

INSTALLER'S AID

R-19, T-19, and C-19 Key System Intercom Units

Section 417-231

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This sheet provides directions for installing and testing a TELTONE® R-19, T-19, or C-19 Nineteen-Station Modular Intercom unit. (Directions for the TELTONE Ten-Station units R-10 and T-10 are provided in installer's aid 417-221.)

Accessories: The R-19, T-19, and C-19 can be used with paging access units such as the TELTONE PA-14. One or more expansion units such as the TELTONE EX-18A can increase the capacity of the intercom to a maximum of 100 stations. Prewired quick-connect blocks (M-416-19 and M-416-37) are available which simplify installation of the intercom units. When installing the intercom with these QCB's, use the installer's aids supplied with the QCB.

References: If more information is required, consult the following Teltone documents:

R-19 Technical Practice	Section 417-130
T-19 Technical Practice	Section 417-150
C-19 Technical Practice	Section 417-160
EX-18A Technical Practice	Section 413-130
PA-14 Technical Practice	Section 414-110

FCC Part 68: The R-19, T-19, and C-19 are registered as KX devices under FCC Part 68. The registration number is AHH9WA-67282-KX-9. The technical practices contain further Part 68 compliance information.

Maintenance: No routine maintenance is required. The unit will not require field adjustment at any time. If equipment fails beyond the warranty period, Teltone offers a flat rate repair service.

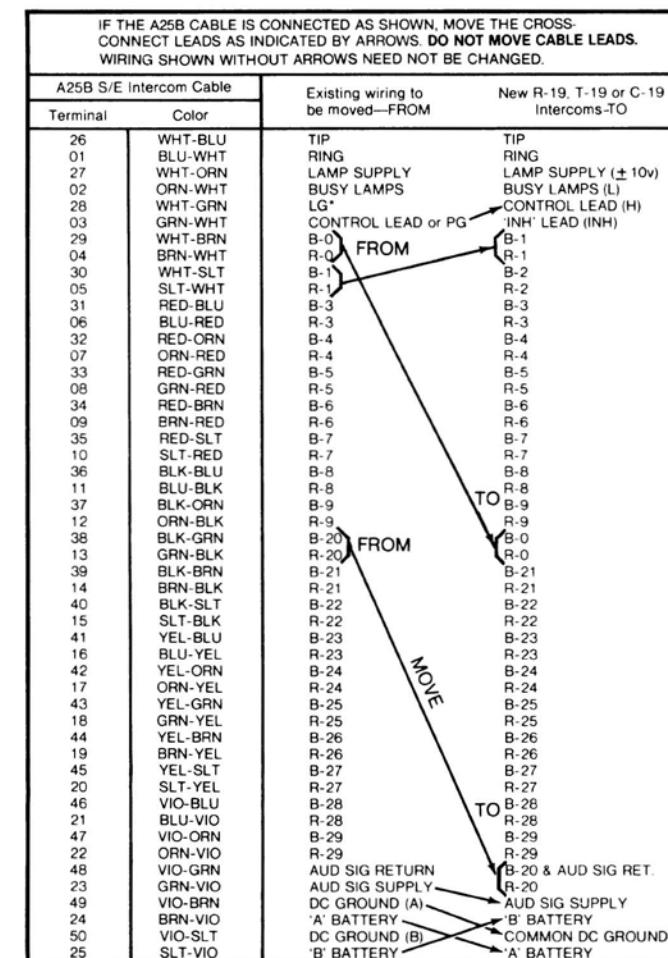
IF THIS UNIT IS REPLACING ANOTHER UNIT:

- **Wiring changes are required** when the R-19, T-19, or C-19 replaces a TELTONE M-416 or M-417 intercom. Refer to Figure 1.
- **Wiring changes may be required** when the R-19, T-19, or C-19 replaces another manufacturer's product. Figure 1 is valid for Melco TD 508-19 and similar intercoms.
- **No changes are required** if this R-19, T-19, or C-19 replaces a TELTONE R-10 or T-10 intercom.

IF THIS IS A NEW INSTALLATION:

Cautions:

- Do not connect the cable to the intercom unit until all wiring is terminated and checked.
- Do not connect more than 20 type 51A or 10ESB lamps to the busy lamp terminal without using an external lamp extension device.
- Do not connect more than two signalling devices per station.



*If a ground is connected here, remove it.

Figure 1 R-19, T-19, or C-19 Replacing M-416 19-Station Intercom

1. Remove the intercom from its shipping container and return any unit that appears to be damaged.
2. Install the intercom in an apparatus cabinet or other protected location.
3. Run a single-ended connectorized cable (A25B or equivalent) from the intercom location to a 66B-type connect block (connect block and cable are not supplied).
4. Terminate the intercom cable leads at the connect block (standard connection).
5. Punch down station leads at the connect block as required. (Figure 3 lists station designations and shows an example connection for station 1. Note that signal leads are punched down to column B.)
6. Multiple Tip, Ring, LG, and L for all assigned stations.
7. Connect the key system power supply to the intercom connect block.

Figure 2 provides an overview of intercom and accessory connections. Referring to Figure 3, perform steps 4 through 10.

- Note:** "A" and "B" grounds must be connected together at the power supply. A separate cable pair for each battery should be run from the power supply to the intercom connect block.
8. Install a strap or "B" bridging clip between C and D at Rows 1, 2, and 4 for Tip, Ring, and Lamp.
 9. Strap 3B or 49F for lamp supply.
 10. If the intercom is being used in ten-station mode, strap 5B to 6B.

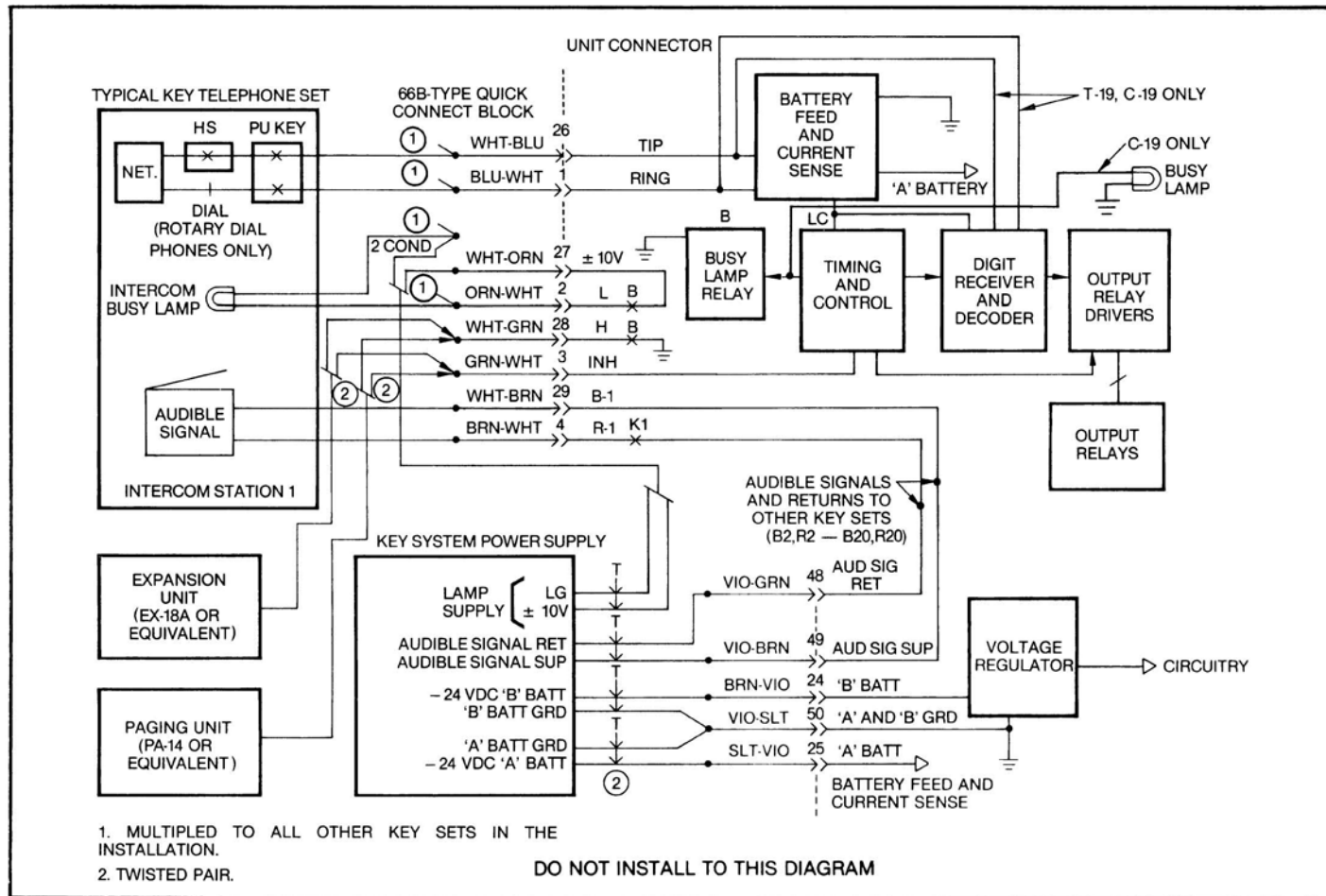
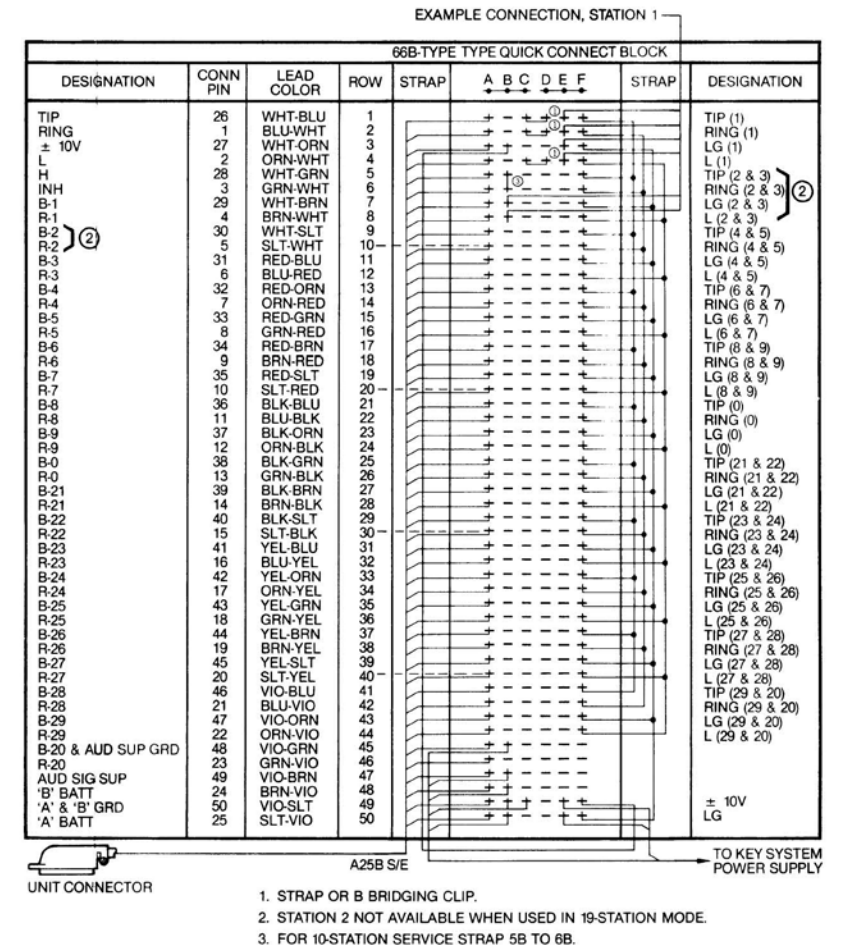


Figure 2 R-19, T-19, C-19 Functions and Applications (For Reference Only)



11. Plug in the intercom cable and secure it with the fastener provided on the unit. For supervision and testing, a 51A or 10ESB lamp can be wedged between intercom connect block terminals L and H. This lamp (and the intercom status lamp on the C-19) will light whenever the intercom is in use.
12. Make a call to yourself at each of the assigned stations. Verify that each station can be signalled and that the lamps at all stations light when one station goes off-hook.
13. **R-19 Installations Only:** Verify the resignal feature by making a call to yourself and then, after the ring burst ends and without hanging up, dialing the second digit of any station in the same 10's group.
14. **C-19 Installations Only:** Verify that the ringback signal is present in the receiver while the audible signal is present in the key set, and that the intercom busy lamp winks when both signals stop. Verify the resignal feature by making a call to yourself and then, after the ring burst ends and without hanging up, dialing both digits of any station.
15. Complete the installation in accordance with local practices.

INSTALLATION WITH EXPANSION UNIT:

Figure 4 provides an overview of connections for expanded intercom systems. Figure 5 shows 66B connect block connections for an EX-18A unit. Note that:

- Tip, Ring, H, and INH leads are continued throughout the system.
- To add 19 stations to an intercom unit, the intercom connect block's R1 through R0 outputs must be connected to the I1 through I0 inputs on the expansion module connect block. Similarly, for each added expansion module, R outputs are brought from the preceding connect block to the I inputs of the next connect block, as shown in Figure 4.
- Transfer digits are assigned by strapping single-digit R outputs to the X(A) and X(B) terminals. For example, Figure 4 shows strapping for 10's and 30's stations at R1 and R3.
- Inputs X(A) and X(B) will accept any one of the following voltages: 10 VAC; 18 VAC; 105 VAC, 30 HZ; or GRD. (If using the key system battery supply, the **negative** side

of the supply connects to the key system at AUD SIG RET and the positive side connects at AUD SIG SUP. **Do not use -24VDC** as input voltage for X(A) or X(B).

Single-digit station connections appear on the last expansion module. Only those digits not used as transfer digits are available for single-digit station connections.

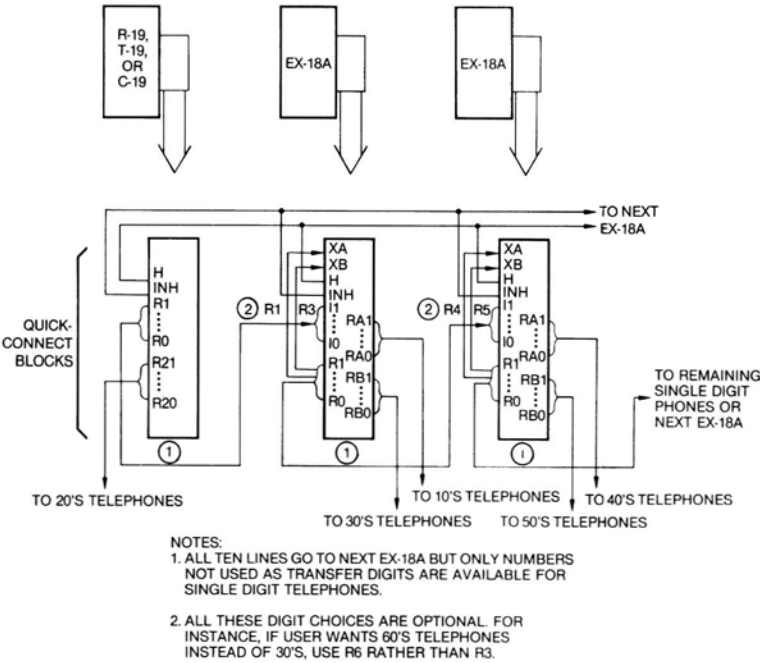


Figure 4 Overview of Connections for Expanded Systems

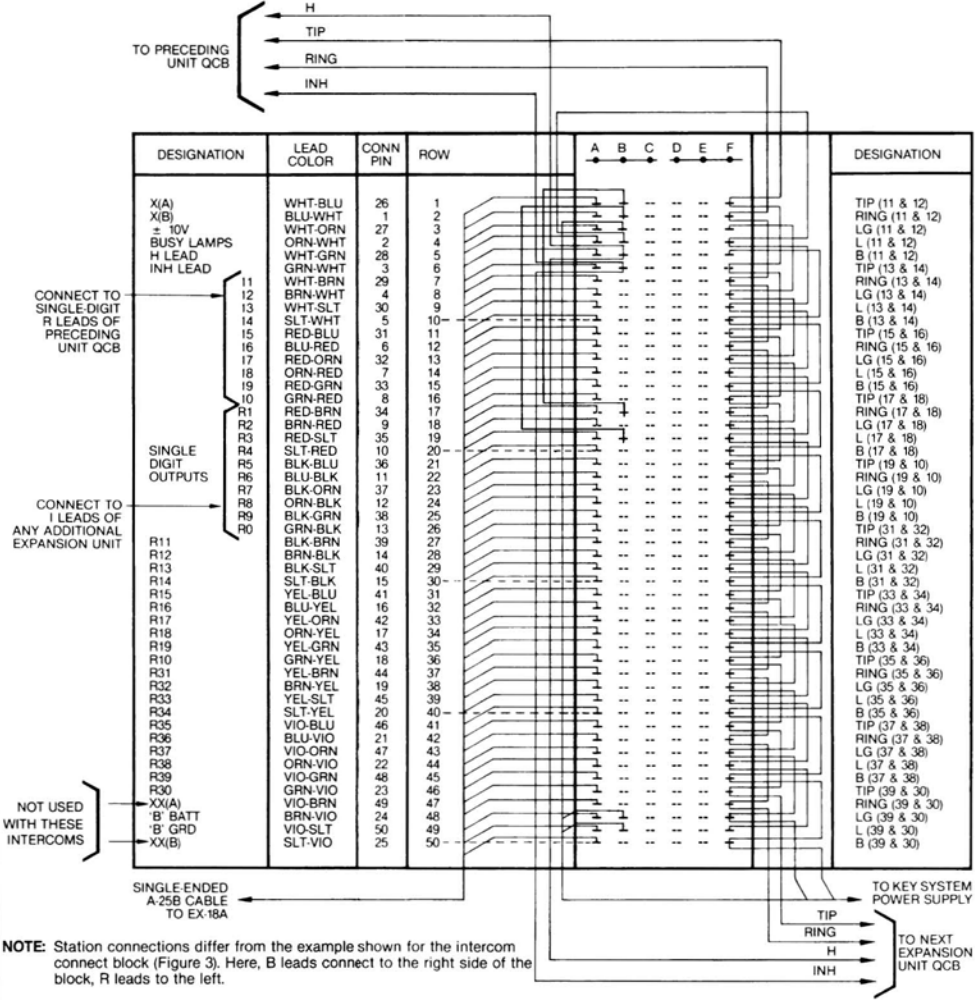


Figure 5 66B Connect Block Layout for Expansion Unit (For RTC Intercoms Only)

For technical assistance on this product please call:
(206) 827-9626 (Kirkland, Washington) Mountain and Pacific time zone customers.
(404) 763-2277 (Atlanta, Georgia) Central and Eastern time zone customers.