Audio In jack.



Additional extension cables may be needed to make all the connections.

Connecting to an Additional VTC AccuMic

You can connect one additional VTC AccuMic in order to extend sound pick up to the conferencing system.



1. Connect the first VTC AccuMic to the video codec.
2. Using a VTC mini-din cable (10' cable available, order 830-000-041), connect the 8-pin connector to the 8-pin receptor on the first VTC AccuMic.
3. Connect the 9-pin connector to the 9-pin receptor on the second VTC AccuMic.

Troubleshooting

If you are having trouble with your VTC AccuMic, it may not have been set up properly or other equipment might be malfunctioning. To begin, check the following:

- The VTC AccuMic power supply is plugged into a 120-volt electrical outlet.
- The base connector cable from the power supply to the VTC AccuMic is securely connected.
- Connections to the video codec and television are secure.
- The equipment the other party is using is comparable in quality to your video conferencing system and is working properly.
- The LEDs illuminate in the direction of the participant. The participants need to be within 10 feet of the VTC AccuMic.

If problems persist, contact technical support. See instructions on page 3.

Warranty

Gentner Communications Corp. warrants the original purchaser that this product will be free from defects in materials and workmanship for a period of one (1) year from the date of purchase. During the limited warranty period, and upon proof of purchase, the product will be repaired or replaced (with the same or a similar model, which may be a refurbished model) at Gentner's option, without charge for either parts or labor. Gentner is not responsible for costs incurred in delivering or shipping your VTC AccuMic to or from the service site. All replaced equipment becomes the property of Gentner.

This limited warranty will not apply if the product is modified, tampered with, misused, or subjected to abnormal working conditions (including, but not limited to, lightning and water damage).

This limited warranty does not guarantee you uninterrupted service. Repair or replacement as provided under this limited warranty is the exclusive remedy of the purchaser. This limited warranty is in lieu of all other warranties, express or implied, including but not limited to any implied warranty of merchantability or fitness for a particular use or purpose. Gentner will in no event be liable for any special, indirect, incidental, punitive, or consequential damages of any kind or character, including, without limitation, loss of revenue or profits, failure to realize savings or other benefits, loss of data or use, damage to equipment, and claims against the purchaser by a third person, even if Gentner has been advised of the possibility of such damages.

This limited warranty gives you specific

legal rights. You may have others. The law of certain states and nations do not allow limitations on duration of an implied warranty, or the exclusion or limitation of incidental or consequential damages, so the above limitations, disclaimers, or exclusions may not apply to you.

To obtain service under this limited warranty, contact Gentner Technical Support at 1.800.283.5936 (USA) or 1.801.974.3760. You will be given a Return Authorization (RA) number to help Gentner keep track of your limited warranty request. Once you have received your RA number, send the package, postage prepaid and insured, to Gentner. Include proof of the date of purchase.

IMPORTANT: If you return your VTC AccuMic, pack it securely and be sure your RA number is visible on the outside of the package.

Other restrictions

You will not (and will not allow any third party to)

- Decompile, disassemble, or otherwise reverse engineer or attempt to reconstruct or discover any source code or underlying ideas or algorithms of the software by any means whatsoever or,
- Remove any product identification, copyright, or other notices.

Regulatory Information

FCC Rules Compliance

The Gentner VTC AccuMic has been tested and found to comply with the limits for a Class A digital device as specified in Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. The VTC AccuMic 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.

You must use shielded cables with this equipment to ensure compliance with the Class A FCC limits.

Changes or modifications not expressly approved by Gentner Communications Corporation could void your authority to operate your VTC AccuMic.

Radio and Television Interference

The VTC AccuMic generates, uses, and can radiate radio frequency energy. If your VTC AccuMic is not installed and used in strict accordance with the manufacturer's instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If your VTC AccuMic does cause harmful interference with radio or television reception, which can be determined by turning the VTC AccuMic off and on,

try to correct the interference by:

- Reorienting or relocating the radio or television receiving antenna
- Increasing the separation between your VTC AccuMic and the receiver
- Connecting your VTC AccuMic to an outlet or electrical circuit different from the one to which the receiver is connected
- Consulting your ClearOne IM dealer or an experienced radio/television technician for help

You may want to obtain a copy of *How to Identify and Resolve Radio-TV Interference Problems*, Stock #004-000-0345-4. This booklet was prepared by the FCC and is available from the U.S. Government Printing Office, Washington DC 20402.

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Canadian Regulatory Information

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Technical Specifications

ELECTRICAL

Power:

15–18 VDC, 500 mA, 2.1 mm center positive

DSP:

TMS320C32, 60 MHz

AD conversion:

16 bit, 16 kHz

Frequency response:

50 Hz–7 kHz

AEC tail-time:

64 msec

Microphone Out (RCA plug):

Nominal level: –15 dBu

Impedance: 1 kOhms

Speaker Reference In (RCA plug):

Nominal level: –15 dBu

Impedance: 10 kOhms

Speaker Reference Out (RCA jack):

Nominal level: –15 dBu

Impedance: in parallel with Speaker Reference In

CONNECTIONS

Cables:

- (1) 25' 8-pin to 9-pin mini-din (10' cable available, order 830-000-041)
- (1) 8-pin to 4-way breakout cable adapter:
 - 1 Power In, 15–18 VDC, 500 mA
 - 1 Microphone Out
 - 1 Speaker Reference In
 - 1 Speaker Reference Out

REGULATORY

FCC:

Class A

Part 15, sub part B

Standards:

Meets ITU-T recommendation G.167

ENVIRONMENT

Operating:

Temperature: 5–40° C

Humidity: 50–80%

Storage:

Temperature: 5–70° C

Humidity: 10–90%

Dimension:

8" (L) x 6.5" (W) x 1" (H)

Weight:

1 lb

FEATURES

Microphone:

3 elements

Visual Feedback:

3 LED indicators

Mute Button:

1 (blue button)

AGC:

Dynamic automatic gain control with noise suppression

VTM:

360-degree dynamic audio pickup

AEC:

Removes echo and eliminates clipped speech