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Electra **Elite** IPK II

**H.323 TRUNK
QUICK SETUP GUIDE**



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NEC

INT-1075 (IPK II)
DOCUMENT REVISION 1

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Technology Development

Setting up the H.323 Trunk Card Application



This document briefly describes how to setup a fully functional H.323 trunk application. Hardware Installation instructions for the IAD(8)-U() are **NOT** provided in this document.

SECTION 1 HARDWARE SETUP

This section describes the boot up sequence, connectors and dip switch settings for the IAD(8)-U() ETU.

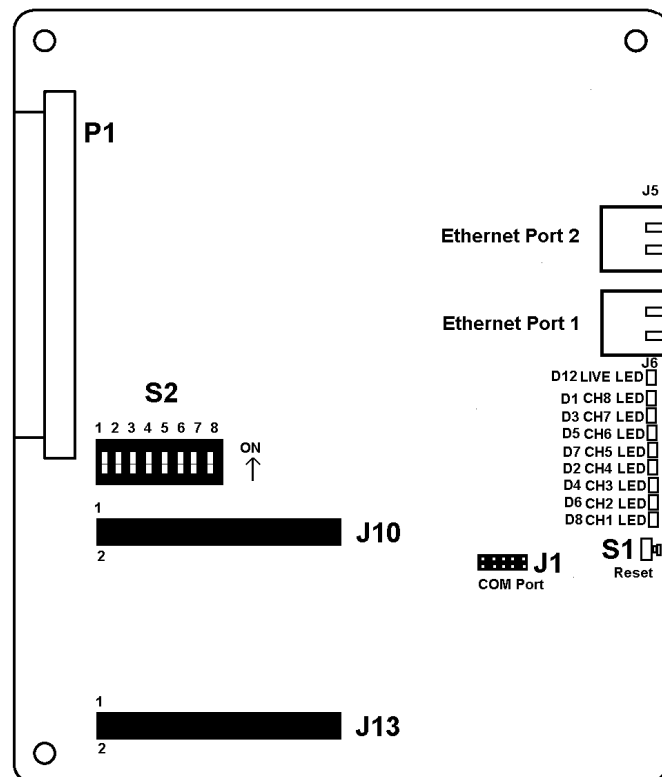


Figure 1 IAD(8)-U() ETU

1.1 Boot Up Sequence

The LED chart shows the status of the IAD(8)-U() ETU card during boot up. The LED conditions change as the IAD(8)-U() ETU passes through different boot states.

Table 1 Boot Up Sequence LED Patterns

STATE	D8 CH1	D6 CH2	D4 CH3	D2 CH4	D7 CH5	D5 CH6	D3 CH7	D1 CH8	D12 LIVE
1	○	○	○	○	○	○	○	○	✱
2	●	●	●	●	○	○	○	○	✱
3	○	○	○	○	○	○	○	○	✱
4	○	○	○	○	●	●	○	○	✱
5	○	○	○	○	○	○	●	●	✱
6	○	○	○	○	○	○	○	○	✱

● = LED ON
 ○ = LED OFF
 ✱ = LED Flashing

1.2 Connectors

- J6 = Default Ethernet connection

1.3 S2 DIP Switch Settings

Table 2 S2 DIPSW Settings

Reserved			Auto Sense	No. of Ports	Mode Operation			
SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	Mode
OFF	OFF	OFF	ON	OFF	ON	ON	ON	COI(4)
OFF	OFF	OFF	ON	ON	ON	ON	ON	COI(8)
OFF	OFF	OFF	ON	OFF	OFF	ON	ON	COID(4)
OFF	OFF	OFF	ON	ON	OFF	ON	ON	COID(8)
OFF	OFF	OFF	ON	OFF	ON	OFF	ON	DID(4)
OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	TLI(2)
OFF	OFF	OFF	ON	ON	ON	ON	OFF	DTI(8)

1. Configure DIPSW S2 in accordance to Table 2. Place the IAD(8)-U() ETU in the Electra Elite KSU.
2. Connect the Ethernet cable to connector J6.
3. The CH1~CH8 LEDs start to run indicating that the system is initializing the IP Networking parameters. The Status LED (D12) is red (refer to [Table 1 Boot Up Sequence LED Patterns](#)).
4. Once all the LEDs are **OFF** and the Status LED (D12) is flashing red, the IAD(8)-U() can be set up with the system.

SECTION 2 ELECTRA ELITE IPK II PROGRAMMING

After the Dip Switches have been set and the IAD(8)-U() ETU has been installed in the KSU, you are ready to program the settings the for the IAD ETU.


The IAD(8)-U10 ETU is recognized by the Electra Elite IPK II KSU system as a COI(4)/(8)-U10 ETU, a COID(4)/(8)-U10 ETU, a DID(4)-U10 ETU, a DTI ETU, or TLI (2)-U10 ETU based on the configuration on the ETU. This ETU takes longer to initialize than the other Electra Elite IPK II ETUs and must be programmed using Memory Block 7-1 (Card Interface Slot Assignment).

First, program MB 14-02-01 Signaling Type (DP/DTMF). For the IAD trunks, this must be set for Dial Pulse as follows:

0 (10PPS)

or

1 (20PPS)

 At default, 14-02-01 is set to 2 (DTMF).


2.1 Programming the ETU Interface Slot

The Electra Elite IPK II will recognize the IAD(8)-U10 ETU as a trunk card (according to the DIP switch settings) and automatically program the slot.

 Programming is available via PCPro, WebPro application, or a Multiline Terminal.

To review the programming:

1. Enter programming: Speaker # * # * [system password] **Transfer**.
2. Go to Memory Block 10-03-01 by pressing the keys on keypad corresponding to the memory block number.
3. With the flashing cursor on the "Slot No" field, press the softkey labeled +1 to advance through the slots, until you reach the slot where the IAD H.323 Trunk ETU has been inserted. It should show as the chosen trunk card.
4. If it does not show as the chosen trunk card, delete the current slot assignment. Go to Memory Block 90-05-01. Press **Redial** to advance to the "Slot Number" field. Enter the slot number and press **Transfer**.
5. Remove the IAD board and verify the DIP switch settings. Repeat steps 1-3.

 The IAD(8)-U10 ETU consumes trunk ports according to the configured type of card (based upon DIP switch settings). The IPK II recognizes all DTI() cards as DTI(24).

The IAD only has resources for 8 trunks. The balance of the trunks must be assigned in Memory Block 14-05-01 to Trunk Group 0. The unsupported trunks count against the total number of trunks supported by the IPK II.


SECTION 3 IAD(8)-U10 ETU WEB PROGRAMMING

When installed for the first time, the IAD(8)-U() ETU, comes up with factory set default parameters as shown in [Table 3 Factory Network Settings](#).

Table 3 Factory Network Settings

Computer Name	neciad
IP Address	192.168.1.100
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1

In this configuration, the ETU cannot run in any randomly given environment, and its parameters must be redefined before the IAD(8)-U() ETU can work in your environment.

1. Boot up a PC with IP Address: 192.168.1.X, Subnet Mask: 255.255.255.0. Connect to the IAD(8)-U() either via a crossover cable or a small hub.
2. Connect to the IAD(8)-U() ETU via your Web Browser to the following link: <http://192.168.1.100/>.
3. Login into the IAD(8)-U() with the following: Login ID = **admin** and Password=**password**.
 -  The IAD ETU supports Microsoft Internet Explorer 6.0 and higher.
4. Set the IP Address, Subnet Mask, Computer Name, and Default IP parameters in the IAD(8)-U() ETU card configuration tab and select **Submit**.
5. Enter H.323 Settings:
 - Assign H.323 ID and enable Gatekeeper function
 - Statically assign Gatekeeper IP Address or check the Automatically Discovery box.
6. Set the Encoding Preference under the Port Tab and select **Submit**.

7. Set the parameters for outgoing calls in the Address tab. This information maps the dialed digits to the IP address of the receiving H.323 Trunk card.

Example:

Dialed Number	Address
214	10.1.0.100

When the user dials any number beginning with 214 (e.g., 2145551234), the call is routed to a H.323 Trunk card with IP Address 10.1.0.100.

8. Set the parameters in the Station Settings tab.


For COID/COI and DTI(ANI) modes, the incoming numbers to a particular trunk on the KSU are mapped to the Station Settings tab dialed number.

For COID, the caller ID is the outgoing Caller Name field.

Select **Submit**.


Example:

Trunk Number	Caller ID	Dialed Number
1	Sales	9727517653
2	Marketing	9727517646
3	Station 3	102

 When the IAD(8)-U() ETU (COI/COID) receives 9727517646 as the digits from the calling IAD system, it presents the call on Trunk 2. For outgoing calls made on Trunk 2, the H.323 Trunk ETU sends the caller name as Marketing and Caller ID Number 9727517646.

9. Select the **System** tab, then select the **Reset the Card** option.

The ETU goes through a reboot cycle which can take a few minutes.

 At this point, the IP address of the card has been modified, you will not be able to access it until the PC's IP Address is manipulated to be in the same subnet.

10. Disconnect the crossover cable and connect the IAD(8)-U() ETU to your network.

The ETU is now ready for operation.

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