

Talk-A-Phone Co.

Creating Communication Solutions

Installation & Operation Manual

For

TAP-200 Series

Automation Intercom Systems

With Plug-In Master, Amplifier And Junction Box

Totally hands-free two way conversation
Between attendant and customer

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TAP-1 Intercom System

I. Installation

A. Sub-Stations: Call Origination and Volume

Set up the TAP-1 and the Sub-Station of your choice in the desired locations. Model TAP-LR-3W Sub-Station provides localized coverage **with** call origination. Models K-LR-2R and TAP-2RC Sub-Stations provide localized coverage **without** call origination. Models K-C-20 and K-C-20V Horn provide greater receiving volume at the Sub location.

A K-S-100W Call Switch can be used with Models K-LR-2R, TAP-2RC, K-C-20(V) or other non-originating Sub-Stations to add call origination. Locate the K-LR-2R, TAP-2RC, TAP-LR-3W and K-S-100W at normal operating height. Locate K-C-20(V) high enough to provide broad coverage. All of these units are designed for indoor or outdoor use.

B. Installing Sub-Stations Without Built-In Call Origination

Run 1 length of #6303 cable (1 shielded pair) from TAP-1 to Models K-LR-2R, TAP-2RC, K-C-20(V) or other non-originating Sub-Station without a call switch.

Run 2 lengths of #6303 or one length of #6305 cable (1 shielded pair + 1 unshielded pair) from the TAP-1 to K-LR-2R, TAP-2RC, K-C-20(V) or other non-originating Sub-Station along with a K-S-100W Call Switch or other call button.

Connect Sub-Stations as shown in Figure 1. The bare wire of the #6305 and #6303 cable is always connected at the Master end, but it is not connected at the Sub-Station. Tape the end of bare wires not connected to prevent shorting, grounding, etc.

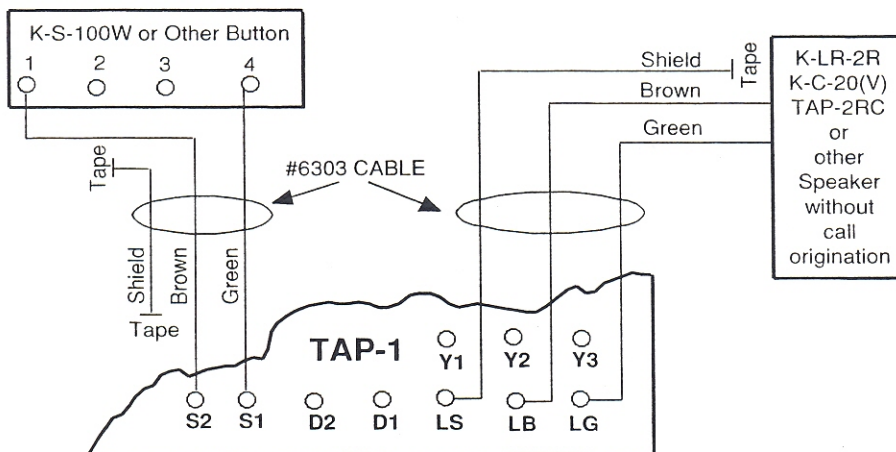


Figure 1. Connecting non-originating Sub Stations with or without separate call button

TAP-1

C. Installing Sub-Stations With Built-In Call Origination

Run 1 length of #6305 cable (1 shielded pair + 1 unshielded pair) from the TAP-1 to TAP-LR-3W or other originating Sub-Station.

Connect Sub-Stations as shown in Figure 2. The bare wire of the #6305 and #6303 cable is always connected at the Master end, but it is not connected at the Sub-Station. Tape the end of bare wires not connected to prevent shorting, grounding, etc.

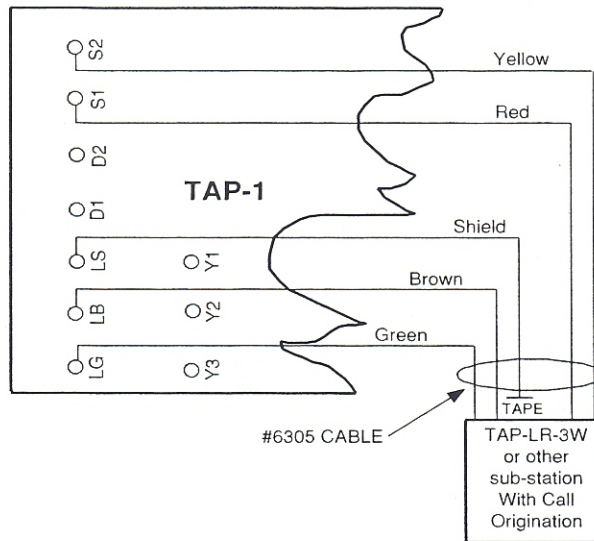


Figure 2. Connecting originating Sub-Stations

D. Completing the Installation

Underneath the Master is a cable clamp. Remove screw on cable clamp and pass interconnecting cables underneath clamp. Adjust cable clamp so that it holds cable securely. Replace screw.

Care should be taken so that no part of the cable is too near electric or telephone wiring, etc., nor should it be shorted to any grounded conductors, radiators, or pipes, beams, etc., and the bare wires at the various terminals should not short from one terminal to the other, nor to the metal chassis. When staples are used to hold the cables in place, use only insulated staples and do not drive them in so hard as to cause the wires inside the cable to short to each other.

I. Operation

A. Operation of Master Station

Plug in the line cord, extending from the unit into an electrical outlet of 120 volts, 60 Hz AC. Place the Performance Control in Out position. Speak directly into the microphone at a distance of approximately 1 to 2 inches, in a normal tone of voice, and Sub location will hear you. The Master utilizes a close proximity microphone, designed to eliminate background noises. Neither you nor the person at the Sub location operate any controls. When desired, sounds in both directions can be silenced by using the Performance Control.

B. Volume Controls

Located underneath the Master unit are 2 volume controls. One adjusts incoming volume; the other outgoing volume. The volume controls should be set at a pleasant level for continuous use and may not have to be adjusted from factory settings. The system is equipped with an Automatic Gain Control in both directions so that both incoming and outgoing volumes you have set are maintained without feedback, whether speaking normally or loudly.

C. Microphone Sensitivity Switch

Located underneath the Master, this Switch has 3 positions: Minimum, Normal and Maximum. Unit is shipped in the Normal position, which is used for most applications. Do not move switch setting until system is tested in actual operation.

To adjust volume control settings:

1. Place Microphone Sensitivity Switch in Normal position.
2. Place Performance Control on front of Master in "operational" (out) mode. You should hear background noise. Have someone speak to you from the Sub-Station while you adjust the Incoming Volume Control to a good level.
3. Speak through the Microphone while you adjust the Outgoing Volume.

Do not tap on the equipment or move the gooseneck of the microphone while adjusting control settings.

D. Performance Control

Located on the front left of Master Unit. Depress in with slight pressure to silence incoming and outgoing signals. Depress in again to return to "out" position and immediately provide totally hands-free 2-way conversation without either party operating any controls.

E. Power Indicator

Located to the left, and below the Performance Control. Remains lit to show Master is receiving power. If unlit, check to see that Master is plugged into its electrical outlet, and that fuse on Master is good. Use only 1 amp. 3AG fuse.

TAP-1

F. Terminals Y1, Y2 and Y3

These terminals, located underneath the unit, adjust sensitivity and background noise at the Sub-Station. As shipped, terminals Y2 and Y3 are jumpered to provide proper sensitivity in most applications. If the Sub-Station is located in a very noisy location, sensitivity (and background noise pick-up) can be further reduced by jumpering terminals Y1, Y2 and Y3 together. For maximum sensitivity, remove jumper entirely.

A 10 ohm resistor is factory-connected under the unit across terminals LG and LB . This resistor also reduces sensitivity and background noises at the Sub-Station. Remove this resistor if desired.

G. Terminals S1 and S2

Even when you have silenced the system, you can be contacted by a tone signal from a Sub-Station with call origination (such as Model TAP-LR-3W) or a separate call button (such as Model K-S-100W). See Figure 1 for wiring connections.

TAP-6 Intercom System

I. Installation

A. Sub-Stations: Call Origination and Volume

Set up the TAP-6 and Sub-Stations in the desired locations. Model TAP-LR-3W Sub-Station provides localized coverage **with** call origination. Models K-LR-2R and TAP-2RC Sub-Stations provide localized coverage **without** call origination. Models K-C-20 and K-C-20V Horn provide greater receiving volume at the Sub location.

A K-S-100W Call Switch can be used with Models K-LR-2R, TAP-2RC, K-C-20(V) or other non-originating Sub-Stations to add call origination. Locate the K-LR-2R, TAP-2RC, TAP-LR-3W and K-S-100W at normal operating height. Locate K-C-20(V) high enough to provide broad coverage. All of these units are designed for indoor or outdoor use.

B. Installing Sub-Stations

Run 1 length of #6303 cable (1 shielded pair) from TAP-6 to Models K-LR-2R, TAP-2RC, K-C-20(V) or other non-originating Sub-Station without a call switch.

Run 2 lengths of #6303 or one length of #6305 cable (1 shielded pair + 1 unshielded pair) from the TAP-6 to K-LR-2R, TAP-2RC, K-C-20(V) or other non-originating Sub-Stations along with a K-S-100W Call Switch or other call button.

Connect Sub-Stations as shown in Figure 3. Sub-Station #1 connects to the LB, LS and LG terminals. All other Sub-Stations connect to the numbered T terminals. The bare wire of the #6305 and #6303 cable is always connected at the Master end, but it is not connected at the Sub-Station. Tape the end of bare wires not connected to prevent shorting, grounding, etc. All interconnecting cables should be properly strain-relieved at time of installation to avoid undue tension on cable connections.

C. Completing the Installation

Underneath the Master is a cable clamp. Remove screw on cable clamp and pass interconnecting cables underneath clamp. Adjust cable clamp so that it holds cable securely. Replace screw.

Care should be taken so that no part of the cable is too near electric or telephone wiring, etc., nor should it be shorted to any grounded conductors, radiators, or pipes, beams, etc., and the bare wires at the various terminals should not short from one terminal to the other, nor to the metal chassis. When staples are used to hold the cables in place, use only insulated staples and do not drive them in so hard as to cause the wires inside the cable to short to each other.

TAP-6

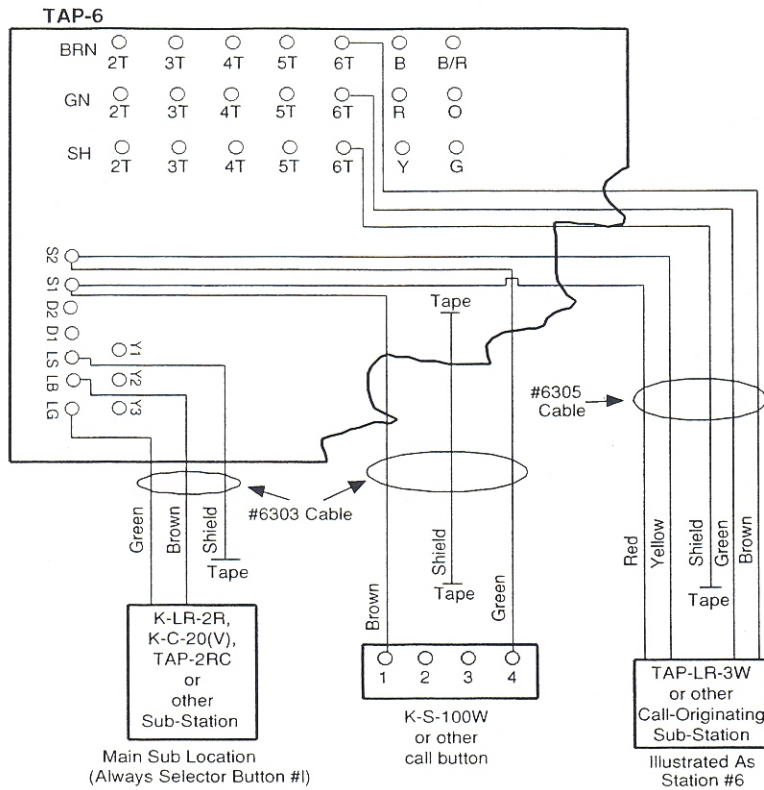


Figure 3. TAP-6 Wire Connections

I. Operation

A. Operation of Master Station

Plug in the line cord, extending from the unit into an electrical outlet of 120 volts, 60 Hz AC. Depress the Station Selector Button for the location with which you wish to communicate. Speak directly into the microphone at a distance of approximately 1 to 2 inches, in a normal tone of voice, and that location will hear you. The Master utilizes a close proximity microphone, designed to eliminate background noises. Neither you nor the person at the Sub location operate any controls. Release the Station Selector Button and the Sub location will be automatically silenced.

B. Operation of Sub-Stations

Once called, people at Sub-Stations simply talk and listen hands-free without operating any controls. Those Sub locations with origination switches call the Master by tone signal when their switch is depressed. Once the Master answers by selecting the Sub-Station that is calling, conversation proceeds hands-free in both directions.

For kiosk, drive-thru window, and other applications where customer will be within 4 to 5 feet of Sub location #1, keep the 10 ohm resistor across terminals LB and LG on the TAP-6 to provide proper sensitivity. If you wish customer to be able to reply at a greater distance at Sub location #1, remove this resistor.

C. Volume Controls

Located underneath the Master unit are 2 volume controls. One adjusts incoming volume; the other outgoing volume. The volume controls should be set at a pleasant level for continuous use and may not have to be adjusted from factory settings. The system is equipped with an Automatic Gain Control in both directions so that both incoming and outgoing volumes you have set are maintained without feedback, whether speaking normally or loudly.

D. Microphone Sensitivity Switch

Located underneath the Master, this Switch has 3 positions: Minimum, Normal and Maximum. Unit is shipped in the Normal position, which is used for most applications. Do not move switch setting until system is tested in actual operation.

To adjust volume control settings:

1. Place Microphone Sensitivity Switch in Normal position.
2. Depress Station Selector Button #1 on front of Master so it is in the On position. You should hear background noise. Have someone speak to you from the Sub-Station while you adjust the Incoming Volume Control to a good level.
3. Speak through the Microphone while you adjust the Outgoing Volume.

Do not tap on the equipment or move the gooseneck of the microphone while adjusting control settings.

E. Station Selector Buttons

There are 6 buttons located on the front of the TAP-6. Depress one or more with slight pressure to open communication with Sub-Stations. Release by depressing in again. Keep all station selector buttons out in the "off" position when TAP-6 is not in use.

F. Power Indicator

Located on the front of TAP-6, this indicator remains lit to show Master is receiving power. If unlit, check to see that TAP-6 is plugged into its electrical outlet, and that fuse on Master is good. Use only 1 amp. 3AG fuse.

G. Terminals Y1, Y2 and Y3

These terminals, located underneath the unit, adjust sensitivity and background noise at all of the Sub-Stations. As shipped, terminals Y2 and Y3 are jumpered to provide proper sensitivity in most applications. If the Sub-Stations are located in very noisy locations, sensitivity (and background noise pick-up) can be further reduced by jumpering terminals Y1, Y2 and Y3 together. For maximum sensitivity, remove jumper entirely.

A 10 ohm resistor is factory-connected under the unit across terminals LG and LB. This resistor also reduces sensitivity and background noises at the Sub-Station. Remove this resistor if desired.

H. Terminals S1 and S2

Even when you have silenced the system, you can be contacted by a tone signal from a Sub-Station with call origination (such as Model TAP-LR-3W) or a separate call button (such as Model K-S-100W). See Figure 3 for wiring connections.

TAP-1R-CM & TAP-1R Intercom System

I. Installation

A. Placing the Equipment

1. **TAP-200:** Locate the Amplifier/Power Supply (TAP-200) underneath the mounting surface within 5 feet of the Master Unit (TAP-1R-CM or TAP-1R). Cables attached to Master Unit are 5 feet long and should not need to be extended. See separate instructions to mount TAP-200 with K-BKT
2. **TAP-MIC (for TAP-1R only):** Locate the microphone on the counter within 5 feet of the TAP-200. The Microphone cable should not be extended beyond this 5-foot distance. Drill a hole through the mounting surface approximately 3/8" diameter to allow for the microphone to pass through.
3. **TAP-1R-CM or TAP-1R Master:**

- a. **Recessing the TAP-1R:** The mounting surface will require an opening of 6-1/2" x 4-1/8" x 3-1/4"d. Cut the surface accurately.

As shipped from the factory, the TAP-1R is assembled in a back box. Separate front panel from Master by removing the two phillips head screws. Next separate chassis from back box by removing the two binder head screws in the diagonal corners. Mount back box in opening with tabs facing top of mounting surface and front edge of back box even with top of surface. Secure back box in place.

Replace chassis of Master into back box and lead all extending cables through the large opening on back of back box that lies behind the speaker when chassis inserts in back box. Do NOT lead the cables through the large round opening that falls behind the switch. Insert the two binder head screws through the two oval slots of chassis and into screw receptacles of back box. Turn binder head screws fingertight. Place front panel of Master on chassis. Insert the two phillips head screws into opening provided on front panel and tighten slightly. Align front panel on counter. Tighten phillips head screws (but do not overtighten).

- b. **Placing TAP-1R-CM on Surface:** Clean surface where unit is to be located to remove dust and dirt.. Dry thoroughly.

Remove protective covering from four pads on the bottom of the TAP-1R-CM and press down firmly on mounting surface. Adhesive will set immediately, but takes about an hour to reach full adhesion.

Cable extending from the back of the unit goes under the mounting surface to TAP-200. Cable can go through the same opening in counter used for other counter-top electronic items.

4. **Sub-Station:** Model K-LR-2R (TAP-2RC in close proximity to Master) will meet most requirements. TAP-LR-3W will provide call origination from the sub-station. You can also use a K-C-20(V) horn (with K-S-100W call switch) where greater receiving volume at sub location is desired. All Subs are designed for indoor or outdoor use. Locate Subs at normal operating height. Locate K-C-20(V) horn high enough to provide broad coverage.

B. Wiring Connections

To connect Sub-Station, Call Buttons, and Master (and microphone on TAP-1R) to TAP-200, see Figure 4. Sub-Station connects to LS, LB and LG terminals. Call switch (including call switch from TAP-LR-3W) connects to S1 and S2 terminals.

C. Completing the Installation

Underneath the Master is a cable clamp. Remove screw on cable clamp and pass interconnecting cables underneath cable clamp. Adjust cable clamp so that it holds cable securely. Replace screw.

Care should be taken so that no part of the cable is too near electric or telephone wiring, etc., nor should it be shorted to any grounded conductors, radiators, or pipes, beams, etc., and the bare wires at the various terminals are not shorted from one terminal to the other, nor to the metal chassis. When staples are used to hold the cables in place, use only insulated staples and do not drive them in so hard as to cause the wires inside the cable to short to each other.

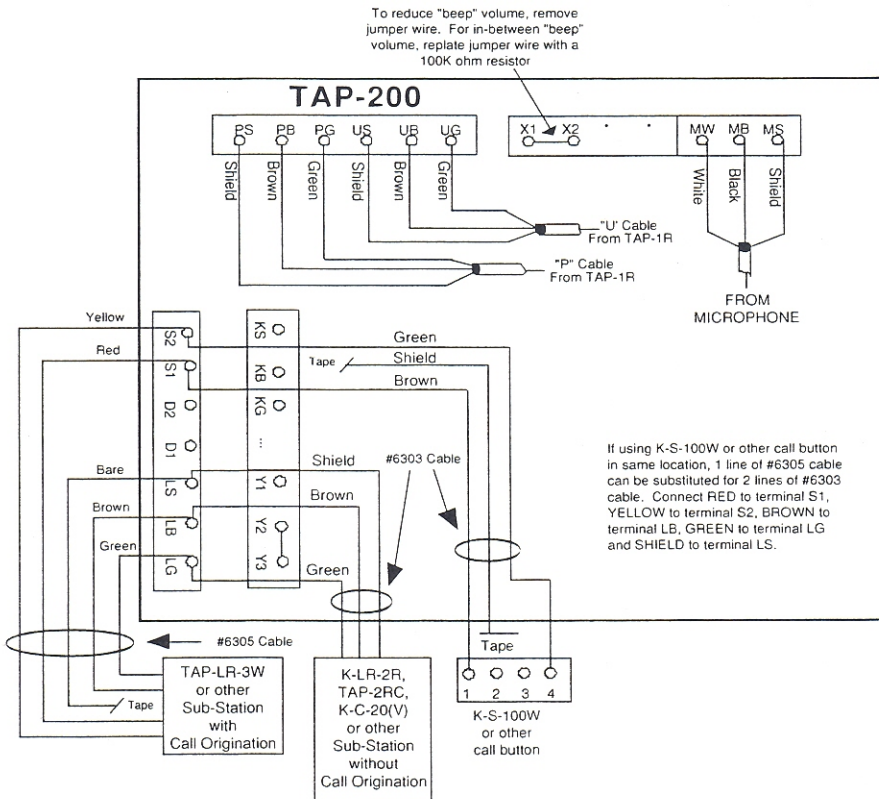


Figure 4. TAP-1R-CM and TAP-1R Wire Connections

I. Operation

A. Operation of Master Station

Plug in the line cord, extending from the TAP-200 into an electrical outlet of 120 volts, 60 Hz AC. Place the Performance Control (located in center on face of Master) in Out position. Speak directly into the microphone at a distance of approximately 1 to 2 inches, in a normal tone of voice, and Sub location will hear you. The Master utilizes a close proximity microphone, designed to eliminate background noises. Neither you nor the person at the Sub location operate any controls. When desired, sounds in both directions can be silenced by depressing in the Performance Control.

B. Operation of Sub-Station

Once called, persons at Sub simply talk and listen hands-free without operating any controls. Origination switch allows Sub to call the Master by tone signal when origination switch is depressed (see Terminals S1 and S2). Once the Master answers, conversation continues hands-free in both directions.

C. Volume Controls

Located underneath the TAP-200 are 2 volume controls. One adjusts incoming volume; the other outgoing volume. The volume controls should be set at a pleasant level for continuous use and may not have to be adjusted from factory settings. The system is equipped with an Automatic Gain Control in both directions so that both incoming and outgoing volumes you have set are maintained without feedback, whether speaking normally or loudly.

D. Microphone Sensitivity Switch

Located underneath the TAP-200, this Switch has 3 positions: Minimum, Normal and Maximum. Unit is shipped in the Normal position, which is used for most applications. Do not move switch setting until system is tested in actual operation.

To adjust volume control settings:

1. Place Microphone Sensitivity Switch in Normal position.
2. Place Performance Control on front of Master in "operational" (out) mode. You should hear background noise. Have someone speak to you from the Sub-Station while you adjust the Incoming Volume Control to a good level.
3. Speak through the Microphone while you adjust the Outgoing Volume.

Do not tap on the equipment or move the gooseneck of the microphone while adjusting control settings.

E. Performance Control

Located on the front left of Master Unit. Depress in with slight pressure to silence incoming and outgoing signals. Depress in again to return to Out position and immediately provide totally hands-free 2-way conversation without either party operating any controls.

F. Power Indicator

Located on front of TAP-200, light remains on to show unit is receiving power. If off, check to see that unit is plugged into its electrical outlet and that the fuse is good. Use only 1 amp. 3AG fuse.

F. Terminals Y1, Y2 and Y3

These terminals, located underneath the TAP-200, adjust sensitivity and background noise at the Sub-Station. As shipped, terminals Y2 and Y3 are jumpered to provide proper sensitivity in most applications. If the Sub-Station is located in a very noisy location, sensitivity (and background noise pick-up) can be further reduced by jumpering terminals Y1, Y2 and Y3 together. For maximum sensitivity, remove jumper entirely.

A 10 ohm resistor is factory-connected under the unit across terminals LG and LB . This resistor also reduces sensitivity and background noises at the Sub-Station. Remove this resistor if desired.

G. Terminals S1 and S2

Even when you have silenced the system, you can be contacted by a tone signal from a Sub-Station with call origination (such as Model TAP-LR-3W) or a separate call button (such as Model K-S-100W). See Figure 4 for wiring connections.

TAP-204R, TAP-204R-CM, TAP-208R, TAP-208R-CM, TAP-212R and TAP-212R-CM Intercom Systems

I. Installation

A. Placing the Equipment

1. **TAP-200:** Locate the Amplifier/Power Supply (TAP-200) underneath the mounting surface within 5 feet of the Master Unit. Cables attached to Master Unit are 5 feet long and should not need to be extended. See separate instructions to mount TAP-200 with K-BKT
2. **TAP-MIC** (for Masters without built-in microphones only): Locate the microphone on the counter within 5 feet of the TAP-200. The Microphone cable should not be extended beyond this 5-foot distance. Drill a hole through the mounting surface approximately 3/8" diameter to allow for the microphone to pass through.

3. **Master:**

- a. **Recessing Masters without Built-in Microphones:** The mounting surface will require an opening of 6-1/2" x 4-1/8" x 3-1/4"d. Cut the surface accurately.

As shipped from the factory, the Master is assembled in a back box. Separate front panel from Master by removing the two phillips head screws. Next separate chassis from back box by removing the two binder head screws in the diagonal corners. Mount back box in opening with tabs facing top of mounting surface and front edge of back box even with top of surface. Secure back box in place.

Replace chassis of Master into back box and lead all extending cables through the large opening on back of back box that lies behind the speaker when chassis inserts in back box. Do NOT lead the cables through the large round opening that falls behind the switch. Insert the two binder head screws through the two oval slots of chassis and into screw receptacles of back box. Turn binder head screws fingertight. Place front panel of Master on chassis. Insert the two phillips head screws into opening provided on front panel and tighten slightly. Align front panel on counter. Tighten phillips head screws (but do not overtighten).

- b. **Placing Masters with Built-in Microphones on Surface:** Clean surface where unit is to be located to remove dust and dirt.. Dry thoroughly.

Remove protective covering from four pads on the bottom of the Master and press down firmly on mounting surface. Adhesive will set immediately, but takes about an hour to reach full adhesion.

Cables extending from the back of the unit go under the mounting surface to TAP-200 and junction box. Cable can go through the same opening in counter used for other counter-top electronic items. Be careful not to damage the plugs on the cable end.

4. **Junction Box:** Mount under counter or other mounting surface within 5 feet of Master unit. Cable attached to the master should not be extended.

5. **Sub-Station:** Model K-LR-2R (TAP-2RC in close proximity to Master) will meet most requirements. TAP-LR-3W will provide call origination from the sub-station. You can also use a K-C-20(V) horn (with K-S-100W call switch) where greater receiving volume at sub location is desired. All Subs are designed for indoor or outdoor use. Locate Subs at normal operating height. Locate K-C-20(V) horn high enough to provide broad coverage.

B. Wiring Connections

1. **TAP-200:** Separate microphones (not built into Master) and all Call Buttons (either stand alone or built into Sub-Stations) must be connected directly to TAP-200 (see Figure 5). A cable from the Master is also plugged in.
2. **Master:** The Master has 3 cables extending from it. One male connector plugs into the female connector on the TAP-200. A second male connector plugs into the female connector extending from the Junction Box. The third cable, without a connector, is only to be used with a K-RW-7B music relay (see K-RW-7B section). If it is not being used, tape off all wires to prevent shorts.
3. **Junction Box:** All Sub-Stations connect to the junction box, which in turn connects to the Master. If a Sub-Station has a call button, the button connects directly to the S1 & S2 terminals on the TAP-200 (see Figure 6).

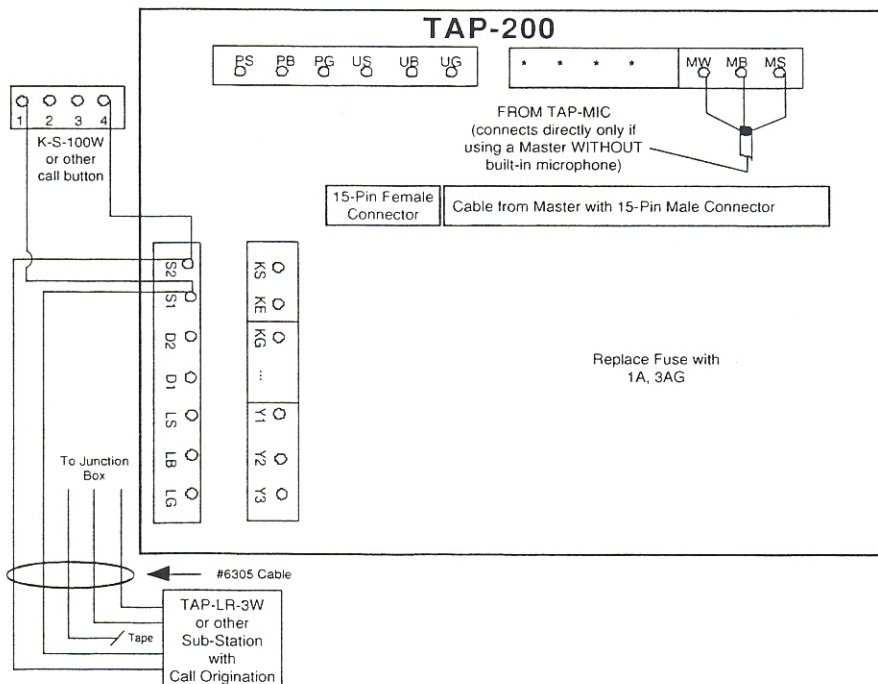


Figure 5. TAP-200 wire connections for 4-, 8- and 12-Channel Hands-Free Masters

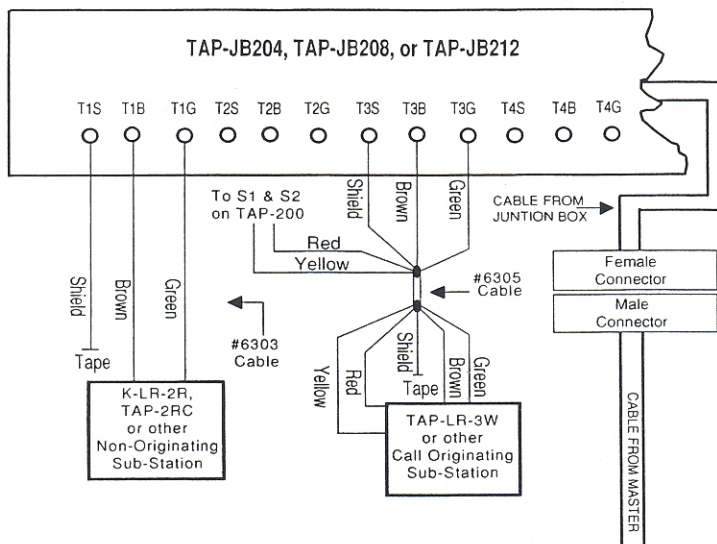


Figure 6. Junction Box wire connections

C. Completing the Installation

Underneath the Master is a cable clamp. Remove screw on cable clamp and pass interconnecting cables underneath clamp. Adjust cable clamp so that it holds cable securely. Replace screw.

Care should be taken so that no part of the cable is too near electric or telephone wiring, etc., nor should it be shorted to any grounded conductors, radiators, or pipes, beams, etc., and the bare wires at the various terminals should not short from one terminal to the other, nor to the metal chassis. When staples are used to hold the cables in place, use only insulated staples and do not drive them in so hard as to cause the wires inside the cable to short to each other.

I. Operation

A. Station Selector Switches

Depending on your model, you have either 4, 8 or 12 buttons located on the front panel, protected by 2 black metal arms. Depress selector button with slight pressure to turn On. Press in again to turn Off. Selector button #1 is normally used for a Sub-Station located nearby to the Master. Keep all station selector buttons out in the Off position when Master is not in use.

B. Power Indicator

Located on front of TAP-200, light remains on to show unit is receiving power. If off, check to see that unit is plugged into its electrical outlet and that the fuse is good. Use only 1 amp. 3AG fuse.

C. Volume Controls

Located underneath the TAP-200 are 2 volume controls. One adjusts incoming volume; the other outgoing volume. The volume controls should be set at a pleasant level for continuous use and may not have to be adjusted from factory settings. The system is equipped with an Automatic Gain Control in both directions so that both incoming and outgoing volumes you have set are maintained without feedback, whether speaking normally or loudly.

D. Microphone Sensitivity Switch

Located underneath the TAP-200, this Switch has 3 positions: Minimum, Normal and Maximum. Unit is shipped in the Normal position, which is used for most applications. Do not move switch setting until system is tested in actual operation.

To adjust volume control settings:

1. Place Microphone Sensitivity Switch in Normal position.
2. Depress station selector button #1 on the Master. You should hear background noise. Have someone speak to you from the Sub-Station while you adjust the Incoming Volume Control to a good level.
3. Speak through the Microphone while you adjust the Outgoing Volume.

Do not tap on the equipment or move the gooseneck of the microphone while adjusting control settings.

E. Operation of Master Station

Plug in the line cord, extending from the TAP-200 into an electrical outlet of 120 volts, 60 Hz AC. Release all station selector buttons to Off position (out).

Depress the station selector button for the location with which you wish to communicate. You will automatically be listening to that location. Speak directly into the microphone at a distance of approximately 1 to 2 inches, in a normal tone of voice, and the Sub location will hear you. The Master utilizes a close proximity microphone, designed to eliminate background noises. Neither

you nor the person at the Sub location operate any controls. Release the station selector button(s) and the Sub-location(s) will be silenced.

F. Operation of Sub-Station

Once called, persons at Sub simply talk and listen hands-free without operating any controls. Origination switch allows Sub to call the Master by tone signal when origination switch is depressed (see Terminals S1 and S2). Once the Master answers, conversation continues hands-free in both directions.

G. Terminals Y1, Y2 and Y3

These terminals, located underneath the TAP-200, adjust sensitivity and background noise at all the Sub-Stations. As shipped, terminals Y2 and Y3 are jumpered to provide proper sensitivity in most applications. If Sub-Stations are located in a very noisy location, sensitivity (and background noise pick-up) can be further reduced by jumpering terminals Y1, Y2 and Y3 together. For maximum sensitivity, remove jumper entirely.

A 10 ohm resistor is factory-connected on the Junction Box across terminals T1B and T1G to provide proper sensitivity when channel #1 is used for a cash drawer. If channel number #1 is not being used for a cash drawer location, remove this resistor.

There is also a 10 ohm resistor connected across terminals LB and LG on the TAP-200 which reduces the sensitivity of all the Sub-Stations. To increase the sensitivity, remove this resistor.

G. Terminals S1 and S2

Even when you have silenced the system, you can be contacted by a tone signal from a Sub-Station with call origination (such as Model TAP-LR-3W) or a separate call button (such as Model K-S-100W). See Figure 5 for wiring connections.

K-RW-7B Program Relay

The K-RW-7B Relay is for use with models TAP-204R, TAP-208R, TAP-212R (all with or without "CM" suffix) and TAP-6. It provides for music and/or announcements to be played through up to 8 Sub-Stations being used for regular communication. For more than 8 Sub-Stations, use a second K-RW-7B.

I. Installation

A. With TAP-204R, TAP-208R and TAP-212R (with or without "CM")

1. Locate the K-RW-7B(s) in close proximity to the Master. Cables from the Sub-Stations that will receive music route through the K-RW-7B(s) (see Figures 7 and 8).
 - a. Run a length of #6303 cable from each K-LR-2R and other non-originating Sub-Stations that you wish to receive music directly to the K-RW-7B.
 - b. Run a length of #6305 cable from each TAP-LR-3W and other Sub-Stations with call origination that you wish to receive music directly to the K-RW-7B. The Green, Brown & Bare of #6305 connect to the K-RW-7B, while the Red & Yellow connect to the S1 & S2 terminals on the TAP-200.
 - c. Run a corresponding length of #6303 cable between the K-RW-7B and the Junction Box for every Sub-Station connected to the K-RW-7B.
2. Extending from the Master is a cable tagged "use only to connect K-RW-7B Relay for use in a music system". Connect this cable directly to the K-RW-7B Relay as shown in Figure 7 for 4- and 8-channel masters. Connect as shown in Figure 8 for TAP-212R-CM and TAP-212R Masters.

B. With TAP-6

1. Locate the K-RW-7B in close proximity to the Master. Cables from the Sub-Stations that will receive music route through the K-RW-7B (see Figure 9).
 - a. Run a length of #6303 cable from each K-LR-2R and other non-originating Sub-Stations that you wish to receive music directly to the K-RW-7B.
 - b. Run a length of #6305 cable from each TAP-LR-3W and other Sub-Stations with call origination that you wish to receive music directly to the K-RW-7B. The Green, Brown & Bare of #6305 connect to the K-RW-7B, while the Red & Yellow connect to the S1 & S2 terminals on the TAP-6.
 - c. Run a corresponding length of #6303 cable between the K-RW-7B and the TAP-6 for every Sub-Station connected to the K-RW-7B.
2. Extending from the Master is a cable tagged "use only to connect K-RW-7B Relay for use in a music system". Connect this cable directly to the K-RW-7B Relay as shown in Figure 9.

C. Connecting Music or Programming to Program Terminals

The K-RW-7B is designed for connection from the output of your external, amplified radio receiver, tape or CD player for playing music, announcements or commercials through the Sub-Stations. Do NOT use a program signal that will exceed 10 volts RMS (28 volts peak to peak). An appropriate audio transformer may be necessary to accomplish this. Your program source will be seeing between 5.8 ohms and 1.9 ohms impedance and may at times actually be open.

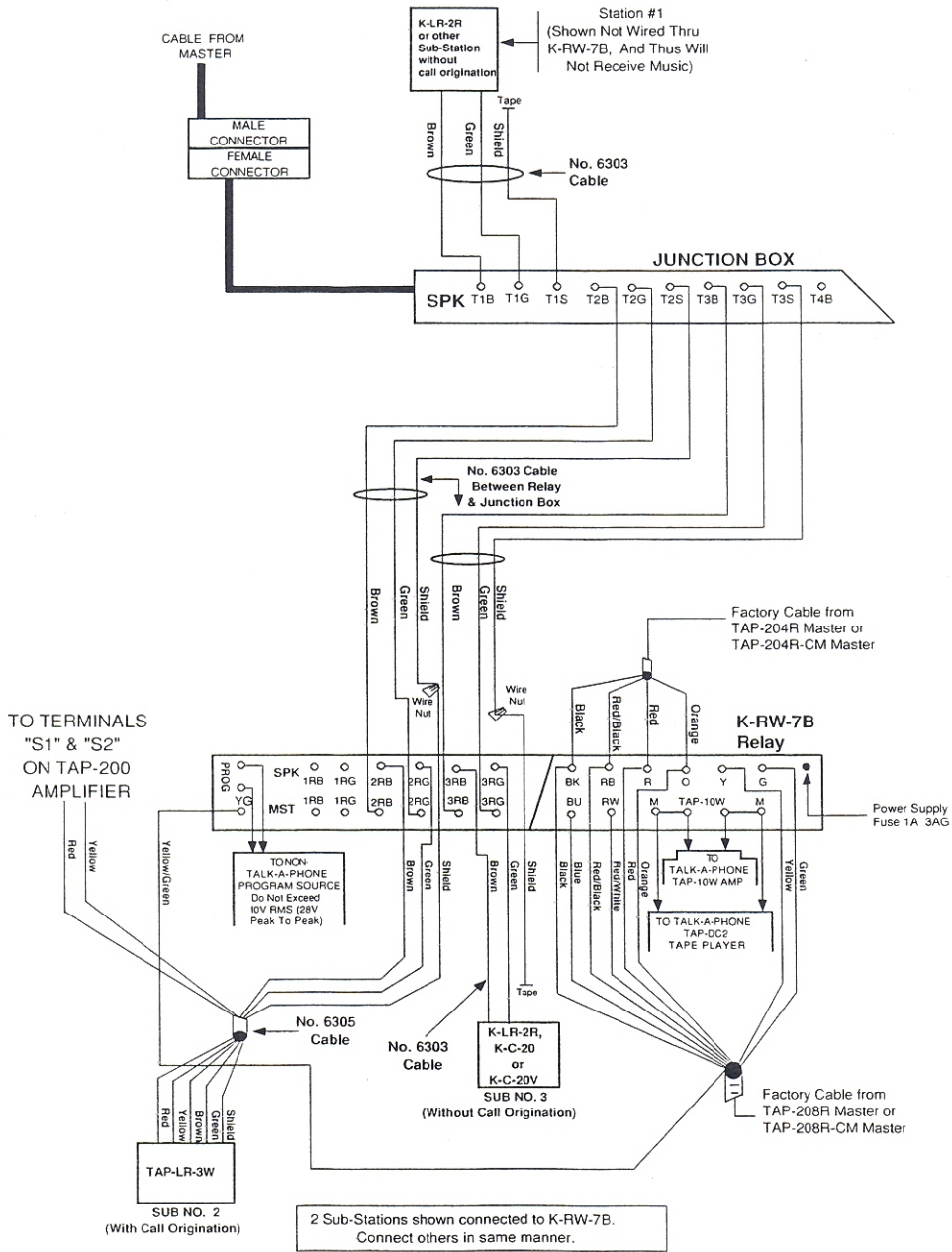


Figure 7. Wire Connections for K-RW-7B Relay with TAP-204-R-CM and TAP-208R-CM Masters

K-RW-7B

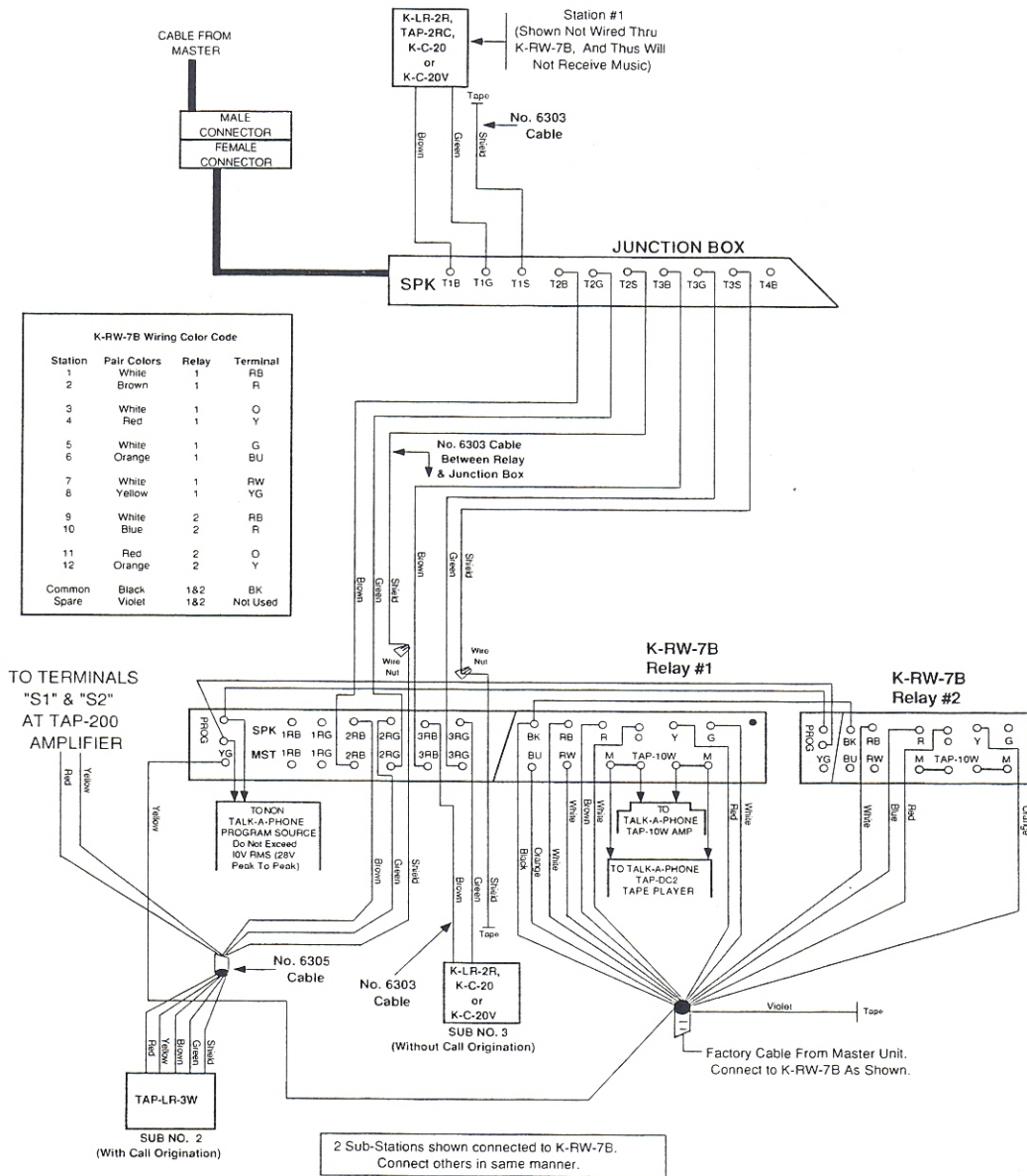


Figure 8. Wire Connections for K-RW-7B with TAP-212R-CM Master

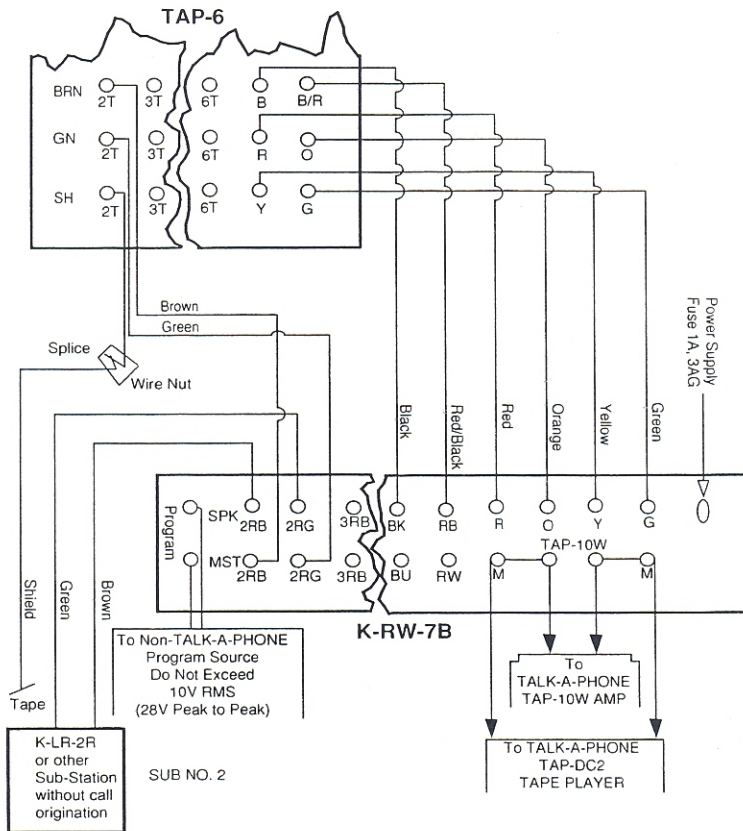


Figure 9. Wire Connections for K-RW-7B with TAP-6

II. Operation

Plug in the line cord of the K-RW-7B to an electrical outlet of 120 volts, 50-60 Hz. AC. When K-RW-7B is used with a program source, all Subs connected to the relay will automatically receive the programming when selector buttons relating to them are released. Programming will stop at individual locations when an individual Station Selector Button is depressed to enable conversation to that location. Programming will continue at all other locations.

Installer's Checklist

1. TAP-200 Amplifier/Power Supply plugged into electrical outlet of 120 volts, AC..
Red LED is on.
2. Incoming and outgoing volume is adjusted.
3. Microphone sensitivity control adjusted to require speech within 1-2 inches of microphone.
4. "Y" terminals correctly connected.

Talk-A-Phone Co. Factory Service

Talk-A-Phone factory service is available to Talk-A-Phone users at a reasonable charge, plus transportation to and from our factory. Prepay transportation to factory and units can be thoroughly examined, serviced by factory-trained personnel and returned promptly, transportation collect. If desired, charges can be estimated awaiting your approval before proceeding with repairs.

Talk-A-Phone also offers for sale replacement parts for our products directly to dealers and to our users. When ordering please send either the part number or a brief description of a part's function and the model number for which it is needed.

Talk-A-Phone Co. Limited Warranty: Intercommunication Products

Talk-A-Phone Co. warrants Talk-A-Phone equipment against any defect in material and workmanship, under normal use, for a period of three (3) months from date of installation, provided that Talk-A-Phone receives a completed Installation Certification certifying the date on which the system has been installed. An Installation Certification card is enclosed with every unit. In the event that no Installation Certification is received by Talk-A-Phone, the three (3) months will commence on the date of shipment by Talk-A-Phone.

In the event this product is found by Talk-A-Phone to be defective within the warranty period, Talk-A-Phone's only obligation and your exclusive remedy, shall be the repair and/or replacement of any defective parts, provided the equipment is returned to Talk-A-Phone Co., 5013 N. Kedzie Ave., Chicago, IL 60625. It is expressly understood that Talk-A-Phone shall have no obligation to furnish labor, nor pay for the labor of any third parties, nor bear the expense of shipping defective products for their repair. This warranty shall not apply if Talk-A-Phone determines that the defect was caused by improper use or installation, or damage caused to the equipment by others.

In no event shall Talk-A-Phone be liable for incidental or consequential damages of any kind whatsoever.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

BEFORE SENDING EQUIPMENT TO TALK-A-PHONE YOU MUST CALL TO RECEIVE A RETURN AUTHORIZATION NUMBER.