

CNC Innovations, LLC

Innovation Driving Quality and Productivity

THE ORIGINAL MS-DOS CNC SOLUTION

EasyTalk™

RS232 Communications
Designed Specifically
for CNC Controls

Year 2000
Date Compatible

15 Definable
Machine Presets

Powerful
NC Specific Editor

Side-By-Side File
Comparator

Terminal Mode
For Simplified
Machine Setup

Interactive DNC,
Drip-Feed and
Remote Request

File Management
With 32 Character
Part Names

Tape Reader
Replacement
for Many Controls

**New EasyTalk Shell
For Windows**

PRODUCT SUMMARY

Easytalk, the original MS-DOS DNC solution, combines a comprehensive file management utility with an easy to use communications package and a powerful NC specific program editor. These features are easily accessed using a shop-friendly menu system, making it simple to operate – even for the first time PC user. Help is always available at the touch of a key to assist the user.

FILE MANAGEMENT

Assign 32 character file names to your NC program files, thus enabling your part and operation numbers (for example) to be displayed along with the DOS name of the file. The software also allows you to designate a non-destructive 32 character customer or machine name to directories. The directories may be sorted by either the 32 character name or the DOS name for convenient cross reference. At the touch of a key, the 32 character file name can be created from your NC program's comment line. Functions for file copy, delete, duplicate and rename are also provided.

MACHINE COMMUNICATIONS

Serial (RS232) communications with Easytalk is almost effortless. Match the machine control parameters, plug in the proper cable and DNC becomes a reality. Standard serial communication protocols are supported, as well as many special protocols. Mazatrol CMT, Bosto-Matic CRC, Heidenhain Blockwise, Bridgeport DNC Link and more are included as part of the standard software.

EASYTALK COMMUNICATIONS PARAMETERS	
Machine Name	Specific Protocol: GENERAL
1 Fanuc 0	Required Parameters
2 Fanuc 16T	Baud Rate : 9600
3 Okuma OSP3000	Data Type : ISO
4 Allen Bradley 8400	Parity : PRESET for ISO
5 Fanuc 16I	Data Bits : PRESET for ISO
6 Yasnac MX 180	Stop Bits : 1
7 Fanuc 10M	Comm Port : 1
8 Okuma OSP3000	End-of-Block: LF/CR/CR (10 13 13)
9 Fanuc 0	Optional Parameters
10 Allen Bradley 8400	Delay after EOB (milliseconds):
11	Delay after Char(milliseconds):
12	Pause Character :
13	Start Char (ASCII): Amount:
14	String:
15	End Char (ASCII): Amount:
16 DNC Host Connection	String:
17 Serial Print Device	
[F2] - Save Parameters and Exit [F3] - Print Parameter settings [F4] - To set Machine [F5] - To move between fields [F6] - To select values	

Older controls without serial capabilities are supported through the Tape Emulation Option (not available for EasyTalk Shell) and the use of our DTE (Direct Tape Emulation) interfaces. These devices bypass the tape reader and connect the PC directly to the reader input circuitry. This technique adds the power of Easytalk to these older, but still productive machines. Other special protocols, like Bridgeport RealTime DNC, are supported through the Tape Emulation Option.

DRIP-FEED NC PROGRAMS

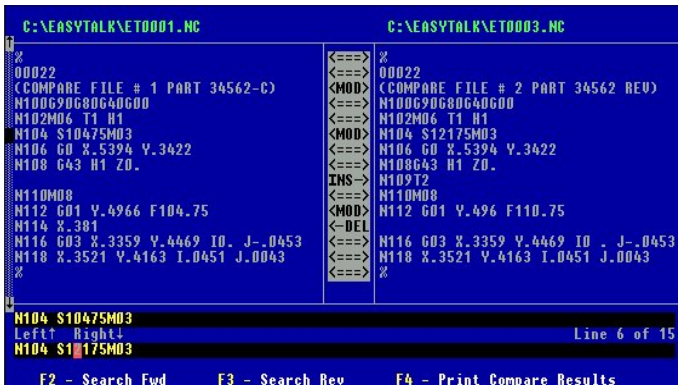
The ability to "drip-feed" NC programs is provided for both serial and non-serial controls. Drip-feed allows programs which are too long for a control's memory to be executed block by block from the PC. This operation is performed using the control's drip-feed or block mode option for serial RS232 or the parallel tape input using the previously mentioned DTE interface.

FILE COMPARE

Easytalk's side-by-side file comparison of two NC program files highlights modified lines and automatically adjusts for inserted and/or deleted lines. A printed report may be generated for only the differences or for the entire program.

FILE EDITING

A powerful NC editor is provided for fast and easy editing on the shop floor. All the standard word processing features like Block Copy, Block Move, Block Save, Search & Replace are included, as well as, the NC specific functions of Scale, Shift, Renumber, Strip Numbers and Field Reformat (decimal to/from leading or trailing zero).



```
C:\EASYTALK\ET0001.NC          C:\EASYTALK\ET0003.NC
%                               %
00022                            00022
(COMPARE FILE # 1 PART 34562-C)   (COMPARE FILE # 2 PART 34562 REV)
N100G90G80G40G00                N100G90G80G40G00
N102M06 T1 H1                    N102M06 T1 H1
N104 S10475M03                   N104 S12175M03
N106 G0 X.5394 Y.3422            N106 G0 X.5394 Y.3422
N108 G43 H1 Z0.                  N108G43 H1 Z0.
%                               %
N110M08                          N110M08
N112 G01 Y.4966 F104.75          N112 G01 Y.496 F110.75
N114 X.381                       N114 X.381
N116 G03 X.3359 Y.4469 I0. J-.0453  N116 G03 X.3359 Y.4469 I0. J-.0453
N118 X.3521 Y.4163 I.0451 J.0043  N118 X.3521 Y.4163 I.0451 J.0043
%                               %
N104 S10475M03                   N104 S1175M03
Left Right                         Line 6 of 15
F2 - Search Fwd  F3 - Search Rev  F4 - Print Compare Results
```

INTERACTIVE DNC

Run DNC operations from within the Editor. This allows operators to view and monitor program blocks as they are sent to the machine. Select any starting point from within the program. Enhanced features allow M99/M98 sub-program support.

SEND FILE OPTIONS

Choose from send file once, send continuously or send from a selected starting point.

COMPRESS DATA

Even if your machine control does not understand comment fields, you can still have them displayed on the screen for operator instructions. Easytalk will strip these fields from the data stream while sending. Default settings are also available to remove spaces, tabs, line numbers, or a user definable character.



```
EASYTALK DEFAULT VALUES
Monitor Type : COLOR
Parallel Port : LPT1
Page Length : 66
Printer Type : Paralle
Facit Option : Disabled
File Prefix for file handler: ET
File Extension for file handler: NC
Directory for file handler: C:\EASYTALK
Sort Directory by: Part Name
Compare Default Settings:
Ignore Tabs(Y/N): Y
Ignore Spaces(Y/N): Y
Lines to look ahead: 100
Print in NC Mode(Y/N): Y
Bridgeport Realtime Subprogram
Byte Count: 3750
Compress Default Settings:
Comments(Y/N): N
Line Numbers(Y/N): N
Tabs(Y/N): Y
Spaces(Y/N): Y
Character(Y/N): N
--> ASCII Val: 0
F2 - Save defaults  TAB - Select next default field  ↑↓ - To select values
```

TERMINAL MODE

Interactive terminal mode is essential for initial machine setup. It provides a quick and easy method to establish basic serial communications. Advanced features allow you change parameters as well as send and capture program files.

PASSWORD PROTECTION

Protects files and system functions from unauthorized access.

MAZATROL CMT

Communicate with Mazatrol Controls. Send/Receive Mazatrol created programs. Convert "G-Code" programs to Mazatrol Packet format for communications with the CMT port of the control.

APPLICATION NOTES

Easytalk (including Tape Emulation) is intended only for MS-DOS based operating systems on PCs supporting both a serial and a parallel printer port.

Easytalk Shell is intended for MS-Windows operating systems on PCs supporting COM 1 or 2. Other than native COM ports, best performance may require a quality PCMCIA adaptor. Some USB to RS232 adaptors may exhibit performance degradation.