How to order ISDN lines

Ordering ISDN service can be confusing and frustrating, but it is getting easier. Just to find a person in the telephone company who had heard of ISDN used to take several phone calls and hours on hold. Now most telephone companies have a special ISDN "hotline" number and internet web sites that removes these difficulties.

Once you reach the ISDN "order desk" you will be asked how you want the line configured. ISDN is a very versatile service and, because of this, there are a bewildering number of choices. Basically, your line configuration depends on the functions supported by the terminal adapter you will be using. The following order information is correct for Comrex Envoy,Nexus or Matrix ISDN Codecs and also for the ADTRAN ISU128, one of the most popular terminal adapters in North America.

NOTE: The good news is that the Bellcore National ISDN User's Forum has a list of predetermined "capability packages" that will cover the full range of BRI applications. This system is starting to be used by local telephone companies and will greatly simplify the ISDN ordering process. For instance, in the case of the Envoy, Nexus, Matrix ISDN or ADTRAN TA, all you would need to tell the phone company is that you want BRI ISDN with "Capability Package M" (or Generic Data M). This simple code replaces the following ordering information.

If your phone company does not recognize Capability Packages, you can fax them the following:

Request an ISDN Basic Rate Interface (BRI) line

- A U-interface reference point

- 2B1Q line coding

Choose one of the following:

- 2B+D Service (Supports up to 128 Kb/s)

- 1B+D Service (Supports up to 64 Kb/s)

The following switches and protocols may be offered:

- AT&T 5ESS - with Custom protocol (5E6 or later software)

- Northern Telecom DMS-100(with Pvc1 protocol, BCS-32 or later software)

- National ISDN-1 compatible (may be a Siemens, AT&T 5ESS NI1, Northern Telecom Pvc2 or other switch)

Request that the ISDN line allocate one Dynamic Terminal Endpoint Identifier (TEI) for each phone number.

Put Comrex On The Line.
COMREX

Toll Free in USA: 800-237-1776 • www.comrex.com
e-mail: info@comrex.com
19 Pine Road, Devens, MA 01434 USA
Tel: +1-978-784-1776 • Fax: +1-978-784-1717

With an AT&T 5ESS Custom Switch

With an AT&T 5ESS switch most telephone companies provide the option of Point-to-Point (one telephone number which operates both B-channels) or Point-to-Multipoint (two telephone numbers and two SPIDs or Service Profile IDentifiers - one for each "B" channel). Point-to-Point service can complicate certain applications. For example, if you have two codecs attached to one terminal adapter that need to be able to receive calls independently, you are probably better off with Point-to-Multipoint service. Point-to-Multipoint can be trickier to set up, so if you only plan to use one codec (either on one or both channels), Point-to-Point may prove easier for you.

Request the following features

FEATURE	VALUE
B1 Service	OnDemand (DMD)
B2 Service	OnDemand (DMD) if 2B+D
Data Line Class	Point-to-Point or Point-to-Multipoint
Maximum B Channels	2 if 2B+D, 1 if 1B+D
Circuit Switched Voice	-
(CSV) Bearer Channel	Any
Number of CSV calls	1
Circuit Switched Data -	
(CSD) Bearer Channels	Any
Number of CSD calls	2 if 2B+D, 1 if 1B+D
Terminal Type	Type A

Turn the following features OFF

- Packet Mode Data

- Multiline Hunt Groups

- Multiple Call Appearances

- Electronic Key Telephone Sets (EKTS)

- Shared Dictionary Numbers

- Accept Special Type of Number

- Intercom Groups

Put Comrex On The Line.
COMREX

Toll Free in USA: 800-237-1776 • www.comrex.com
e-mail: info@comrex.com
19 Pine Road, Devens, MA 01434 USA
Tel: +1-978-784-1776 • Fax: +1-978-784-1717

- Network Resource Selector (Modem Pools)

- Message Waiting

- Hunting

- InterLata Competition

With a Northern Telecom DMS100 Pvc1 Switch

When accessing a DMS100 switch you are required to have two phone numbers and two SPIDs. Therefore, all service is Point-to-Multipoint.

Request an ISDN Basic Rate Interface (BRI) with

FEATURE	VALUE
Line type	Basic Rate Functional
Electronic Key Telephone	-
Sets (EKTS)	No
Call Appearance Handling (CACH)	No
Non-initializing Terminal	No
Packet Switched Data Service	No
TEI	Dynamic
Bearer Service CSV and Data	Allowed on any B Channel

Checklist for All Switch Types

After you have placed your order, make sure that the phone company provides you with the following information for programming your Terminal Adapter:

- ISDN Switch Type

- ISDN Switch Protocol Version

- ISDN phone number(s) or LDN

- Whether the ISDN line is Point-to-Point or Point-to-Multipoint

- SPIDs with prefixes and suffixes (unless one is AT&T Point-to-Point)

Our thanks to Adtran for allowing us to use this information.

Put Comrex On The Line.

COMREX

Toll Free in USA: 800-237-1776 • www.comrex.com
e-mail: info@comrex.com
19 Pine Road, Devens, MA 01434 USA
Tel: +1-978-784-1776 • Fax: +1-978-784-1717