# **NCI Technologies**



## User Manual for NCI 424 Fax/Modem Data Switch

FEATURES			
4 Individual Ports	<ul> <li>True 90V, 20 Hz Ringing Signal</li> </ul>		
<ul> <li>2 Separate Modem Ports</li> </ul>	Program Retention During Power Failure		
Caller ID Compatible	Wall/Shelf Mounting.		
• 3 Year Warranty	<ul> <li>Complies with both UL &amp; CSA standards</li> </ul>		

Should you require technical assistance during installation, please call our toll-free Technical Support Line

## 1-888-633-2666

## **SPECIFICATIONS**

Power Requirements:	120 VAC, 50-60 Hz AC Adapter with an output of 12 VAC @ 1 A	Facility Interface:	RJ11X / CA11A Modular Jack 7 5/16" × 4 5/8" × 2"
Line Voltage	120 VAC, ± 8%	Dimensions.	185mm x 118mm x 50mm
Ringer	FCC REN: 0.7B	Weight:	1.1 lb (500 g)
Equivalence	IC REN: 0.3	FCC Reg. No.	GUI3SE-60256-OT-N
Ringer Signal	90VAC 20Hz	DOC Certification:	973 3176 A

### INSTALLATION

The diagrams shown below cater to the most common installations.

If you have only one (1) line, follow diagram A.

If you have **two (2) or more lines**, follow diagram **B**. It is important that the NCI 424 Fax/Modem Data Switch be connected to the last line. This ensures that an incoming fax or modem transmission will be routed directly to the Fax/Modem Switch and not to an unoccupied telephone line.



## **OPERATION TEST**

#### Test your installation as follows:

- 1 Pick up the handset of your telephone and listen for a dial tone, then hang up.
- 2 Pick up the handset of your fax or go into originate mode of your modem and listen for a dial tone.
- 3 Now also pick up the handset of your telephone and listen for a busy tone.
- 4 Hang up the handset(s) and/or cancel the modem originate action.

Your NCI 424 Fax/Modem Data Switch installation is now ready for normal operation.

## PROGRAMMING

To select a programming mode, other than the factory preset code (80#), simply follow these instructions.

- 1 Lift the handset of a Touch-Tone<sup>™</sup> telephone connected to the TEL.EQPT. port of the NCI 424 Fax/Modem Data Switch.
- 2 Dial the desired code from the list below followed by the pound (#) sign.
- 3 Wait for about 1 second until you hear 2 successive beep tones which will acknowledge program acceptance.
- 4 Hang up the handset. The NCI 424 Fax/Modem Switch has now been reprogrammed.

Code	Parameter		
21#new parameter#	Programming up to 4 digits of Transfer code to TEL.EQPT. port. Range of parameter : 1 - 9999 (Factory Preset 21)		
22#new parameter#	Programming up to 4 digits of Transfer code to FAX port. Range of parameter : 1 - 9999 (Factory Preset 22)		
23#new parameter#	Programming up to 4 digits of Transfer code to MODEM 1 port. Range of parameter : 1 - 9999 (Factory Preset 23)		
24#new parameter#	Programming up to 4 digits of Transfer code to MODEM 2 port. Range of parameter : 1 - 9999 (Factory Preset 24)		
50#new parameter#	Number of rings detected by the NCI 424 before its answers. Range of parameter: 1 - 9 (Factory preset) Note: Caller I.D. needs to be disabled to use this function.		
51#	Allows transfer to MODEM 1 by dialing "*" or "8" enable (Factory Preset)		
52# 53# 54#	Allows transfer to MODEM 1 by dialing "" or "8" disable Allows transfer to MODEM 2 by dialing "#" or "9" enable (Factory Preset) Allows transfer to MODEM 2 by dialing "#" or "9" disable		
55#	Caller I.D. Enable, with first ring		
56#	Caller I.D. Enable, first silent ring *** Your call display must support the first silent ring feature ***		
57#	Caller I.D. Disable (Factory Preset)		
60# new parameter#	Maximum number of rings generated by the NCI 424 before proceeding with the programmable actions below. Range of parameter 1 to 19 rings (factory preset 8 rings).		
61#	Incoming calls ring the number of rings programmed in code 60# at TEL.EQPT. port before disconnect if not already answered.		
62#	Incoming calls ring the number of rings programmed in code 60# at TEL.EQPT. port before transferring to FAX port if not already answered. (factory preset)		
63#	Incoming calls ring the number of rings programmed in code 60# at TEL.EQPT. port before transferring to MODEM 1 port if not already answered.		
64#	Incoming calls ring the number of rings programmed in code 60# at TEL.EQPT. port before transferring to MODEM 2 port if not already answered.		
65#	TAD: Incoming calls ring at TEL.EQPT. port until the TAD (Telephone Answering Device) responds and are transferred to the FAX port as soon as the answering machine finishes its message and hangs up. It will ring number of rings programmed in code 60# to TEL.EQPT. before transferring to the FAX if the call is not answered.		
80#	Reload Factory Presets		

## OPERATION

#### **Telephone Calls**

All incoming and outgoing telephone calls are conducted in the normal manner and are unaffected by the Fax/Modern Data Switch.

#### Fax Transmissions

Under most operating conditions, only your fax machine will ring and automatically answer on an incoming fax.

If you have some callers who are still using older types of fax machines which have no auto-dial feature or do not send a fax CNG "beep" signal, their fax call will then cause your telephone to ring. Simply dial 22 (factory preset) and hang up. The NCI 424 Fax/Modem Data Switch will then route the call over to your fax machine. See also Programming.

If the same type of callers, as described above, wish to reach you without calling ahead, advise them that they may send a fax directly to you by dialing 22 (factory preset) on their Touch-Tone<sup>™</sup> telephone after they hear the first ring on the telephone. This establishes direct communication with your fax without you first having to answer the telephone.

#### **Modem Operations**

To have an incoming modem call automatically routed to the modem ports, the caller must add the following string after your telephone number in his auto-dial mode:

#### For MODEM-1 port:

comma asterisk comma asterisk comma asterisk comma asterisk - e.g. 234 5678 , \* , \* , \* , \* , \* , \*

#### For MODEM-2 port:

comma pound comma pound comma pound comma pound - e.g. 234 5678, #, #, #, #, #, #,

NCI warrants its products to be free from defects in material and NCL warrants its products to be ree reor from defects in material and workmanship under normal use and service for a period of three (3) years after delivery to the ultimate user. At our discretion, NCI will repair-free-of charge or replace at no charge a product should it, upon examination, be proven defective and under warranty. NCI reserves unto itself the sole right to make the final decision whether there is a defect in materials and/or workmanship, and whether or pat the archaet is a within the unscreently not the product is within the warranty.

## LIMITED WARRANTY

This warranty shall not apply to any NCI product which has been subject to misuse, neglect, accident, or used in violation of instructions furnished, nor extended to units which have been repaired or altered outside of the factory.

This warranty covers bench repairs only. Any repairs must be made at the shop or place designated in writing by NCI. NCI will not be responsible for any costs incurred involving on-site calls.

Note: A comma is equivalent to a pause; usually about 2 seconds or similar value depending on the particular modem software used. If not available, the \* and # may be substituted with 8 and 9 respectively.

If your caller's modem software does not provide for auto-dial capability, the other party may first make voice contact with you advising you of an intended modem transmission after which you can then dial 23 (factory preset) for Modem 1 or dial 24 (factory preset) for Modem 2 on your telephone. This will switch the incoming line to the selected modem port of the NCI 424 Fax/Modem Data Switch. Hang up the telephone and wait until the modem transmission is completed.

If you want more security for your modems ports access, you can put restriction by disabling the possibility for the caller to transfert to your modems by using \* or # and by changing the transfer code (ie. 3456 instead of the default 23 and 6.7.8.9 instead of the default 24) and then the caller will have to add the following string after your telephone number in his auto-dial mode:

#### For MODEM-1 port:

comma 3456 comma 3456 comma 3456 comma 3456 comma 3456 comma 3456 e.g. 234 5678, 3456, 3456, 3456, 3456, 3456, 3456

#### For MODEM-2 port:

comma 6789 comma 6789 comma 6789 comma 6789 comma 6789 comma 6789 e.g. 234 5678, 6789, 6789, 6789, 6789, 6789, 6789

See **PROGRAMMING** for details

All implied warranties, including any implied warranty of An implied warrantee, including any implied warranty of merchantability or fitness for any particular purpose, are limited in duration to three years from date of original purchase. In no event will NCI be responsible for consequential damages resulting from the use of this product.

## CLASS B DIGITAL DEVICE WARNINGS **INFORMATION TO USER**

This equipment has been tested and found to comply with the limits for Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by unprior the activity of and one by the unprior the upper prior the upper prior the interference in the upper prior to the upper If this equipment does cause mannar interference to have or econsisting the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and receiver;
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

Any changes or modifications not expressly approved by NCI Technologies could void the user's authority to operate the equipment.

#### ANALOGUE DEVICE WARNINGS

This equipment complies with Part 68 of the Federal Communications Commission (FCC) rules for the United States

A label is located on the underside of the base unit containing either the FCC registration number and Ringer Equivalence Number (REN). You must upon request, provide the following information to your local telephone company:

USOC Jack Type: RJ11X REN: 0.7B

Should you experience trouble with this telephone equipment, please contact:

NCI Technologies Inc. 1 Transborder Drive Champlain, NY 12919 1-888-633-2666

The REN is used to determine the quantity of devices which may be connected to the telephone line. In the second second to be the second of the second company.

If trouble is experienced with this equipment (NCI 424 Fax/Modem Data Switch), for repair or warranty information, please contact NCI Technologies at 1-888-633-2666. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

This equipment cannot be used on public coin phone service provided by the telephone company. Connection to party line service is subject to state tariffs.

Your telephone company may discontinue your service if your equipment causes harm to the telephone network. They will notify you in advance of disconnection, if possible. During notification, you will be informed of your right to file a complaint to the FCC.

Occasionally, your telephone company may make changes in its facilities, equipment, operation, or procedures that could affect the operation of your equipment. I so, you will be given advance notice of the change to give you an opportunity to maintain uninterrupted service.

#### INDUSTRY CANADA WARNINGS

The Industry Canada label identifies certified equipment. This certification means that the equipment meets The massly cumulation network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephones lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas. Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

NOTE: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Number of all the devices does not exceed 5.