Active Thermal Management

The trusted name in thermal protection...

2012 Catalog

Celebrating 13 years
of QUIET cooling!
est. 1999

SOLVING HEAT-RELATED PROBLEMS
FOR THE CUSTOM AUDIO-VIDEO
INSTALLATION COMMUNITY

Specialty products for the Custom Audio/Video Installation Community

Active Thermal Management was formed by a small group of home entertainment electronics professionals to solve a specific problem faced by the custom installation Community: excessive heat in audio-video/home theater installations. Not rocket science, perhaps, but an increasingly important factor as systems become both more powerful and complex. The keyword is "more" and the equation is:

> **More channels**
> **+ More power per channel**
> **+ More new types of equipment**
>
> **= More heat generated.**

Put the equipment in an enclosed rack or cabinet, and temperatures can easily reach damaging levels. The results can include nuisance service calls, reduced equipment life, and damage to the designer/installer's reputation for allowing so obvious and annoying a "loose end"...

Technical papers available

Active Thermal Management has written a series of white papers on topics of interest to the custom audio-video systems designer and installer. Many of your questions regarding heat problems are answered in these papers and are available for download on the Technical Info page at www.activethermal.com.

Important notes for systems designers and installers:

Not every product we make is suitable for use with every amplifier, receiver, or other heat-producing piece of electronic equipment. It is the responsibility of the systems designer or installer to determine that a particular Active Thermal Management product is suitable for use in a particular situation. Active Thermal Management cannot be responsible for damage as a result of incorrect choice, failure, or use of its products. Active Thermal Management will gladly exchange equipment or refund the purchase price (less shipping costs) within 14 days of receipt if the wrong equipment has been purchased for a particular use if the equipment has not been damaged. We are not responsible for typographical errors.

Active Thermal Management reserves the right to make changes to its products and their specifications in an ongoing process of product improvement.

The 8 basic Cooling Situations
...And how to solve the problem!

1. A single unenclosed component
    - ***Cool it II**
    - ***Dual-mode**
    - ***Tri-Mode**
    - ***Cool Slim**

2. An enclosure which has at least 2" of open space behind it
    (fans can be mounted out of sight on rear panel)
    - ***System 2 Original**
    - ***System 2 or 2+2 kit**
    - ***System 3**
    - ***SEC-1**

3. A built-in enclosure (fans can't be mounted on rear panel)
    - ***Cool vent**
    - ***Circle vent**
    - ***Cool cube**
    - ***Cool line**
    - ***System 4**

4. An unenclosed rack
    - ***Cool stack I**
    - ***Cool stack II**
    - ***System 2 Rack-mount**
    - ***Cool stack III**

5. An enclosed rack (in a closet or cabinet)
    - ***Cool stack II**
    - ***Cool stack III**

6. A large enclosure (walk-in or coat-size closet)
    - ***Cool cube**
    - ***System 1**

7. An enclosed video projector
    - ***System 2 kit**
    - ***Cool cube**
    - ***System 1**

8. A flat panel display set into a wall or cabinet
    - ***Cool stick**
    - ***System 3**

TABLE OF CONTENTS:

System 1—Now Energy Star rated!
The inexpensive way to cool overheated systems and enclosures

The problem solver...

A complete package that will solve 90% of the heat-related problems the systems designer will experience when working with large systems and enclosures.

The System 1 is comprised of:

⇒ an extraordinary centrifugal air mover, in an in-line configuration for use within a house OR in a weatherproof enclosure for use outdoors.
⇒ 8 feet of flexible tubing.
⇒ a hot air collector that easily mounts to almost any enclosure; the combination is simple, inexpensive, and virtually silent. All necessary clamps, brackets, and instructions are included.

The fans — The in-line Energy-Star rated fan will exhaust 140 cubic feet of hot air per minute in free air, while the EXT version (not Energy Star rated) will exhaust 100CFM. With as much as 25' of tubing, either will still move a large volume of heated air-quietly.

⇒ The in-line model is suitable for use indoors, in any position, and is not affected by moisture, dust, or temperatures up to 140° F. Tubing can be connected to both intake and exhaust ports; the fan can push or pull air—or do both!

⇒ The EXTerior model is enclosed in a weatherproof metal case 10"w x 14"h x 5"d. It mounts outside the house and incorporates a one-way "trap door" to prevent outside air, dust, and insects from entering the house.

Specifications:

The in-line version is 13" long and 9.5" in diameter at its widest. Both use a Swiss-made, balanced motorized impeller that produces minimal noise and vibration. They consume only 60 watts and are rated for continuous operation; we guarantee the System 1 fans for 3 years.

The tubing — The System 1 comes with 8 feet of 4" ID/ 6" OD flexible, acoustically-damped tubing. This diameter allows hot air to move slowly and quietly. Additional lengths are available and will reduce the amount of air moved.

The hot air collector — measures 6 ¼" square at its mounting flange; just screw the collector over a 4 " opening in the rear or other surface of the enclosure, and slip the tubing on.

System 1 (in-line)   **ATM # 00-100-02**
System 1 (EXT)   **ATM # 00-100-03**

In-line model

EXT model

System 1 Accessories

The System 1 is Active Thermal Management's large system workhorse. It can move over 140 CFM (in-line model) of heated air out of a large cabinet or closet and move it up to 25 feet away. Powerful enough to solve major heat problems in home theater installations, the fans still have to be turned on and off; in some installations, speed control is desirable.

(Note – All of the thermal switches can be used with the System 1 speed control for situations in which the full air moving capacity of the System 1 isn't required.)

Adjustable Thermal Switch

Simplest, lowest-cost thermal switch for the System 1

Simple plug-in connections

Mounts in a junction box; must be located close to heat source

ATM Part #   03-101-01

Remote Digital Thermal Switch

Digital read out of system temperature, turn-on & turn-off temperatures

Low-voltage wiring from sensor to fan; avoid wiring code violations

Sensor lead 6.5' long; easily lengthened

Simple plug-in connections

ATM Part #   03-101-03

Multi-Input Thermal Switch

Uses low-voltage wiring from sensors to switch; avoid code violations

Accepts up to 3 thermal switches; fan is on when ANY sensed area is hot, off when ALL are cool - great for multi-section cabinets

Simple plug-in connections

Comes with (1) 90° switch; add more switches as needed

ATM Part #   03-101-02

extra 90° thermal switch assembly   03-203-02

System 1 Accessories, cont.

Speed Control

Lets you "fine tune" airflow

Minimizes noise & waste of heated/cooled room air
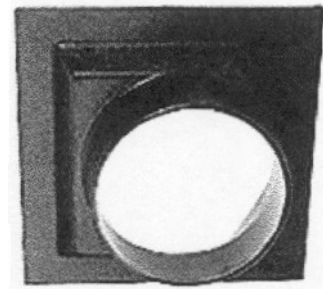
ATM Part #   03-102-01

Hot Air Collectors

Hot air collectors are funnel-shaped plastic fittings that make it easy to connect the System 1's insulated tubing to flat surfaces, such as the back of a cabinet. Larger sizes can be used to catch heated air rising above a rack. All appear similar to illustration at right, and are supplied with clamps.

ATM Part #

6 ¼" sq. (std. size)   03-104-00
8 ¼" sq.   03-104-02
8" x 10"   03-104-03
12 ¼" sq.   03-104-04
14" sq.   03-104-05

4" Y-fitting

Take advantage of the System 1's power; cool 2 cabinets (or cabinet sections) with one fan. Supplied with clamps.

ATM Part #   03-110-00

System 2 Family
For cooling mid-size enclosures

System 2 Original

System 2 Kit

System 2 Rack-Mount

The System 2 products are <u>the</u> affordable, simple-to-install, *quiet* venting solutions for mid-size heat loads in mid-sized cabinets (and mid-sized budgets!). Use them to cool computer enclosures, too, or anywhere else heat is a problem.

The family has 4 members - the System 2 Original, the System 2 Kit, the 2+2 Kit, and the Rack-Mount (R-M). All feature proportional speed control: ***fan speed is proportional to temperature rise***, relieving the system designer of control issues. As equipment warms, fans begin to turn at about 1/3 of full speed, increasing to 2/3 of full speed if temperature rises further. When the system is turned off, fan speed slows as temperature falls, shutting off completely just above room temperature. Speed limitation and the use of multiple 4.7" (120mm) fans ensure effective cooling with very little noise.

Differences among the System 2 products are in their mounting systems:

⇒ The System 2 Original has 2 fans and drive electronics on a ⅛" mounting plate, and is used to exhaust hot air. Use it on the back of a cabinet when it's at least 2" from a wall.

⇒ The System 2 (supplied with 2 fans, for most mid-sized cabinets) and 2+2 kits (supplied with 4 fans, for the larger cabinet or larger heat load) consist of "separates": fans, fan guards, drive electronics in a small metal chassis, power supply, and 2 temperature-sensing thermistors. Both kit forms of the System 2 are ideal for "building-in" to an enclosure at the planning stage. (Or squeezing into existing installations that are running hot.) Fans and temperature sensors come with long wires for an easy, no-soldering installation.

⇒ The rack-mount version is 3U high, has 3 fans, and can be mounted in the front or the rear of a rack for front-to-back ventilation. If there's clearance for air behind the rack, a System 2 R-M mounted high on the rear rack rails with a vent panel low on the front rails will move air through the rack from front to back and bottom to top for quiet, effective cooling.

ATM Part

System 2 Original	**00-200-02**
System 2 kit	**00-201-02**
System 2+2 kit	**00-202-02**
System 2 R-M	**00-203-01**

System 3E
Quiet cooling on a budget

While it's the medium-to-large systems that generate the most heat, small systems in small enclosures can also suffer from overheating. Whether it's a receiver and one or two other components in a small cabinet, a compact bedroom system tucked away inside a night table, or a remote amp for whole-house audio hidden in a linen closet, overheating causes problems for the installer and client alike.

Realistically, the amount of heat - *and money -* available in these situations is frequently limited. Here is a silent ventilating system that moves a moderate amount of air at a moderate price.

Smaller enclosures of 8 to 10 cubic feet in volume (typically under 2' wide, about 30" high, and less than 2' deep) do not need large volumes of air to remove heat generated by audio systems of moderate size. A venting arrangement that moves 15 to 20 cubic feet of air per minute would change the air completely twice a minute under ideal conditions (more than once a minute under real-world conditions), more than enough for systems of greater power and complexity. We've developed such a system for your smaller installations that doesn't require the air moving capabilities or sophisticated control systems of larger Active Thermal Management systems.

When the budget is tight, the System 3E may be just the answer.

The System 3E is comprised of two high-quality 3 ⅛" (80mm) fans, guards, a plug-type power supply, a thermal probe, and a temperature controlled module. All connections are "plug and play"- no wire stripping or soldering! Complete and inexpensive, the System 3 will move 15 to 20 CFM in typical applications <u>in almost complete silence</u>. The installer mounts the fans at appropriate places to pull room air in and push heated air out. Just fasten the thermal probe to the amplifier or other heat source, plug in the fan wires, thermal probe, and power supply to the control board, and plug the power supply into an always-live AC outlet.

Limited space and limited budgets are no longer reasons to ignore active ventilation systems and just "hope for the best". Give your clients the protection they deserve, and minimize profit-killing call-backs.

ATM Part # 00-400-01

SEC-1E
Makes Cooling Small Enclosures Easy

The Small Enclosure Cooler is designed to make cooling smaller enclosures easier than ever. Two 80 mm fans are pre-assembled to a thin panel which mounts over a simple rectangular cutout on a small cabinet's back panel. With a thermal probe that easily fastens to the component whose temperature is being monitored, installation is quick and simple.

An important change to the SEC-1E for 2012 is that it now uses an all-electronic thermal control module and remote thermal probe, replacing the older thermo-mechanical switch. Another feature is the ease with which the thermal control module attaches to equipment to be monitored. All components of the SEC-1 plug together; no wire cutting, stripping, or soldering is required.

The SEC-1 is generally used in exhaust mode, mounted to the rear panel of a cabinet at least 2" from a wall.

Specifications:

Fans:	**(**2) 3 ⅛" (80mm)
Dimensions (fan panel):	8 ½" l x 4 ½"w x 1 ¾"d
Air flow:	50 CFM (free air), 20 CFM (typical)
Noise level:	19 dBA
Trigger temperature:	90° F
Weight:	1 lb

ATM Part # 00-401-01

ACTIVE THERMAL MANAGEMENT

To Order:
(661) 294-7999—voice
(661) 294-1115—fax
sales@activethermal.com

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Cool-vent™
When it has to match…!

There are some installations in which you can't hide the fans' grilles, no matter how hard you try! When vent openings are going to be visible, Cool-vent II or III may be the answer. Each can be configured during installation to quietly move air in <u>or</u> out of an enclosure, and consists of a fan assembly and a very high quality wooden grille.

The Cool-vent family is ideal for mounting on a cabinet's base, or "kick-plate". Cool-vents II and III turn on at 90º, and turn off automatically when the temperature goes below that threshold. Just fasten the thermal probe to the amplifier or other heat source, plug in the fan wires, thermal probe, and power supply to the control board, and plug the power supply into an always-live AC outlet.

Available unfinished in more than 26 species of wood, the Cool-vents easily separate into fan and grille sections. After painting or staining the grille to match the client's enclosure, the fan assemblies screw back onto the grilles, facing one way to exhaust hot air or the other way to bring fresh air in.

The grilles are also available without fans to use as matching passive inlets or outlets.

Model	Rough opening	Finished size	#/size of fans	CFM - lo/hi Speed
Cool-vent II	4" x 14"	5 ½" x 15 ½"	4/80mm	20/30
Cool-vent III	6" x 14"	7 ⅛" x 15 ½"	2/120mm	30/50

SEE BACK INSIDE COVER FOR WOOD CODES AND SAMPLE WOOD SPECIES GUIDE!

ATM Part #   (replace "XX" with 2-letter wood abbreviation above)

Cool-vent II   00-502-XX
Cool-vent III   00-503-XX

Circle-vent™
When cooling devices can't be hidden

Circle-vent™ products are powered air vents designed for easy mounting in fine cabinetry. Available in surface or flush-mount configurations in a variety of wood species, Circle-vent is easily field-adjusted to either exhaust hot air out of an audio-video cabinet or pull fresh air in. Each system consists of 2 fan assemblies, power supply, and a magnetic-base thermal switch assembly. This turns the fans on at 90°.

The surface-mount configuration is easily retrofitted into existing cabinets; the flush-mount version is intended for installation during cabinet construction.

Surface mount units will be stocked in White Oak, Poplar, Maple, Black Walnut, and Cherry woods; other species (and all flush mount units) available by special order. (See below for wood codes)
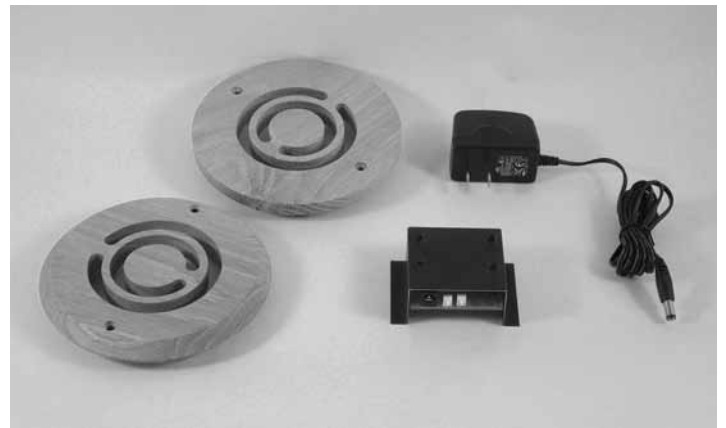
Specifications:

Fans:	**(**2) 3 ⅛" (80mm)
Dimensions:	5" o.d., 1 1/2" d.
Air flow:	20 CFM (free air), 15 CFM (typical) (each fan/grille assembly)
Noise level:	19 dBA
Trigger temperature:	90° F
Weight:	1/2 lb (each assembly)

ATM Part #   **(Replace "XX" with codes below)**

00-510-XX (surface mount)
00-511-XX (flush mount)

PLEASE ORDER (PG) or Paint Grade if you are going to paint the grille!

Wood species: *Paint Grade (PG), Red Oak (RO), White Oak (WO) Maple (MA), Cherry (CH), Q-sawn White Oak (QO), White Pine (WP), So. Yellow Pine (YP), Black Walnut (BW), Ash (AS), Poplar (PO), White Birch (WB), Red Birch (RB), Phil. Mahogany (PM), Sassafras (SA), Cypress (CY), Beech (BE), Cedar (CE), Bamboo (BA), Purple Heart (PH), Jajoba (JA), Ant. Heart Pine (AP), Hond. Mahogany (HM), Hickory (HI), VG Fir (VG), Redwood (RW), Teak (TE), and Alder (AL).*

SEE BACK INSIDE COVER FOR SAMPLE WOOD SPECIES GUIDE!

Cool-Line™
Modern, sleek, quiet...

Recognizing the need for cooling products for narrow spaces, such as above or below flat-panel displays, or mounted on kick panels, Active Thermal Management has introduced the Cool-Line series of quiet ventilating products. Available in satin-anodized aluminum and a wide variety of unfinished woods, all Cool-line products measure 3 ½" in width; length varies depending on the number of fans. Units will be available with 1 or 2 fans, and can be mounted horizontally or vertically.
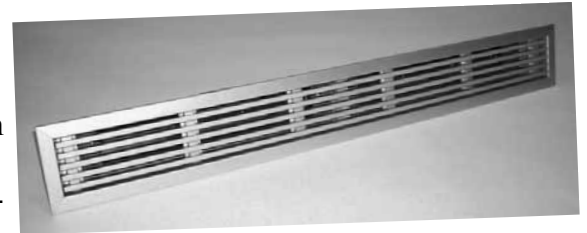
The slim, linear styling of the Cool-line series makes it ideal for use in commercial and residential A/V and computer installations where quiet cooling is required and space is limited. Powerful but quiet cross-flow fans are used in all models to move air in or out of the enclosure to be ventilated. Temperature controlled and multi-speed, the fans are completely automatic.

Intake Grille

The aluminum Cool-line systems ship configured to exhaust heated air from enclosures, but are easily changed in the field for use as intake devices. *Wood Cool-line versions must be ordered as either intake or exhaust models.* Matching grilles, both metal and wood, are available without fans to trim passive openings. Wood units are stocked in White Oak, Poplar, Maple, Black Walnut, and Cherry; other species are available by special order.

Exhaust Grille

Model	Rough opening	Finished size	#/size of fan	CFM
Cool-line 1 Alum.	14 ¼" x 2 ½"	15 ⅜" x 3 ½"	(1) 300mm cross-flow	25 CFM
Cool-line 1 Wood	14 ¾" x 2"	16 ⅜" x 3 ½"	(1) 300mm cross-flow	22 CFM
Cool-line 2 Alum.	29 ⅛" x 2 ½"	30 ¼" x 3 ⅜"	(2) 300mm cross-flow	50 CFM
Cool-line 2 Wood	28 ¼" x 2 ⅛"	30" x 3 ½"	(2) 300 mm cross-flow	47 CFM

ATM Part

Cool-line I Satin-anodized aluminum	00-531-01
Cool-line II Satin-anodized aluminum	00-532-01
Cool-line I Wood (intake)	00-521-XX-I (see page 8) Intake
Cool-line I Wood (exhaust)	00-521-XX-E (see page 8) Exhaust
Cool-line II Wood (intake)	00-522-XX-I (see page 8) Intake
Cool-line II Wood (exhaust)	00-522-XX-E (see page 8) Exhaust

*SEE BACK INSIDE COVER FOR WOOD CODES AND SAMPLE WOOD SPECIES GUIDE!*

System 4
When nothing else will do the job!

Other cooling systems typically require openings to both exhaust heated air and to allow fresh air to enter the enclosure, but there are situations in which aesthetic considerations rule out two openings. Built-in cabinets can also be a problem for the custom installer; frequently the only surface available for ventilation is the front, where openings are most visible.

Using only one small opening at the very bottom of a cabinet, trimmed with either a wood or anodized aluminum grille, the new "6-pack" fan module developed by ATM is powerful enough to quietly force heated air out through the gap (typically 1/8") between the cabinet's doors. Where doors close completely, small shims supplied with each system can be used to create narrow gaps. Like all ATM products, the System 4 is completely automatic; fan operation and speed is controlled by the temperature within the enclosure.

While it should not be the "first choice", the System 4 is appropriate to use when aesthetic considerations rule out other ventilation methods.
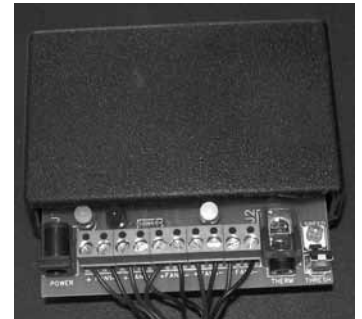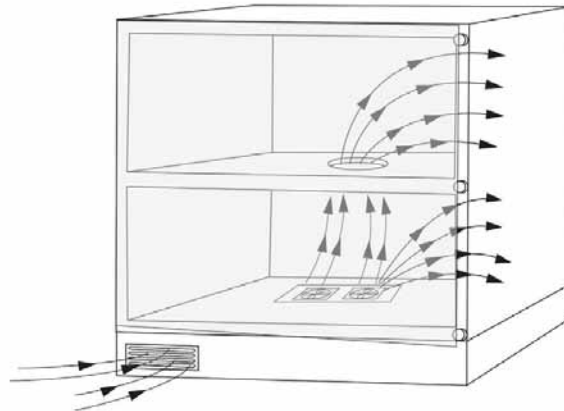
Specifications:

Fans:	**(**6) 80mm
Dimensions (fan panel):	8 ½"l x 4 ½"w x 3 ⅛"d
	(2" below mounting surface; 1 ⅛" above)
Air flow:	6-12 CFM (typical)
Noise level:	18—24 dBA, installation and speed-dependant
Trigger temperature:	90° F (low speed, adjustable speed and temperature)
	100°F (full speed)
Weight:	2-3 lb

ATM Part #	00-602-NA	w/ anodized aluminum grille
	00-602-BA	w/ black anodized grille
	00-602-00	w/ no grille
	00-602-XX	w/ wood grille

SEE BACK INSIDE COVER FOR WOOD CODES AND SAMPLE WOOD SPECIES GUIDE!

Cool-stick™
## Designed to cool enclosed flat-panel displays

Cool-stick — Specifically designed to solve the problem of quietly cooling flat-panel displays recessed into walls or cabinets. While no one device is suitable for ventilating every installation, Cool-stick™ is the answer to many problems.

Damage to expensive displays from heat is a real possibility; Cool-stick can help you avoid this problem with its 16 quiet fans blowing a stream of air across the back of a display panel. With mounting brackets (not shown) that give the installer flexibility in mounting, Cool-stick is small enough to squeeze behind, below, or above displays in all but the tightest situations. A 1" (min.) gap above & below the display is required. **Protection for the panel, the owner, AND the installer!**

Cool-stick 36" has **sixteen** fans, **two** power supplies and **two** thermal controls for a high degree of reliability through redundancy. Should a power supply or control fail, half of the fans will provide continuous cooling. Miniature power supplies are used to ease installation in crowded enclosures.

A shorter version, Cool-stick 18, is also available. Supplied with a single power supply and thermal control, Cool-stick 18 is useful for mounting behind components in tight quarters, such as between closely-spaced shelves.

Note: Active Thermal Management has written a white paper on cooling flat-panel displays, in which other products and cooling methods are discussed and illustrated. See it on our website @ www.activethermal.com, at Downloads, or e-mail sales@activethermal.com for a copy!
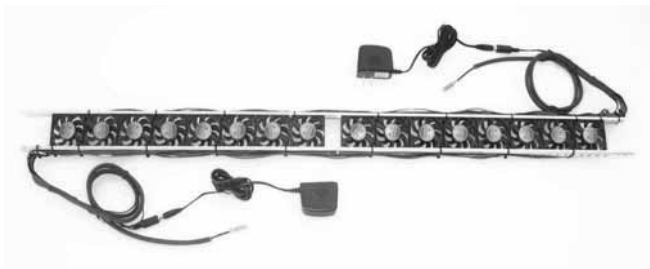
Specifications:	Cool-stick 36"	Cool-stick 18"
Fans	(16) 2" (50mm)	(8) 2" (50mm)
Dimensions:	36"l x 2 ½"w x ⅞"d	18"l x 2 ½"w x ⅞"d
Air flow:	60 CFM (free air), 15 CFM (typical)	30 CFM (free air), 8 CFM (typical)
Noise level:	21 dBA	18 dBA
Weight:	4 lbs	2 lbs
ATM Part #	**00-701-01**	**00-701-18**

Cool-stack I™
Includes a remote thermal probe

One of our most popular models, Cool-stack I is the cooling solution for small to mid-sized racks or sections of a larger rack. A remote thermal probe lets Cool-stack I's operation be controlled by the temperature of a component in the rack. This means fans can turn on later and stay on until residual heat has been removed from the component being cooled. (Fan operation can also be controlled by a contact closure instead of the thermal probe.) If the probe is accidentally disconnected from the Cool-stack I's chassis, the fans automatically turn on.

Cool-stack I™, is a 1 RU high true rack-mount ventilator. Very quiet in operation, it mounts above the heat producing equipment and pulls the heated air up and out of the equipment, and out the <u>front</u> of the rack. Four fans on the under side of Cool-stack turn relatively slowly, making essentially NO noise as they bring room air in and expel heated air through openings on the front panel.

For larger rack installations, with larger heat loads, the Cool-stack I is also available in an "intake" model. Mounted low in a rack and blowing cool air UP, with an "exhaust" Cool-stack I mounted high in the rack and moving heated air OUT, a strong (but quiet) ventilation current is established.

Specifications:

Dimensions: 19" x 1 3/4" x 8"
Fans: (4) 3.125" (80mm) 12Vdc
Air flow   70 CFM (full speed)
Noise level   26 dBA
Color   Black

ATM Part #   **Exhaust**   **00-301-03**
ATM Part #   **Intake**   **00-302-02**

Cool-stack II™
A 2U high quiet cooler for larger racks, larger heat loads

With six 120mm fans and a 16.5" depth, the Cool-stack II has the power - and the reach - to pull up to 130 CFM of hot air out of tightly-packed racks while generating low noise levels. The Cool-stack II has two temperature-controlled speeds, to satisfy the requirements of both residential and commercial installations; in either case, heated air can be expelled through the perforated front panel or through ports on the top or rear panels. When front panel exhaust is not practical, as when the rack has a door in front of it, or is in a closet, optional tubing and fittings are available to allow the Cool-stack II to channel exhausted hot air from its top or rear exhaust ports to nearby hallways, attics, utility rooms, etc.

- Rear exhaust — Two four-foot lengths of 2" diameter tubing can attach to fittings on the rear panel, and move heated air out of a rack cabinet, or into a near-by closet.

- Top exhaust — A blanking panel on the top of the Cool-stack II removes to allow the attachment of an eight-foot length of our 4"/6" (ID/OD) acoustically-insulated flex tubing. Hot air can be moved from within a rack, up through the top of an enclosure or a closet's ceiling.

Cool-stack II — cools the rack AND the enclosure the rack is in!

Specifications:

Dimensions: 19" w x 16.5" d x 3 1/2" h
Air flow: 10 to 130 CFM
Speeds: 2 (temperature controlled)
Noise level: 22 to 36 dBA
Finish: Black powder-coat

ATM Part # Fan unit only   00-303-01

ATM Part # Rear Exh kit   03-303-03

ATM Part # Top Exh kit   03-303-04

Cool-stack III™
Effective rack cooling in ONE space!

Cool-stack III is a 1-unit high hot air exhaust system for mid-size racks with mid-size heat loads! With four 120mm fans and an 18" depth, the Cool-stack III has the power – and the reach – to pull up to 70 CFM of hot air out of tightly-packed racks while generating very low noise levels. Heated air is normally

Top View

exhausted through the perforated front panel, but exhaust fittings and tubing provided can move the hot air safely away to the rear if the rack is located in a closet or cabinet.

Cool-stack III is temperature-controlled, coming on at 90° and shutting off when it has cooled below the set temperature.   This is suitable for removing stand-by heat generated by components such as cable boxes and satellite receivers. Temperature is sensed by a very small, remotely-located thermal probe which is easily secured to the component being monitored. A contact closure can also trigger full speed. Internal movable jumpers can be set to satisfy the requirements of a particular installation, whether residential or commercial.

Bottom View

A bracing bar is included to mount the unit to rear rack rails and support the rear section of the Cool-stack III.

Specifications:

Dimensions	19"w x 18"d x 1 ¾"h
Air flow	70 CFM (full speed)
Noise level	26 dBA
Color	Black
Fans	(4) 4.7" (120mm) DC
Trigger temperature	90°

ATM Part #   **00-304-01**

ELECTRONICHOUSE

2007
Product of the Year

Cool-Cube E™
When space is <u>really</u> tight

There are times when a situation calls for the System 1's ability to move hot air through a tube to "somewhere else", but there's just not enough room for the System 1's tubing or centrifugal blower.

Cool-Cube E (replacing the original Cool-Cube) was developed for the home theater design and installation community. Combining a compact power module with either 4", 3" or 2" flexible tubing, Cool-Cube E will pull heated air out of a closed mid-size cabinet, small closet, or enclosed video projector, holding a typical home theater system and quietly move it to a nearby closet, utility room, crawl space, etc. The power module measures 6" x 6" x 10" and is powerful enough to move a useful amount of air through tubing thin enough to snake through all but the most crowded cabinets. (See chart below.)

The Cool-Cube E features a new control system, activated by a remote temperature-sensing probe, with field-adjustable temperature set-points and speeds. The noise level generated even at high speed is low (when used with the insulated 4" tubing) in keeping with Active Thermal Management's policy of not "trading a heat problem for a noise problem".

Cool-cube with 2" tubing, with 2" & 3" adapters

The nature of this type of air moving device is such that it can *pull* air somewhat more effectively than it can *push* it. Cool-Cube E's power module should be placed, ideally, at the exhaust end of the tubing. A compact hot air collector, or flange, is provided at the suction end of the tubing, and is easily connected to a flat surface, such as the back of a cabinet.

Order the Cool-Cube E with 4" tubing if clearance allows, or with 3" or 2" tubing for those really tight situations. As little as 12 CFM of air movement means that the air in a typical 4' x 3' x 2' cabinet will be changed every two minutes. (This assumes free air flow; real-world installations will take somewhat longer for an air exchange)

Cool-Cube E with 8' of 4" tubing   ATM Part # 00-120-04

Cool-Cube E with 6' of 3" tubing   ATM Part # 00-120-01

Cool-Cube E with 6' of 2" tubing   ATM Part # 00-120-02

(Airflow through 6' of tubing)	LOW speed	HIGH speed
2" tubing	12 CFM	18 CFM
3" tubing	25 CFM	40 CFM
4" tubing	35 CFM	70 CFM

Dual-Mode & Tri-Mode Component Coolers

Designed for use in open or semi-enclosed installations where existing ventilation is insufficient, the Dual-Mode and Tri-Mode Component Coolers combine the functions of a bottom-mounted component cooler and an active heat shield. In heat shield mode, it's placed on top of a heat-generating component and provides a shelf on which a heat-sensitive component, such as a DVD player, can be safely placed. When the remote thermal probe (optional for the Tri-Mode) reaches 90°, quiet 120 mm fans cool the component below, preventing heat from reaching the component above.

Dual Mode Heat Shield

Changing to the bottom-mounted component cooler configuration is easily and quickly done using only a Phillips screwdriver. In this mode, either the Dual-Mode or Tri-Mode is placed beneath a component which has vent openings in the bottom panel. Either Component Cooler then sends a quiet stream of cooling air up into the amplifier or other hot component, reducing its internal temperature.

**Dual-Mode
Bottom-mounted Cooler**

The third configuration of the Tri-Mode turns it into an effective cooler for small digital media extenders which can fit beneath the Tri-mode.

In all configurations of the Tri-Mode, the fan operates continuously at an moderate speed, generating very little noise. If desired, an optional thermal switch accessory can be used to turn the fan on and off as temperature rises and falls.
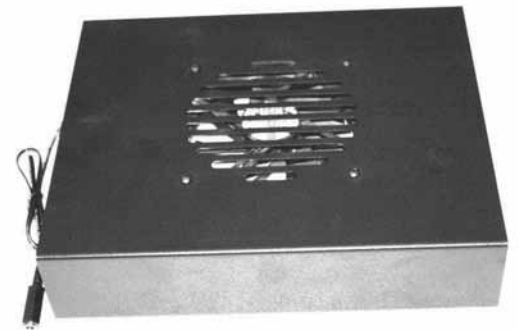
**Tri-Mode
Component Cooler**

Please note that the Component Coolers will NOT work in closed cabinets, as it would simply re-circulate the heated air. For those installations, choose one of ATM's enclosure coolers.

Specifications	Dual-Mode	Tri-Mode
Dimensions	14"d x 16"w x 2 ⅛"h	11"w x 9"d x 2 ½"h
Shelf capacity	100 lbs.	50 lbs.
Noise level	20 dBA	17 dBA
Color	Black	Black
Fans	(2) 4.7" (120mm) DC	(1) 4.7" (120mm) DC
Trigger temperature	90°	90°F (Optional)

| **ATM Part #** | **01-008-01** | **01-008-02** |

Cool-it II™
Simple spot cooling for components

Active Thermal Management introduced the original Cool-it™ several years ago. Since then, it has solved equipment heating problems in many shelf or bookcase installations.

Cool-it II is a single unit equipment cooler that is placed on top of equipment that is running hotter than it should be. Two almost totally silent 4.7" (120mm) fans send a stream of air down into the equipment to remove excess heat and prevent damage due to overheating.

Needing virtually no installation, Cool-it II is simply placed on top of the overheated receiver, processor or amplifier, the thermal switch is fastened, and the wall-type power supply is plugged into an always-live outlet. When the thermal probe reaches 90º, Cool-it II sends a quiet stream of cool air down into the component.

(Please note that it won't work in a tightly sealed enclosure; it will just stir the hot air around and around! For these situations, use an ATM enclosure cooler.)

Using the Cool-it II dramatically lowers the temperature of the output transistors and nearby components within a receiver or amplifier, and will extend its useful life significantly; heat is enemy number one of modern electronic devices.

The Cool-it II™ — cheap insurance for expensive equipment

Specifications:

Dimensions   15"l x 6.75"w x 2"h

Fans   (2) 4.7" (120mm) DC

ATM Part #   **01-002-02**

New for 2012!
Cool-Slim™
Simple spot cooling for smaller components

Our new Cool-Slim Component Cooler is designed to boost existing (but insufficient) ventilation for audio and video components. Very slim, it will solve overheating problems where components sit on closely-spaced shelves. Its 1 5/8" height can be reduced to 1 5/16" by removing the Cool-Slim's feet.

It will cool components both with <u>and</u> without vent openings in their top covers, and is temperature-controlled for fully automatic operation.

Please note that it won't work in a tightly sealed enclosure; it will just stir the hot air around and around! For these situations, see our enclosure coolers...

The Cool Slim™ — cheap insurance for expensive equipment

Specifications:

Dimensions	11"l x 11"w x 1⅝"h
Fans	(4) 3⅛" (80mm) DC
Power	4 watts
Noise level	19 dBA
Control	90°F thermal control with probe
Air flow	40 CFM (free air)

ATM Part #　　　　**01-008-03**

Cool-off™
If cooling should fail…!

There are installations in which protection against cooling system failure and equipment overheating must be protected against. Causes for failure of a cooling system could be as simple as a power plug accidentally disconnected, an air conditioning system that unexpectedly became a heating system when temperatures dropped, thermal probes moved out of position, or air paths blocked by added or repositioned equipment.

Below the pre-set temperature, AC power is fed to a power socket through heavy 10 ampere relay contacts. When the temperature at the remote sensor rises above the set-point, power to the socket is interrupted to protect expensive or heat-sensitive equipment.

Cool-off can be set so that power is restored when temperature drops by a predetermined number of degrees or remains off.

Cool-off can be powered from any wall socket or power conditioner. System temperature is displayed on the display screen at all times.

Specifications:

Power:	**120 volts, 60 Hz or 230 volts, 50 Hz**
Contact rating	**10 amps, at 120 or 230 volt**
Temperature range	**-30F - 212F (-34C - 212C)**
Weight:	**2 lb**

ATM Part #	**03-400-01**

SPECIFICATIONS SHEET

PRODUCT	DIMENSIONS	WEIGHT (BOXED)	FANS	AIRFLOW	NOISE LEVEL	TRIGGER TEMP	PART #
System 1	13"l x 9 ½" diameter	12 lb	(1) In-line centrifugal	140 cfm	34 dBA	n/a	00-100-02
System 1 EXT	10"w x 14"h x 5"d	16 lb	(1) centrifugal	100 cfm	34 dBA	n/a	00-100-03
System 2 Original	15 ¾"l x 7 ¾"w	3 lb	(2) 120 mm	10-40 cfm	24 (full speed)	85-120°	00-200-02
System 2 kit	n/a	3 lb	(2) 120 mm	10-40 cfm	24 (full speed)	85-120°	00-201-02
System 2+2 kit	n/a	4 lb	(4) 120 mm	20-80 cfm	27 (full speed)	85-120°	00-202-02
System 2 Rack-mount	19"w x 5 ¼"h x 2 ¾"d	4 lb	(3) 120 mm	15-45 cfm	26 (full speed)	85-120°	00-203-02
System 3	n/a	2 lb	(2) 80 mm	30/38 cfm	19/23 dBA	90°	00-400-01
SEC-1	8 ½"l x 4 ½"h	2 lb	(2) 80 mm	30 cfm	19 dBA	90°	00-401-01
System 4	8 ½"l x 4 ½"h	3 lb	(6) 120mm	enclosure dependent	20 dBA	90° lo (adj) 100° hi	00-602-XX
Cool-vent II	15 ½"l x 5 ½"h 4" x 14" rough opening	4 lb	(4) 80 mm	30 cfm	28 dBA	90°	00-502-XX
Cool-vent III	15 ½"l x 7 1/8"h 6" x 14" rough opening	4 lb	(2) 120 mm	50 cfm	26 dBA	90°	00-503-XX
Cool-line	See page 10 for table	4-6 lb	1 or 2 300mm cross-flow	~20 cfm per fan	20-25 dBA	multi-speed	See page 10
Circle-vent	5" diameter	2 lb	(2) 80 mm	20 cfm	19 dBA	90°	00-510-XX 00-511-XX
Cool stick 36"	36"l x 2 ½"w x 7/8"d	4 lb	(16) 50 mm	60 cfm	21 dBA	90°	00-701-01
Cool stick 18"	18"l x 2 ½"w x 7/8"d	2 lb	(8) 50 mm	30 cfm	18 dBA	90°	00-701-18
Cool stack I	19"w x 1 ¾"h x 8"d	8 lb	(4) 80 mm	40 cfm	21 dBA	90°	00-301-03 00-302-02
Cool stack II	19"w x 3 ½"h x 18"d	23 lb	(6) 120 mm	10-130 cfm	22-36 dBA	varies	00-303-01
Cool stack III	19"w x 1 ¾"h x 18"d	16 lb	(4) 120 mm	70 cfm	26 dBA	90°	00-304-01
Cool cube 2"	6"w x 6 ½"h x 10"l	10 lb	(5) 120 mm	12 cfm- lo 18 cfm- hi	28 dBA– lo 34 dBA– hi	90° lo (adj) 100° hi	00-120-02
Cool cube 3"	6"w x 6 ½"h x 10"l	10 lb	(5) 120 mm	25 cfm- lo 40 cfm- hi	24 dBA– lo 29 dBA– hi	90° lo (adj) 100° hi	00-120-01
Cool cube 4"	6"w x 6 ½"h x 10"l	10 lb	(5) 120 mm	35 cfm- lo 70 cfm- hi	20 dBA– lo 22 dBA– hi	90° lo (adj) 100° hi	00-120-04
Dual-Mode Cooler	16"w x 14"d x 2 1/8"h	9 lb	(2) 120 mm	30 cfm	20 dBA	90°	01-008-01
Tri-Mode	9"w x 11"l x 2 ½"h	3lb	(1) 120mm	12 cfm	16 dBA	optional 90°	01-008-02
Cool slim	11"w x 11"d x 1 5/8"h	4 lb	(1) 120 mm	12 cfm	16 dBA	90°	01-008-03
Cool it II	15"l x 6 ¾"w x 2"h	5 lb	(2) 120 mm	20 cfm	19 dBA	90°	01-002-02

ATM REPRESENTATIVES

Area	Company	Phone	Area	Company	Phone
AK	The Joncas Company	(206) 363-9200	NC	Creative Marketing	(615) 831-9690
AL	Creative Marketing	(615) 831-9690	NE	Flannigan & Assoc	(913) 888-9901
AR	Charles Lucas Sales	(817) 446-7575	NH	Pro Audio, Inc.	(781) 939-5630
AZ	Discovery Marketing	(800) 290-3433	NJ (N)	Bach Sales	(516) 334-2323
CA (N)	Profit Line	(415) 898-1617	NJ (S)	The NuTech Group	(215) 654-1224
CO	Discovery Marketing	(800) 290-3433	NM	Discovery Marketing	(800) 290-3433
CT	Pro Audio, Inc.	(781) 939-5630	NY	Bach Sales (metro, LI)	(516) 334-2323
DE	The NuTech Group	(215) 654-1224	OH	The Performance Grp	(614) 791-9911
DC	The NuTech Group	(215) 654-1224	OK	Charles Lucas Sale	(817) 446-7575
GA	Creative Marketing	(615) 831-9690	OR	The Joncas Company	(206) 363-9200
ID	Discovery Marketing	(800) 290-3433	PA (E)	The NuTech Group	(215) 654-1224
IL (S)	Flannigan & Assoc	(913) 888-9901	PA (W)	The Performance Grp	(614) 791-9911
IN	The Performance Grp	(614) 791-9911	RI	Pro Audio, Inc.	(781) 939-5630
IA	Flannigan & Assoc	(913) 888-9901	SC	Creative Marketing	(615) 831-9690
KS	Flannigan & Assoc	(913) 888-9901	TN	Creative Marketing	(615) 831-9690
KY	The Performance Grp	(614) 791-9911	TX (E)	Charles Lucas Sales	(817) 446-7575
LA	Charles Lucas Sales	(817) 446-7575	TX (W)	Discovery Marketing	(800) 290-3433
MA	Pro Audio, Inc.	(781) 939-5630	UT	Discovery Marketing	(800) 290-3433
MD	The NuTech Group	(215) 654-1224	VA	The NuTech Group	(215) 654-1224
ME	Pro Audio, Inc.	(781) 939-5630	VT	Pro Audio, Inc.	(781) 939-5630
MI	Flannigan & Assoc	(913) 888-9901	WA	The Joncas Company	(206) 363-9200
MO	Flannigan & Assoc	(913) 888-9901	WV	The Performance Grp	(614) 791-9911
MS	Creative Marketing	(615) 831-9690	WY	Discovery Marketing	(800) 290-3433
MT	Discovery Marketing	(800) 290-3433			

IF YOU DO NOT SEE YOUR STATE LISTED, PLEASE CONTACT ATM DIRECTLY!
(661) 294-7999

ATM DISTRIBUTORS

Area	Company	Phone	Area	Company	Phone
AL	Creative Marketing	(615) 831-9690	MT	AVAD Rocky Mtns	(303) 650-0939
AR	ECD	(713) 528-1543	NE	Custom Dist. Ltd.	(913) 888-9901
AZ	AVAD Rocky Mtns	(480) 609-0453	NH	Pro Audio, Inc.	(781) 939-5630
AZ	ICON Distributing	(480) 607-6616	NJ (N)	BDC	(516) 334-2399
CA (N)	Profit Line	(415) 898-1617	NJ (S)	TechSource	(215) 654-1552
CA (S)	Volutone	(800) 795-5111	NM	AVAD Rocky Mtns	(303) 650-0939
CO	AVAD Rocky Mtns	(303) 650-0939	NV (Clark)	Volutone	(702) 992-5111
CT	Pro Audio, Inc.	(781) 939-5630	NY (metro, LI)	BDC	(516) 334-2399
DC	TechSource	(215) 654-1552	NC	21st Century Dist.	(919) 779-0273
DE	TechSource	(215) 654-1552	NC	Creative Marketing	(615) 831-9690
FL	Electronics Source	(561) 687-7737	ND	AVAD Central	(888) 725-5638
GA	Creative Marketing	(615) 831-9690	OH	Custom Essentials	(614) 791-9911
IA	Custom Dist. Ltd.	(913) 888-9901	OK	ECD	(713) 528-1543
IL (N)	AVAD Central	(888) 725-5638	OK	Lucas Marketing	(817) 446-7575
IL (S)	Custom Dist. Ltd.	(913) 888-9901	PA (E)	TechSource	(215) 654-1552
IN	AVAD Central	(317) 574-7919	RI	Pro Audio, Inc.	(781) 939-5630
KS	Custom Dist. Ltd.	(913) 888-9901	SC	Creative Marketing	(615) 831-9690
KY	AVAD Central	(317) 574-7919	TN	Creative Marketing	(615) 831-9690
LA	ECD	(713) 528-1543	TX (E)	ECD	(713) 528-1543
LA	Lucas Marketing	(817) 446-7575	TX (W)	AVAD Rocky Mtns	(303) 650-0939
MA	Pro Audio, Inc.	(781) 939-5630	UT	AVAD Rocky Mtns	(303) 650-0939
MD	TechSource	(215) 654-1552	VA	Specialty Marketing	(804) 746-0778
ME	Pro Audio, Inc.	(781) 939-5630	VT	Pro Audio, Inc.	(781) 939-5630
MI	AVAD Central	(866) 425-5638	WI	AVAD Central	(888) 725-5638
MN	AVAD Central	(888) 725-5638	WY	AVAD Rocky Mtns	(303) 650-0939
MS	Creative Marketing	(615) 831-9690			

INTERNATIONAL DISTRIBUTORS

AUSTRALIA	**LeisureTech**	**+61 2 9697 9888**
CANADA (East)	**Positive Marketing**	**1-866-767-6584**
CANADA (West)	**Positive Marketing**	**1-866-410-9377**
ISRAEL	**Laser City, Ltd.**	**+972 9 9569615**
NEW ZEALAND	**LeisureTech**	**+61 2 9697 9888**

PRODUCTS FOR EXPORT:

All Active Thermal Management products, *except the speed control for the System 1*, are available for use on power mains from 100 to 240 volts at 50 or 60 Hz. Some ATM products normally ship with universal power supplies; some of these require "blade adaptors" which can be purchased locally for the specific country in which they will be used. Others can ship with packages of snap-in blade holders for use abroad. Other ATM products can be supplied with universal power supplies upon request.
If products being purchased are for use outside of the U.S., please inform us at time of ordering.

IF YOU DO NOT SEE YOUR STATE/COUNTRY LISTED, PLEASE CONTACT ATM DIRECTLY!   (661) 294-7999

WOOD SPECIES

IMPORTANT!!   Please use this page as a guide only. Our wooden grilles are all natural wood; the "color" and grain can vary substantially from lot to lot and monitors can display colors differently. Staining the wood can produce extremely varied results; ATM can not be responsible for color variances.

PLEASE ORDER (PG) or Paint Grade if you are going to paint the grille!

Wood species: *Paint Grade (PG), Red Oak (RO), White Oak (WO) Maple (MA), Cherry (CH), Q-sawn White Oak (QO), White Pine (WP), So. Yellow Pine (YP), Black Walnut (BW), Ash (AS), Poplar (PO), White Birch (WB), Red Birch (RB), Phil. Mahogany (PM), Sassafras (SA), Cypress (CY), Beech (BE), Cedar (CE), Bamboo (BA), Purple Heart (PH), Jajoba (JA), Ant. Heart Pine (AP), Hond. Mahogany (HM), Hickory (HI), VG Fir (VG), Redwood (RW), Teak (TE), and Alder (AL).*

Black walnut		**Red Birch**	
Cherry		**Red Oak**	
Fir		**So. Yellow Pine**	
Hickory		**Teak**	
Honduran Mahogany		**White Birch**	
Maple		**White Oak**	
Philippine Mahogany		**White Pine**	
Antique Heart Pine		**Poplar**	
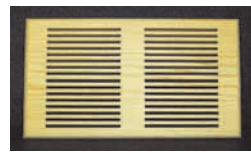
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