



Link 150 M3 MCU

Facility Preparation

Link Wireless Telephone System

Part Number: 72-0075-05
Issue F

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WARNING: Changes or modifications to this equipment not approved by SpectraLink Corporation may cause this equipment to not comply with part 15 of the FCC rules and void the user's authority to operate this equipment.



WARNING: SpectraLink products contain no user-serviceable parts inside. Refer servicing to qualified service personnel.



IMPORTANT SAFETY INFORMATION

Follow these general precautions while installing telephone equipment:

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines
- When installing Base Stations outside or in buildings other than the one containing the System Controller, take the following precaution:
If wiring for a Base Station exits a building—whether to reach an outdoor Base Station location or to reach a Base Station in another building—the wiring must be protected at both ends by a Quick Clip Fuse from Illinois Tool Works, Linx Division, model number SCP-2X2. The Quick Clip Fuse replaces the bridging clips on the 66 blocks for all four connections to the non-internal Base Station.

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1. About This Document

This document describes the installation procedure for the Link Wireless Telephone System (Link WTS) with a Link 150 M3 Master Control Unit (MCU). The procedures described in this manual are those that take place *after* the installation-planning procedure. You should already know the equipment requirements and installation locations. For example, you should know where each Base Station and the MCU will be installed.

1.1 SpectraLink Corporation Model Numbers

This document covers the following registered model numbers:

SCA416, SCA408, SCA516, SCC408, SCC416, SCD408, SCD416, SCE408, SCE416, SCF4089, SCF416, SCI408, SCI416, SCJ408, SCJ416, SCK408, SCK416, SCL408, SCL416, SCM408, SCM416, SCN408, SCN416, SCO408, SCO416, SCS416, SCT416, SCX416 RCC400, RCO400, RCU100, RCU200, RCU201, MOG400

1.2 Related Documents

Link 150 M3 MCU: Installation and Operation (72-0075-01)

Link 150 M3 MCU: Quick Reference (72-0075-02)

Link 150 M3 MCU: Open Application Interface (OAI) Gateway Installation and Setup (72-0075-07)

Installing the Outdoor Base Station (72-0050-01)

Available at <http://www.spectralink.com/consumer/resources/manuals.jsp>.

LinkPlus Interface Guide (72-0171-xx where xx indicates a number corresponding to the type of PBX)

Available at http://www.spectralink.com/consumer/resources/interface_guides.jsp.

1.3 Customer Support Hotline

SpectraLink wants you to have a successful installation. If you have questions please contact the Customer Support Hotline at (800) 775-5330. The hotline is open Monday through Friday, 6 a.m. to 6 p.m. Mountain time.

1.4 Icons and Conventions

This manual uses the following icons and conventions.



Caution! Follow these instructions carefully to avoid danger.



Note these instructions carefully.

NORM

This typeface indicates a key, label, or button on the MCU or Link Wireless Telephone (handset).

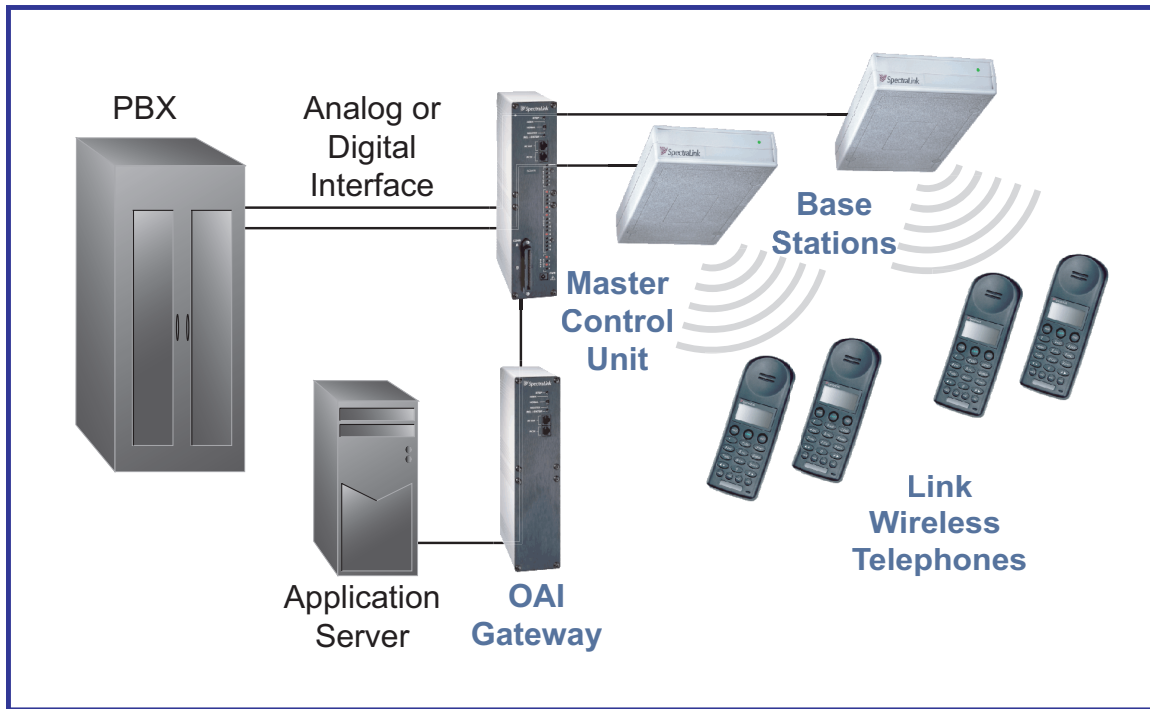
2. Link Wireless Telephone System Overview

Review this section if you are unfamiliar with the features and operation of the Link 150 M3 MCU.

2.1 System Operation

The Link WTS is a wireless communication system that offers direct telephone access for incoming and outgoing calls anywhere within a facility.

The Link WTS consists of three basic components: the Master Control Unit, the Base Station, and the Wireless Telephone, or handset. This diagram shows an overview of system. Components are described below.



The Link Wireless Telephone System

Master Control Unit (MCU)

Serves as the connecting point, or gateway, between the Base Stations and the existing telephone system. One or more of these boxes (approximately 12" x 3" x 7") are typically installed in the telephone equipment room and provide connectivity from the telephone system to the Link WTS. Each MCU is hard-wired to one or more Base Stations, which in turn provides the wireless link to each of the handsets. The MCU establishes the connection from the telephone line to the appropriate Base Station in order to reach a handset.

The MCU supports four Base Stations and up to 16 handsets. Up to four Link 150 M3 MCUs can be linked together for extended coverage area. Chained MCUs support up to 64 handsets maximum.

SpectraLink offers an analog MCU that works with telephone systems (CO, PBX or key systems) with analog (loop start) ports. SpectraLink also offers digital MCUs that work with the most common brands of telephone systems (PBX or key systems) digital ports.

Base Stations

Act as a radio transceiver to provide the communications signal between the handset and the MCU. Base Stations are slightly larger than a smoke detector and are typically mounted on the ceiling, in strategic locations throughout the facility. A single Base Station can provide radio coverage for an area of 5,000 to 50,000 square feet depending on building obstructions. Base Stations may be located up to 2,200 cable feet from the MCU.

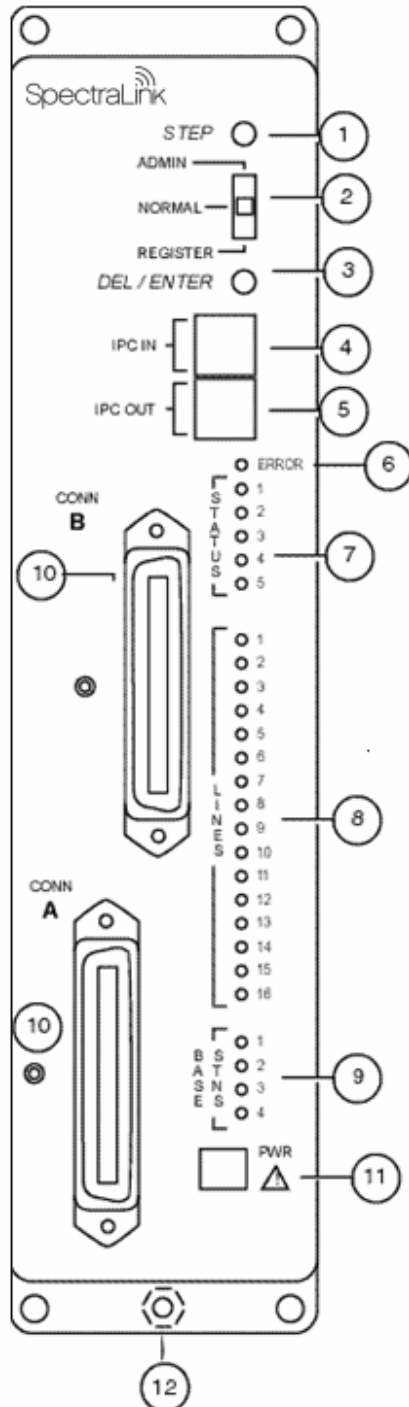
When a handset user makes or receives a call, the handset and Base Station establish a digital radio communication link. As the user moves throughout the coverage area, calls are “handed off” to the Base Station that is able to provide the best radio signal (typically the closest Base Station). These handoffs involve the handset establishing a communication link with another Base Station and dropping the previous link.

Link Wireless Telephones

Communicate with the Base Station using digital spread spectrum transmission at 902-928 MHz. Employees can carry handsets to keep in contact as they move throughout the building. The handsets use on-premises wireless technology; they are not cellular or satellite phones. They are connected to the facility’s existing telephone system and, just like wired telephones, can receive calls directly, receive transferred calls, transfer calls to other extensions and make outside and long-distance calls (subject to the restrictions applied in the facility.)

2.2 The Front Panel of the MCU

The MCU's front panel contains the connections to the telephone system, switches to control system administration, and status LEDs.



1. **STEP Button:** Selects a specific line or Base Station during registration process.

2. **Mode Switch:** Selects the mode of operation for the Link 150 M3 MCU.

ADMIN: Administration mode, used to set up system features to match features on the telephone system.

NORMAL: Normal mode, used during day-to-day operations.

REGISTER: Registration mode, used to add or delete handsets and Base Stations.

3. **DEL/ENTER Button:** Removes a registered handset from the system.

4. **IPC IN Port:** Used to connect preceding MCUs in a multi-MCU configuration.

5. **IPC OUT Port:** Used to connect sequential MCUs in a multi-MCU configuration or to connect to an Open Applications Interface (OAI) Telephony Gateway.

6. **ERROR LED:** Flashes when the system has detected an error. When flashing, check the **STATUS** LEDs for an error code.

7. **STATUS LEDs:** Indicate system error messages and status. See *Link 150 M3 MCU: Installation and Operation* for more information.

8. **LINE LEDs:** Indicate the line status of each handset: ringing, in-use or not active.

9. **BASE STN LEDs:** Indicate the status of each Base Station.

10. **CONN A or B:** RJ-21 connector to the cross-connect demarc block. Connector B is supplied and used only with four-wire digital interface.

11. **Power Jack:** Connects to the AC adapter to supply power to the system.

CAUTION: Use only the provided Class II AC Adapter with output 24VDC, 1A.

12. **Grounding Lug:** For use on the analog interface MCU (SCA-5XX).

3. Site Preparation

All site preparation steps should be completed prior to the arrival of the SpectraLink field service engineer. A SpectraLink customer support representative will contact the customer the week before the scheduled installation date to confirm that pre-installation tasks have been completed. Upon confirmation, a SpectraLink field service engineer will travel to the site to complete the system installation and train the system administrator and handset users.

If upon arrival the SpectraLink field service engineer determines that the pre-installation work has not been completed correctly, the engineer can: 1) leave the site and reschedule the installation when the action items have been completed or corrected, or 2) assist in preparing the site, and thus spend additional time in the installation of the system. Because of the additional cost incurred by SpectraLink in executing either option, the customer will be billed for the additional time at the standard hourly rate plus expenses.

- MCU location prepared. Typically the MCU is installed in the telephone equipment room. This location must have sufficient backboard space. See section 3.3 *Determine Location of MCU* for more information.
- The correct number of cross-connect blocks (or equivalent) are installed and connected to a 25-pair telco wire terminated with an RJ-21 male connector at the MCU location. See section 4.4 *Prepare Demarc Blocks* for more information.
- A two-pair cable to each Base Station as designated on the building floor plans. See section 4.1 *Run Cables to Base Station Locations* for more information.
- The Base Station wire is terminated at the appropriate cross-connect demarc blocks as shown in sections 4.4 *Prepare Demarc Blocks* and 4.7 *Connect Cables from Base Stations and Phone Lines to Demarc Blocks*.
- The Base Station wiring is terminated with RJ-45 crimp-on plugs at the designated Base Station locations. See section 4.3 *Terminate Cables at Base Station Locations* for more information.
- The analog or digital-phone extensions from the phone system are terminated at the appropriate cross-connect demarc block and the block is labeled. See section 4.7 *Connect Cables from Base Stations and Phone Lines to Demarc Blocks*.
- A dedicated dial line is available for the diagnostic modem.
- A system administrator is designated for the Link WTS. This person should be present for the installation. The SpectraLink field service engineer will provide system training to the system administrator on the day following the installation.

When this checklist is completed please sign, date, and fax to:

Install Coordination 303-449-7016

Signature: _____ Date: _____

3.1 Installation Steps

This table lists the installation steps and the person usually responsible for each step.

✓	Task Description	Wire Contractor or Electrician	Field Service Engineer	Customer Project Mgr/ Sys Admin
	Site Preparation			
	Determine location of MCU			✓
	Run Cable for System			
	Run cable to Base Station locations	✓		
	Terminate cable at Base Station locations	✓		
	Prepare and install demarc blocks	✓		
	Assign and program ports			✓
	Connect cables to demarc blocks	✓		
	Install Link WTS			
	Survey site and check components		✓	
	Install MCUs		✓	
	Install Base Stations		✓	
	Install Outdoor Base Stations	✓		
	Connect and register handsets		✓	
	Set up diagnostic modem		✓	
	Register handsets		✓	
	Program handset features			✓
	Test handsets		✓	
	Site certification		✓	

3.2 Materials Required by Customer

The following equipment must be provided by the customer.

- Outlet Strip** Recommended for installations with more than one MCU. This will allow the MCUs to be turned on and off together.
- Cross-Connect Block** Required to connect the PBX ports and the Base Stations to the MCU.
- 25 Pair Cables** RJ-21 male at MCU end, required to connect the MCU to the cross-connect blocks.
- Backboard space** The MCU is designed to be wall mounted to 3/4" plywood securely screwed to the wall.
- Quick Clip Fuse** Required with an RCO410 Outdoor Base Station or when a Base Station is located in a separate building from the Link 150 M3 MCU. Recommended Quick Clip Fuse is available from Illinois Tool Works, Linx Division, Model # SCP-2X2.
- Mounting Hardware** If the Base Stations will be mounted on finished walls or ceilings, 4 to 5" long 1/4" bolts, nuts, and washers are required for each Base Station mounted.

3.3 Determine Location of MCU

Each MCU is approximately 2.75" wide, 12.5" high, and 7" deep, and weighs about five pounds. The unit is designed to be wall mounted over 3/4" plywood.

- Select a location for the MCU with sufficient backboard space and an available electrical outlet.
- Since the front panel is used for cabling and as an operator's console, mount the unit so the front panel is accessible.
- The MCU must be within 250 feet of the PBX for a digital interface and within 2,200 feet of the Base Stations.

See your telephone system specifications for distance limitations for analog modules.



If your system has more than one MCU, the units should be mounted vertically, side by side physically touching the adjacent unit. Do not stack units on top of one another. Stacked MCUs can cause overheating and failure.

4. Run Cable for System

4.1 Run Cables to Base Station Locations

The Base Station locations should be designated on the building floor plans provided to the SpectraLink field service engineer. Base Stations can be mounted easily on raised or acoustical ceiling tiles. Avoid locating Base Stations in high or hard-to-reach places, as this will hinder maintenance, testing and/or repositioning.

Wire Specifications



The customer's wire contractor is responsible for adhering to all local codes for wiring.

SpectraLink recommends UL-listed wire that conforms to the following specifications for AWG, distance, and number of power pairs required for this installation.

Power Pairs	Max Cable Feet 22 AWG	Max Cable Feet 24 AWG	Max Cable Feet 26 AWG
1	1,100	750	470
2	2,200	1,500	940
3	2,200	2,200	1,400



One additional pair is required for data.

Attenuation must not exceed 6.8 dB/1,000 feet at 772 KHz.

Wire that is already installed (spare-house cable) can be used when it is available. House cable will usually run from the MDF in the telephone equipment room to intermediate distribution frames (IDFs) spread throughout the facility. Install new wire from the closest IDF to the Base Station. Be sure no bridge taps, multiples or "Y" connections are created or present.

Determine the amount of wire needed to connect the Base Station to the MCU by scaling from a floor plan or a sketch, pacing, measuring or estimating. Remember to include enough wire to reach the ceiling.



The wire length between the MCU and each Base Station may not exceed 2,200 cable feet.

Install an extra 25 feet of wire at the Base Station to allow for possible relocation.

4.2 Pull Cable

Pull the cable from the MCU location (usually in the telephone equipment room) to the Base Station locations designated on the floor plans.



If the cabling exits the building, consult the telephone system manual, the National Electrical Code (NEC) and local codes for instructions on providing lightning and other over-current protection.

When cabling an external Base Station or a Base Station with wiring that exits the building, protect all Base Station wiring with the Quick Clip Fuse (Illinois Tool Works, Linx Division, SCP-2X2) before bridging with other Base Station power leads.

Run all cable before attaching the RJ-45 connectors to the Base Stations. Label both the demarcation-block end and the Base Station end of each wire with the Base Station number using a wire-tie marker or other form of marker.



Remove bridge taps, multiples, or “Y” connections to the Base Station wires; these will cause data transmission errors.

The area above some suspended ceilings is used as an environmental air plenum. The NEC requires that wire installed in plenums be rated for plenum installation.

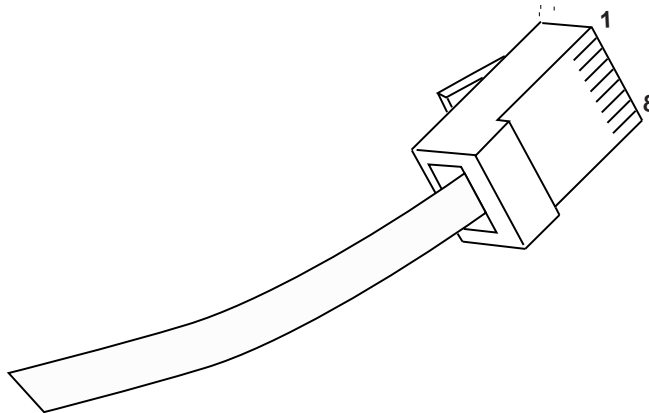
4.3 Terminate Cable at Base Station Locations

After running the wire to the Base Station location, terminate the wire using an RJ-45 modular crimp-on plug. Connect the data pair to pins 1 and 2 and the power pair to pins 7 and 8.

If the connection uses more than two pair, refer to the table on the following page.



To avoid damage to the connectors or crimps, be sure to run the wire to the Base Station before connecting the RJ-45 connectors.



RJ-45 Modular Cable

When wiring the 8-pin connector, use the following table as a guide.

8-pin Modular Connector	MCU Pin Function	Polarity
1	Data 1	Any
2	Data 2	Any
3	Power 3	+
4	Power 2	-
5	Power 2	+
6	Power 3	-
7	Power 1	-
8	Power 1	+

4.4 Prepare Demarc Blocks

The MCU is connected to the existing telephone system using RJ-21 connections. An MCU is designed to operate with a specific interface to the telephone system: two-wire digital or analog, or four-wire digital. The number of demarcation blocks required for the system depends on the number and type of interface modules to be installed.

Interface Type	MCU Part Number	Wire Pairs	# Blocks
Analog POTS	SCA-5XX	1	1
Universal Digital Interface (Norstar, Meridian, Comdial, Fujitsu, Inter-Tel, DEFINITY two-wire, NEC, Rolm, Toshiba)	SCU-5XX	1	1
Merlin Legend and DEFINITY four-wire	SCF-5XX	2	2
Mitel (DNIC)	SCX-5XX	1	1
Panasonic (Universal two-wire Auxiliary Digital)	SCP-5XX	1	1
Executone (Universal four-wire Auxiliary Digital)	SCB-5XX	2	2



If the wiring between the Link 150 M3 MCU and the telephone system leaves the building, consult your telephone system manual for instructions on providing adequate lightning and other over-current protection. All MCUs (except the SCA analog interface MCU) are intended only for connection to the isolated side of an on-premises PBX. The interfaces are intended to connect to digital PBX ports that provide signals of 5Vp-p (max) AC component and some PBXs provide a 48 V DC offset.

Based on the number and type of interfaces in the system, determine the number of 25-pair cables required to connect line ports and Base Stations to the demarcation blocks.

The diagrams that follow provide an overview of the connections.

Multiple Power Pairs

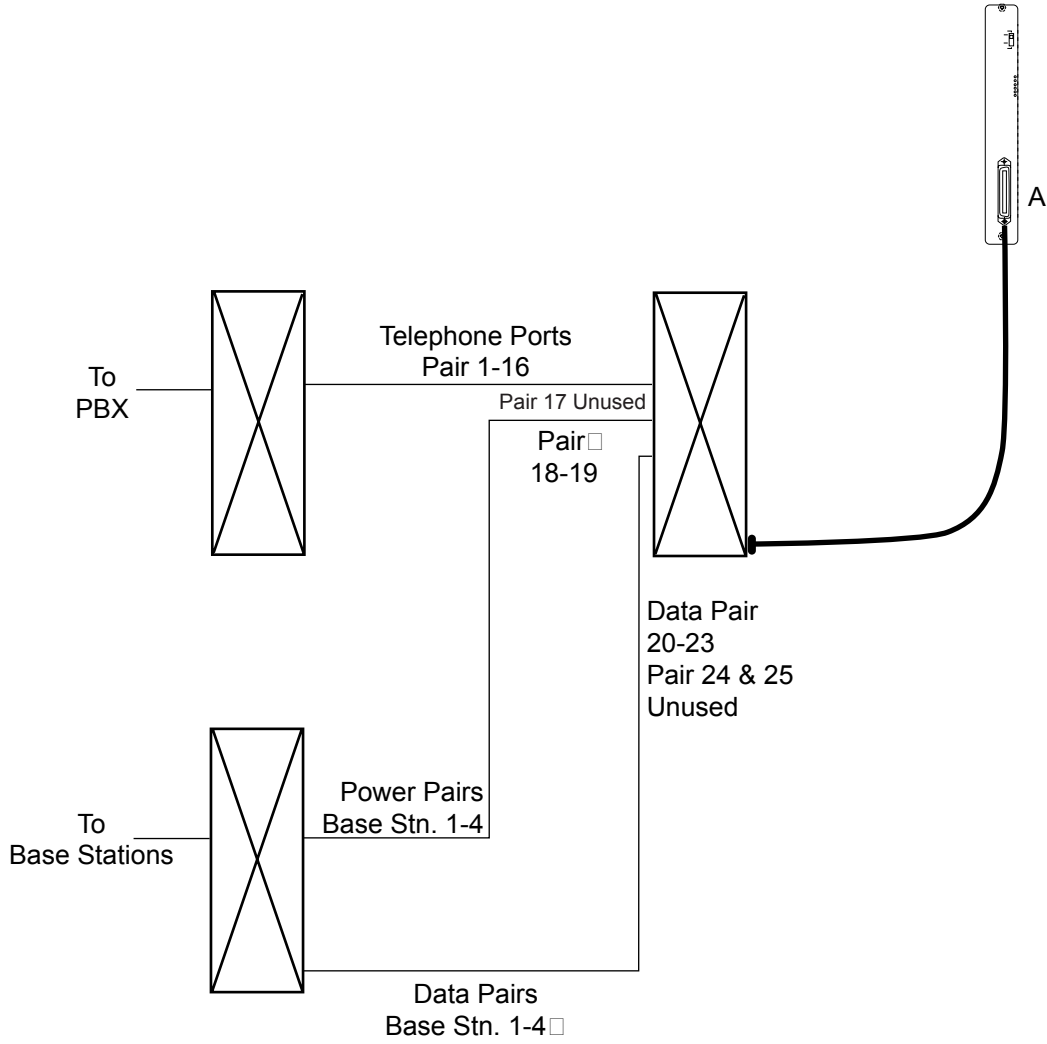
Some sites may prefer to wire Base Stations to a separate demarc block in order to split out power pairs.

Dedicated Line for Diagnostic Modem

The Link 150 M3 MCU can be accessed remotely using an internal modem. To use the modem for remote access, a dedicated dial-in line must be provided. On digital interface systems, this line must be terminated as a digital extension to the MCU.

Two-wire Analog or Digital Interface

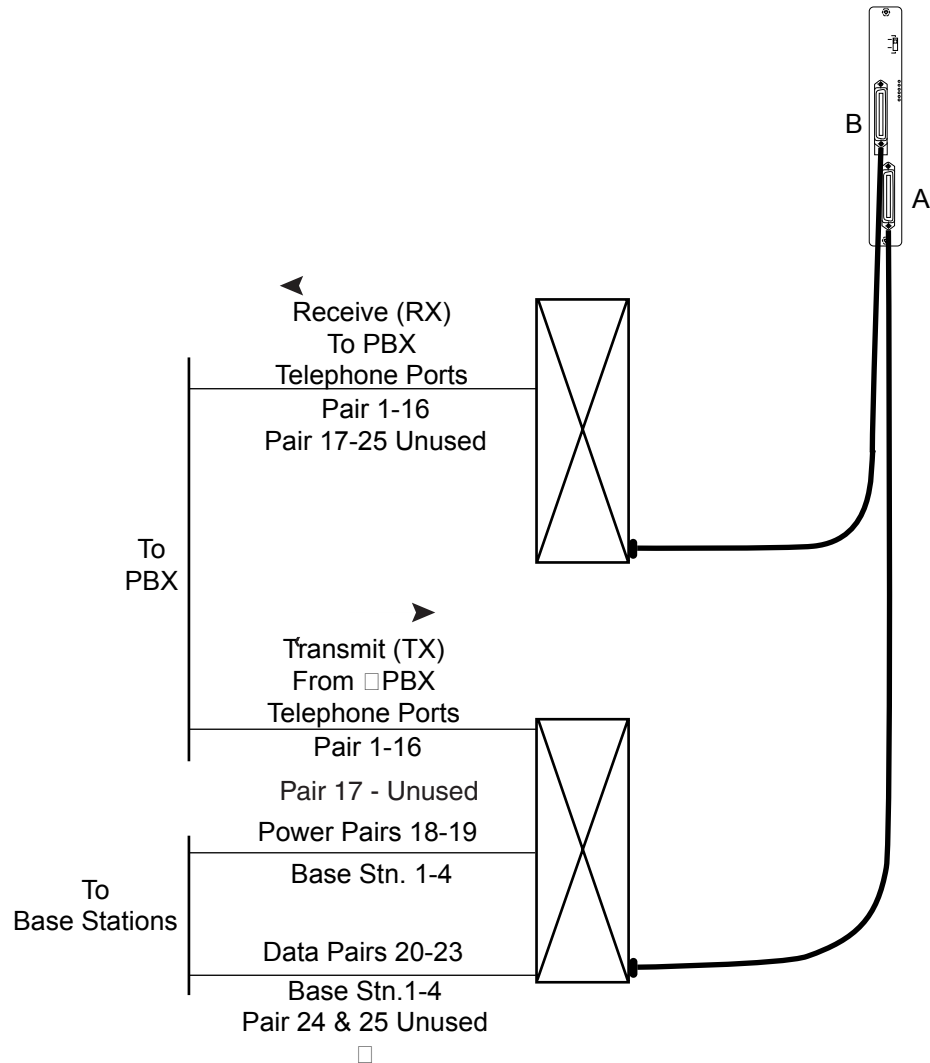
The wiring diagram below shows the connections required for a two-wire analog or digital interface.



Two-wire Analog or Digital Connection

Four-wire Digital Interface

The wiring diagram below shows the connections required for a four-wire digital interface (available in a future release). Each MCU of this type requires two demarcation blocks which will be wired as indicated.



Four-wire Digital Connection

4.5 Install Demarc Blocks

The demarcation blocks used to connect the telephone system and Base Stations to the MCU should be installed on a typical telephone facility backboard. A 1/2" or 3/4" thick board mounted on the wall near the MCU is typical. Although this manual uses 66 blocks as examples, any standard cross-connect blocks are acceptable.



When cabling an external Base Station or a Base Station with wiring that exits the building, protect all Base Station wiring with the Quick Clip Fuse (Illinois Tool Works, Linx Division, SCP-2X2) before bridging with other Base Station power leads.

If the cabling between the MCU and the telephone system leaves the building, consult the telephone system manual, the NEC and local codes for instructions on providing lightning and other over-current protection.

4.6 Assign and Program Ports

The wire contractor should inform the system administrator which port numbers have been designated for the handsets and the remote diagnostics modem line.

The system administrator must assign extension numbers to the handsets and plan the functions (trunk access, toll restrictions, system features, ringing options etc.) to be programmed for the handsets. This programming will be done after the handsets are registered, but will be faster if it is planned in advance by verifying the parameters and features on the current telephone system and wired phones.

For details, refer to the section of the *LinkPlus Interface Guide* for the type of telephone system for the MCU in use at your location.

4.7 Connect Cables from Base Stations and Phone Lines to Demarc Blocks

Two-pair twisted cable from Base Stations installed throughout the facility converge at the demarc block or backboard. Each MCU can support four Base Stations and up to 16 handsets. The Base Station and handset cables are punched down onto the demarc/cross-connect blocks as shown in the demarc block diagrams below. Refer also to the diagrams in section 4.4 *Prepare Demarc Blocks*.

Photocopy the *Base Station Location Form* and *Extension Assignments Worksheet* provided in this manual as needed. Use the forms to track the Base Stations and handset port assignments connected to each MCU. As the SpectraLink field service engineer makes each Base Station or handset connection, fill in the information on the form to identify the position of the Base Station or handset (the building and floor number, for example) and a detailed description of the location (perhaps a room number). A copy of this form should be posted near the cross-connect block.



Up to four Base Stations can be connected on a single MCU. Each Base Station uses two pair, one for data and one for power.

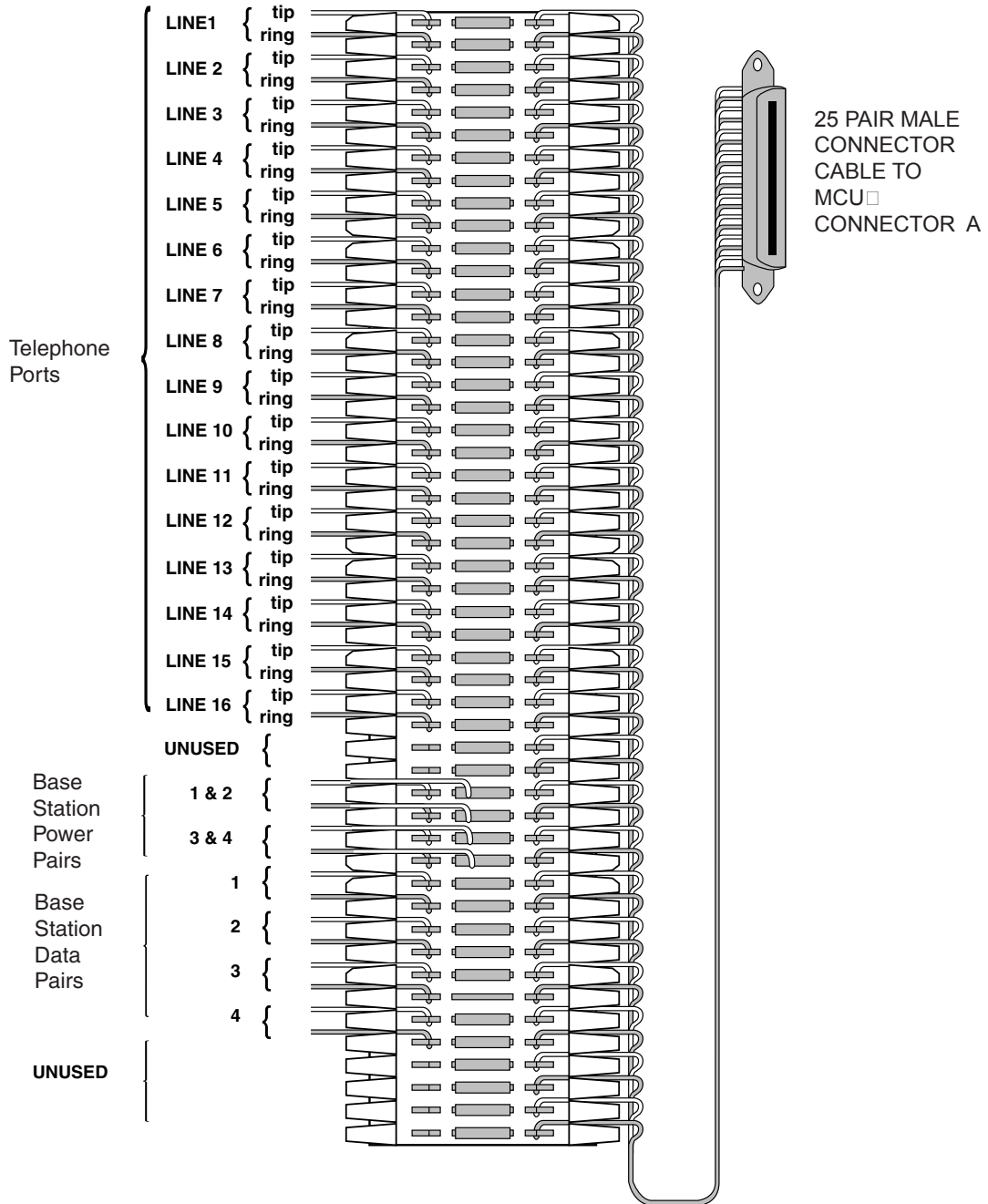


When cabling an external Base Station or a Base Station with wiring that exits the building, protect all Base Station wiring with fuse protection. One method is to use a Quick Clip Fuse (Illinois Tool Works, Linx Division, SCP-2X2) to provide protection from external wiring.

If the wiring between the MCU and the telephone system leaves the building, consult the telephone system manual, the NEC and local codes for instructions on providing lightning and other over-current protection.

Two-wire Analog or Digital Demarc Block

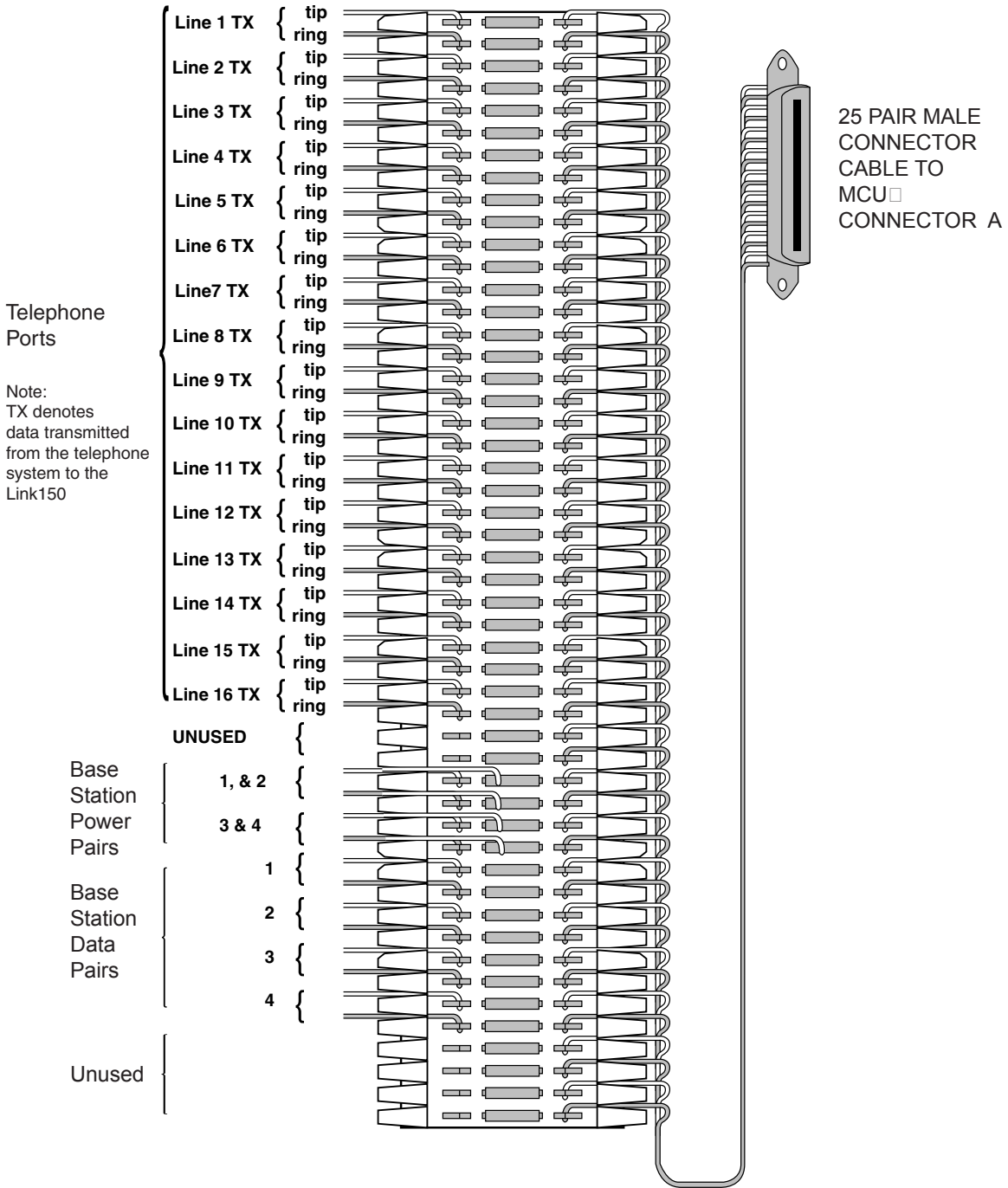
The demarc block for the two-wire analog or digital interface should be wired as follows.



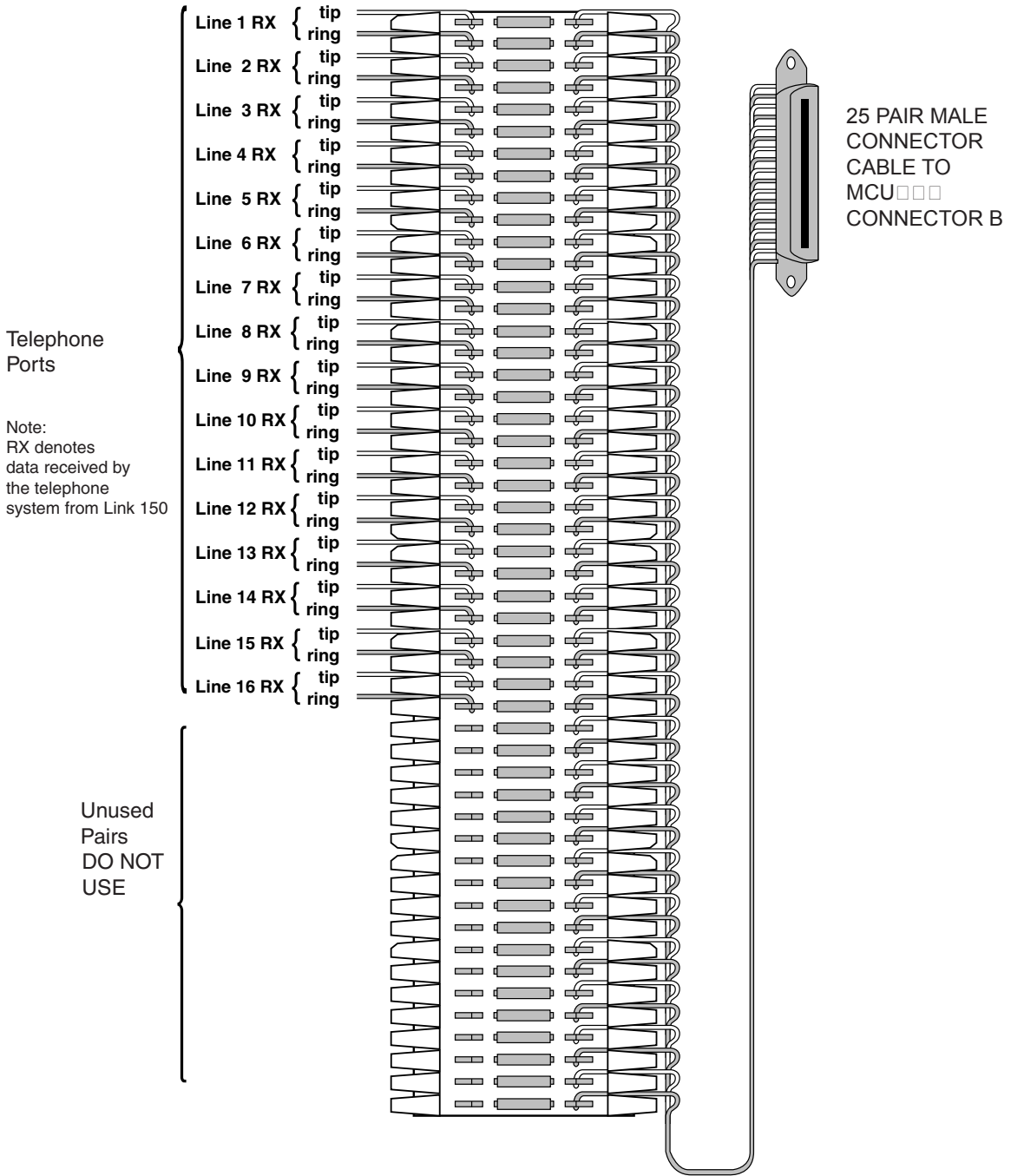
Two-wire Connector

Four-wire Digital Demarc Block

The four-wire digital interface (future release) requires two demarc blocks, one to Connector **A** and one to Connector **B** on the MCU. They should be wired as follows.



Four-wire Connector A



Four-wire Connector B

5. Install Base Stations

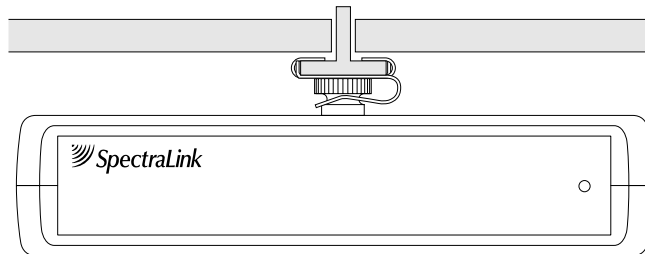
Be sure the Base Station is positioned clear of anything that might damage it. The Base Station should be well above head height, away from doors and other objects that might strike it, and away from areas open to the elements or possible water leaks.

Check your location for other radio-antenna devices and place the Base Stations to avoid interference. Leave enough slack wire to account for possible future Base Station moves.

5.1 Mount Base Stations on Dropped Tile Ceilings

A ceiling clip and plastic bolt are supplied to install Base Stations on the drop ceiling rails (T-bars) used to support acoustical tile. The plastic bolt screws into the top of the Base Station, then snaps into the ceiling clip which has been attached to the rails that hold the acoustical tile. The fastener is designed for use on 15/16" wide rails.

1. Attach the metal fastener to the rail (T-bar) supporting the dropped ceiling by rotating it into position until it snaps into the locked position.
2. Screw the plastic bolt to the 1/4" x 20 captive nut into the top of the Base Station.
3. Slide the bolt into the exposed prongs of the metal clip until it snaps into position.



4. When properly attached the Base Station should sit almost flush against the ceiling and be tightly attached to the clip and T-bar grid work.
5. Once the Base Station is anchored to the fastener, lift the acoustical tile and plug the RJ-45 8-pin modular plug into the connector on the top of the Base Station.
6. Observe LED functioning:

The LED will blink red and green as the system software downloads to the Base Station and the Base Station is tested.

When the LED blinks amber, the system is ready for operation.

When the LED blinks green, a telephone has established a radio link with that Base Station.

If the LED turns solid red, there should be an error message on the MCU's **STATUS** LEDs. Refer to *Link 150 M3 MCU: Installation and Operation* for error code message information.

5.2 Mount Base Stations On Finished Ceilings

If your site does not have a dropped tile ceiling, the Base Station can be mounted to a finished ceiling or wall with a 4 to 5" long 1/4" -20 TPI plastic or nylon screw or bolt (such as a lag screw).



The customer's wire contractor is responsible for this installation.

1. Drill two holes approximately 1" apart. Make the holes large enough to accommodate the RJ-45 connector and a bolt to secure the Base Station.
2. Insert a wide washer above the ceiling, then screw the bolt into the beam or ceiling.
3. Insert three nuts on the bolt, then screw the Base Station into the bolt, **being careful not to insert the bolt more than 1/3", five full turns, into the Base Station.**

If the ceiling is open with I-beams or pipe construction, mount the Base Station with I-beam clamps or pipe clamps.

5.3 Install Outdoor Base Stations

Outdoor Base Stations are equipped with a protective enclosure, designed to be mounted to a wall or pole. After the enclosure is mounted, the Base Station is inserted in the enclosure and connected.



Only RCO Base Stations can be used outdoors.

The customer's wire contractor is responsible for wiring and mounting the outdoor Base Station enclosure. The contractor is responsible for supplying screws, brackets, and other appropriate hardware.

Wire and Connect Outdoor Base Stations



If the wiring for a Base Station exits a building - whether to reach an outdoor Base Station location or to reach a Base Station in another building - it should be equipped with primary protection according to the NEC and/or local codes.

Wiring that exits the building must also be protected at both ends by a Quick Clip Fuse from Illinois Tool Works, Linx Division, model number SCP-2X2. Insert the Quick Clip fuses in place of bridging clips on a 66 block for the non-internal Base Station circuits.

1. Mount the outdoor Base Station enclosure to a wall or pole. The enclosure should be attached at the highest point available that will provide central coverage for the outdoor area.
2. Insert the Base Station cable through the compression fitting and tighten the fitting.
3. Wire the Base Station connector just as you wired the RJ-45 connectors for the indoor Base Stations.
4. Place the Base Station inside the enclosure with the part number label facing the back of the enclosure.
5. Screw the protective cover onto the Base Station enclosure.

6. Sample Schedule for Installation

This schedule assumes that the facility has been completely prepared for the installation and that all Base Station mounting follows SpectraLink standards. For larger installations (greater than 18 Base Stations), the schedule may be lengthened.

Day One

The SpectraLink field service engineer will install the system and train an administrator. Our engineer will usually be on-site from 9 a.m. to 5 p.m. Activities will include the following:

When the SpectraLink field service engineer arrives on-site he/she will:

1. Survey site for installation preparation.
2. Inventory equipment.
3. Set up MCU and verify operation.
4. Register, label and verify operation of all handsets.
5. Program any feature codes required.
6. Install Base Stations and verify operation (see note).
7. Test coverage of system and make any required adjustments.
8. Install and verify modem connection.
9. Provide system administrator with coverage map.
10. Walk the site with the system administrator to show coverage.
11. Train the system administrator(s).

Note: SpectraLink standard mounting is on 7/8" T-bar grid or on 3/4" steel beams. All areas must be accessible with standard on-site equipment. All other non-standard or non-accessible mounting of the Base Stations should be completed prior to the installation by the customer.

Day Two

The SpectraLink field service engineer will assist with training of the end-user and verify that all questions are answered. Our engineer will usually be on-site from 9 a.m. to 3 p.m. Activities will include the following:

1. Assist with handout and training of handset users.
2. Stay on-site for a couple hours to answer any questions from users and/or administrator.
3. Have customer contact or system administrator sign the installation acceptance document.

7. Link Wireless Telephone Planning Worksheet

Copy and complete this worksheet to keep track of the port numbers, extensions, users, and features assigned to your handsets.

MCU ID: _____

Tel No.	Extension	Port ID	User Name	Feature Notes
1 *				
2 **				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				



*On MCU No. 1: Reserve Port 1 for access to SpectraLink Diagnostic Modem

**On MCU No. 1: Port 2 is used for administrative programming (analog system only)

8. Base Station Location Worksheet

MCU: _____

Base Station #	Location (e.g.: building, floor #, detailed description)	Port ID
Base Station 1		1
Base Station 2		2
Base Station 3		3
Base Station 4		4

MCU: _____

Base Station #	Location (e.g.: building, floor #, detailed description)	Port ID
Base Station 1		1
Base Station 2		2
Base Station 3		3
Base Station 4		4

MCU: _____

Base Station #	Location (e.g.: building, floor #, detailed description)	Port ID
Base Station 1		1
Base Station 2		2
Base Station 3		3
Base Station 4		4

MCU: _____

Base Station #	Location (e.g.: building, floor #, detailed description)	Port ID
Base Station 1		1
Base Station 2		2
Base Station 3		3
Base Station 4		4

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