## KEPTEL SNI-4600 OUTDOOR MULTI-LINE NETWORK INTERFACE DEVICE DESCRIPTION AND INSTALLATION

#### 1. GENERAL

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- 1.01 This section is a cover sheet for the Keptel SNI-4600 Outdoor Multi-Line Network Interface Device. This section is reproduced with permission of KEPTEL.
- 1.02 Whenever this section is reissued the reason(s) for reissues will be listed in this paragraph.
- 1.03 The Keptel SNI-4600 N.I.D. unit provides a discrete and recognizable demarcation point mandated by local commission rulings or business strategies facilitating a physical separation between Telco network facilities and customer or vendor premise wire.
- 1.04 If corrections are required in the attached document, use Form E-3973 as described in Section 000-010-015.
- 1.05 If equipment design and/or manufacturing problems should occur, refer to Section SW 010-522-906 for procedures on filing an Engineering Complaint.

#### 2. ORDERING PROCEDURE

2.01 The Keptel SNI-4600 Outdoor Multi-Line Network Interface Device may be ordered via the Southwestern Inventory Management System (SWIMS).

2.02 To order additional copies of this practice, use Section KPTL 462-005-801SW as the section number.

#### 3. REPAIR/RETURN

3.01 The Keptel SNI-4600 is not a repairable unit. For warranty credit, defective products should be returned utilizing existing procedures.

Attachment: KEPTEL SNI-4600 OUTDOOR MULTI-LINE NETWORK INTERFACE DEVICE DESCRIPTION AND INSTALLATION

#### PROPRIETARY

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## **KEPTEL SNI-4600**

# OUTDOOR MULTI-LINE NETWORK INTERFACE DEVICE DESCRIPTION AND INSTALLATION

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## 1.0 GENERAL

**1.01** This practice provides information on the Keptel SNI-4600 Multi-Line Outdoor Network Interface Device (N.I.D.). The SNI-4600 has been selected for use where an outdoor network interface is required. The primary use for this product will be in conjunction with applications of residential and simple business locations.

1.02 Whenever this practice is reissued, the reason(s) for reissue will be provided in this paragraph.

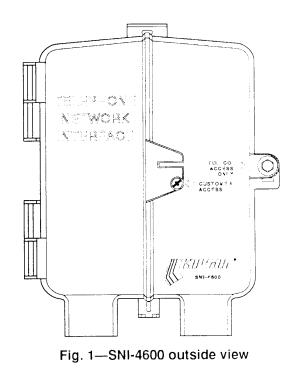
**1.03** The Keptel SNI-4600 N.I.D. unit provides a discrete and recognizable demarcation point mandated by local commision rulings or business strategies facilitating a physical separation between Telco network facilities and customer or vendor premise wire.

## 2.0 DESCRIPTION

**2.01** The Keptel SNI-4600 N.I.D. is manufactured using ABS/PVC thermoplastic.

**2.02** The SNI-4600 is intended for outdoor installation. The base of the unit is fitted with grommets. The Network Interface modular jacks are encompassed by grommets in front and epoxy sealed plastic caps in the rear.

**2.03** The SNI-4600 will provide facilities for terminating up to 6 lines.



**NOTICE** Not for use or disclosure outside Keptel except under written agreement. 2.04 The SNI-4600 is a split cover design and has an individual cover for both the Telco and Subscriber sides. The SNI-4600 may also be equipped with up to 6 individually lockable Subscriber Access doors (each attached to a corresponding interface module under the Subscriber cover) for Subscriber Access. Refer to Figure 1.

2.05 The SNI-4600 provides the Subscriber security against vandalism, while allowing for override by Telco personnel. Specifically, the hinged Subscriber cover is screw fastened (with provision to be padlocked) to the Telco cover. The Telco cover is attached to units base via a recessed hex head screw, which may be secured. Since the Subscriber cover is secured to the Telco cover and not the base, Telco personnel override the security system by backing out the Telco cover screw.

2.06 The individual Subscriber Access Door (if provided) may be padlocked by the Subscriber. This lock can be removed (if the situation warrants) by simply opening the Telco door, thus opening the loop on the lock hasp. At this point, pulling out on the padlock will free it from the lock Staple. Caution

should be exercised tp prevent dislodging other locks from the security loop.

**2.07** The SNI-4600 will accomodate a variety of station protectors. These include all manufacturers of the 123, 125, and 128 style protectors.

#### 3.0 INSTALLATION

**3.01** Installation of this device shall conform to the same procedures for mounting outside protectors, buried service wire and aeriel service wire. The N.I.D. shall be installed outside whenever possible. Plan the installation so the N.I.D. can be bonded to the power ground, or other acceptable ground, using the shortest possible length of ground wire run in the most direct route. Place the N.I.D. in an accessible location so as to minimize the possibility of damage or immersion. Whenever possible, avoid placing the SNI-4600 on the front of buildings where appearance is a signicant factor, in living quarters, or where a ladder is necessary for installation and maintenance.

**3.02** When installing station protection, select the appropriate ground wire size as illustrated in Table A.

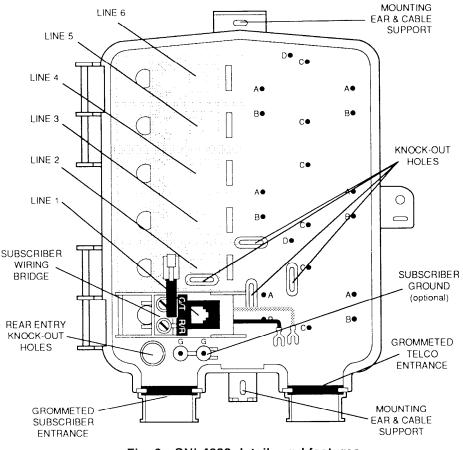


Fig. 2—SNI-4600 details and features

**3.03** When using the six-position Ground Jumper Bus Bracket (see Fig. 3) on new installations and the 125 series station protector is being used, a #10 AWG ground wire shall be installed. Use of the maximum wire size for the Bus Bracket will permit future expansion and additions of station protectors to the maximum number without having to replace or upgrade the ground wire. If 123 or 128 type protectors are used as part of the retro-fit, the existing ground wire should not be replaced or upgraded unless additional protectors are being installed.

**3.04** Verify line quality by taking routine measurements (positive identification of Tip, Ring and Ground - all lines).

**3.03** Open the Telco cover of the SNI-4600 and remove mounting screws (note that the Telco and Subscriber covers will open together).

#### TABLE A GROUND WIRE CAPACITY

GROUND WIRE SIZE	MAXIMUM NUMBER OF PROTECTED CIRCUITS		
No. 12	2		
<b>N</b> o. 10	6		
No. 6	7 or more		
NOTE: The ground wire size between			

protectors shall be the same size between ground wire between the protector and the grounding electrode.

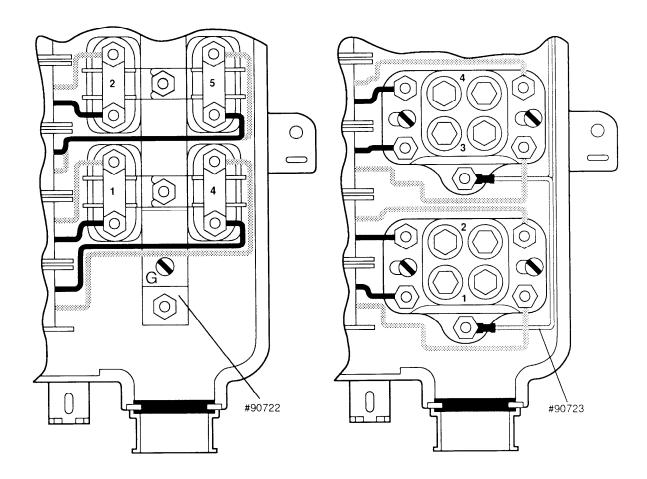


Fig. 3—SNI-4600 showing 125 style mounting configuration (using Ground Jumper Bus Bracket Kit #90722) and 128 style mounting configuration (using Ground Jumper Wire Kit #90723).

**3.04** Using the screws provided, mount the SNI-4600 using one of the following methods:

- 1. External mounting ears (using screws included).
- 2. Mounting in place of existing Customer Service Closure on premise or trailer post (using knock-out holes to match footprint and screws included).
- 3. Mounting on vertical conduit (using lashed cable supports around external mounting ears).
- 4. Wall mounting using service wire conduit (using lashed cable supports).

NOTE: When using knock-out holes for installation, an approved caulking compound should be used to fill holes to retain housing integrity.

**3.05** If applicable, mount station protector(s) in space indicated using the screws provided. Refer to Table A.

**3.06** Using a pointed object, such as a pencil (DO NOT use a knife), pierce the Telco and Subscriber grommets.

**3.07** Insert drop wire(s) through entrance (right) grommet and secure to station protector(s). Refer to Figure 2.

**3.08** Connect Tip and Ring leads from interface modules to appropriate leads on station protectors.

**3.09** If premise wire(s) is to be terminated, insert P/W(s) through entrance (left) grommet and secure to Subscriber Wiring Bridge(s). Refer to Figure 2.

**3.10** Insure all connections are tight and wiring is properly routed.

**3.11** Test lines for service. If problem is encountered, refer to section on Troubleshooting.

**3.12** An area is provided inside the Subscriber cover to record telephone/suite/apartment numbers.

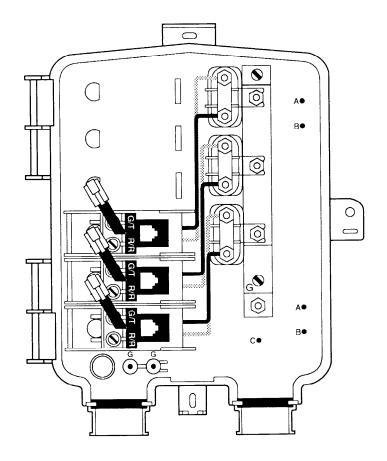


Fig. 4—SNI-4600 shown in three-line configuration.

**3.13** Secure Telco and Subscriber covers by tightening fastener.

### INSTALLING ADDITIONAL LINES IN THE SNI-4600

**3.14** Verify that all parts needed to complete installation aree present.

**3.15** Open SNI-4600 in the appropriate manner.

**3.16** Verify quality of lines being installed by taking routine measurements.

**3.17** Install additional station protectors as needed.

**3.18** Insert Network Interface Module into base by inserting hinge side under hold down located in the base (refer to Figure 3). Push Down on the opposite end until module snaps into slot in base.

**3.18** Connect Tip and Ring leads from module (green and red) to station protectors.

## **INSTALLING ELECTRONICS IN THE SNI-4600**

**3.19** Electronic modules (e.g. PSR-902, PSR-904, ANI-911) may be installed in the SNI-4600 by first installing the Electronic Module Adapter Kit (Keptel #90960).

**3.20** When the Electronic Module Adapter Kit is used, only two lines may be installed in the SNI-4600.

**3.21** Electronic modules are installed from left to right in the Electronic Module Adapter Kit. This allows storage of excess service wire when using floating bond.

**3.22** The Module adapter Kit allows up to three electronic modules to be installed in the SNI-4600.

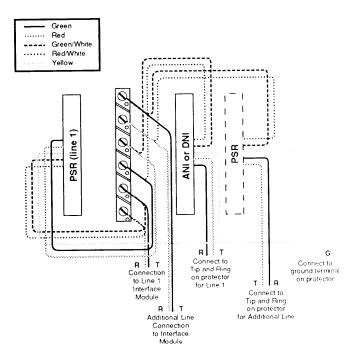
**3.23** Open both covers of the SNI-4600 by loosening telco access fastener.

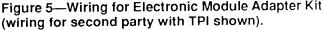
**3.24** Disconnect Tip and Ring leads of Interface Module(s) from station protector(s).

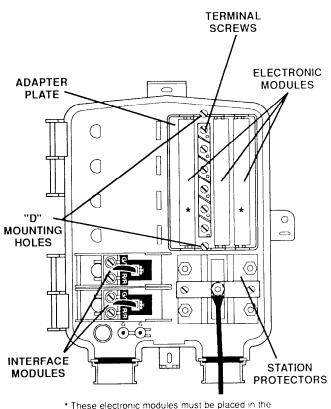
**3.25** Install Module Adapter Plate using the screws provided in the mounting holes marked "D". Refer to Figure 1.

**3.26** Slide electronic modules into appropriate slots in Module Adapter. Refer to Figure 1.

3.27 Make wiring connections as shown in Figure2. Note that wiring must be dressed as close to the







These electronic modules must be placed in the adapter plate so that the switch is at the bottom

Figure 6—Electronic Module Adapter Kit installed in the SNI-4600

electronic modules as possible to insure proper cover closing. In addition, wiring must be aligned with terminals as shown.

**3.28** Refer to specific practice for detailed instructions for installation of TPI and PSR.

## 4.0 TROUBLESHOOTING

**4.01** Insure all wiring is routed properly and is making good connection. Check to see all connections are tight.

**4.02** Verify identification and presence of Tip, Ring and Ground.

**4.03** Verify continuity through modular jack with ohmmeter.

4.04 Repeat line measurement tests.