3. Connect the SZ, SZ1, S, and S1 leads from the 909A/B to an auxiliary trunk circuit pack.
   a. Tip and ring connect from the voice recorder to the auxiliary trunk circuit pack (J1 on the 909A/B).
   b. CBS1/C1 and CBS2/C2 connect from the voice recorder to J2 on the 909A/B.
4. On the 909A/B universal coupler:
   a. Connect seizure control voltage of from -9 to -70 Volts to the PG2/BZ2 connection (pin 2 of J1). Switching voltage to the PG2/BZ2 connection can be from the 909A/B -48 VDC supply.
   b. Connect SZ1 to the ground lead of the DC power source used for PG2/BZ2.
   c. Set S1 to the “C2” position. Set S2 position 7 to “OPEN”.
   d. Connect an approved -48 VDC power source to the **-48** and **GRD** terminals (pins 5 and 2, respectively, of J3 on the 909A/B).
5. Administer the switch for the call trace device.

Note:

For more information about installation, see *909A/909B Universal Coupler Installation Instructions*, which is usually shipped with the 909A/909B Universal Coupler.

Music-on-hold

With the music-on-hold (MOH) feature, a caller hears music when that caller is placed on hold. Music-on-hold can be provided:

through either

- a two-wire TN2183 analog line circuit pack, or equivalent,

  or

- auxiliary trunk circuit pack to a customer-supplied music source.

Music-on-hold is available on the following media gateways:

- MCC1
- SCC1
- CMC1
- G600
- G650

- through a port on an MM711 Analog Media Module to a customer-supplied music source on a G700 Media Gateway.
- through a port on an MM711 Analog Media Module or MM714 Analog Media Module, or through a fixed analog port (LINE 1 or LINE 2) to a customer-supplied music source on a G350 Media Gateway.

Figure 35: Typical registered equipment connections (auxiliary access) for an MCC1, SCC1, or CMC1, G600, and G650 Media Gateway on page 130 shows the connections for music-on-hold, dial dictation, or recorded announcement features when the music source is Federal Communications Commission (FCC) registered (or equivalent). Figure 36: Typical nonregistered equipment connections (auxiliary access) for an MCC1, SCC1, or CMC1, G600, or G650 Media Gateway on page 132 shows the connections when the music source is not **FCC**-registered (or equivalent).

Local music-on-hold allows one music source. However, if you purchase the multiple music-on-hold (tenant partitioning) feature, you can have up to 100 music sources.

Note:

Use the following connection instructions when the music source is not located in the equipment room. If the music source is located in the equipment room, do not route the connections through the information outlet.

Figure 35: Typical registered equipment connections (auxiliary access) for an MCC1, SCC1, or CMC1, G600, and G650 Media Gateway

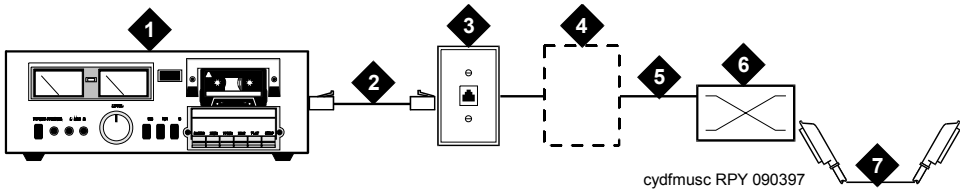

Figure notes:

1. **Music source**
2. **4-pair modular cord**
3. **103A or modular wall jack**
4. **122A music adapter (if required—primarily required in France)**
5. **Tip (green) and ring (red)**
6. **Part of main distribution frame**
7. **A25D 25 pair cable (male-to-male) to auxiliary trunk circuit pack**

1. If the music source is registered, the system side of the MDF connects directly to the system.
2. If the music source is not registered, the system side of the MDF connects to a 909A/B universal coupler (see 909A/B universal coupler on page 124).

Registered music source

See Figure 35: Typical registered equipment connections (auxiliary access) for an MCC1, SCC1, or CMC1, G600, and G650 Media Gateway on page 130 to install a registered music source.

1. Determine feature port assignment from Feature-Related System Parameters form.
2. Install music source according to the manufacturer instructions.
3. Install patch cord/jumper wires at the main distribution frame.
4. Administer the switch for the new equipment.

Nonregistered music source

See Figure 36: Typical nonregistered equipment connections (auxiliary access) for an MCC1, SCC1, or CMC1, G600, or G650 Media Gateway on page 132 and Figure 37: Connections to nonregistered music-on-hold using analog line for an MCC1, SCC1, or CMC1, G600, or G650 Media Gateway on page 133 when installing a nonregistered music source.

1. Determine feature port assignment from Feature-Related System Parameters Form.
2. Install the music source according to the manufacturer instructions.
3. Connect a cable from the assigned port carrier slot to J1 on the 909A/B universal coupler. For more information, see 909A/B universal coupler on page 124. A wiring block must be locally engineered.
   a. Connect the T-lead at pin 5 and the R-lead at pin 4 of J1 on the 909A/B universal coupler to the corresponding leads from the TN2183.
   b. Connect the CT-lead at pin 5 and the CR-lead at pin 4 of J2 on the 909A/B universal coupler to the MDF.
4. Install patch cord/jumper wires at the MDF to connect tip and ring to the information outlet at the music source.
5. Set the Protection/Paging switch to C1.
6. Connect a modular cord from the information outlet to the music source.
7. Connect -48V to pin 5 and -48V RET to pin 2 of J3 on the 909A/B. The power source can be an 1151A, 1151A2, or other approved power supply.
8. Administer the switch for the new equipment.

Figure 36: Typical nonregistered equipment connections (auxiliary access) for an MCC1, SCC1, *or* CMC1, G600, or G650 Media Gateway

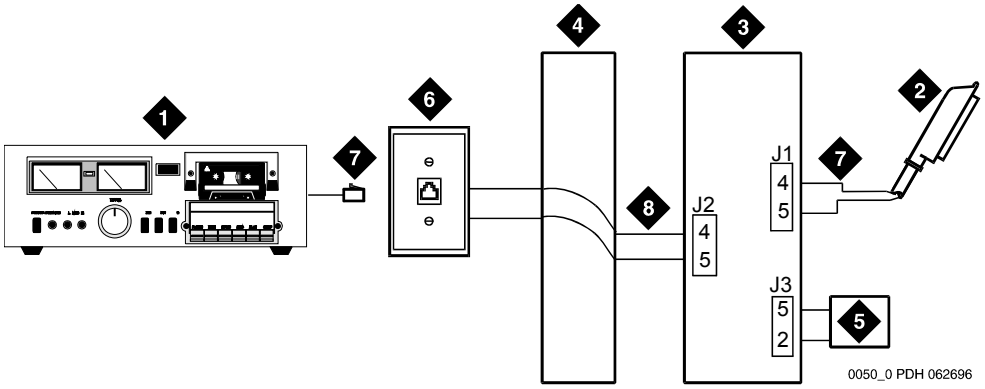

Figure notes:

1. **Customer-supplied music source**
2. **A25D 25-pair cable to auxiliary trunk circuit pack**
3. **909A/B universal coupler**
4. **Part of main distribution frame**
5. **Power supply for universal coupler**
6. **103A or modular wall jack**
7. **4-pair modular cord**
8. **Tip and ring wires**

Note:

A wiring block must be locally engineered.

Figure 37: Connections to nonregistered music-on-hold using analog line for an MCC1, SCC1, *or C*MC1, G600, or G650 Media Gateway

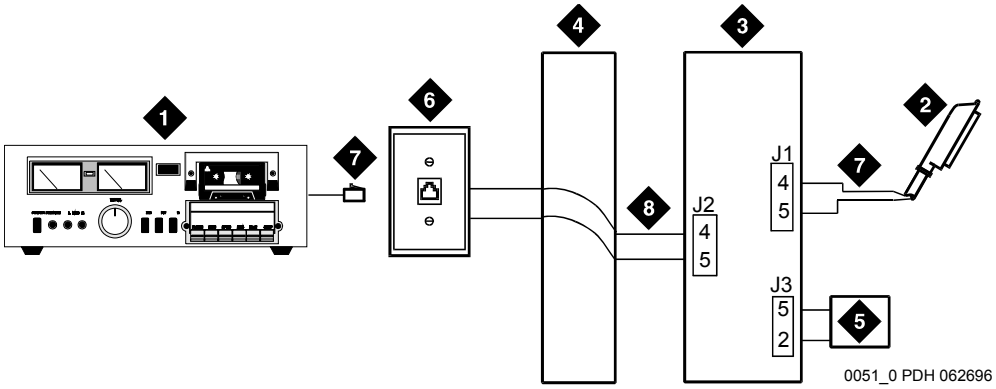

Figure notes:

1. **Customer-supplied music source**
2. **25-pair cable to analog line circuit pack**
3. **909A/B universal coupler**
4. **Part of main distribution frame**
5. **Power supply for universal coupler**
6. **103A or modular wall jack**
7. **4-pair modular cord**
8. **Tip and ring wires**

Note:

A wiring block must be locally engineered.

Note:

For more information about installation, see *909A/909B Universal Coupler Installation Instructions*, which is usually shipped with the 909A/909B Universal Coupler.

On a G700 or G350 Media Gateway, the music-on-hold feature is connected through a port on an MM711 Analog Media Module or, for a G350 Media Gateway only, an MM714 Analog Media Module or the analog LINE ports of the integrated analog media module.

The G700 or G350 Media Gateway does not support an auxiliary trunk circuit pack. Therefore, for S8300 Server users, the music-on-hold feature through an auxiliary trunk is not supported. However, G700 or G350 Media Gateway users with an S8500 or S8700 Server as primary controller can access the music-on-hold feature if their equipment is physically connected to a TN763 auxiliary trunk circuit pack in an EPN carrier of an S8500 or S8700 system.

Unregistered Music Source on a G700 or G350 Media Gateway

Figure 38: Unregistered music-on-hold equipment connecting to KS-23395-L3 for a G700 Media Gateway on page 134 and Figure 39: Unregistered music-on-hold equipment connecting to KS-23395-L4 for a G700 Media Gateway on page 135 show the connections for the music-on-hold feature on a G700 Media Gateway for an unregistered source.

Note:

The G350 Media Gateway's physical connection with the MM711 Analog Media Module, MM714 Analog Media Module, or fixed analog ports (LINE 1 or 2) on the front panel is the same as the G700 Media Gateway's connection with the MM711 Analog Media Module.

Note:

If you want multiple music sources, you must use multiple ports on the MM711 Analog Media Module.

Figure 38: Unregistered music-on-hold equipment connecting to KS-23395-L3 for a G700 Media Gateway

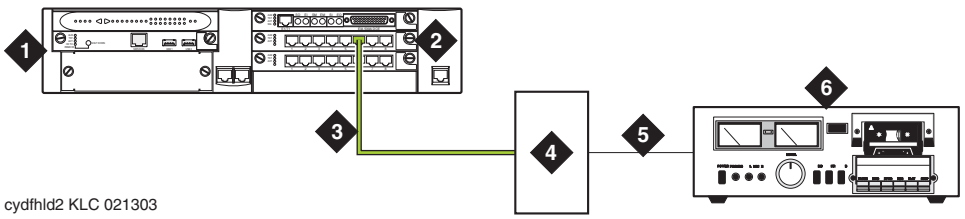

Figure notes:

1. **G700 Media Gateway**
2. **MM711 Analog Media Module**
3. **RJ-45 connection**
4. **KS-23395-L3 coupler**
5. **RCA cord**
6. **Music source**

To hook up an unregistered music-on-hold source to a G700 or G350 Media Gateway using a KS-23395-L3 coupler:

1. Connect one end of an RJ-45 cable to a port in the MM711 Analog Media Module. Or, for a G350 Media Gateway only, connect the RJ-45 cable to a port in an MM714 Analog Media Module or a fixed analog (LINE 1 or 2) port on the G350 front panel.
2. Connect the other end of the RJ-45 cable to a KS-23395-L3 coupler.
3. Connect the KS-23395-L3 coupler to the customer-supplied music source. Follow the manufacturer's instructions to properly connect the music source to the KS-23395-L3 coupler. Normally, you simply use an RCA cord.
4. Administer the switch for the new equipment.

Figure 39: Unregistered music-on-hold equipment connecting to KS-23395-L4 for a G700 Media Gateway

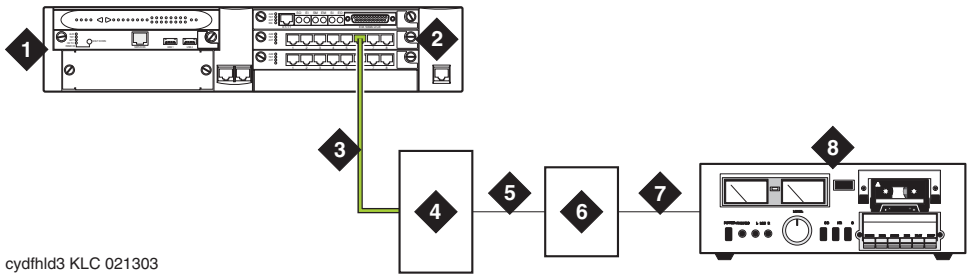

Figure notes:

1. **G700 Media Gateway**
2. **MM711 Analog Media Module**
3. **RJ-45 connection**
4. **KS-23395-L4 coupler**
5. **8-pair modular cord**
6. **909A/B universal coupler**
7. **8-pair modular cord**
8. **Music source**

To hook up an unregistered music-on-hold source to a G700 or G350 Media Gateway using a KS-23395-L4 coupler:

1. Connect one end of an RJ-45 cable to a port in the MM711 Analog Media Module. Or, for a G350 Media Gateway only, connect the RJ-45 cable to a port in an MM714 Analog Media Module or a fixed analog (LINE 1 or 2) port on the G350 front panel.
2. Connect the other end of the RJ-45 cable to a KS-23395-L4 coupler.
3. Connect the KS-23395-L4 coupler to the 909A/B universal coupler using a 8-pair modular cord.
4. Connect the 909A/B universal coupler to the music source using a 8-pair modular cord.
5. Administer the switch for the new equipment.

Note:

For additional installation information, refer to *909A/909B Universal Coupler Installation Instructions*, which is normally shipped with the 909A/909B Universal Coupler.

Registered Music Source on a G700 or G350 Media Gateway

Figure 40: Registered music-on-hold equipment connecting to KS-23395-L4 for a G700 Media Gateway on page 136 show the connections for the music-on-hold feature on a G700 Media Gateway for an unregistered source.

Note:

The G350 Media Gateway's physical connection with the MM711 Analog Media Module, MM714 Analog Media Module, or fixed analog ports (LINE 1 or 2) on the front panel is the same as the G700 Media Gateway's connection with the MM711 Analog Media Module.

Note:

If you want multiple music sources, you must use multiple ports on the MM711 Analog Media Module.

Figure 40: Registered music-on-hold equipment connecting to KS-23395-L4 for a G700 Media Gateway

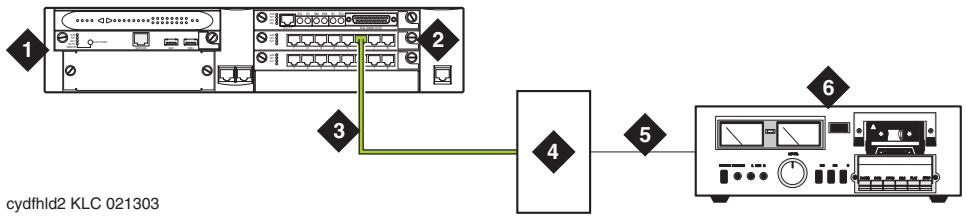

Figure notes:

1. **G700 Media Gateway**
2. **MM711 Analog Media Module**
3. **RJ-45 connection**
4. **KS-23395-L4 coupler**
5. **8-pair modular cord**
6. **Music source**

To hook up an registered music-on-hold source to a G700 or G350 Media Gateway using a KS-23395-L4 coupler:

1. Connect one end of an RJ-45 cable to a port in the MM711 Analog Media Module. Or, for a G350 Media Gateway only, connect the RJ-45 cable to a port in an MM714 Analog Media Module or a fixed analog (LINE 1 or 2) port on the G350 front panel.
2. Connect the KS-23395-L4 coupler to the customer-supplied music source. Normally, you simply use a 8-pair modular cord.
3. Administer the switch for the new equipment.

Paging and announcement equipment

This section explains the most common system configurations for the paging feature of Avaya Communication Manager. This chapter provides information on the following features:

- Loudspeaker paging
- ESPA radio paging
- External ringing
- Queue warning indicator
- Loudspeaker paging

Loudspeaker paging

In an MCC1, SCC1, CMC1, G600, or G650 Media Gateway, the loudspeaker paging feature provides a connection from a TN763B/C/D auxiliary trunk circuit pack (or equivalent) to a customer-supplied paging amplifier.

Loudspeaker paging without paging adapter

Figure 41: Connections for loudspeaker paging without paging adapter for an MCC1, SCC1, CMC1, G600, or G650 Media Gateway on page 138 shows the connections for the loudspeaker paging feature. These connections are used when the loudspeaker interface equipment is not located in the equipment room. If the equipment is located in the equipment room, the information outlet is not required. The connections shown are for one zone.

Figure 41: Connections for loudspeaker paging without paging adapter for an MCC1, SCC1, CMC1, G600, or G650 Media Gateway on page 138 also shows connections from an optional customer-supplied music source to the loudspeaker system through a paging amplifier, as well as connections to the loudspeaker system through a 909A/B universal coupler (see 909A/B universal coupler on page 124).

Note:

If the loudspeaker paging system provides a talkback microphone at the speakers, either

- the microphone must be FCC approved (or equivalent),

  or

- a 909A/B universal coupler is required.

Figure 41: Connections for loudspeaker paging without paging adapter for an MCC1, SCC1, CMC1, G600, or G650 Media Gateway

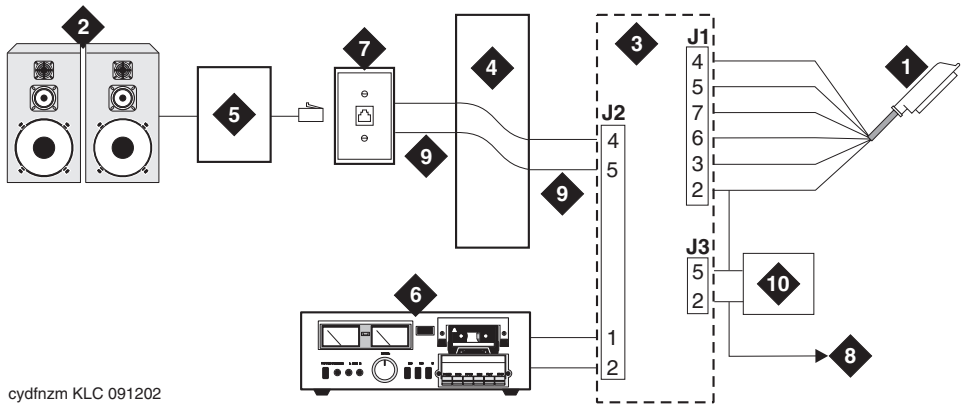

Figure notes:

1. **25-pair cable to TN763B/C/D auxiliary trunk circuit pack**
2. **Loudspeaker paging system**
3. **909A/B universal coupler (if required)**
4. **Part of main distribution frame (MDF) circuits 1-16**
5. **Paging amplifier**
6. **Music source for background music over loudspeakers (optional)**
7. **103A or modular wall jack**
8. **To SZ1 on TN763 connector**
9. **Tip and ring wires**
10. **-48 VDC power supply for 909B**

Note:

On the 25-pair cable to TN763B/C/D auxiliary trunk circuit pack, SZ1 connects to GRD on key 10. The 50 points amphenol is connected to the back of a G600 or G650 Media Gateway.

Loudspeaker paging access without universal coupler

To install the loudspeaker equipment:

1. Determine port assignment of paging zone(s) from loudspeaker paging form.
2. At the main distribution frame, locate the connecting block and terminals assigned to the selected port.
3. On the locally engineered wiring block, place a strap between terminals S and SZ. Place a strap between terminals S1 and SZ1.
4. Install patch cord/jumper wires at the main distribution frame.
5. Connect a 2-pair line cord, with a modular plug at one end, from the information outlet to the paging amplifier of the loudspeaker system.
6. Install loudspeaker equipment according to the manufacturer instructions.
7. Administer the switch for the new equipment.

Loudspeaker paging with universal coupler

An information outlet provides access to loudspeaker paging. The system side of the main distribution frame connects to a 909A/B universal coupler. Make provisions for the **DC** power that the 909A/B universal coupler requires, such as a 1151A, 1151A2, or other approved -48VDC power supply.

Six leads (T, R, SZ, SZ1, S, and S1) connect the adapter to an auxiliary trunk circuit pack located in a port carrier.

1. Determine port assignment of paging zone(s) from loudspeaker Paging form.
2. Identify carrier slot and label both ends of an A25D (male to male) cable.
3. Connect a cable from the 909A/B to the system side of the main distribution frame. A wiring block must be locally engineered.
4. 909A/B universal coupler on page 124 provides details of the connections between the 909A/B universal coupler and the wiring blocks.

   CAUTION:

   Damage to the 909A/B might occur if the cable is plugged into J3 ***before*** all cross-connects are completed.

5. On the 909A/B universal coupler:
   - Connect seizure control voltage of from -9 to -70 volts to the PG2/BZ2 connection (pin 2 of J1). Switching voltage to the PG2/BZ2 connection can be from the 909-48-volt supply.
   - Connect a -48 VDC power source to the -48 and GRD terminals on the 909A/B.
6. Install patch cord/jumper wires at the main distribution frame.
7. Connect a 2-pair line cord (modular plug at one end) from the information outlet to the loudspeaker system.
8. Install loudspeaker equipment according to the manufacturer instructions.
9. Connect an approved -48 VDC power source to the **-48** and **GRD** terminals (pins 5 and 2, respectively, of J3).
10. Administer the switch for the new equipment.

    Note:

    For more information about installation, see *909A/909B Universal Coupler Installation Instructions*, which is usually shipped with the 909A/909B Universal Coupler.

ESPA radio paging

Figure 42: Typical ESPA radio paging connections shows typical connections to European Standard Paging Access (ESPA) equipment. Connect the LINE jack on the PassageWay interface to a digital line 4-wire DCP circuit pack through the MDF.

Figure 42: Typical ESPA radio paging connections

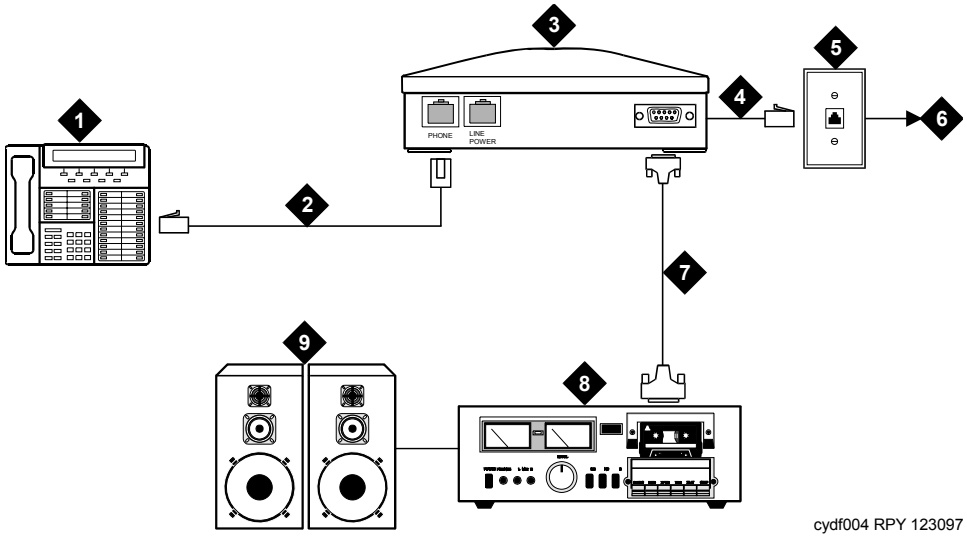

Figure notes:

1. **DCP telephone**
2. **4-pair modular cord**
3. **PassageWay interface**
4. **4-pair modular cord**
5. **103A or modular wall jack**
6. **To digital line circuit pack**
7. **RS-232 connector**
8. **ESPA radio paging equipment**
9. **Loudspeaker paging system**