



TECHNICAL NEWS BULLETIN
PAGING ACCESS FROM THE TELEPHONE COMPANY

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When a request is made to the telephone company for paging access, it would be well to specify the purpose for which the request is made. It should be emphasized that the paging access is to be effected FROM the telephone line as otherwise the telephone company representative will immediately request an FCC number on the customer equipment for the purpose of protecting the telephone line from overload from the device that would feed it. Specifying the purpose accurately in advance will avoid misinterpretations on the part of the telephone company representative as well as confusion on the part of the installer making the request.

When the telephone line feeds the amplifier for paging, the telephone company when requested provides a protective device before its output to the paging amplifier unit. All that is now required is a 500/600 ohm matching device for coupling the output of the protective device or voice coupler to the paging amplifier. The Raymer TM-2 Adaptor has been designed specifically for this purpose in that it matches a 500/600 ohm line or telephone line to the input of any amplifier or receiver. The TM-2 Adaptor matches the output of a telephone switchboard, a dial access telephone, or internal telephone system as a paging source for an amplifier or receiver. *Such connections require that there is no DC voltage applied to the TM-2 input from the telephone circuit.* The TM-2 may also be used with any amplifier for distributing background music or paging which has been transmitted over leased telephone lines.

The input to the TM-2 may be from either a balanced or unbalanced line. A center tap terminal is provided for balanced line input. This terminal permits "simplex" operation when a DC switching or signaling scheme is required.

Two outputs are provided on the TM-2. The low level output matches the microphone input of any amplifier either HI-Z or LO-Z; for optimum performance use the HI-Z input. The high level output of the TM-2 matches the auxiliary (phono/line) input of any amplifier.

THIS UNIT IS NOT TERMINAL EQUIPMENT AND MAY NOT BE DIRECTLY CONNECTED TO THE NATIONAL TELECOMMUNICATION NETWORK. THE RINGER EQUIVALENT OF THIS UNIT IS Z, WHICH MEANS THAT RINGING VOLTAGE SHOULD NOT BE APPLIED TO IT.

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The input of the TM-2 is designed to provide a balanced 600 ohm termination for the paging access output port of registered equipment such as a PABX or switchboard. Such equipment contains the protective circuitry as required by the FCC and has the appropriate registration. When connected in this manner, no FCC number is required for the Model TM-2.

In order to add paging access from a telephone system to customer provided paging equipment, the appropriate voice coupler (protective device) must be installed by the phone company. This service may be ordered through their marketing department. You will be ordering "Paging access to customer provided equipment." On key phone systems the order code is identified as 57K. A connection between this coupler and the TM-2 must also be ordered, which is identified as ER8. Additional features may also have to be ordered to meet the needs of each installation requirement. Example, DA9 for dial access or KGM for manual access.

Telephone systems other than standard key phone systems may require a different USOC (Universal Service Order Code). In order to obtain paging access from this equipment, the Marketing Representative will refer to the *Marketing Practice Manual* for the ordering codes which apply to this specific equipment. For example the ordering code for "paging access" through the new American Bell Company for use on the Horizon System is: PE CODE 62134 and 62135. To order music-on-hold use PE CODE 62112.

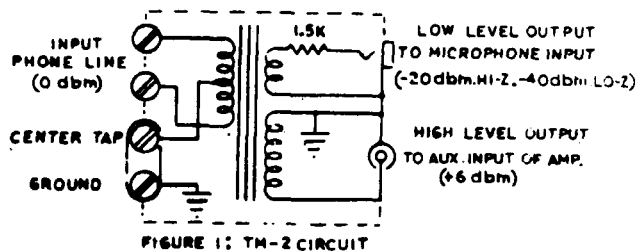


FIGURE 1: TM-2 CIRCUIT

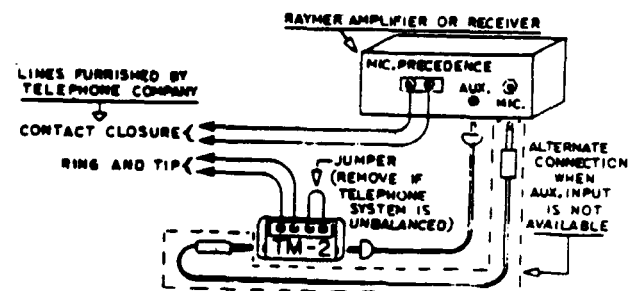
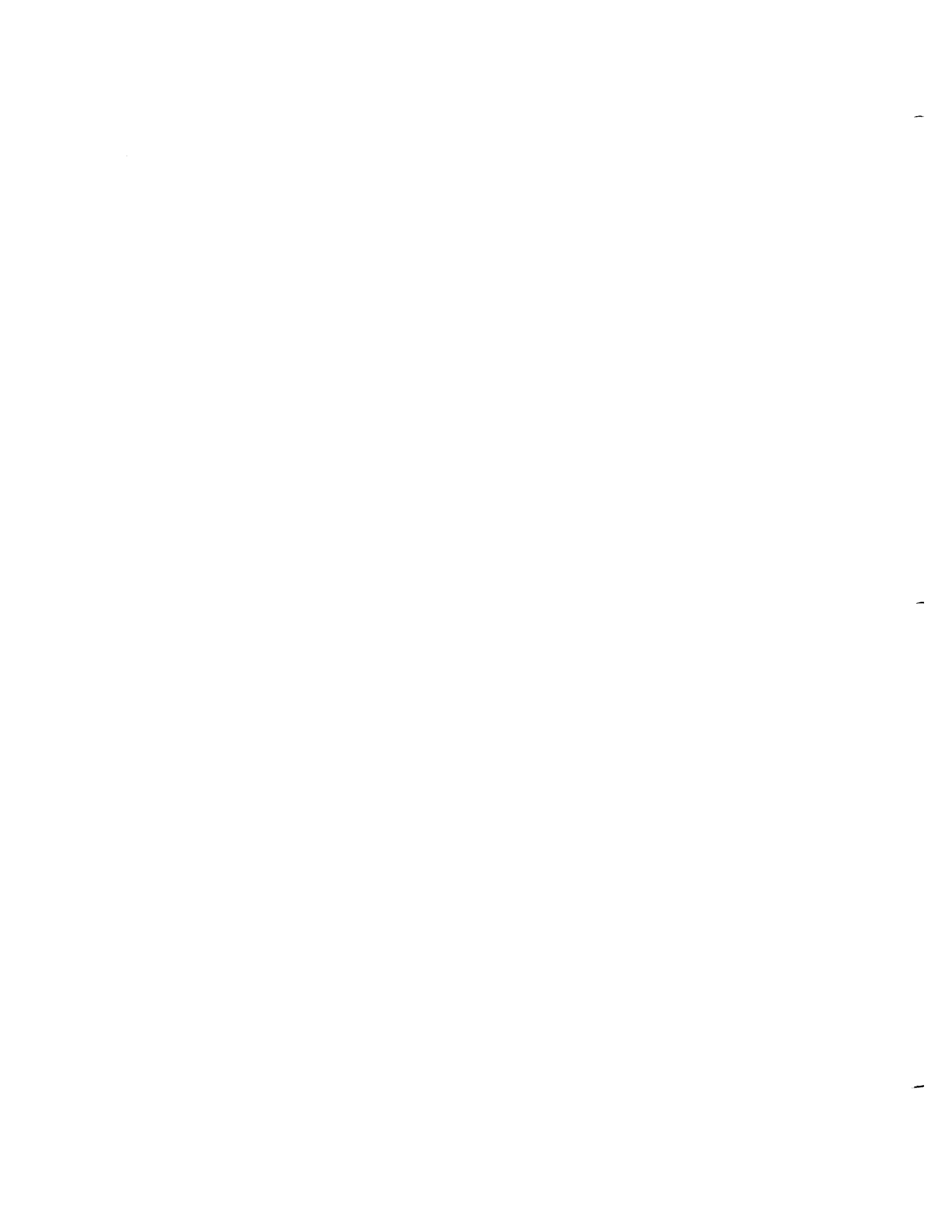
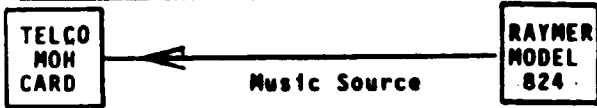


FIGURE 2: TYPICAL INTERCONNECTION TO TELEPHONE COMPANY LINES USING TM-2 TELEPHONE ADAPTOR.

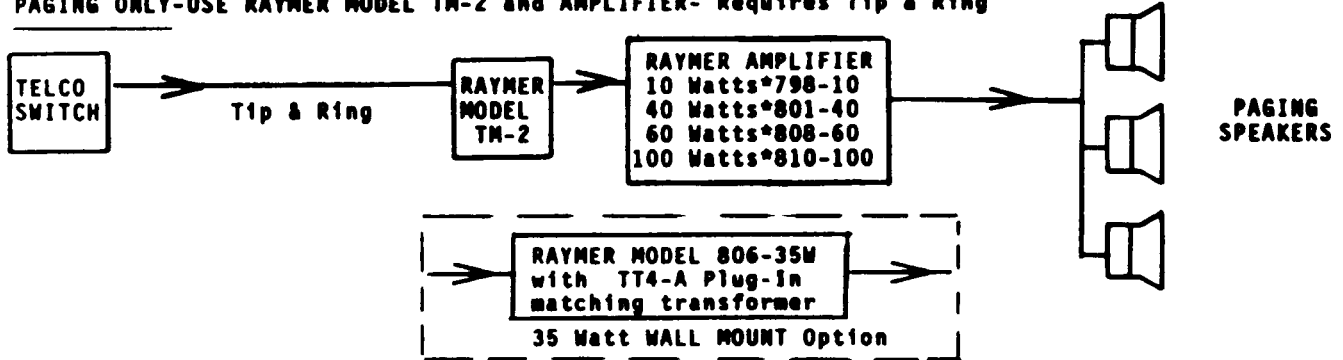


*** MUSIC-ON-HOLD and PAGING OPTIONS ***

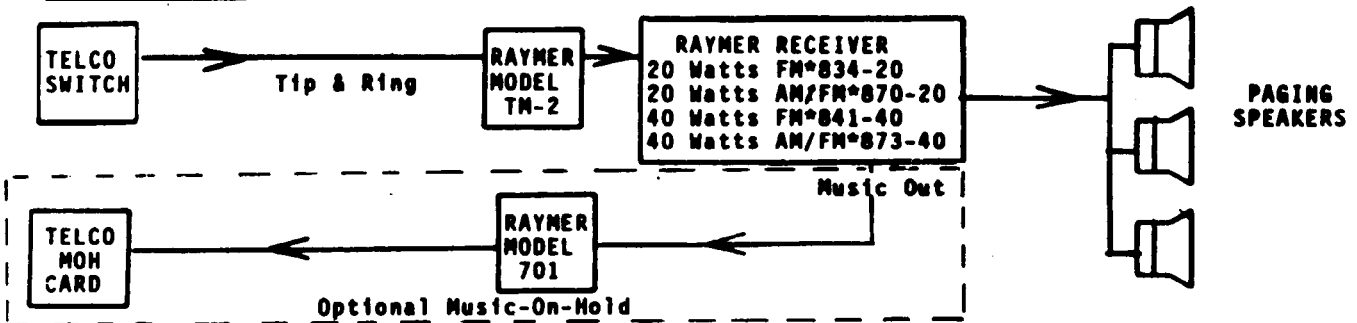
MUSIC-ON-HOLD ONLY -USE RAYMER MODEL 824- Requires MOH card



PAGING ONLY-USE RAYMER MODEL TM-2 and AMPLIFIER- Requires Tip & Ring



MUSIC AND PAGE-USE RAYMER MODEL TM-2 and RECEIVER-Requires Tip & Ring plus Contact Closure



MUSIC AND PAGE-USE RAYMER MODEL TM-2 ,824 ,and AMPLIFIER-Required When Contact Closure Is Not Available (Horizon Type)

