



# TELECENTER V

## DESCRIPTION AND GENERAL INFORMATION

The Telecenter IV is a multi-link communication system, providing 16 links for direct dialing telephone communication between a number of "Administrative Telephones," between Administrative Telephone and "Staff Telephones" and between Administrative Telephones and a quantity of "Staff or Remote speakers."

In the Telecenter concept, "Administrative Telephones" are telephones equipped with a standard dual-tone pushbutton dial, while a "Staff Telephone" does not have a dial and can only originate an annunciator call to one or more centrally located Administrative Telephones equipped with Digital Readout.

Since the Telecenter IV has many functions that are programmable by an Administrative Telephone, it is recommended that a TC4211 Administrative Telephone with the display be included in all systems.

Two types of Staff Telephones are available, Single Link Telephones or Multi-Link Telephones. Single Link Telephones provide only one telephone communication path. When a Single Link Staff Telephone is in use all other Single Link Staff Telephones are "busy". Single Link Staff Telephones cannot be rung. They must be called by an associated staff speaker.

Multi-Link Staff Telephones provide up to sixteen simultaneous Administrative telephone to Staff telephone communication path. The Multi-Link Staff Telephone can be provided with ringers. This allows direct dialing to Multi-Link Staff Telephones from an Administrative Telephone.

To provide the Single Link Staff Telephone function each 25 speaker/telephone lines must have a TC4110, TC4120, or TC4130 for Speakers and an associated TC4120 Control Assembly for the Single Link Staff Telephone.

The Multi-Link Staff Telephones require a TC4150 Line Link Module for each 16 telephone lines. If speakers are provided with associated Multi-Link telephones the TC4110, TC4120, or TC4130 chassis are required for speaker functions.

Maximum capacity of the Telecenter IV system is 16 links and 500 lines. The lines can be either Administrative Telephone Lines, Multi-Link Staff Telephone Lines, Single Link Telephone Lines or Staff Speaker lines. Any type of these lines can be combined in a system for a total of 500.

The Telecenter IV system provides 25V output on all program functions, paging functions and voice amplified intercom. It can be used with all of our Director Series systems.

The Telecenter IV equipment can be mounted in any rack that has EIA dimensional standards such as our RP1100 Series Equipment Racks, however, cable lengths must be observed. The control cables between the TC4001 Central Switching Assembly and the TC4140 Expander Chassis with the TC4150 Modules should not exceed (54"). The control cabling to the TC4110, TC4120, and the TC4130 Speaker Control Assemblies should not exceed (15').

The Telecenter IV provides one 12 watt voice amplifier Intercom Channel for telephone to speaker communications. An additional Intercom Channel can be provided by adding a second TC4160 Module in the TC4001. Each Intercom Channel must have its own assigned TC4110, TC4120, or TC4130 Speaker Control Assemblies. They cannot share the same TC4110, TC4120, or TC4130 Chassis. More than two additional Intercom Channels can be provided in a system. The additional TC4160 Modules require the TCS4560 Expander Chassis. The TCS4560 Chassis holds two TC4160 Modules and provides the required additional switching and power supply.

## TELEPHONE INTERCONNECT FUNCTIONS

Central Office Lines or PBX Lines may be interconnected with the Telecenter IV to provide a wide range of telephone functions and features. Each interconnected line must be terminated on a TC4171 Central Office Adapter Module. In some applications, audio level losses through the Telecenter IV may require that a TC4181 Line Amplifier Module be added to each interconnected line. A separate twenty four volt DC power supply must be provided for the line amplifiers. Up to ten C.O. or PBX lines may be interconnected to a Telecenter IV System. If greater than ten lines are to be interconnected, special attention must be paid to traffic in the system.

Both the TC4171 and the TC4181 may be mounted in a TC4180 Interconnect Chassis. Up to five such pairs may be added to a single Chassis.

For improved call handling efficiency, a TC4400 Call Control Console may be added to the system. In addition to the console itself, a TC4420 Console Interface Assembly, a TC4430 Power Supply and a TC4440 Console Junction Box are required. Only one console may be included in a system.

## ADDITIONAL FUNCTIONS

### ALARM SIGNALS

To provide Multi-Tone Alarm Signals, the MTGIOO Alarm Generator is added to the TC4001 Chassis.

### 8 CHANNEL TIME SIGNALS:

To provide 8 Channel Time Signals the MTGIOO Tone Generator is added to the TC4001 Chassis. If a MTGIOO Alarm Generator is added for Alarm Signals, the same MTGIOO is used for Time Signals. A Power Amplifier of adequate output power is also required. No patch panels are required for speaker zone selection. The assignment of speakers into any of the 8 zones is accomplished by an authorized Administrative Telephone. The TC4110 or TC4120 used for voice amplified intercom are also used for 8 Channel Time Signals and Zone Paging.

### ZONE PAGING:

No additional equipment is required except a Power Amplifier of adequate output power.

### NOTE

When 8 Channel Time Signals and Zone Paging are provided in the same system, only one Power Amplifier is required for both functions.

### GRAPHIC DISPLAY:

The Telecenter IV provides two separate outputs to drive Graphic Display Annunciator Panels. Each output provides a separate function for the Display Panels. Display panels connected to output number ONE (1) will display all Annunciator type call-ins from speaker or staff telephone locations. Display panels connected to output number two (2) will show the number dialed by an Administrative Telephone.

The TM432 Graphic Display Module is required to provide the drive signal for the Graphic Display lamps or LED's. Each TM432 Module will drive up to 32 lamps or LED's. Additional modules can be added to accommodate up to 500 lamps or LED's.

The TM432 Modules are normally located in the Graphic Display Assembly. Power for the lamps can be 7 to 30 volts DC with a maximum of 100 milliamps per lamp. A separate DC power supply is required for the Display Panels.

The only wiring required from the Telecenter IV to the TM432 Module is one shielded conductor.