

PRÉSERVER
SAUVEGARDER
VALORISER

MANUEL DE RÉFÉRENCE : PROFESSIONAL PLOTTER F-920

FICHE N° 9964

Période de fabrication : 1975-1999
Fabricant : fabricant non renseigné
Domaines : Informatique et Communication
Sous-domaines : Ordinateurs
Organisme : ACONIT
Ville : Grenoble (Isère)
Modèle :
Matériaux : Carton, Papier

Description

Titre traduit : Traceur professionnel F-920

Ce livre est un Manuel de référence qui porte le titre : Professional Plotter F-920.

Il a été édité en 1990 par la société Mutoh (Japon). Il comporte 370 pages et est structuré en 17 chapitres. Il inclut de nombreux schémas pour les connexions, des dessins pour des pièces et accessoires, des tableaux pour les diverses configurations, des listes d'instructions de commandes, des exemples de paramétrage et une liste de messages d'erreurs.

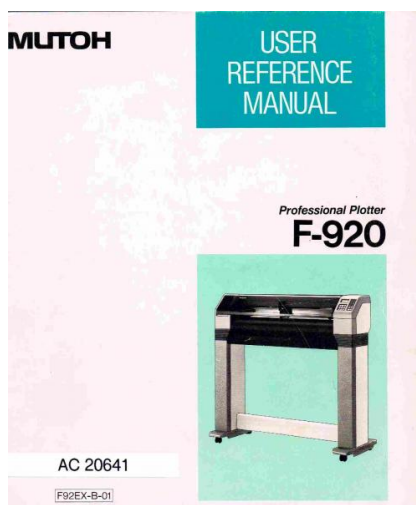
Ce document, particulièrement clair et complet, représente à ce titre un bon exemple des documents utilisés par les services informatiques des grandes entreprises ou instituts lorsqu'il s'agissait d'interfacer des matériels d'origines diverses, avant que ce genre d'instructions ne deviennent des didacticiels à accéder par Internet.

Utilisation

Il s'agit d'un Manuel pour l'utilisation des interfaces entre un ordinateur et un traceur de courbes.

Ce type de traceur de courbes a été utilisé pour Autocad, logiciel fameux de conception assistée par ordinateur, Autocad tournant en particulier sur l'ordinateur Hewlett Packard 7586.

Bien que ne concernant pas des matériels français, ce document n'est pas sans intérêt, car il correspond à la table traçante Mutoh F900B qui a notamment été utilisée à l'Institut des Sciences Nucléaires de Grenoble à partir de 1988-1989, pour la Conception Assistée par Ordinateur (CAO) mécanique et électronique.



The MUTOH F-920 Professional Plotter User Reference Manual

MUTOH INDUSTRIES LTD.

3: GETTING STARTED

Operation Flow

Use the flow chart that follows as a guide for your everyday operation of the plotter. (See Figure 3.3.) Use the chapter references for more information about the procedures you need to follow.

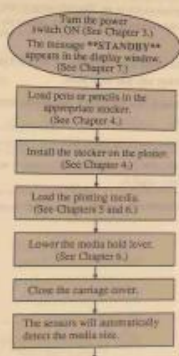


Figure 3.3 Everyday Operational Flow

3: GETTING STARTED

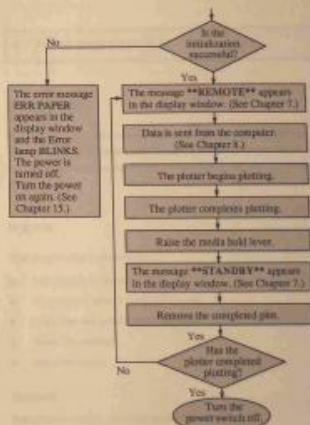


Figure 3.3 Everyday Operational Flow (continued)

4: PENS AND PENCILS

Pencil Stocker

The pencil stocker can only be used with pencils. The pencil stocker uses the same pencil cartridges as the auto pencil stocker. However, it holds 40 pencil cartridges in 8 groups of 5 pencils. A diagram of the pencil stocker is shown below (Figure 4.2).

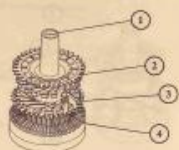


Figure 4.2 Pencil Stocker

- 1 **Stocker label**
The label on the top of the stocker indicates that it is a pencil stocker.
- 2 **Upper disk**
The upper disk of the pencil stocker has 40 jaws, one for each pencil stall. The jaws hold the tops of the pencil cartridges.
- 3 **Lower disk**
The 40 jaws on the lower disk hold the bottoms of the pencil cartridges.
- 4 **Pencil stall**
The pencil stocker has 8 numbered cartridge stalls. Each stall holds a group of 5 pencils.

4: PENS AND PENCILS

Pen Stockers

Each pen stocker holds 8 pens. A diagram of a pen stocker is shown in Figure 4.3.

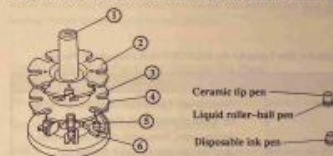


Figure 4.3 Pen Stocker

- 1 **Stocker label**
The label indicates the pen type the stocker uses.
- 2 **Upper disk**
The 8 jaws on the upper disk hold the pen tips.
- 3 **Lower disk**
The 8 jaws on the lower disk hold the pen bodies.
- 4 **Pen stall**
Each pen stocker has 8 numbered pen stalls.
- 5 **Pen boot**
Each stall contains a rubber pen boot. You will need to insert the pen into the pen boot.
- 6 **Pen cap**
The pen cap is attached to the base of the pen boot. The pen is automatically capped when it is inserted into the pen boot.

Menus and Prompts (continued)

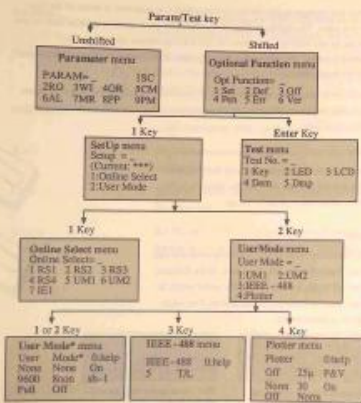


Figure 7.5 Plotter Menus

Indicator Lamps

There are two groups of indicator lamps on the control panel: plotting condition lamps and plotting parameter lamps. You will learn more about the conditions indicated by these lamps in the chapters that follow.

Plotting Condition Lamps

The plotting conditions are indicated by the six lamps at the upper right of the control panel. Table 7.9 describes the significance of these lamp conditions.

Table 7.9 Plotting Condition Lamps

Lamp	Color	Condition When On	Condition When Blinking	Condition When Off
POWER	Green	Power is on	—	Power is off
DIGITIZE	Orange	Point is to be read for coordinates	—	Coordinates have been read
BYPASS	Orange	Plotter is bypassed	—	Plotter interprets data and plots it
OUT OF LIMIT	Orange	—	Pen is outside clip area	Pen is inside clip area
ERROR	Red	Recoverable error has occurred	Non-recoverable error has occurred	No error or error has been corrected*
COVER OPEN	Orange	—	Carriage cover is open	Carriage cover is closed

*See "Recoverable Errors" in Chapter 15, "In Case of Difficulty."

8: CONFIGURING YOUR PLOTTER

Table 8.1 Plotter Parameters

Key Number	Parameter	Possible Value	Description
1	Mirror mode	Off	The plotter does not send a copy of the plotting data to a terminal connected to its test data port.
		On	The plotter sends a copy of the plotting data to a terminal connected to its test data port.
2	Buffer size	Norm	The plotter's internal memory has a capacity of one megabyte (one million bytes).
		Small	The plotter's internal memory has a capacity of one kilobyte (one thousand bytes).
3	No parameter	—	—
4	Clip area	Norm	The plotter uses the standard (normal) clip area.
		Ext	The plotter uses an extended clip area.
5	Smoothness	0°	An angle greater than this between the current line and the line to be plotted next will force the plotter to slow down and form a sharp corner.
		5°	
		10°	
		15°	
		20°	An angle less than this will allow the plotter to maintain high speed and form a rounded corner.
		∞	The angle varies with the length of the line next to be plotted.

9: CONFIGURING YOUR PLOTTER

Table 8.1 Plotter Parameters (continued)

Key Number	Parameter	Possible Value	Description
6	Buzzer	On	The buzzer sounds as usual.
		Off	The buzzer does not sound (except during the lamp diagnostic test).
7	Emulation	Off	The MUTOH F-920 plotter performs in its native mode.
		Fr	The plotter emulates a MUTOH F-9000/F-6000 plotter.
		759a	The plotter emulates a Hewlett-Packard 759a-series plotter.
		759b	The plotter emulates a Hewlett-Packard 759b-series plotter.
8	Minimum plotting unit	25μ	The minimum plotting unit is 0.025 millimeters.
		50μ	The minimum plotting unit is 0.050 millimeters.
9	Sorting	EDV	The plotter sorts data for efficient pen/pencil selection and movement.
		Pen	The plotter sorts data for efficient pen/pencil selection only.
		Off	The plotter plots data in the order it is received.

14: DIAGNOSTICS

RS-232C Port Test

When you test the RS-232C port, you connect the plotter's test data port to its RS-232C port with a cable. The internal wiring of the cable is shown in Figure 14.3.



Figure 14.3 Cable for Test of RS-232C Port

This cable brings the data back into the plotter's RS-232C port. The RS-232C parameters are in effect as you have set them up. The data is plotted as if it had been sent from a computer.

Caution!

Performing this test erases plotting data that is stored in the plotter's internal memory.

To perform the RS-232C port test, follow these steps:

- Step 1. Connect the cable shown in Figure 14.3 from the plotter's test data port to the RS-232C port.
- Step 2. Place the plotter in standby or local mode.

14: DIAGNOSTICS

RS-232C Port Test (continued)

Step 3. Press the Enter key to place the key pad in shift mode.

Step 4. Press the Test key.

The Optional Function menu appears:

Opt Functions =
1 Set 2 Def 3 Off
4 Pen 5 Err 6 Var

Step 5. Press the Enter key.

The Test menu appears:

Test No. =
1 Key 2 LED 3 LCD
4 Dem 5 Disp 6 Test
(Menu appearing on standard model)

Test No. =
1 Key 2 LED 3 LCD
4 Dem 5 Disp 6 Test
(Menu appearing on roll mode model)

Step 6. Press the 4 key to select the denomination test.

The Plotting Test menu appears:

Plotting Test =
1 Long Back 2 Not Plotting
(Menu appearing on standard model)

Plotting Test =
1 Long Back 2 Not Plotting
3 Connecting
(Menu appearing on roll mode model)

Table 15.1 Recoverable Error Messages (continued)

Error Message	Problem	Solution
COMMUNI MISMATCH	The plotter baud rate, parity, handshake, and mode are not the same for the computer and the plotter. This error only occurs with an RS-232C interface.	1. Check the interface parameters for the plotter and computer.
	If the power has been turned off while the plotter is backing up interface parameters, the parameters will be initialized to the backup values when the power is turned on again.	2. Reset the interface parameters. (See "Chapter 8, Connecting Your Plotter.")
	The interface cable may not be connected properly.	3. Check the interface cable. Make sure it is securely fastened to both the plotter and computer.
	There may be a serial port problem.	4. Test the RS-232C port with the loop-back plotting test. (See Chapter 14, "Diagnostics.")

Table 15.1 Recoverable Error Messages (continued)

Error Message	Problem	Solution
ERR ONL FRAM	The parameters set up for map box and hand size are not the same for the computer and plotter. This error only occurs with an RS-232C interface.	1. Check the interface parameters for the plotter and computer.
	If the power has been turned off while the plotter is backing up interface parameters, the parameters will be initialized to the backup values when the power is turned on again.	2. Reset the interface parameters. (See "Chapter 8, Connecting Your Plotter.")
	The interface cable may not be connected properly.	3. Check the interface cable. Make sure it is securely fastened to both the plotter and computer.
	There may be a serial port problem.	4. Test the RS-232C port with the loop-back plotting test. (See Chapter 14, "Diagnostics.")

17: SUPPLIES AND ACCESSORIES

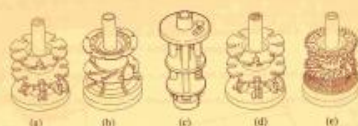


Figure 17.3 (a) Ink Pen Stocker (b) Auto Pencil Stocker (c) Automatic Lead Loader (d) Liquid Roller-Ball Pen Stocker (e) Pencil Stocker

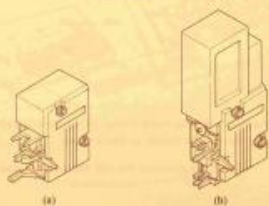


Figure 17.4 (a) Pen Head (b) Pencil Head

17: SUPPLIES AND ACCESSORIES



Figure 17.5 (a) Power Cable - 100 Volt (b) Power Cable - 200 Volt



Figure 17.6 (a) Pencil Cartridge (b) Pencil Leads (c) Cleaning Wires

Pour nous citer :

Base de la Mission nationale de sauvegarde et de valorisation du patrimoine scientifique et technique contemporain, PATSTEC, Manuel de référence : Professional Plotter F-920 (fabricant non renseigné), <https://www.patstec.fr/ressources/objets/detail?id=27685>, consulté le 2026-07-26