

Chapter 2

SITE PLANNING

This chapter has been included to assist in identifying future equipment ordering requirements and preparing a site for the installation. While the information in the first sub-heading below more specifically addresses future ordering requirements, the second sub-heading includes suggestions that will help the installation process proceed more smoothly.

Before Ordering

1. Determine the total number of devices or cable theft detection pairs that will be monitored by the uM260 Micro Monitor. For PressureMAP a maximum of 21 devices—four binary and 16 analog, plus one control relay—can be monitored by the Micro Monitor. For the CopperWATCH application, you will need to make sure that your monitoring requirement for the installation location does not exceed 16 pairs.
2. Identify the means that will be used to communicate with the uM260, and select the appropriate monitor. As explained in Chapter 1 of this booklet, two versions of the Micro Monitor are available: one that includes an on-board 33.6K bps modem (Part No. 9800-6260M) and one with an Ethernet port for TCP/IP LAN communications (Part No. 9800-6260L).
3. Make arrangements, if necessary, with the central office engineer to obtain the exact equipment bay location for the uM260 monitor. Depending upon individual company practices, this information—as well as power and wiring specifications—is generally provided on a central office work order.
4. Decide how you intend to terminate the pairs: standard connector block or System Studies-designed Termination Adapter. If you plan to use a standard connector block, you will need to determine where the block and monitor will be placed. Then you will need to order a connector cable and specify the required length.

Please note that System Studies Incorporated provides standard male-to-male connector cables in lengths varying from 2 feet to 250 feet. We also provide a dedicated cross connector block (Part No. 9800-6055) for the Micro Monitor and two Termination Adapter configurations—a 21 pair model (Part No. 9010-0062) and a 6 pair model (Part No. 9010-0060). Both of these wiring options are described and illustrated in Chapter 4 of this documentation.

Before Installation

1. Make sure that communication facilities are available for use with the Micro Monitor. For a modem-version uM260 monitor, this means a telephone line terminating in a standard modular connecting block (type RJ-11C in most operating companies) is needed. Additionally, a suitable length of telephone cord with RJ-11 connectors on both ends is required to complete the phone line connection to the monitor's modem.

The LAN-version uM260 requires local or wide area network connectivity and a Category 5 Ethernet cable to connect the monitor's RJ-45 connector to the local network hub. The uM260 Micro Monitor uses 10 Mbps Ethernet. The network hub or Ethernet adapter to which the monitor is connected must be either a 10 Mbps unit or a 10/100 unit that can adapt to either 10 or 100 Mbps.

In addition to the physical components required to complete the network connection, it will be necessary to obtain local IP address, Port Number, Gateway address and Subnet address information from your network administrator. This information should be recorded in the spaces below and referenced during the network configuration part of the installation process, as described in Chapter 5 of this booklet.

IP ADDRESS	_____	_____	_____	_____
	IP BYTE 1	IP BYTE 2	IP BYTE 3	IP BYTE 4
PORT NUMBER	_____			
GATEWAY	_____	_____	_____	_____
	GW BYTE 1	GW BYTE 2	GW BYTE 3	GW BYTE 4
SUBNET	_____	_____	_____	_____
	SN BYTE 1	SN BYTE 2	SN BYTE 3	SN BYTE 4

2. Arrange for a -48 volt DC (filtered) power supply to the uM260 monitor.

Please note that the originating power should also include a 100 milliamper fuse. The size and gauge of the power conductors should be compatible with existing operating company practices. As a general practice, however, System Studies does not recommend the use of a conductor larger than 16 gauge or smaller than 22 gauge to power the Micro Monitor.

Note: uM260 Micro Monitor grounding requirements are fulfilled by the use of a 12 inch by ¼ inch bonded frame ground strap which is supplied with the unit (refer to Chapter 4). A separate ground wire from the power source to the Micro is not required, although one may be used if desired.

3. For central office installations, request horizontal and vertical frame positions for the uM260 Micro Monitor equipment. This information, along with power and wiring specifications, is provided by the central office equipment engineer. A central office miscellaneous equipment work order typically contains this required information.

If the requirements listed above for ordering the necessary equipment and preparing the installation site have been fulfilled, the time required to install the uM260 monitor and connect the monitoring devices will be reduced significantly.

Note: If desired, System Studies Incorporated can be contracted to install the uM260 Micro Monitor. This installation service includes not only the placement of the uM260 equipment and required components, but also the wiring of monitoring pairs and creating the necessary database in PressureMAP or CopperWATCH (office information, device data, Alarm Centers, etc.). It also includes testing the new installation and selected device pairs to ensure that the uM260 office is properly configured and fully operational. An additional check of the alarm reporting system will confirm that once an alarm is generated, it will be distributed to the defined alarm centers and personnel.

Additional information regarding the pricing and scheduling of this Installation Service can be obtained by contacting the Inside Sales Department at System Studies Incorporated (sales@airalk.com). Scheduling contracted uM260 installations in Mexico, Central America and South America can be arranged by contacting SAS Reps (scott@sasreps.com).

For individuals who wish to perform their own uM260 installation, important procedural information is provided in the next two chapters. Those who intend to perform the required data entry for PressureMAP or CopperWATCH should refer to Sections 12 & 14 of the *PressureMAP System Data Entry Manual* or Sections 2 & 3 of the *CopperWATCH Installation & Data Entry Manual*. The information in these books will guide you through the process of creating both the office database and the specific device information needed for the uM260-monitored office.

