

The PRISM 3010 six-port voice card is the solution for integrating analog voice applications into fractional or full T1 services. Hardware switch settings are not required on PRISM modules, except for the jumpers on the the FXO card.

Module configuration is performed using the PRISM front panel LCD interface, a terminal connected to the SUPV port, the 8100A Site Controller.

If the PRISM is equipped with the SNMP/Telnet interface, the voice card can be accessed via a Telnet session from any LAN connected device.

Card Installation

Note: Only two FXO or FXS cards can be used in the standard 3060 chassis (p/n F-3060-001--xxxx). Four FXS or FXO cards can be used in the 3060 chassis with the enhanced power supply (p/n F-3060-001A--xxxx).

Option modules may be damaged by static electricity. Use ESD (electrostatic device) precautionary measures such as wearing static grounding straps and storing modules in the supplied antistatic bags.

Warning: To prevent electric shock or damage to the unit, turn the rear panel power switch OFF before removing or installing any option modules.

To add a module to an empty slot, remove the cover plate which is held in place by two screws. Carefully slide the new card along the guides with the component side facing down. Push the board in until the faceplate rests against the rear panel. Replace the screws.

If resistance is encountered when inserting the card, remove the card and verify that there are no obstructions in its path. Also check for bent or damaged pins in the connectors of the module and chassis.

2-Wire FXS Connection

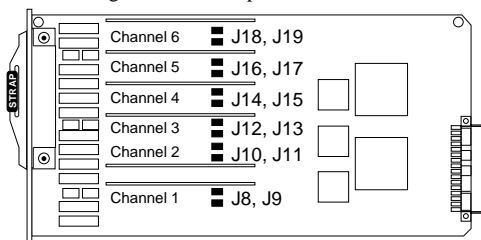
Pair	Pin #	Color	Function
1	26 T	White / Blue	Circuit #1
	1 R	Blue / White	
2	27 T	White / Orange	Circuit #2
	2 R	Orange / White	
3	28 T	White / Green	Circuit #3
	3 R	Green / White	
4	29 T	White / Brown	Circuit #4
	4 R	Brown / White	
5	30 T	White / Slate	Circuit #5
	5 R	Slate / White	
6	31 T	Red / Blue	Circuit #6
	6 R	Blue / Red	

Specifications

Connector:	AMP 50-pin (25 pairs), female
Encoding:	PCM six ports per card
Noise:	< 20 dBmC
Signal to Noise:	> 35 dB
Freq. Response:	300 Hz to 3 kHz (± 0.5 dB)
Power:	Internal (FXS and FXO) External (4-Wire E&M: -48 VDC)
Signalling:	See the Signalling section on the other side.
Warranty:	5 Years
Operating Temp:	0° to 50°C (32° to 122°F)
Storage Temp:	-20° to 85°C (-4° to 185°F)
Humidity:	95% max (non-condensing)

FXO Line Build Out Jumpers

The line build out choices are AT&T Compromise and 900 Ω. Set the jumper pairs the same way for each channel. Using the diagram below as a reference, AT&T Compromise has the jumper set on the center and right pins. 900 Ω has the jumper set on the center and left pins. The default setting is AT&T Compromise.



Voice Card Connections

The 3010 voice cards are used to interface up to six pieces of analog telephone equipment (telephones or key equipment) to a T1 facility.

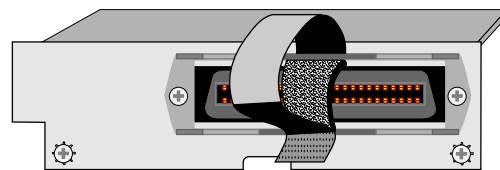
The 4-Wire E&M requires an external -48 VDC source (42 to 60 VDC at 300 mA). The external source is used for relay activation and Type 2 signalling.

Connection to each type of voice card is made through a rear panel 25-pair female connector, retained by a hook-and-loop-fastener strap. Refer to the tables on this page for connection information.

2-Wire FXO Connection

Pair	Pin #	Color	Function
1	26 T	White / Blue	Circuit #1
	1 R	Blue / White	
2	27 T	White / Orange	Circuit #2
	2 R	Orange / White	
3	28 T	White / Green	Circuit #3
	3 R	Green / White	
4	29 T	White / Brown	Circuit #4
	4 R	Brown / White	
5	30 T	White / Slate	Circuit #5
	5 R	Slate / White	
6	31 T	Red / Blue	Circuit #6
	6 R	Blue / Red	
25	50 T	Violet / Slate	-48 VDC
	25 R	Slate / Violet	

3010 Module Options



Voice Card Type Part Number

Card Type	Part Number
6-Port FXS	F-3010-200A-111
6-Port E&M	F-3010-200--112 (Types I, II, III)
6-Port FXO	F-3010-200A-113
6-Port E&M	F-3010-200--114 (Types I, II, III, IV, V)

4-Wire E&M Connection

Pair	Pin #	Color	Function	Circuit
1	26 T	White / Blue	Audio In Tip	Circuit #1
	1 R	Blue / White	Audio In Ring	
2	27 T	White / Orange	Audio Out Tip	Circuit #1
	2 R	Orange / White	Audio Out Ring	
3	28 T	White / Green	E Lead	Circuit #1
	3 R	Green / White	Signal Ground	
4	29 T	White / Brown	M Lead	Circuit #1
	4 R	Brown / White	Signal Battery	
5	30 T	White / Slate	Audio In Tip	Circuit #2
	5 R	Slate / White	Audio In Ring	
6	31 T	Red / Blue	Audio Out Tip	Circuit #2
	6 R	Blue / Red	Audio Out Ring	
7	32 T	Red / Orange	E Lead	Circuit #2
	7 R	Orange / Red	Signal Ground	
8	33 T	Red / Green	M Lead	Circuit #2
	8 R	Green / Red	Signal Battery	
9	34 T	Red / Brown	Audio In Tip	Circuit #3
	9 R	Brown / Red	Audio In Ring	
10	35 T	Red / Slate	Audio Out Tip	Circuit #3
	10 R	Slate / Red	Audio Out Ring	
11	36 T	Black / Blue	E Lead	Circuit #3
	11 R	Blue / Black	Signal Ground	
12	37 T	Black / Orange	M Lead	Circuit #3
	12 R	Orange / Black	Signal Battery	
13	38 T	Black / Green	Audio In Tip	Circuit #4
	13 R	Green / Black	Audio In Ring	
14	39 T	Black / Brown	Audio Out Tip	Circuit #4
	14 R	Brown / Black	Audio Out Ring	
15	40 T	Black / Slate	E Lead	Circuit #4
	15 R	Slate / Black	Signal Ground	
16	41 T	Yellow / Blue	M Lead	Circuit #4
	16 R	Blue / Yellow	Signal Battery	
17	42 T	Yellow / Orange	Audio In Tip	Circuit #5
	17 R	Orange / Yellow	Audio In Ring	
18	43 T	Yellow / Green	Audio Out Tip	Circuit #5
	18 R	Green / Yellow	Audio Out Ring	
19	44 T	Yellow / Brown	E Lead	Circuit #5
	19 R	Brown / Yellow	Signal Ground	
20	45 T	Yellow / Slate	M Lead	Circuit #5
	20 R	Slate / Yellow	Signal Battery	
21	46 T	Violet / Blue	Audio In Tip	Circuit #6
	21 R	Blue / Violet	Audio In Ring	
22	47 T	Violet / Orange	Audio Out Tip	Circuit #6
	22 R	Orange / Violet	Audio Out Ring	
23	48 T	Violet / Green	E Lead	Circuit #6
	23 R	Green / Violet	Signal Ground	
24	49 T	Violet / Brown	M Lead	Circuit #6
	24 R	Brown / Violet	Signal Battery	
25	50 T	Violet / Slate	Signalling	-48VDC*
	25 R	Slate / Violet	Power	

* Option of connecting power to the voice card using cable pair(s) or the external lugs.

Port Configuration Menu

The Voice Card Configuration screen display allows the assignment of voice DS0s to network channels. This display is accessible from the PRISM unit front panel LCD, its terminal interface, or the 8100A Site Controller under the Configuration top level menu. Only the voice ports with the Mode parameter set to ACTIVE are connected to the selected network channel.

The 3010 voice modules have six voice circuits, each of which is independently assignable to a selected network channel. For a more detailed description of voice port operation, refer to the reference manual for the product where the card is located. The following fields are available for voice port configuration:

Port: This field indicates the port number of the card in the assigned slot.

DS0: This field assigns the voice port to a network channel. The choices are channels 1 through 24.

Mode: This field selects whether the voice port is actively assigned to a network channel, ACTIVE, or is not used, SPARE. If set to SPARE, the other voice port parameters are ignored and the port is inactive.

State: This field displays the voice port status as either in the BUSY or IDLE state.

Name: This field may be used to provide up to 20 characters of text for identifying the voice circuit name and number.

Signalling: This field selects the supervisory operation of the voice port. The choices for the different modules are as follows.

FXS

- FXS/LS Foreign Exchange Station / Loop Start
- FXS/GS Foreign Exchange Station / Ground Start
- MEG/LS MEGACOM® / Loop Start
- MEG/GS MEGACOM / Ground Start
- PLAR Private Line Automatic Ringdown
- DID/DNIS Direct Inward Dialing/Dialed Number Identification Service [Dial Pulse Originate (DPO) mode]
- DNISW/LS Loop Start DNIS (LS-DNIS) with wink
- DNISD/LS LS-DNIS with delay start
- DNISWR/LS LS-DNIS with wink and Reverse Battery
- DNISDR/LS LS-DNIS with delay and Reverse Battery
- DNISW/GS Ground Start DNIS (GS-DNIS) with wink
- DNISD/GS GS-DNIS with delay start
- DNISWR/GS GS-DNIS with wink and Reverse Battery
- DNISDR/GS GS-DNIS with delay and Reverse Battery

FXO

- FXO/LS Foreign Exchange Station / Loop Start
- FXO/GS Foreign Exchange Station / Ground Start
- FXO UVG Foreign Exchange Office/Universal Voice Grade
- FXO UVGR Foreign Exchange Office/Universal Voice Grade with Reverse Battery
- DID/DNIS Direct Inward Dialing/Dialed Number Identification Service [Dial Pulse Terminate (DPT) mode]

4-Wire E&M

E-3010-200--112 F-3010-200--114

- | | | | |
|-----------------|-------------------|-----|-----|
| • Type I | Signalling | YES | YES |
| • Type II | Signalling | YES | YES |
| • Type III | Signalling | YES | YES |
| • Type IV and V | Signalling | NO | YES |
| • TO | Transmission Only | YES | YES |

Delay Seconds: If the signalling mode has a delay, it can be set from 1 to 5 seconds.

Tx Gain: This field selects the transmit gain over the following ranges:

- 2-Wire FXS: -4.0 dB fixed
- 2-Wire FXO: -6 dB to 0 dB
- 4-Wire E&M: -10 dB to +3 dB, 0 dB

Rx Gain: This field selects the receive gain over the following ranges:

- 2-Wire FXS: -11 dB to 0 dB
- 2-Wire FXO: -6 dB to 0 dB
- 4-Wire E&M: -16 dB to +2 dB, 0 dB

Slot/Channel Allocation: These display-only fields indicate the network channel assignments with Channel 1 on the left and Channel 24 on the right. The upper line indicates the card slot to which the channel is allocated. The lower line indicates the port in the assigned card for that channel.

2-Wire FXS Screen

```

3060 DSU                                     Time: HH:MM:SS
Element Rev xx.xx/x.xx                       Date: MM/DD/YY
----- VOICE CARD CONFIGURATION -----
                                           Slot: (2)
                                           Card Type: 2 Wire FXS

Port DS0  Mode      State  Name/ID      Sig.      Delay Tx  Gn  Rx  Gn
          [ ]      [ ]      [ ]      [ ]      [ ]      Secs. dB  dB  dB
-----
A  ( 1) [ACTIVE]  BUSY (      ) [FXS/LS]    (-4.0) (-2)
B  ( 2) [ACTIVE]  IDLE (      ) [FXS/GS]    (-4.0) (-2)
C  ( 3) [ACTIVE]  BUSY (      ) [MEG/LS]    (-4.0) (-2)
D  ( 4) [SPARE ]  IDLE (      ) [MEG/GS]    (-4.0) (-2)
E  ( 5) [SPARE ]  IDLE (      ) [PLAR ]     (-4.0) (-2)
F  ( 6) [ACTIVE]  BUSY (      ) [FXS/LS]    (-4.0) (-2)

                                           222222 333333 -----
Channel Allocation: ABCDEF AAAAAA -----
----- Messages -----

```

2-Wire FXO Screen

```

3060 DSU                                     Time: HH:MM:SS
Element Rev xx.xx/x.xx                       Date: MM/DD/YY
----- VOICE CARD CONFIGURATION -----
                                           Slot: (2)
                                           Card Type: 2 Wire FXO

Port DS0  Mode      State  Name/ID      Sig.      Delay Tx  Gn  Rx  Gn
          [ ]      [ ]      [ ]      [ ]      [ ]      Secs. dB  dB  dB
-----
A  ( 1) [ACTIVE]  BUSY (      ) [FXS/LS]    (-6) (-2)
B  ( 2) [ACTIVE]  IDLE (      ) [FXS/GS]    (-6) (-2)
C  ( 3) [ACTIVE]  BUSY (      ) [MEG/LS]    (-6) (-2)
D  ( 4) [SPARE ]  IDLE (      ) [MEG/GS]    (-6) (-2)
E  ( 5) [SPARE ]  IDLE (      ) [FXO/GS]    (-6) (-2)
F  ( 6) [ACTIVE]  BUSY (      ) [FXO/LS]    (-6) (-2)

                                           222222 333333 -----
Channel Allocation: ABCDEF AAAAAA -----
----- Messages -----

```

4-Wire E&M Screen

```

3060 DSU                                     Time: HH:MM:SS
Element Rev xx.xx/x.xx                       Date: MM/DD/YY
----- VOICE CARD CONFIGURATION -----
                                           Slot: (2)
                                           Card Type: 4 Wire E&M

Port DS0  Mode      State  Name/ID      Sig.      Delay Tx  Gn  Rx  Gn
          [ ]      [ ]      [ ]      [ ]      [ ]      Secs. dB  dB  dB
-----
A  ( 1) [ACTIVE]  BUSY (      ) [TYPE 1]    (-.5) (+2)
B  ( 2) [ACTIVE]  IDLE (      ) [TYPE 3]    (-.5) (+2)
C  ( 3) [ACTIVE]  BUSY (      ) [TYPE 2]    (-.5) (+2)
D  ( 4) [SPARE ]  IDLE (      ) [TO ]       (-.5) (+2)
E  ( 5) [SPARE ]  IDLE (      ) [TYPE 1]    (-.5) (+2)
F  ( 6) [ACTIVE]  BUSY (      ) [TYPE 1]    (-.5) (+2)

                                           222222 333333 -----
Channel Allocation: ABCDEF AAAAAA -----
----- Messages -----

```



127 Jetplex Circle
Madison, Alabama 35758
www.verilink.com

Sales and Marketing

800-285-2755
256-772-3770
info@verilink.com

Technical Support

800-285-2755
256-772-3770
support@verilink.com

Returns/RMA

800-285-2755, ext. 2282

MEGACOM is a registered trademark of AT&T.