

CNC RETROFITS & REPAIRS

AUTOMATION SYSTEMS

DNC, POWER MONITOR SYSTEMS

Electronic Service Products

When Thinking Electronics Use ESP

FANUC, SIEMENS, ESP CNC COMPANION

TURNKEY CO2 & YAG LASER SYSTEMS

LINEAR AND ROTARY CALIBRATIONS

1070 North Farms Rd. / Wallingford, Connecticut 06492 / 203-265 -4167 / www.espcnc.com / bill@espcnc.com

Features

1. Operator Friendly
2. Custom Program Screens
3. Interface to feedback systems

The Rotary Companion is the most versatile and operator friendly Rotary control on the market today. With a large 17" Lcd touch screen and custom part program generating operators need no formal programming or cnc experience . Simply input a few part features (starting angle , number of indexes) and the program is generated for you. Our rotary control can interface to your existing servo system or we can provide a new servo and feedback system.



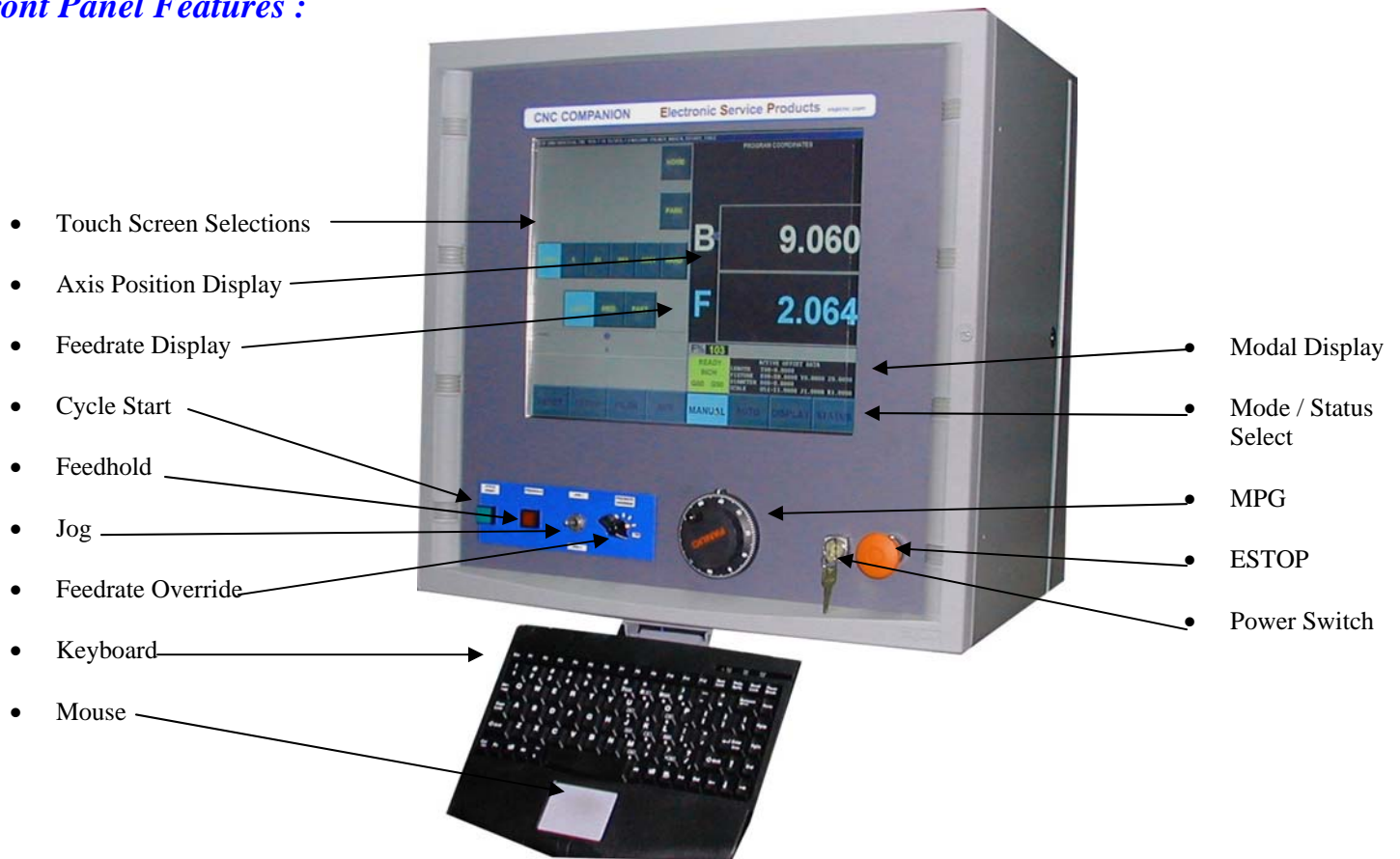
Rotary Control System

Operator Manual



CNC Rotary Companion Front Panel

Front Panel Features :



CNC Companion Manual Screen

Manual Features :

- Axis Home Select → **HOME**
- Jog / MPG Increments → **CONT** .1 .01 .001 .0001
- Jog Speed Select → **SLOW** **MED** **FAST**
- Feedrate % → **F% 100**
- Machine Status → **READY** **INCH** **G01** **G90**
- Manual Select → **MANUAL**

The screenshot shows the CNC Companion Manual Screen interface. At the top, it displays 'ESP-2000 UNIVERSAL CNC-VER=7.24 PLCVER= MACHINE=PALMER_NIKKEN_ROTARY_TABLE_1'. The main display area is divided into several sections:

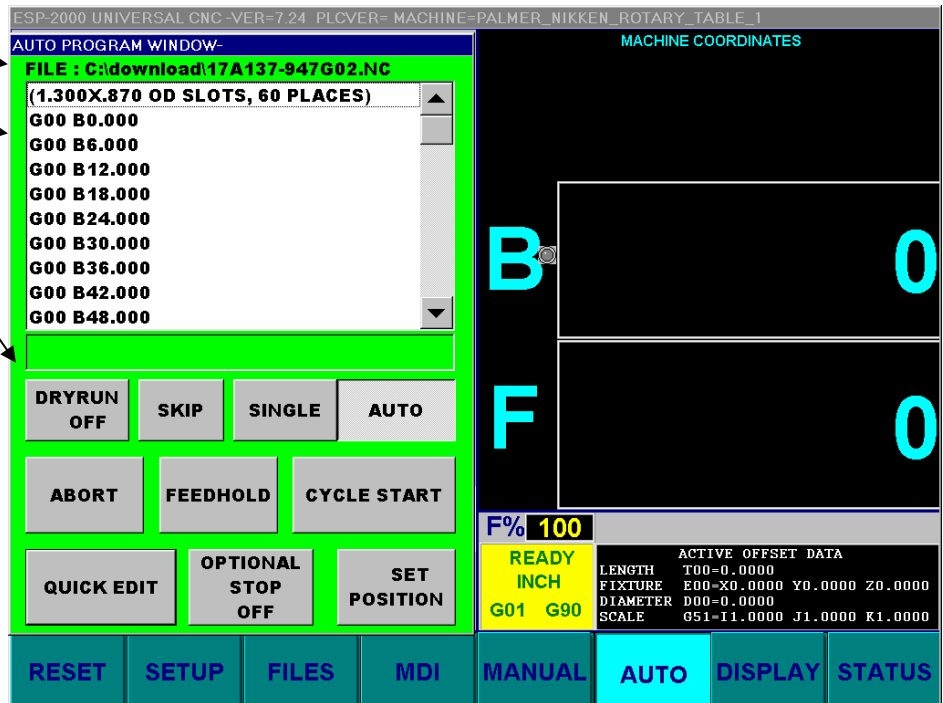
- HOME** and **PARK** buttons are located at the top right.
- JOG/HANDWHEEL INCRIMENTS** section includes buttons for **CONT**, **.1**, **.01**, **.001**, and **.0001**.
- JOG-SPEED** section includes buttons for **SLOW**, **MED**, and **FAST**.
- HANDWHEEL** section includes buttons for **DISABLE** and **ENABLE**.
- MACHINE COORDINATES** section shows **B** and **F** axes with **0** values.
- FEEDRATE** section shows **F% 100**.
- STATUS** section shows **READY**, **INCH**, **G01**, and **G90**.
- ACTIVE OFFSET DATA** section shows:

LENGTH	T00-0.0000
FIXTURE	E00-X0.0000 Y0.0000 Z0.0000
DIAMETER	D00-0.0000
SCALE	G51-I1.0000 J1.0000 K1.0000
- RESET**, **SETUP**, **FILES**, **MDI**, **MANUAL**, **AUTO**, **DISPLAY**, and **STATUS** buttons are located at the bottom.

CNC Companion Auto Screen

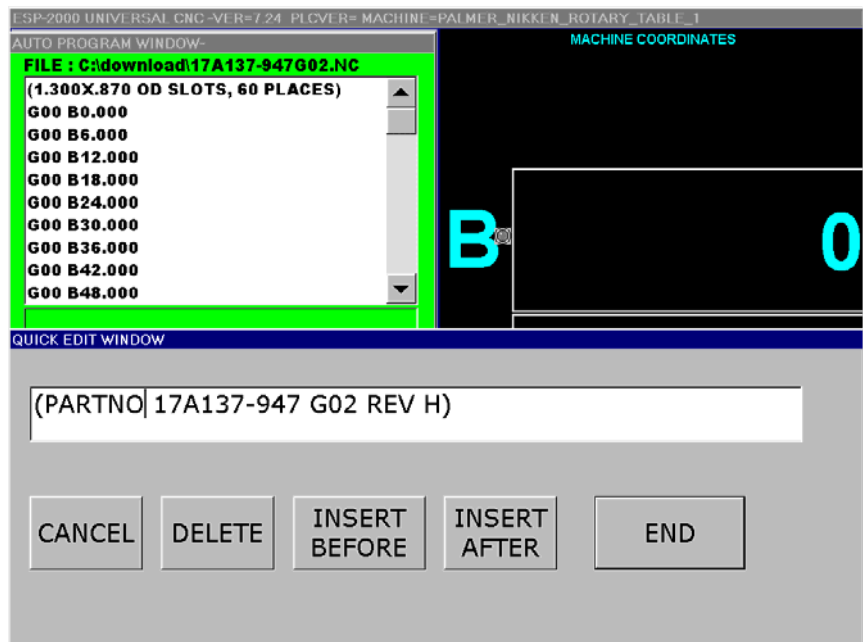
Auto Features :

- Selected File
- Part Program
- Auto Function Keys



Quick edit :

- Allows you to edit a program line in your program
- Select single
- Select quick edit and edit your program line
- Select end or other options
- Pressing Cycle Start runs your edited line over again



CNC Companion

MDI Screen

MDI Features :

- Input G and M codes

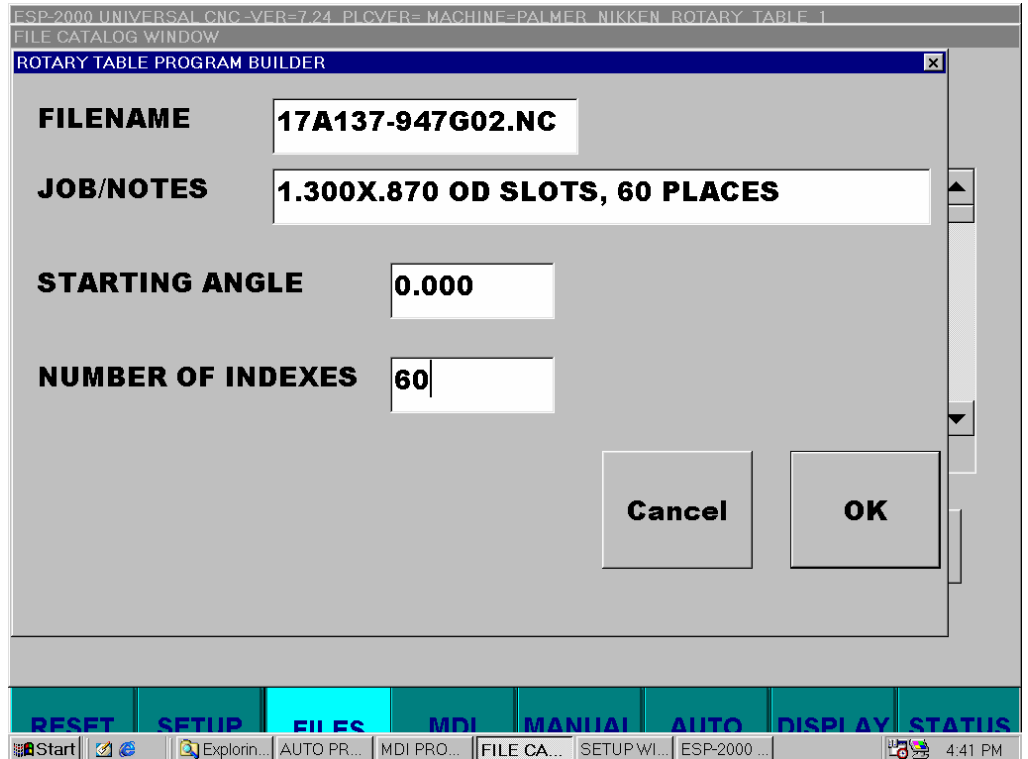
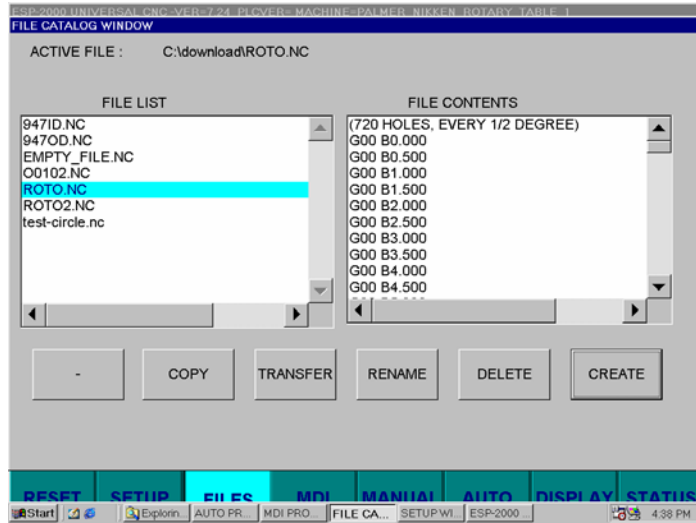
The screenshot displays the MDI screen of a CNC machine. At the top, the title bar reads "ESP-2000 UNIVERSAL CNC-VER=7.24 PLCVER= MACHINE=PALMER_NIKKEN_ROTARY_TABLE_1". The main interface is divided into several sections:

- MDI PROGRAM WINDOW:** A yellow-bordered area containing the text "FILE : C:\download\MDI.NC", "G0A0", "M64", and "M2".
- MACHINE COORDINATES:** A black area on the right showing "B" and "F" with large "0" values.
- Control Buttons:** A grid of buttons including "DRYRUN OFF", "SKIP", "SINGLE", "AUTO", "ABORT", "FEEDHOLD", "CYCLE START", "QUICK EDIT", "OPTIONAL STOP OFF", and "SET POSITION".
- Status and Data:** A section showing "F% 100", "READY INCH", "G01 G90", and "ACTIVE OFFSET DATA" with values for LENGTH, FIXTURE, DIAMETER, and SCALE.
- Bottom Navigation:** A row of buttons: "RESET", "SETUP", "FILES", "MDI" (highlighted), "MANUAL", "AUTO", "DISPLAY", and "STATUS".

CNC Rotary Companion Program Screen

Auto Generate Program:

- Select Create from file screen
- Input file name
- Input job notes
- Select Starting angle for first index
- Select total number of indexes
- Select OK
- The Program is automatically generated

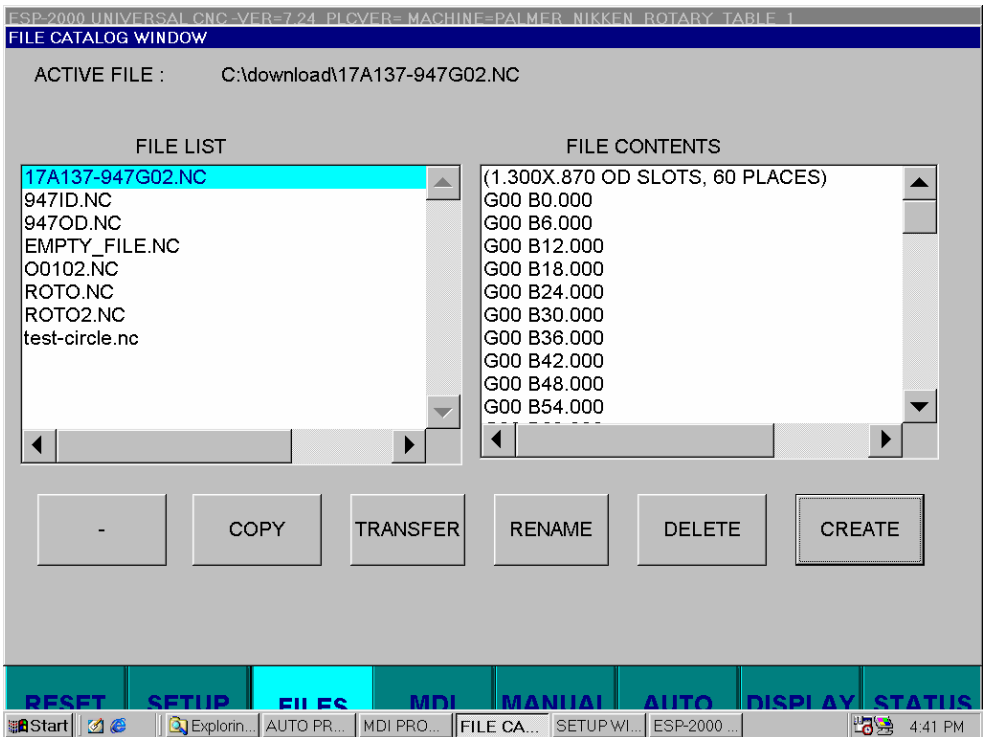


CNC Companion

Program Screen

DNC Program:

- Select a program from your server, floppy or our hard drive
- Save programs to server, floppy or hard drive



CNC Rotary Companion

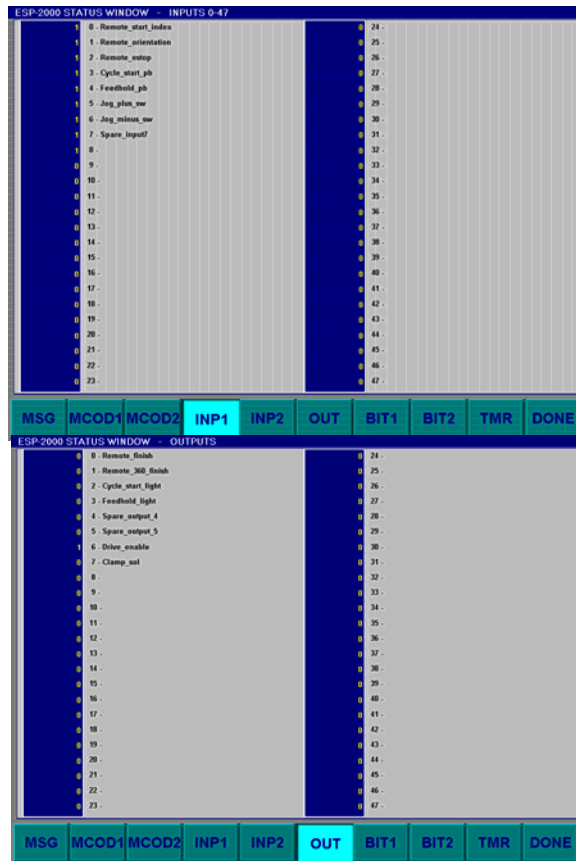
Status Screens

Input screen:

- Status of input switches on your machine

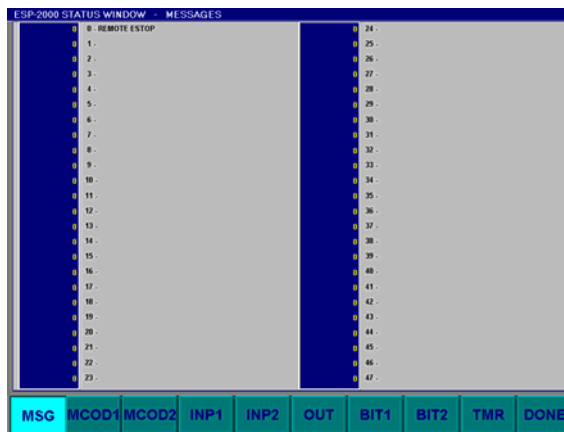
Output screen:

- Status of outputs on your machine



Message screen:

- Displays fault messages for your machine



CNC Companion

Input / Output

Connections

