

# **FLOPPY MEMORY CONTROLLER**

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*Used with the*

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***PROFIT (BEAT) SERIES***

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# FEATURES / PRECAUTIONS

## **FLOPPY MEMORY CONTROLLER (FMC)**

- Reads 1 inch paper tape and 3 1/2 inch floppy disk\*
- Stores 209,000 stitches or 36 patterns per disk
- Allows you to combine patterns from paper tapes onto disk
- Allows you to fast-forward through unwanted parts of a pattern
- Allows you to find the number of stitches in a pattern without sewing the entire pattern
- Allows you to download patterns from the Profit Series to a disk in the FMC

### ***Precautions***

Always turn on the Profit **first**, then turn on the FMC.

Never turn the FMC on or off with a disk in the disk drive. *Serious damage will result to the FMC and to the disk.*

Never insert or remove a disk from the disk drive when the red BUSY light is lit.

*\* Always use double sided / double density 3 1/2 inch disks (diskettes).*

# OPERATION

## SEWING A PATTERN FROM A DISK

A disk can store 36 patterns, or a total of 209,000 stitches. The largest single pattern that can be stored is 64,000 stitches. Patterns that are no longer needed can be erased to create more storage space.

All FMC activities depend on the disk drive. A pattern must be put on the disk first — then it can be used by the machine.

1. Put the disk with the pattern you want to sew in the disk drive.
2. The BUSY light will come on briefly. Wait for this light to go off.
3. Select the desired pattern number with the PATTERN NO. keys. These keys can select any number from 00 to 99, although only 36 patterns can be stored. Numbers that flash indicate a vacant pattern number. Numbers that are solid indicate a stored pattern and its stitch count.
4. Select "B" with the CODE key.
5. Select "OUT" with the JOB key.
6. Press ENT. The selected pattern will be transferred from the disk to the buffer memory of the FMC and then be ready for the Profit.
7. Set up the Profit as follows:

NEW	PORT	CODE
LINE	PTR1	B

8. You can begin to sew when you see five flashing zeros on the FMC display.  
Press DRIVE then START on the Profit console to begin sewing.

# OPERATION

## SEWING A PATTERN FROM A PAPER TAPE

During this procedure, the pattern will be transferred from the paper tape to a disk. When this transfer is complete, the pattern will be stored on the disk and in the buffer of the FMC, ready to be used by the Profit.

It is not possible to run the Profit directly from a paper tape without first storing it on the disk.

1. The disk that is to receive the data should be in the disk drive.
2. Using the two PATTERN NO. keys, select a flashing (vacant) pattern number.
3. Carefully slide the paper tape into the tape reader with the white lever in LOAD position. When the tape is aligned in the track, move the lever to RUN position.

The reel of tape should be free to unwind as it goes through the reader. Provide a box to catch the tape as it falls to the floor to keep the tape clean.

4. Select "IN" with the JOB key.
5. Select "B" (Barudan code) with the CODE key\*.
6. Press ENT once.
7. Your tape will begin reading onto the disk. It will stop automatically.
8. When it stops, you will hear a series of short beeps, then a long beep. The total stitch count will be flashing, and the FMC will automatically switch to OUT.
9. Set up the Profit as follows:

NEW	PORT	CODE
LINE	PTR1	B

10. Press DRIVE then START on the Profit console to begin sewing.

\* If the paper tape you are using has been punched in a code other than Barudan (B code), select that code with the CODE key.

# OPERATION

## **COMBINING TWO TAPES ONTO ONE PATTERN NUMBER**

More than one paper tape can be combined (transferred) onto the same pattern number on a disk.

1. On the FMC, select a vacant (flashing) pattern number with the PATTERN NO. keys.
2. Select "IN" with the JOB key.
3. Select "B" with the CODE key.
4. Press and hold CTL, then press JOB. The FMC will begin to beep slowly.
5. Load the first paper tape into the FMC tape reader. Be sure the white lever is in the RUN position on the reader.
6. Press ENT once. The paper tape will begin to read. It will stop automatically.
7. When it stops, you will hear continuous beeping.
8. Rewind the first tape. Load the second tape into the tape reader, then press ENT once. It will begin to read the second tape, and will stop automatically.
9. When it stops, you will again hear continuous beeping.
10. Press and hold CTL, then press JOB. The BUSY light will be lit while these patterns are being stored on the disk.
11. When the BUSY light goes out, the total stitch count will be flashing. Press and hold CTL, then press ENT. Total stitch count will stop flashing. The two tapes have now been saved onto the pattern number that you selected in Step #1.

# OPERATION

## **COMBINING A TAPE WITH LETTERING FROM THE MONOGRAM KEYBOARD**

A data cable must be connected from DATA OUTPUT on the Profit to DATA INPUT on the FMC for this operation to take place.

It is assumed that lettering created at the Monogram Keyboard has already been stored in a Profit memory location.

1. On the FMC, select a vacant (flashing) pattern number with the PATTERN NO. keys.
2. Select "IN" with the JOB key.
3. Select "B" with the CODE key.
4. Press and hold CTL, then press JOB. The FMC will begin to beep slowly.
5. Load the paper tape into the FMC tape reader. Be sure that the white lever is in the RUN position on the reader.
6. Press ENT once. The tape will begin to read, and will stop automatically.
7. When it stops, press the EXT-INPUT key so that it is lit (red).
8. At the Profit console, use the MODE key to select OUT then use F1 to choose the pattern to be downloaded. Then press DRIVE.
9. On the FMC, press ENT once. Downloading will begin. The BUSY light will be lit.
10. When the BUSY light goes out, press and hold CTL, then press JOB. The BUSY light will light up again.
11. Downloading is complete when there is a long, steady beep and the total stitch count is flashing on the FMC.

Press and hold CTL, then press ENT. Total stitch count will stop flashing. Press EXT-INPUT so that it is no longer lit.

Your tape pattern and monogram information have now been combined onto the pattern number that you selected in Step #1.

## **DOWNLOADING A PATTERN FROM THE PROFIT TO THE FMC**

A data cable must be connected from DATA OUTPUT on the Profit to DATA INPUT on the FMC for this operation to take place.

It is assumed that a pattern has already been stored in a Profit memory location.

1. On the FMC, select a vacant (flashing) pattern number with the PATTERN NO. keys.
2. Select "IN" with the JOB key.
3. Press and hold CTL, then press JOB. The FMC will begin to beep slowly.
4. Press the EXT-INPUT key so that it is lit (red).
5. At the Profit console, use the MODE key to select OUT then use F1 to choose the pattern to be downloaded. Then press DRIVE.
6. On the FMC, press ENT once. Downloading (transfer) will begin. The BUSY light will be lit.
7. When the BUSY light goes out, press and hold CTL, then press JOB. The BUSY light will light up again.
8. Downloading is complete when there is a long, steady beep and the total stitch count is flashing on the FMC.

Press and hold CTL, then press ENT. Total stitch count will stop flashing. Press EXT-INPUT so that it is no longer lit.

Your pattern has now been downloaded onto the pattern number that you selected in step #1.

## FLOAT

This procedure allows you to "float"\* through a pattern on a disk until you reach a point where you need to correct a missed stitch or group of missed stitches.

1. Insert the disk into the disk drive. (FMC power should already be on.)
2. Select the pattern number using the PATTERN NO. keys.
3. Press ENT once. Five zeros will flash on the display.
4. Press and hold CTL, then press SELECT repeatedly until the desired stitch count is reached.
5. Set up the Profit as follows:

NEW	PORT	CODE
LINE	PTR1	B

6. Press DRIVE then START to begin sewing.

\* Move through a pattern without actually sewing.

# *SPECIAL DISK OPERATIONS*

## **FORMATTING A DISK**

A new (blank) disk must be formatted before it can be used. An old disk can be reformatted as long as its patterns are no longer needed.

*The formatting process completely erases a disk.*

1. Before you put the disk to be formatted in the drive, select "FORMAT" with the JOB key.
2. Put the disk in the drive.
3. Press ENT once.
4. The formatting process now begins. The right end of the display will count from '80' backwards to '0'.
5. You will hear a short and a long beep when the formatting is complete. Also, pattern number 01 will flash.

If a problem was found during the formatting process, an error code will be displayed. If this happens, repeat the entire procedure. If the error code is seen again, the disk may be faulty. Try another disk.

# *SPECIAL DISK OPERATIONS*

## ***ERASING A PATTERN FROM A DISK***

1. Put the disk that has the pattern you want to erase in the drive.
2. Using the PATTERN NO. keys, select the pattern to be erased.
3. Press and hold CTL, then press the Memory-Clear key. A slow beeping will indicate that erasing is taking place. The BUSY light will be lit.
4. A long beep signals that erasing is complete. Pattern Number 01 will be displayed automatically.

## ***ERASING AN ENTIRE DISK***

An entire disk can be erased by simply following the procedures for "Formatting a New Disk". In the formatting process, all information on the disk is erased or cleared.

# *SPECIAL DISK OPERATIONS*

## ***COPYING A PATTERN FROM ONE DISK TO ANOTHER***

This procedure will copy a pattern from the disk called the "first disk" onto the disk called the "second disk".  
When complete, the pattern will be found on both disks.

1. With no disk in the drive, select "COPY" with the JOB key.
2. Put the first disk in the drive.
3. Select the pattern number to be copied using the PATTERN NO. keys.
4. Press ENT once. The pattern will be copied into the FMC buffer.  
You will hear continuous beeping.
5. When BUSY light goes off, remove the first disk and put in the second disk.
6. Select a vacant (flashing) pattern number using the PATTERN NO. keys.
7. Press ENT once.
8. When the BUSY light goes off and you hear a long beep, copying is complete.

The pattern has now been copied from the first to the second disk.

## ***DETERMINING THE VERSION OF SOFTWARE IN YOUR MACHINE***

The software (program) that controls the internal operation of your machine is stored in microchips (ROMs or EPROMs) inside the machine itself. This software is given a number at the factory.

When you first turn on the FMC, the five digits that appear briefly on the right side of the display indicate the version of software that is present. For example, "61213" may be seen for a second or two, then disappear.

You may be asked for this number by a representative from Customer Service when you call for assistance. It is always seen when you first turn on the FMC.

## ***RESETTING YOUR MACHINE***

At times it may be necessary to interrupt an operation currently in progress on your machine, or clear (cancel) an Error Code from the display.

To do this, press and hold CTL, then press ENT. This will halt the current activity and return you to a beginning point.

It is strongly recommended that you do not turn the FMC off and back on again to reset the machine. Under certain conditions, this may damage your FMC and the floppy disk that contains your patterns.

## FMC ERROR CODES

When a problem occurs, a five-digit error code will be displayed in the rightmost five digits on the FMC.

In addition, you will hear a series of short beeps and the red ERROR light will flash.

**To clear this error code, press and hold CTL, then press ENT.**

<u>Error Code</u>	<u>Type of Error</u>	<u>Description / Cause</u>
10000	Disk Read Error	---
10001	Disk Write Error	Disk is write-protected, or memory capacity of disk is exceeded during JOB IN.
20000	Operator Error	---
20001	P-Copy Error	Attempted to copy one pattern on top of another.
30000	PTR Error	Paper Tape Reader problem.
30001	PTR Read Error	Wrong selection of tape code (B,EL,etc.), or the tape being read has distorted holes or misaligned columns of holes.
30002	Tapeout Error	RUN/LOAD lever is set to LOAD, or when connected machine is set for Tape Out.
40000	FDC Command Error	Floppy Disk Controller problem.
40001	FDC Open Error	---
40002	FDC Make Error	---

## FMC ERROR CODES

(continued)

<u>Error Code</u>	<u>Type of Error</u>	<u>Description / Cause</u>
40003	FDC Write Error	---
40004 Error	FDC RAM Write	A write-protected disk is formatted.
40005	FDC RAM Read Error	---
40006	FDC Read Error	Disk has been formatted on another system and cannot be read.
40009	---	Disk not formatted, or disk removed while being read, or capacity of disk exceeded during JOB COPY.
50000	Buffer Full Error	Memory capacity of IC memory buffer is exceeded during JOB IN.
50001	Pattern Over Error	Attempted to load more than 36 patterns during JOB IN or JOB COPY.