

#### **TNC-5000**

# **Telephone Network Controller Board Installation Instructions**

#### **Module Mounting Locations**

The TNC-5000 Telephone Network Controller board can be mounted in two places. One mounting location is in slot 1 of the Audio Amplifier backplane. The TNC-5000 Telephone Network Controller is mounted above (beside) the ANC-5000 Audio Network Controller board, both are mounted on a black plate and the TNC-5000 plugs into slot 1 on the audio backplane, see Figure 1 below. The other position is over the ANC-5000 Audio Network Controller board and both are mounted on a metal plate and then that plate is mounted into a BB-5008 or BB-5014 backbox in positions marked 4 to 9 inclusive, refer to drawing of large chassis Figure 2.

Figure 1: Mechanical Installation for the TNC-5000 Telephone Network Controller Board

BBX-FXMNS/MMX-BBX-FXMNS or BBX-2000/MMX-BBX-2000 Backboxes

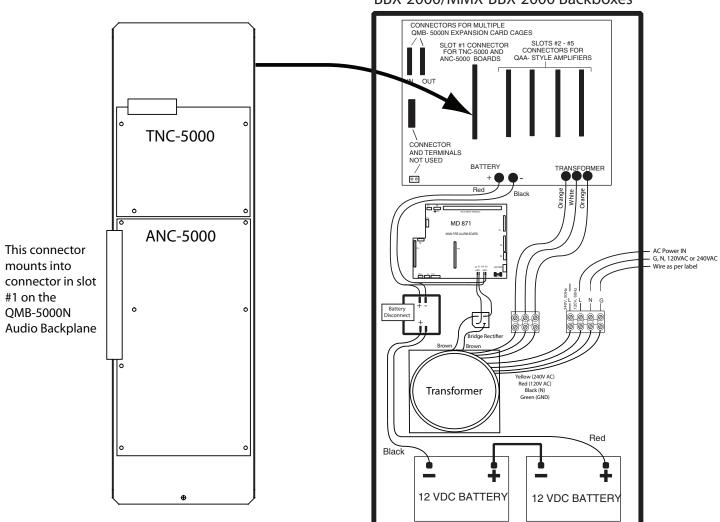
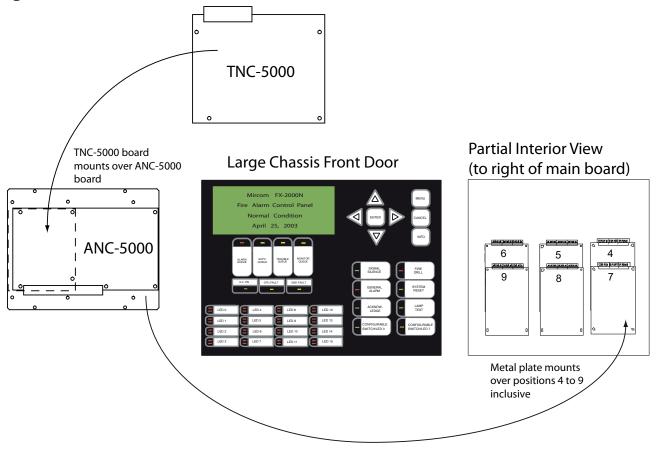
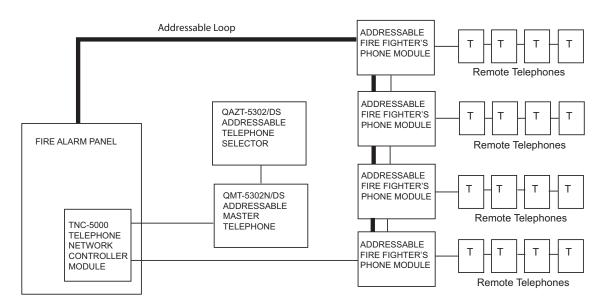


Figure 2: Mechanical Installation of the TNC-5000 within the BB-5008 and BB-5014



#### **Typical Set-up**

The typical set-up is with a FACP connection from the display board to the TNC-5000 and from the TNC-5000 to the Master Telephone (QMT-5302N/DS). The selector panels (QAZT-5302/DS) are connected to the Master Telephone by ribbon cable only. The Addressable Firefighter's Phone Modules are connected to the addressable loop from the FACP and to each other and the Master Telephone. Remote telephones are connected to the Addressable Firefighter's Phone Modules.



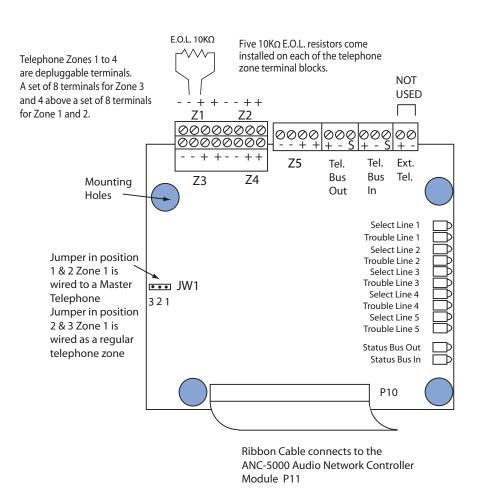
#### **Connectors and Terminal Locations**

Refer to Figure 3 for connector and terminal locations. Table 1 below shows the cable connections and jumpers required and additional wiring.

Table 1: TNC-5000 Connectors and Terminals

TNC-5000 Connector and Terminals	Connects to
P10 Cable	P11 on the ANC-5000 Audio Network Controller Module.
Z1 Terminals	These two terminals are wired to the Master Telephone if used, otherwise to any telephone zone.
Z2, Z3, Z4 and Z5 Terminals	These terminals are wired to telephone zones.
Telephone Bus In and Out Terminals	Wire from previous TNC-5000 to next TNC-5000. Total cable resistance is 50 ohms maximum, 18 gauge twisted pair. Telephone Bus is power limited and fully supervised
JW1	Jumper positions 1 and 2 if zone 1 is connected to a Master Telephone.
JW1	Jumper positions 2 and 3 if zone 1 is NOT connected to a Master Telephone.

Figure 3: TNC-5000 Telephone Network Controller Board Layout



## Telephone Bus Specifications:

15V, 50mA Maximum

Total cable resistance: 50 ohm maximum 18 gauge twisted pair wire

Telephone Bus is powerlimited and fully supervised

### **TNC-5000 Telephone Wiring**

Zones 1 to 5 are wired to telephones via addressable control modules. Only Zone 1 is wired to the Master Telephone (if used) at the main fire alarm centre, otherwise Zone 1 is wired as another telephone zone when a master telephone is not required.

Figure 4: TNC-5000 Telephone Zone Wiring

