# INSTALLER SOLUTIONS FOR PRO AV

KRAMER OFFERS AN EXTREMELY BROAD LINE OF INSTALLER & ROOM CONNECTIVITY SOLUTIONS FOR ALL AV APPLICATIONS

## Kramer has the Products to Reliably Connect Professional AV Systems

Kramer is the "AV Glue" for every Pro AV System: from the boardroom to the classroom, from the sanctuary to the arena. Where there is AV, Kramer's behind-the-scenes products provide reliable signal management, distribution, and processing. The show not only goes on but proceeds flawlessly with the best possible image quality.

Kramer is well known for its switchers, scalers, distribution amplifiers and other signal distribution products. While enjoying success with these products, we have carefully and deliberately designed and produced an incredibly wide array of highly reliable Installer Solution products.

## Kramer Installer Solutions Products

To create a professional AV system you start with sources and displays. Add to that the proper signal distribution and processing required for your application. Finally installer solutions flesh out and customize the design to your site.

You may need cable management devices such as Kramer's elegant table mounted boxes for handling diverse connectivity needs in a table or podium. You may also need Wall Plates that provide convenient access to your AV system. From these connectivity points you need high-quality cables of varying types to carry the signals to their destination. Finally your video message needs audio support - speakers that faithfully reproduce and distribute your audio. Kramer's wide range of installer solution products give you the tools and freedom to design a perfect installation.

**TBUS®**

**CABLES**

**SPEAKERS**

**WALL PLATES**

# Kramer TBUS® Products - Elegant Table Mounted Cable Connectivity Solutions

An important challenge facing Pro AV system designers is to provide an elegant and sophisticated integrated solution for AV signal management and distribution in conference rooms, training centers, classrooms, call centers or other similar applications. The solution requires effective management of all the video, audio and network signals and power combined in one enclosure in the most unobtrusive, attractive and functional manner possible.

Kramer Electronics offers TBUS (Table Bus), our comprehensive lines of preconfigured or modular Table Mounted Cable Management Solutions, ideal for any professionally integrated AV system. Kramer TBUS models easily install in any flat surface to ensure a quick and efficient installation.

Kramer's TBUS table mounted cable management and connection assemblies are designed to provide maximum connectivity in the smallest possible footprint. Many of our TBUS models are modular and can be configured with the appropriate selection of the signal inserts and power sockets necessary for your application. Our TBUS products are available in various frame styles (rectangular, round), sizes and different finishes to ensure perfect integration in any AV system.

Kramer also offers the K-ABLE-BOX, a compact cable retractor that can be used as a standalone product or in conjunction with our TBUS models. Convenient to install, the K-ABLE-BOX can be purchased with various cable types installed. Cable types available are VGA, VGA and audio, HDMI/Ethernet, CAT 6 twisted pair, audio (3.5mm), USB–A and DVI.

TBUS-1A
Rectangular Tilt-lid
Modular Enclosure

TBUS-201
Rectangular Pneumatic
Lift Fixed Enclosure

RTBUS-11
Round Pneumatic
Lift Fixed Enclosure

UTBUS-1xl
Under Table
Modular Enclosure

K-ABLE-BOX
Cable Retractor

## AVAILABLE TBUS FINISHES:

Kramer's modular TBUS enclosures now have a new texture and neat finish in two colors: elegant Black Anodized, or Brushed Clear Aluminum. Pick the color that best fits your room and continue to choose your TBUS components.

BLACK ANODIZED



BRUSHED CLEAR

# Clearest Sound for the Clearest Message with Kramer Speakers

Kramer's three distinct families of speakers, Galil, Yarden and Tavor meet every Pro AV sound reinforcement goal. Galil is our line of value-oriented closed-back ceiling and on-wall commercial speakers for AV. Yarden is our high-performance family of closed-back ceiling, ceiling tile and on-wall commercial speakers with Kevlar woofers and, where applicable, titanium tweeters. The Tavor models are powered ceiling tile and on-wall speakers that also have Kevlar woofers and titanium tweeters. All our speakers can operate as either 70V or 100V and are 4Ω or 8Ω.

Kramer will soon be adding a fourth family, the Dolev line of studio monitor speakers.

To complement our extensive line of speakers, Kramer has developed and introduced a full line of audio amplifiers for professional AV applications.

GALIL COMMERCIAL FAMILY OF SPEAKERS

YARDEN HIGH PERFORMANCE FAMILY OF SPEAKERS

TAVOR POWERED SPEAKER

## KEY KRAMER SPEAKER TECHNOLOGIES

Complete K-overage ESD™ (Equal sound Dispertion) is an innovative, patent pending Kramer technology. It provides built–in stereo separation in a single ceiling tile speaker. Kramer speakers with Complete K-overage ESD are constructed with a central driver and four pivoting tweeters in a sealed enclosure. The pivoting tweeters are the unique aspect in this design. As a result, one Kramer ceiling speaker with this technology can be used in place of competing products from other manufacturers where more than one speaker is required to achieve the same level of sound dispersion. The Kramer Complete K–overage ESD™ provides unmatched sound response for both voice and music in ceiling tile speakers along with unparalleled value for the professional AV market.

PIVOTING TWEETERS

AUDIO AMPLIFIERS

# Kramer's Ideal Cable Solutions for Every Pro AV Need

## WITH EXTENSIVE VARIETY, OUR QUALITY AND VALUE ENSURE PROFITABILITY

Kramer offers an incredibly large array of cable assemblies, bulk cable, cable adapters and accessories. All of our cables and adapters are designed and built with an uncompromising level of quality. Kramer cables always deliver the signal to its destination while maintaining the absolute best signal quality. They are designed to do their job and be transparent in every system. Use our Kramer Cable Search Engine to effortlessly find the cable you need.

Kramer also now offers bulk cable for use with HDBaseT™ products that is certified by the HDBaseT Alliance together with a comprehensive line of HDBaseT products, all of which are certified by the HDBaseT Alliance. This new cable is the perfect companion product to use when installing Kramer HDBaseT solutions.

HDMI PLENUM CABLE

BULK CABLES

CABLE ADAPTERS

HDBaseT BULK CABLE AND PRODUCTS

# Key Kramer Cable Technologies Highlighted

## K-LOCK™ - THE ULTIMATE PULL RESISTANT CONNECTOR TECHNOLOGY FOR KRAMER HDMI CABLES

Everyone in the Pro AV industry is familiar with the challenges that may arise while using HDMI cables, even in the simplest installation. The tendency of lower gauge (thicker – higher quality) cables to weigh down the cable connector and pull it out of the socket has a substantial impact on the final result. Even the slightest tension can result in signal loss, and when it comes to longer distances, the chances for signal loss are even higher.

To make your installation a success, Kramer Electronics has developed K-Lock technology, a pull-resistant connector that provides up to 15lbs (6.8kg) of retaining force. K-Lock is equipped with small springs on the surface of the connector that hold the cable tightly in place.

### AVAILABLE HDMI LOCKING SOLUTIONS IN THE MARKET

| SOLUTION | LOCKING FORCE | SAFE DETACH | SECURE PIN | HDMI DIMENSION SPEC | BACKWARD COMPATIBLE | EASY INSTALL | SUPER SLIM PLUG POSSIBLE | EXTRA COST |
|---|---|---|---|---|---|---|---|---|
| **Competitor A** Sliding spring release | High | Yes | No | No | Yes | Yes | No | Yes |
| **Competitor B** Adapter with zip tile secure | Very high | No | No | No | No | No | Possible | Yes |
| **Competitor C** HDMI plug with thumb screw | Very high | No | No | No | No | Moderate | No | Yes |
| **Kramer Electronics K-Lock** | High | Yes | Yes | Yes | Yes | Yes | Yes | **No** |

## KRAMER DGKAT™ SHIELDED TWISTED PAIR CABLES FOR DIGITAL SIGNALS

Transporting video, audio, and control signals over twisted pair (category) wire has become an integral part of almost every AV installation. Twisted pair cable, by design, does an excellent job of eliminating common-mode noise, but it is still susceptible to impulse noise and radio frequency interference (RFI). In addition, crosstalk can occur between different twisted pairs that are in close proximity.

The best way to protect against impulse noise and RFI is to use shielded twisted pair (STP) category wire. Empirical evidence shows that structured wire systems for digital signals perform much more reliably over longer distances when grounded STP cable is used. Commercial AV installations inherently have tremendous "unknowns" with regard to EMI, crosstalk, and impulse noise. It should be an AV "best practice" to consistently specify and use STP cable for all category wire extender applications. Kramer's DGKat cables are the ideal compliment to Kramer's digital signal transmitters and receivers, including all of our HDBaseT models.

Kramer's DGKat cables are available as both pre-terminated cables with connectors installed and as bulk cable that can be terminated with Kramer connectors onsite.

| | 720p/1080i @60Hz | 1080p @60Hz |
|---|---|---|
| **DGKat-524** | 90m (295ft) | 30m (98ft) |
| **DGKat-623** | 90m (295ft) | 70m (230ft) |
| **DGKat-724 Plenum** | 90m (295ft) | 70m (230ft) |

## Kramer Wall Plates Put the System Interface Exactly Where You Need It

Kramer offers elegant active and passive wall plate solutions that are available in a wide range of configurations.

Many of Kramer's offerings are modular to offer installers the flexibility of customization. Just pick a frame and then add the individual modules required for your application.

Kramer has wall plates for room control as well as wall plates for signal routing. Our wall plates come in 1 gang, 2 gang and 3 gang configurations.

For signal distribution, Kramer offers a solution for every type of AV signal, including HDBaseT™ twisted pair transmitters and receivers.

For those applications requiring customization, Kramer also offers custom engraved wall plates.

KRAMER ACTIVE WALL PLATE SOLUTIONS

KRAMER PASSIVE WALL PLATE SOLUTIONS

KRAMER MODULAR SOLUTIONS

# Configuration Tools Make Specifying Room Connectivity Solutions Easy

## KRAMER ROOM CONNECTIVITY CONFIGURATOR (KRC) AND CABLE & ADAPTER SEARCH ENGINE

System design is difficult enough, so we at Kramer have developed new configuration tools to help you design and implement your installation. The Kramer Room Connectivity Configurator (KRC) is a dedicated tool for designing and ordering TBUS, wall plate and floor box solutions. The Kramer Cable and Adapter Search Engine helps you choose the cables and connectors you need. Online and downloadable versions of these tools are available on the Kramer Web site. At Kramer, we want to be sure you can find the precise Kramer products you need to connect your Pro AV system as quickly and effortlessly as possible.

## KRC – KRAMER ROOM CONNECTIVITY CONFIGURATOR

The KRC allows you to choose a frame and then drag and drop modules into an image of the chosen Kramer TBUS® for your application. After fully configuring a TBUS model, you can print a list of all chosen components to make ordering as easy as possible.

## KRAMER CABLE & ADAPTER SEARCH ENGINE

The Kramer Cable & Adapter Search Engine is a dedicated search utility that finds the ideal Kramer cable and connector/adapter for your installation. In the Cable & Adapter Search Engine, you choose the connector types you need at each end, and you immediately get a list of options from Kramer. You can filter the list by other variables such as the length of the cable, and if applicable, male or female connectors. You get a list of applicable Kramer cables and/or adapters that meet the criteria you have specified.

# Kramer Installer Soutions Application Diagram

CABLE LEGEND

- C-HM/HM/ETH - HDMI/ETH Cable
- C-XLQM/XLQF - Audio Cable
- C-A35M/35M - Audio Cable
- BC-2S - Speaker Cable
- BC-2T - Control Cable

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**TBUS®**

**CABLES**

**SPEAKERS**

**WALL PLATES**

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