



# **Thank you for your interest in Melco.**

We are pleased to send you the information you requested and hope it will be helpful to you.

If you have any questions or need further information on any Melco product, please give us a call. Our Application Engineering Department is available to help you with your specific application needs. Call our toll free number:  
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# Introduction

With over 12 years of experience in the telephone industry, Melco continues to respond to current market needs with high quality, reliable telephone equipment. Melco specializes in products for the small business market with a line which includes small telephone systems, key system intercoms, intercom enhancements and line hold circuits. Service observing systems, off-premise devices and lamp extenders are among other products developed to meet special application requirements. Reflecting a reputation for reliability and service, Melco products are covered by a solid warranty service policy.

This catalog briefly describes each product currently in Melco's product line. For more detailed information on any of these products, please contact your Melco Regional Manager or Melco's Customer Services Department.

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# Melco Single Link Combination Intercoms

- are compatible with 1A1 and 1A2 type key systems and can be used with tone, rotary or a combination of both tone and rotary dialing key telephones.
- digital circuitry provides instantaneous selective signaling and high reliability.
- provide station lamp control, bell (or buzzer) signaling and ringback tone.

- directly replace Melco tone and/or rotary intercom systems without changes in cable, wiring or station numbers.
- install rapidly in an apparatus cabinet, relay rack or on the wall.
- are equipped with cable plugs on all except the nine-station intercoms to provide convenient connections to A25B or equivalent connector cables.



**MC-9 Combination Nine Station Intercom:** A nine-station compact intercom designed to be extremely economical in small installations. A built-in 2 x 10 connecting block allows for quick and convenient station and power connections.



**LMC-9 Combination Nine Station Modular Intercom:** Functionally identical to the MC-9 Intercom but is contained on a 400-type line card for easy installation in a panel. Minimal panel wiring changes are required.



**KC-10X Combination Ten Station Expandable Intercom:** Provides a ten-station system that can easily be expanded to a 30, 60 or 90-station system by adding KX-30 Intercom Expanders.



**KC-19 Combination Nineteen Station Intercom:** Provides a 19-station intercom system which may be easily replaced with the 37-station KC-37 if increased intercom station capacity becomes necessary.



**KC-37 Combination Thirty-seven Station Intercom:** Ideal for larger key system installations, the KC-37 provides for up to 37 intercom stations. Can be used to replace the KC-19 intercom with minimal changes.



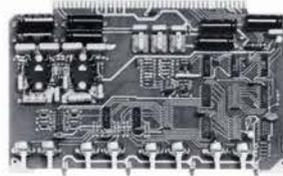
**NEW**  
**KCHF-19 Combination Nineteen Station Handsfree Intercom:** A 19-station handsfree intercom for 1A2 type key systems or PABX systems with a loop start trunk port. Handsfree two-way communication is provided through a 45 ohm speaker contained either inside the telephone set or in an external speaker box. In key system installations, an option allows a private intercom conversation to take place when a called station comes off-hook on the intercom key.

# Melco Two-Link Intercoms

- are designed for use with 1A1 and 1A2 type key systems and operate from tone, rotary or a combination of both tone and rotary dialing key telephones.



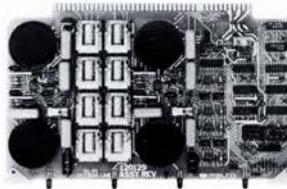
**KL-19A Two-Link Intercom System:** Equips up to 19 stations with two talking paths, call progress tones, flashing lamps, interrupted ringing and conferencing. One of the talking paths is private, the other is common. Both links and all stations are accessed from one telephone pickup key at each station. The system can easily be adapted for paging, and system capacity can be expanded to 38 stations by adding a Melco KX-38 Intercom Expander.



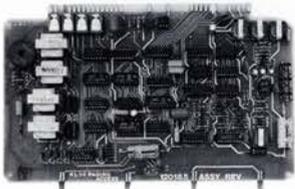
**Four Area Pager for KL-30:** A circuit pack option which may be easily added to the KL-30 system without reducing station capacity. It provides paging capability to four areas which may be accessed separately or simultaneously. Features include background music input, separate paging and background music volume control and visual busy indicators. The circuit pack option is intended for use with speakers and is not designed for use as a preamplifier.



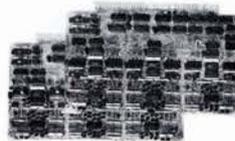
**KL-30 Two-Link Intercom System:** Provides up to 40 stations with two private talking paths, call progress tones, flashing lamps, interrupted ringing and lockout. Only one telephone pickup key is required to access all stations and both links. Switch-selectable PABX features include specific call pickup, call forwarding, conferencing, message waiting and do-not-disturb. Paging, outside line access and call announcing capabilities are circuit pack options.



**Outside Line Access for KL-30:** Allows a station user to dial-access any of four outside lines from the KL-30 intercom. It provides visual busy indicators, busy tone, and allows conferencing from tone dialing telephones. The circuit pack option may be added to the KL-30 system without reducing station capacity.



**Paging Access for KL-30:** This circuit pack option provides paging capability to four areas without reducing station capacity. It is designed for use as a preamplifier and features background music input, visual busy indicators and optional attention tone.



**Call Announcing for KL-30:** Alternate station circuit packs which provide call announcing and handsfree answering capabilities for 6 stations. Two versions are available to enable use with either ATT or ITT handsfree answering station units. Each call announcing station circuit pack used reduces system station capacity by two.

# Melco Key System Panels and Accessories



## NEW

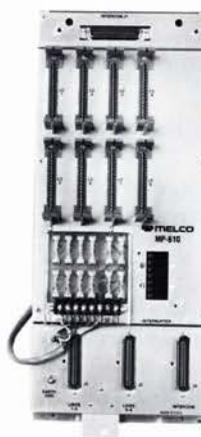
**S-77 Bridging Adapter:** A three-plug bridging adapter designed for use in MP-409 installations. The S-77 allows for connecting telephone sets in series when the MP-409 Panel is equipped with an LMC-9 Intercom. Provisions are made on the S-77 for assigning intercom station numbers and determining whether the telephone will ring for incoming calls.

## NEW

**MP-409 Key System Panel:** A mounting panel which, when fully equipped, can be used as an extremely economical four-line, nine-station key system. The panel is designed for quick, plug-in mounting of up to four 400-type line cards, a Melco KI-409 Interrupter, and an optional Melco LMC-9 Nine-Station Intercom. The interrupter, a power supply and a power cord are furnished. The MP-409 features a flexible design which allows telephone sets to be connected in series.

## NEW

**S-76 Modular Adapter:** Provides one of three methods for making C.O. line connections in an MP-409 installation. The S-76 plugs directly into a connector on the MP-409 panel and has four modular jacks for RJ-11 plugs.



## NEW

**MP-610 Key System Panel:** Provides compact mounting capability for up to eight 400-type key telephone system line cards, a Melco or similar KTU intercom and an interrupter. All connections between units are prewired. The Melco CA-7 or CA-7A Power Cable Assembly may be used for connection to the power supply. When fully equipped, the MP-610 can be used as an economical eight-line key system with up to 37 intercom stations.

# Melco Intercom Mounting Panels

- provide permanent interconnecting wiring through a printed circuit board.

- can be used with optional power cable assemblies for convenient plug-in connections to W.E. Co. 79B, 90B or similar modular power supplies.



**M-19 Modular Panel:** Saves time on Melco 19-station intercom installations. Mounts on a relay rack or backboard and can be connected to the power supply with the CA-7 optional power cable assembly.



**M-37 Modular Panel:** Provides rapid mounting for Melco 10, 19 and 37-station intercoms. Minimum wiring changes are necessary when a 10 or 19-station intercom is replaced with a larger one. An optional plug-ended power cable, the CA-12, is available for connections with a modular power supply.

# Melco Intercom Expanders



## **KX-30 Intercom Expander:**

Expands the station capacity of the KC-10X Combination Intercom in 30-station increments up to 90 stations. One KX-30 expands a ten-station system to 30 stations, two expand it to 60 stations and three expand it to 90.



## **KX-38 Intercom Expander:**

Expands the station capacity of the KL-19A Two-Link Intercom System from 19 stations to 38 stations. A 25-pair cable provides for convenient connections between the two units.

# Melco Auxiliary Intercom Equipment



## **M-266A Flashing Lamp Unit:**

Adds flashing lamp and repeated ringing features to a called intercom station. The lamp flashes at the called intercom station until the call is answered. One M-266A equips up to 10 stations. A furnished cable plug provides for easy connection through an A25B or equivalent 25-pair connector cable.

# Melco Communication Systems



**MAX-824 Communication System:** A microprocessor-controlled system designed for small business or hotel/motel applications. The MAX-824 provides 8 private intercom talk paths and a capacity of 8 network lines and 24 stations. An optional Expander C.O. Card allows for additional system configurations with 12 network lines and up to 18 stations. The system operates from standard single-line telephones and requires only one cable pair to each station for system operation. An attendant's console and a message registration system are optional.



**M-100 Attendant's Console for MAX-824:** Streamlines call supervision and call routing functions with such features as audible signaling of incoming calls, station busy lamp field, digital clock, night transfer switch, network line access buttons with status lamps, and hold, transfer, page and release buttons. Offers the convenience of a built-in push-button keypad and includes a handset, handset cradle and handset jacks. A 25-pair plug is provided for easy connections to the MAX-824 system.



**CA-25B Console Cable:** A 25-pair cable assembly, available in 24-foot lengths, for connections between the attendant's console and the MAX-824 system.

# Melco Communications Systems (cont.)

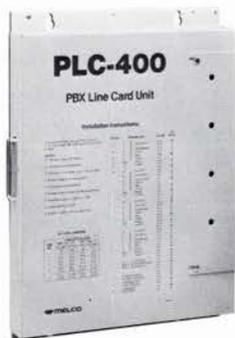
**MRU-24 Message Registration Unit:** Designed for small lodging facilities, the MRU-24 is an economical message registration unit which works in conjunction with the MAX-824 System. The MRU-24 provides a visual display of the number of local calls placed by each extension—call count is quickly determined by simply pressing the desired extension number on the MRU-24 keypad. The MRU-24 connects to the MAX-824 and power supply with just 4 wires and retains the call count during a power failure without standby batteries.



**NEW MAXINE MKS-510 Electronic Key System:** Provides a capacity for five C.O. lines and up to ten electronic key telephones. The telephones are equipped with a speaker, a 12-button keypad, five line access buttons, two intercom buttons, one hold button and a Do-Not-Disturb status lamp. Features are conveniently activated from each telephone by pressing a simple two-button code on the keypad. All station and C.O. line connections are made to modular receptacles on the KSU through standard 6-wire modular cables.



**NEW PLC-400 PBX Line Card:** A 1A2 type key system line card which allows up to 4 C.O. lines to be added to a MAX Communication System or similar PABX system. Designed to enable key telephones to be used with the PABX installation, the PLC-400 provides lamp control, bell or buzzer ringing and line hold. Input ports are available to allow the PABX stations controlled access to the same C.O. lines as the key telephone stations.



## Melco Paging Units PABX Paging Units

**PA-200A Paging Access Unit:** Provides dial-access to an amplifier through a station. Paging time is adjustable between 5 and 25 seconds. Momentary call attention tone and background music are optional. Compatible with MAX Communications Systems, the PA-200A operates from -24 or -48 volt battery and mounts on a relay rack or backboard.



**PA-400 Four-Area PABX Paging Access Unit:** Provides paging access through a PABX station to up to four paging areas which may be accessed separately or simultaneously. Any station user can access the paging amplifiers by dialing the assigned access code. Call attention tone and background music are optional. The PA-400 provides 600 ohm impedance and is compatible with Melco's MAX Communication Systems.



# Melco Paging Units (cont.)

## Intercom Paging Units

- designed for low-cost, reliable paging from key system intercoms.
- accessed by operating the intercom key and dialing the assigned paging access number.



**KA-380 Paging Access Unit:** Provides paging access to an external amplifier. The KA-380 has background music input, optional attention tone and is easy to mount and connect.

- mount easily in a relay rack or on a backboard.
- operate from a 24-volt key system power supply.



**KT-363 Paging Amplifier:** Provides access to a paging area through a 10-watt amplifier. The KT-363 has access circuitry, volume control, background music input and 8-ohm output impedance to speakers.



**KA-384 Four Area Paging Access Unit:** Provides access to four paging areas which may be accessed separately or simultaneously. Only one amplifier is required for paging, and a second if background music is desired. Features include optional call attention tone, background music input and spare contacts for control of auxiliary equipment.



**KT-364 Four Area Pager:** Provides paging capability for one to four areas by dial accessing the four 5-watt amplifiers individually or in combinations. Features access circuitry, volume control, visual busy indication, background music input and 8-ohm output impedance.

## Other Paging Units



**KA-390 Direct Paging Access Unit:** Provides direct access to a paging amplifier from any industry standard single line or key telephone instrument. Talk battery is furnished to the paging station. When using a key telephone, a pickup key provides access to the paging amplifier. The KA-390 provides a background music input, a momentary call attention tone option, and two sets of relay contacts for functions such as line lamp control. The versatile KA-390 can also be used to provide battery feed for a manual intercom. The unit mounts on a relay rack or backboard.

# Melco Line Checkers and Modular Accessories



**NEW**  
**M-630 Modular Wiring Checker:** Visually indicates minimum line and lamp voltages and correct wiring at the station modular connector block. Allows access to individual conductors of the modular cord and wiring. A wiring test can be made in a few seconds without tools or batteries.



**M628-1 Modular Wiring Power Supply:** A battery operated power supply which simulates central office battery and local lamp transformer power in modular station installations. It can be used to test C.O. line conditions, or to test station wiring in conjunction with the M-630.



**M-621P, M623J & M-629:** The M-621P and M-629 Modular Wiring Test Cords and the M-623J Modular Connector are designed to provide convenient connections between the M628-1 Power Supply and the modular wall jack. The M-629 is a male modular to male modular cord, the M-621P is a male modular plug to alligator clip cord, and the M-623J is a female modular connector/adaptor.

## Melco Line Hold Circuits

- provide the HOLD feature for single-line telephones not on a key system.
- recommended for homes, small businesses or telephones on PABX lines.

- connect quickly and easily to telephone. Mount on outside of instrument.



**S-321 Single Line Hold:** Places a call on hold when the S-321 button is pressed and the telephone handset is placed on-hook. A red lamp (LED) lights to indicate that the call is on hold. The call can be resumed at any telephone on the same premises including the original one. The unit easily connects to internal telephone wires without modifications to the telephone instrument.



**NEW**  
**S-321M Modular Single Line Hold (TeleHold):** Designed for single-line modular telephones, the S-321M is user-installable and is individually packaged for retail display. Connections are made through a furnished T-adaptor which is plugged into the modular telephone jack. The S-321M operates in the same manner as the S-321.

# Melco Lamp Extenders

- solve overload problems in lamp power supplies and line card relay contacts.
- provide output power for twenty 10-volt lamps in each of the six line lamp circuits when lamp signal is received from the line card.

- boost power where long lamp leads reduce lamp intensity.
- connect to an A25B or equivalent connector cable and mount in a key system cabinet, relay rack or on the wall.

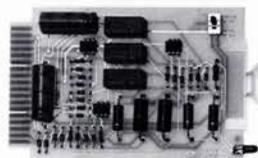


**KT-631 Lamp Extender:** Provides complete auxiliary lamp power supply with six lamp circuits that can power 20 lamps each. A phase reversal indication (LED) and toggle switch help minimize power consumption.



**KT-63 Lamp Extender:** Provides the same operation as the KT-631 when extension for more than six lamp circuits is required. The KT-63 operates on power from the KT-631 or from other auxiliary 10-volt AC lamp supplies.

# Melco Off-Premise Equipment



**M-410 Off-Premise Signaling Circuit:** Provides lamp control for off-premise extensions of 1A2 type key system telephones. An M-410 at both the main and off-premise locations served by the same central office line requires an additional cable pair between both locations to provide for supervision. The M-410 mounts without panel wiring changes in any panel wired for a 400-series line card.



**S64-1 Loop Detector:** A multi-application loop detector that can be used to provide A and A1 control or to activate special features that require an off-hook input signal such as a busy lamp field. The S64-1 can be installed anywhere the line appears.



**M410-1A Off-Premise Signaling Circuit:** Serves the same purpose as the M-410 but does not require an extra control pair between the main and off-premise locations. Is contained in a high-impact plastic housing that mounts easily in a relay rack, on a backboard or on a wall.



**S64-5RA Loop Detector:** Provides five loop sensing circuits which can be used in the same applications as the S64-1. The S64-5RA is contained in an aluminum housing with a plug for convenient connections to a 25-pair connector cable.



**M-62 A-A1 Line Adapter:** Provides an additional switching function from the lineswitch of any standard telephone. It can be used for key system "A" relay control, station busy lamp operation or any other off-hook indication. The M-62 installs inside the telephone and requires no mounting.



**S-71 Off-Premise Ringing Adapter:** Provides for ringing an off-premise extension of a key system intercom without using an additional cable pair. The S-71 mounts on a backboard.

# Melco Service Observing Systems

- ideal for training new customer service or telephone sales representatives.

- trainees can listen and learn from calls being handled by experienced employees.



**KM-330B Service Observing Unit:** Allows for observation of 30 central office, PABX or key system lines (or stations). From the telephone selected as the observing station, a line can be accessed for observation by dialing the number assigned to that line or station. Nothing can be heard by the line being observed. The KM-330B provides volume control and operates with tone and/or rotary dialing phones. Talk assist capability may be added to the system with Melco's TA-300, and system capacity may be expanded beyond 30 lines by adding Melco KMX-333B's.



**TA-300 Talk Assist Unit:** Operates in conjunction with the KM-330B, allowing for a service observer to enter the conversation on the line being observed and offer immediate assistance. The talk assist feature is easily accessed by depressing an assigned pushbutton on the service observing telephone. Each TA-300 added to the KM-330B system provides talk assist capability for 30 lines.



**KMX-333B Service Observing Expander:** Expands the capacity of the KM-330B system by 30 lines. Up to two KMX-333B units and three TA-300 units may be added to the KM-330B for a total observing and assisting capacity of 90 lines.



**KM-308 Service Observing Unit:** Operates in the same manner as the KM-330B, providing an economical system for observation of 8 central office, PABX or key system lines. Ideal in small installations or in larger applications in which more than one service observing station is desired.

## NEW

**KM-308M Modular Service Observing Unit:** An 8-line service observing unit which features modular installation, an internal power supply and integrated talk assist capabilities. Station connections can either be made to modular connectors or to screw terminals, both of which are provided on the unit. The KM-308B is compatible with PABX, central office or key system lines, and is accessed in the same manner as the KM-330B.



**KM-301 Service Observing Unit:** Allows for observation of an individual central office, PABX or key system line (or station). A modular jack is provided for connections to power and to the observed station or line, and standard jacks are provided for connection to a telephone headset. The modular design of the KM-301 promotes flexibility for observing individual lines or stations as desired.

## NEW

**MP-300 Modular Service Observing Mounting Panel:** Designed to provide a quick and convenient method of installing a fully-featured service observing system. The panel allows for direct plug-in connection of the KM-330B Service Observing Unit, a compact talk assist module and a power supply. All components are furnished with the panel. Provisions are made for expanding the system to 60 or 90 lines by externally adding KMX-333B Service Observing Expanders.

# Melco Power Supplies and Accessories

**MPS-350 & MPS-360 Power Supplies:** High performance power supplies designed for use with the MAX-824 and other small PABX systems. The MPS-350 is used on power lines delivering 50 Hertz AC current; the MPS-360 on power lines delivering 60 Hertz AC current. Both provide filtered B battery, audible supply and message waiting lamp battery.



**MBP-25 Battery Backup Pack:** Provides uninterruptable B battery and audible supply to MPS-350 and MPS-360 Power Supplies in the event of power failure. All battery charging and change-over functions are automatic. Features include temperature compensated battery charger, built-in protection against over-charge and over-discharge and sealed lead-acid batteries which eliminate leakage and gas discharge.



**CA-7A, CA-8 & CA-15 Power Cable Assemblies:** Designed to provide power connections in MAX-824 Communication System installations. The CA-7A has 7 conductors for screw terminal connections from a connectorized power supply to the MAX-824. (It may also be used with the MP-610 Key System Panel.) The CA-8, with 8 conductors, provides screw terminal connections to the MAX-824 from a Melco MPS Series Power Supply. The CA-15 has a plug on both ends for connections between an MPS Series Power Supply and the MBP-25 Battery Backup Pack.



**CA-7 & CA-12 Power Cable Assemblies:** Provide power connections from a W.E. Co. 79B1, 90B2 or similar modular power supply using connectors and plugs. Both have a plug on one end and spade-ended conductors on the other. The CA-7, with 7 conductors, is designed for use with Melco's M-19 Modular Panel, MP-610 Key System Panel and KL-30 Two-Link Intercom System. The CA-12, with 12 conductors, can be used with Melco's M-37 Modular Panel.

# Melco Telephone Amplifier Units

**S-11 Telephone Amplifier:** Amplifies voice signals (up to 21dBm) at the receiver of a telephone. It is useful to people with a hearing problem or who use telephones in a noisy area. The S-11 mounts on the side or front of most telephones and easily connects to internal telephone wiring without modifications to the telephone instrument.



**NEW S-11M Modular Telephone Amplifier (Magniphone):** A user-installable amplifier which can be used with any single-line modular telephone. Connects to the telephone in just a few seconds by plugging the handset cord into the S-11M jack and inserting the S-11M plug into the modular telephone jack. Individually packaged for retail display, the S-11M operates in the same manner as the S-11.

# Other Melco Products



**AD-404A Single Digit Dialer:** Dials "0" to summon the operator for assistance when it detects an off-hook signal. Functions on any line capable of registering dial pulses. The AD-404A requires A-A1 wiring and a 24-volt power supply.



**S-73 Auxiliary Relay Circuit:** A general purpose relay circuit which can be used for various transfer functions. The relay operates from either a ground or battery input of 18 to 56V DC, and an LED lights when the relay is operated.



**M-205 Ringdown Circuit:** Provides the interface for a direct line between two locations for two or more telephone stations. When one station lifts the receiver, the M-205 provides bridged ringing to the other station. The M-205 also provides interrupted ringing and ringback tone for both stations. The key system power supply furnishes power for talking, ringing and lamp signaling. The M-205 requires only one cable pair between stations and mounts easily in an apparatus cabinet, in a relay rack or on a wall.



**NEW S-74 Ringing Detector:** A multi-application ringing detector that operates a relay circuit when ringing voltage is present. It can be used to activate an auxiliary visual or audible device, or to provide bridged ringing for an off-premise extension. The S-74 mounts on a backboard, connects from screw terminals and operates from either a 15 to 18V AC wall pack or a standard key system power supply.



**PB-12 Power Block Assembly:** Designed for use at key system installations where a modular power supply is in place and power distribution by individual conductors is required. The PB-12 consists of a connector, a 12-conductor cable and a terminal block with 12 screw terminals. It mounts easily on a backboard, on a relay rack or in an apparatus cabinet.

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## **Additional Product Information**

Enclosed are Melco's Warranty Service Policy and a list of Melco Regional Managers. For further information on any Melco product please contact:



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