

# MAD FORMAT

MAD FORMAT BY MAD PRODUCTIONS...

THE FASTEST FORMAT PRG EVER MADE FOR THE LYSAL IMPROVED BY JUKING APPROXIM (INIT/RESET YOUR DRIVE AFTER GOING THIS)

ENTER NAME: 12345678901234567890  
 ENTER ID: 1234567890

FORMATTING DISK, PLEASE WAIT...

Kommentar am: 20.04.85

1992 SYS2061 falsch!  
 SYS \$0810!

READY.

```

0800 LDX #A9 STA #01 LDX #A9 STA #01
080F LDX #A9 STA #01
0812 37 LDA #127
0813 B5 01 STA #01
0815 20 B1 FF JSR $FFB1 = $FFB, Video-Reset
0818 A9 07 LDA #07 gelb
081A 8D 86 02 STA #0286 als Zeichenfarbe
081D 20 44 E5 JSR $E544 Screen löschen
0820 78
0821 20 8A FF JSR $FF8A Hardware und 10-Vektoren setzen
0824 A9 90 LDA #90
0826 8D 19 03 STA #0319
0829 A9 00 LDA #00
082B 8D 18 03 STA #0318
082E 58
082F A9 00 LDA #00
0831 8D 20 D0 STA #D020
0834 8D 21 D0 STA #D021
0837 A2 00 LDX #00
0839 BD 5B 0F LDA #0F5B, X
083C 9D 00 04 STA #0400, X
083F E8 INX
0840 E0 C8 CPX #C8
0842 D0 F5 BNE #0839
0844 18 CLC
0845 A2 07 LDX #07 Zeile 7
0847 A0 00 LDY #00 Spalte 0
0849 20 0A E5 JSR $E50A Cursor setzen
084B A2 00 LDX #00
084E 18 CLC
0851 F0 07 BEQ #085A
0853 20 E5 JSR $E50A sonst ausgeben
0856 E8 INX
0857 4C 4E 08 JMP #084E ← loop
085A 4C 5D 08 JMP #085D
085D A2 10 LDX #10
085F A9 20 LDA #20
0861 9D 00 02 STA #0200, X
0864 CA DEX
0865 D0 F8 BNE #085F
0867 20 AB 08 JSR #08AB INPUT
086A A2 00 LDX #00
086C 8D 00 02 LDA #0200, X Disknamen
086F 9D 89 08 STA #0E89, X unkopieren
0872 E8 INX
0873 E0 10 CPX #10
0875 D0 F5 BNE #086C
0877 A2 00 LDX #00
    
```

```

0879 8D 0B 08 LDA #0B0B, X Zeichen holen
087C 8D 0B 08 LDA #0B0B, X Zeichen holen
087E 20 D2 FF JSR $FFD2 drucken
0881 E8 INX
0882 4C 07 08 JMP #0879
0885 A2 10 LDX #10
0887 A9 20 LDA #20
0889 9D 00 02 STA #0200, X
088C CA DEX
088D 10 E8 BPL #0887
088F 20 AB 08 JSR #08AB INPUT
0892 A2 05 LDX #05
0894 8D 00 02 LDA #0200, X
0897 9D 9B 0E STA #0E9B, X
089A CA DEX
089B 10 F7 BPL #0894
089D 20 92 08 JSR #0892 formatieren
08A0 A9 01 LDA #01 nächstes Mal nicht
08A2 8D FE 0B STA #0BFE mehr warten
08A5 4C A4 0E JMP #0EA4 woanders gehts weiter INPUT
08AB 20 85 05 JSR #08A5 INPUT
08AB A2 00 LDX #00
08AD 8D 00 02 LDA #0200, X Zeichen holen
08B0 C9 00 ENP #00 Ende-Markierung?
08B2 F0 04 BEQ #08B8 ja
08B4 E8 INX
08B5 4C AD 08 JMP #08AD sonst weiter
08B8 A9 20 LDA #20 Markierung
08BA 9D 00 02 STA #0200, X mit SPACE
08BD 60 RTS überschreiben
    
```

```

08BE 45 4E 54 45 52 20 4E 41 ENTER NA
08C6 4D 45 3A 20 00 45 4E 54 ME: @ENT
08CE 45 52 20 49 44 3A 20 00 ER ID: @
    
```

```

08D6 JSR von $0824 JSR #08EF LISTEN Floppy
08D9 A2 02 LDX #02 3 Bytes
08DB B9 E6 08 LDA #08E6, Y Byte holen
08DE 20 AB FF JSR $FFAB ausgeben
08E1 C8 DEX
08E2 CA DEX
08E3 10 F6 BPL #08DB LOOP
08E5 60 RTS
    
```

```

08E6 4D 2D 57 4D 3D 45 4D 2D M-WM-EM-
08EE 52 A9 00 00 00 00 00 00
    
```

```

08EF JSR von $0806 LDA #00
08F1 B5 90 STA #90 Status löschen
    
```

# MAD FORMAT

```

08F3 A5 BA LDA #BA aktuelles Gerät
08F5 20 B1 FF JSR $FFB1 LISTEN
08F8 A5 90 LDA #90 Status
08FA D0 0A BNE #0906 Fehler
08FC A9 6F LDA #6F Sekundäradr. $F
08FE 20 93 FF JSR $FF93 setzen
0901 A5 90 LDA #90 Fehler?
0903 D0 01 BNE #0906 ja
0905 60 RTS sonst zurück
0908 4C 5A 09 JMP $095A
0909 A9 00 LDA #00
090B 85 90 STA #90
090D A5 BA LDA #BA
090F 20 B4 FF JSR $FFB4
0912 A9 6F LDA #6F
0914 20 96 FF JSR $FF96
0917 A5 90 LDA #90
0919 D0 EB BNE #0906
091B 60 RTS
091C 20 09 09 JSR $0909
091F 20 A5 FF JSR $FFA5
0922 C9 30 CMP #30
0924 D0 0A BNE #0920
0926 20 A5 FF JSR $FFA5
0928 C9 0E CMP #0E
092B D0 F9 BNE #0921
092D 4C AB FF JMP $FFAB
0930 EA NOP
0931 20 FF 09 JSR $09FF

```

nicht benutzt

```

0934 0D 0D 12 9E 44 49 53 4B MMR+DISK
093B 20 45 52 52 4F 52 92 3A ERROR
0944 20 05 00 20 D2 FF 20 A5 ED
0947 20 D2 FF JSR $FFD2
094A 20 A5 FF JSR $FFA5
094D C9 0E CMP #0E
094F D0 F6 BNE #0947
0951 20 D2 FF JSR $FFD2
0954 20 AB FF JSR $FFAB
0957 4C 82 09 JMP $0982
095A 20 FF 09 JSR $09FF

```

```

095D 0D 0D 01 04 20 9E 2D 2D MMAD
0965 44 45 56 49 43 45 20 4E DEVICE N
096D 4E 54 20 50 52 45 53 45 DT PRESE
0975 4E 54 20 45 52 52 4F 52 NT ERROR
097D 3F 2D 2D 00 00

```

```

0982 20 FF 09 JSR $09FF
0984 0D 0D 01 06 20 9E 50 MMQAF
098C 52 45 53 53 20 41 4E 59 RESS ANY
0994 20 4B 45 59 20 54 4F 20 KEY TO
099C 53 45 45 20 4D 45 4E 55 SEE MENU
09A4 2E 05 00 20 DA EA

```

4xSPC

drucken

6xSPC

PRESS ANY...  
drucken

```

09A7 20 B0 09 JSR $09B0 auf Taste warten
09AA 20 DA 09 JSR $09DA Cursor weg
09AD 4C 10 08 JMP $0910 nochmal von vorn auf Taste
09B0 von $09A7 STX #2 Reg. retten
09B2 B4 $08F5 $0F14 STY #2B warten
09B4 A9 6F LDA #6F
09B6 8D 11 D0 STA #D011 in VIC-Reg.
09B9 A9 01 LDA #01
09BB 8D 0E DC STA #DC0E
09BE 58 CLI
09BF A9 01 LDA #01 Farbe unter dem
09C1 8D 87 02 STA #0287 Cursor
09C4 A9 00 LDA #00
09C6 85 CC STA #CC Cursor an
09C8 20 E4 FF JSR $FFE4 Taste holen
09CB F0 FB BEQ #09CB keine Taste
09CD 48 PHA Taste merken
09CE A9 00 LDA #00 Quote-Modus
09D0 85 D4 STA #D4 aus
09D2 85 DB STA #DB Inset aus
09D4 A6 27 LDX #2 Reg. holen
09D6 A4 2B LDY #2B
09D8 68 PLA Taste holen
09D9 40 RTS Cursor
09DA JSR von $09AA PHA Akku merken
09DB JMP von $09FC LDA #01 Cursor löschen
09DD JSR von $09A7 STA #CC aus
09DF A9 00 LDA #00
09E1 85 CD STA #CD } Blinken
09E3 85 CF STA #CF } zurücksetzen
09E5 A9 20 LDA #20 } Cursor
09E7 20 D2 FF JSR $FFD2 } löschen
09EA A9 9D LDA #9D
09EC 20 D2 FF JSR $FFD2
09EF 68 PLA Akku holen
09F0 60 RTS
09F1 JSR von $09C5 LDA #00 Tastatur puffern
09F3 85 D6 STA #D6 auf FCR warten
09F5 20 B0 09 JSR $09B0 Tastatur puffern löschen
09F8 C9 0D CMP #0D =CR?
09FA D0 F9 BNE #09F5 auf Taste warten
09FC 4C DA 09 JMP $09DA =CR?
09FF JSR von $085A PLA
0A00 85 29 STA #29 Adresse vom
0A02 68 PLA Stack holen
0A03 85 2A STA #2A
0A05 E6 29 INC #29
0A07 D0 02 BNE #0A0B } erhöhen
0A09 E6 2A INC #2A
0A0B A0 00 LDY #00
0A0D B1 29 LDA (#29),Y Zeichen holen
0A0F F0 1F BEQ #0A30 Null
0A11 C9 01 CMP #01 Code für wdh.?
0A13 F0 06 BEQ #0A1B ja
0A15 20 D2 FF JSR $FFD2 ausgeben
0A18 4C 05 0A JMP $0A05 Loop
0A1B E6 29 INC #29 } erhöhen
0A1D D0 02 BNE #0A21
0A1F E6 2A INC #2A
0A21 B1 29 LDA (#29),Y Byte holen

```

PRIMM

# MAD FORMAT

|                             |               |   |               |            |
|-----------------------------|---------------|---|---------------|------------|
| 0A23 AA                     | TAX           | als Zähler                                    | 0A9C 4A       | LSR        |
| 0A24 A0 01                  | LDY #01       |   | 0A9D 4A       | LSR        |
| 0A26 B1 29                  | LDA (#29)     | noch ein Byte holen                           | 0A9E 4A       | LSR        |
| 0A28 20 D2 FF               | JSR \$FFD2    | ausgeben                                      | 0A9F 4A       | LSR        |
| 0A2B CA                     | DEX           |   | 0AA0 FB       | SED        |
| 0A2C D0 FA                  | BNE \$0A2B    | LOOP  | 0AA1 4A       | TAX        |
| 0A2E F0 D5                  | BEQ \$0A05    |   | 0AA2 F0 08    | BEQ \$0AAC |
| 0A30 A5 2A                  | LDA \$2A      | Rücksprung-<br>adresse                        | 0AA4 18       | BCC        |
| 0A32 48                     | PHA           | und zurücke                                   | 0AA5 A9 00    | LDA #00    |
| 0A33 A5 29                  | LDA \$29      |   | 0AA7 69 16    | ADC #16    |
| 0A35 48                     | PHA           |   | 0AA9 CA       | DEX        |
| 0A36 60                     | RTS           |   | 0AAA D0 FB    | BNE \$0AA7 |
| 0A37 BD FF 32               | STA \$32FF    |   | 0AAC 85 2D    | STA \$2D   |
| 0A3A A0 FF                  | LDY #FF       |   | 0AAE D8       | CLD        |
| 0A3C D0 02                  | BNE \$0A40    |   | 0AAF 68       | PLA        |
| 0A3E <del>0A</del> 00 00 00 | LDY #00       | Block ab \$200<br>senden                      | 0AB0 29 0E    | AND #0F    |
| 0A40 2C 00 DD               | BIT \$DD00    |   | 0AB2 C9 0A    | CMF #0A    |
| 0A43 10 FB                  | BPL \$0A40    |   | 0AB4 90 02    | BCC \$0ABB |
| 0A45 B9 00 32               | LDA \$3200    | Byte holen                                    | 0AB6 69 05    | ADC #05    |
| 0A48 4A                     | LSR           |   | 0ABB F9       | SED        |
| 0A49 4A                     | LSR           | High-Nybble                                   | 0AB9 4B 2D    | ODD \$2D   |
| 0A4A 4A                     | LSR           | isolieren                                     | 0ABD DB       | CLD        |
| 0A4C 4A                     | LSR           |   | 0ABC 48       | PHA        |
| 0A4L AA                     | TAX           | nach X  | 0ABD 4A       | LSR        |
| 0A4D 18                     | CLC           |   | 0ABE 4A       | LSR        |
| 0A4E AD 12 D0               | LDA \$D012    | Rasterstrahl                                  | 0ABF 4A       | LSR        |
| 0A51 E9 30                  | SBC #30       | -#8   | 0AC0 4A       | LSR        |
| 0A53 90 06                  | BCC \$0A5B    | kleiner, dann OK                              | 0AC1 09 30    | ORA #30    |
| 0A55 29 07                  | AND #07       | "8. Zeile"?                                   | 0AC3 A0       | TAX        |
| 0A57 C9 02                  | CMF #02       | ja!   | 0AC4 68       | PLA        |
| 0A59 90 F3                  | BCC \$0A4E    |   | 0AC5 29 0F    | AND #0F    |
| 0A5B A9 07                  | LDA #07       | fertig zum Senden!                            | 0AC7 09 30    | ORA #30    |
| 0A5D BD 00 DD               | STA \$DD00    |   | 0AC9 AB       | TAY        |
| 0A60 BD BB 0A               | LDA \$0ABB, X |   | 0ACA 60       | RTS        |
| 0A63 BD 00 DD               | STA \$DD00    | kodiert<br>senden                             | 0ACB A0 1F    | LDY #FF    |
| 0A66 4A                     | LSR           |   | 0ACD 20 D8 0A | JSR \$AD8  |
| 0A67 4A                     | LSR           |   | 0AD0 AD FF 32 | LDA \$32FF |
| 0A68 29 F3                  | AND #F3       |   | 0AD3 60       | RTS        |
| 0A6A BD 00 DD               | STA \$DD00    |   | 0AD4 A0 00    | LDY #00    |
| 0A6D B9 00 32               | LDA \$3200    | Byte holen                                    | 0AD6 A2 17    | LDX #17    |
| 0A70 29 0F                  | AND #0F       | unteres Nybble                                | 0ADB 2C 00 DD | BIT \$DD00 |
| 0A71 AA                     | TAX           |   | 0AD8 10 FB    | BPL \$0AD8 |
| 0A73 BD BB 0A               | LDA \$0ABB, X | kodieren                                      | 0ADD 18       | BLC        |
| 0A76 BD 00 DD               | STA \$DD00    |   | 0ADE AD 12 D0 | LDA \$D012 |
| 0A78 4A                     | LSR           | senden  | 0AE1 E9 30    | SBC #30    |
| 0A7A 4A                     | LSR           |   | 0AE3 90 06    | BCC \$0AEB |
| 0A7C 29 F3                  | AND #F3       |   | 0AE5 29 07    | AND #07    |
| 0A7D BD 00 DD               | STA \$DD00    |   | 0AE7 C9 02    | CMF #02    |
| 0A80 A9 17                  | LDA #17       | warten  | 0AE9 20 F3    | BCC \$0ADE |
| 0A82 EA                     | NOP           |   | 0AEB A9 07    | LDA #07    |
| 0A83 EA                     | NOP           |   | 0AED BD 00 DD | STA \$DD00 |
| 0A84 BD 00 DD               | STA \$DD00    | Normalwert senden<br>schon 256 Bytes?<br>Nee! | 0AF0 48       | PHA        |
| 0A87 DB                     | INY           |   | 0AF1 68       | PLA        |
| 0A88 D0 BB                  | BNE \$0A45    |   | 0AF2 48       | PHA        |
| 0A8A 60                     | RTS           |   | 0AF3 68       | PLA        |
|                             |               |   | 0AF4 EA       | NOP        |
|                             |               |   | 0AF5 A0 00 DD | LDA \$DD00 |
|                             |               |   | 0AF8 4A       | LSR        |
|                             |               |   | 0AF9 4A       | LSR        |
|                             |               |   | 0AFA EA       | NOP        |
|                             |               |   | 0AFB 4D 00 DD | EUR \$DD00 |

|                                 |        |
|---------------------------------|--------|
| 0A8B 07 B7 27 A7 47 C7 67 E7 G1 | BI 1 1 |
| 0A93 17 97 37 B7 57 D7 77 F7 W0 | W00    |

Tabelle zur Kodierung der zu  
sendenden Bytes  
nicht benutzt

# MAD FORMAT

|                   |              |                                    |  |                              |                     |                                      |
|-------------------|--------------|------------------------------------|--|------------------------------|---------------------|--------------------------------------|
| 0AFE 4A           | LSR          |                                    |  | 0B77 2C 00 DL                | BIT #DD00           | auf Floppy warten                    |
| 0AFF 4A           | LSR          |                                    |  | 0B7A 10 FB                   | BPL #0B77           | warten                               |
| 0B00 4B           | PHA          |                                    |  | 0B7C A0 00                   | LDY #00             |                                      |
| 0B01 6B           | PLA          |                                    |  | 0B7E B7 94 00                | LDA #0C94, Y        | Byte kopieren                        |
| 0B02 4B           | PHA          |                                    |  | 0B81 99 00 32                | STA #3200, Y        |                                      |
| 0B03 6B           | PLA          |                                    |  | 0B84 C8                      | INY                 |                                      |
| 0B04 4D 00 DD     | EOR #DD00    |                                    |  | 0B85 D0 F7                   | BNE #0B7E           | LOOP                                 |
| 0B07 4A           | LSR          |                                    |  | 0B87 20 3E 0A                | JSR #0A3E           | Block senden                         |
| 0B08 4A           | LSR          |                                    |  | 0B8A EE 80 0B                | INC #0B80           | High-Byte erhöhen                    |
| 0B09 EA           | NOP          |                                    |  | 0B8D C6 26                   | DEC #26             | schon alle Blöcke                    |
| 0B0A 4D 00 DD     | EOR #DD00    |                                    |  | 0B8F D0 EB                   | BNE #0B7C           | nein                                 |
| 0B0D 8E 00 DD     | STX #DD00    |                                    |  | 0B91 60                      | RTS                 |                                      |
| 0B10 49 E9        | EOR #F9      |                                    |  | 0B92 JSR von 0B8D            | JSR #0B1A           | Floppy-Ag übertr. & weiter           |
| 0B12 99 00 32     | STA #3200, Y |                                    |  | 0B95 A9 01                   | LDA #01             | 1 Block                              |
| 0B15 CB           | INY          |                                    |  | 0B97 A2 94                   | LDX #94             | } 0C94                               |
| 0B18 60           | RTS          |                                    |  | 0B99 A0 0C                   | LDY #0C             |                                      |
| 0B19 00           | BRK          |                                    |  | 0B9B 20 6F 0B                | JSR #0B6F           | Block senden                         |
| 0B1A JSR von 0B82 | LDA #00      | Index Start                        |  | 0B9E 20 FF 09                | JSR #09FF           | "INSERT DISK" drucken                |
| 0B1C 85 29        | STA #29      | ablegen                            |  |                              |                     |                                      |
| 0B1E A9 74        | LDA #74      | Low-Byte des M-W-Ziels             |  | 0BA1 0D 11 01 05 20          | 9F 49 4E MQAE       | MIN                                  |
| 0B20 B5 2A        | STA #2A      |                                    |  | 0BA9 53 45 52 54 20 44 49 53 | SERT DIS            |                                      |
| 0B22 A0 00        | LDY #00      | "M-W"                              |  | 0BB1 4B 20 54 4F 20 42 45 20 | K TO                |                                      |
| 0B24 20 0B        | JSR #0BD6    | senden                             |  | 0BB9 46 4F 52 4B 41 54 54 45 | FORMATTE            |                                      |
| 0B27 A5 00        | LDA #00      | Low-Byte                           |  | 0BC1 44 2E 05 00             | <del>78 D. Es</del> |                                      |
| 0B29 20 0F        | JSR #FFAB    | senden                             |  |                              |                     |                                      |
| 0B2C A9 01        | LDA #01      | High-Byte                          |  | 0BC5 20 F1 09                | JSR #09F1           | auf CR warten                        |
| 0B2E 20 0F        | JSR #FFAB    | senden                             |  | 0BC8 7B                      | SEI                 |                                      |
| 0B31 A9 23        | LDA #23      | \$23 Bytes folgen                  |  | 0BC9 A9 02                   | LDA #02             | 2 Blöcke                             |
| 0B33 20 0F        | JSR #FFAB    | senden                             |  | 0BCB A2 AA                   | LDX #AA             | } ab 0CAA                            |
| 0B36 AA 29        | TAX #29      |                                    |  | 0BCD A0 0C                   | LDY #0C             |                                      |
| 0B37 A4 29        | LDY #29      |                                    |  | 0BCF 20 6F 0B                | JSR #0B6F           | übertragen                           |
| 0B39 B9 00        | LDA #00      | Y Byte holen                       |  | 0BD2 20 FF 09                | JSR #09FF           | "FORMATTING" drucken                 |
| 0B3C 20 0B        | JSR #FFAB    | senden                             |  |                              |                     |                                      |
| 0B3E CB           | INY          | weiterzählen                       |  | 0BD5 0D 91 91 11 01 04 20    | 9F M#0QAD           |                                      |
| 0B40 CA           | DEX          | \$23 Bytes...                      |  | 0BDD 46 4F 52 4D 41 54 54 49 | FORMATTI            |                                      |
| 0B41 D0 00        | BNE #0B39    | LOOP                               |  | 0BE5 4E 47 20 44 49 53 4B 2C | NG DISK.            |                                      |
| 0B43 20 0F        | JSR #FFAE    | UNLISTEN                           |  | 0BED 20 50 4C 45 41 53 45 20 | PLEASE              |                                      |
| 0B46 84 29        | STY #29      | neuen Index ablegen                |  | 0BEF 57 41 49 54 2E 2E 2E 00 | WAIT.               |                                      |
| 0B48 1B 00        | CLC          |                                    |  |                              |                     |                                      |
| 0B49 00           | TYA          |                                    |  | 0BFD A9 00                   | LDA #00             |                                      |
| 0B4A 85 2A        | ADC #2A      | zu Startadresse addieren           |  | 0BFF F0 01                   | BEQ #0C02           | warten oder nicht                    |
| 0B4C C0 46        | CPY #46      | bei \$46 angelangt?                |  | 0C01 60                      | RTS                 |                                      |
| 0B4E D0 D0        | BNE #0B20    | nein                               |  | 0C02 20 EF 0B                | JSR #0BEF           | LISTEN (warten, bis UNLISTEN) fertig |
| 0B50 A0 03        | LDY #03      | "M-E"                              |  | 0C05 20 AE FF                | JSR #FFAE           | UNLISTEN                             |
| 0B52 20 D6 0B     | JSR #0BD6    | senden                             |  | 0C08 60                      | RTS                 | Rückprung                            |
| 0B55 A9 74        | LDA #74      | Startadr. \$0174                   |  | 0C09 21 29                   | STA #29, Y          |                                      |
| 0B57 20 AB FF     | JSR #FFAB    | senden                             |  | 0C0B 8B                      | DEX                 |                                      |
| 0B5A A9 01        | LDA #01      |                                    |  | 0C0C 10 FB                   | BPL #0C09           |                                      |
| 0B5C 20 AB FF     | JSR #FFAB    |                                    |  | 0C0E A9 00                   | LDA #00             |                                      |
| 0B5F 20 AE FF     | JSR #FFAE    | UNLISTEN                           |  | 0C10 B5 26                   | STA #26             |                                      |
| 0B62 7B           | SEI          |                                    |  | 0C12 20 B0 09                | JSR #0B6F           |                                      |
| 0B63 A9 17        | LDA #17      | Normalwert                         |  | 0C15 C9 00                   | CMP #00             |                                      |
| 0B65 BD 00 DD     | STA #DD00    | Senden                             |  | 0C17 E0 2E                   | BEQ #0C47           |                                      |
| 0B68 A0 00        | LDY #00      |                                    |  | 0C19 C9 1A                   | BNP #1A             |                                      |
| 0B6A EA           | NOP          |                                    |  | 0C1B D0 13                   | BNE #0C30           |                                      |
| 0B6B 8B           | DEY          | 1793 Zyklen warten                 |  | 0C1D A4 26                   | LDY #26             |                                      |
| 0B6C D0 FC        | BNE #0B6A    |                                    |  | 0C1F E0 F1                   | BEQ #0C12           |                                      |
| 0B6E 60           | RTS          |                                    |  |                              |                     |                                      |
| 0B6F JSR von 0B85 | STA #26      | Block senden                       |  |                              |                     |                                      |
| 0B71 8E 7F 0B     | STX #0B7F    | Blockzahl merken                   |  |                              |                     |                                      |
| 0B74 8C 80 0B     | STY #0B80    | Quelle ablegen, Selbstmodifikation |  |                              |                     |                                      |

nicht benutzt

Floppy-Ag übertragen und starten

Programm übertragen

5xSPC

4xSPC

nicht benutzt

# MAD FORMAT

```

0021 A9 14 LDA #14
0023 20 D2 FF JSR $FFD2
0026 C6 26 DEC #26
0028 A4 26 LDY #26
002A A9 A0 LDA #A0
002C 91 29 STA ($29),Y
002E D0 E2 BNE #0C12
0030 C9 20 CMP #00
0032 90 DE BEQ #0C12
0034 C9 80 CMP #80
0036 B0 DA MCS #0C12
0038 A4 26 LDY #26
003A C4 2F CPY #2F
003C F0 DA BEQ #0C12
003E 91 29 STA ($29),Y
0040 20 D2 FF JSR $FFD2
0043 E6 26 INC #26
0045 D0 DB BNE #0C12
0047 A9 20 LDA #20
0049 20 D2 FF JSR $FFD2
004C 4C DA 09 JMP $09DA
004F 78 SEI
0051 A0 02 LDY #02
0053 8C 00 18 STY $1800
0055 C8 INY
0056 D0 FD BNE #0C55
0058 A0 00 LDY #00
005A A9 00 LDA #00
005C 8D 00 18 STA $1800
005F A9 04 LDA #04
0061 2C 00 18 BIT $1800
0064 D0 FB BNE #0C61
0066 B5 BF STA #BF
0068 AD 00 18 LDA $1800
006B 0A ASL
006C EA NOP
006D EA NOP
006E 0D 00 18 ORA $1800
0071 0A ASL
0072 0A ASL
0073 0A ASL
0074 0A ASL
0077 BD C0 00 STA #00C0
0078 AD 00 18 LDA $1800
007B 0A ASL
007D EA NOP
007E EA NOP
007E 0D 00 18 ORA $1800
0081 29 0F AND #0F
0083 05 C0 ORA #C0
0085 99 00 07 STA $0200,Y
0088 B9 INY
0089 D0 D4 BNE #0C5F
008B A9 02 LDA #02
008D BD 00 18 STA $1800
0090 4B AB 01 JMP ($01AB)
0093 00 BRK
0094 A9 60 LDA #60
0096 8D B5 01 STA $01B5
0099 A9 03 LDA #03
009B 8D AC 01 STA $01AC
009E 20 7D 01 JSR $017D

```

nicht benutzt

\$0174 Floppy-Prgr

1269 Zyklen warten

auf Computer warten

High-Nybble holen

ablegen

Low-Nybble holen

verknüpfen  
Byte ablegen  
schon 256 Bytes  
nee!

\$0700

```

00CA1 EE AC 01 INC #01AC
00CA4 20 7D 01 JSR $017D
00CA7 4C 00 03 JMP $0300
00CAA A5 22 LDA #22
00CAC D0 13 BNE #0CC1
00CAE A9 01 LDA #01
00CB0 B5 06 STA $06
00CB2 A9 C0 LDA #C0
00CB4 B5 00 STA $00
00CB6 58 CLI
00CB7 A5 00 LDA #00
00CB9 30 FC BMI #0CB7
00CBB A5 20 LDA #20
00CBD C9 70 CMP #70
00CBF F0 FA BEQ #0CBB
00CC1 78 SEI
00CC2 AD 10 1C LDA #1C00
00CC5 09 10 1C ORA #0C
00CC7 8D 00 1C STA $1C00
00CCA A9 EE LDA #EE
00CCC 8D 10 1C STA $1C0C
00CCF A2 0E LDX #0E
00CD1 A9 FF LDA #FF
00CD3 8D 00 18 STA $1805
00CD6 2C 00 18 BIT $1805
00CD9 30 10 18 BMI #0CD6
00CDB CA DEX
00CDC D0 13 BNE #0CD1
00CDE A6 22 LDX #22
00CE0 E0 10 CPX #01
00CE2 F0 10 BEQ #0CEE
00CE4 CA DEX
00CE5 F0 10 BEQ #0CEE
00CE7 A9 FF LDA #FF
00CE9 20 04 04 JSR $04BB
00CEC F0 10 BEQ #0CE4
00CEE A9 01 LDA #01
00CF0 B5 22 STA #22
00CF2 A9 05 LDA #05
00CF4 B5 31 STA #31
00CF6 20 04 04 JSR $04B2
00CF9 A9 FF LDA #FF
00CFB 8D 01 05 STA $0501
00CFE A9 FF LDA #FF
00D00 B5 3A STA #3A
00D02 20 BF F7 JSR $F7BF
00D05 A0 B9 LDY #BB
00D07 B9 00 01 LDA $0100,Y
00D0A 9C 00 04 STA $0600,Y
00D0D CB INY
00D0E D0 F7 BNE #0D07
00D10 A9 07 LDA #07
00D12 B5 31 STA #31
00D14 B5 6E STA #6E
00D16 20 B2 04 JSR $04B2
00D19 A9 B4 LDA #B4
00D1B B5 B4 STA #B4
00D1D A9 F0 LDA #F0
00D1F 8D 4F 02 STA $024F
00D22 20 B7 EE JSR $EEB7
00D25 A0 1B LDY #1B

```

\$0300

Track 1 für Job 0  
Bump  
auf Bump warten

Motor & LED an

gleiches Ergebnis?

Motor & LED an

# MAD FORMAT

|               |                            |               |              |
|---------------|----------------------------|---------------|--------------|
| 0D27 B9 DF 04 | LDA #04DF, Y               | 0DAE E8       | INX          |
| 0D2A 99 90 07 | STA #0790, Y               | 0DAF E0 08    | CPX #08      |
| 0D2D 88       | DEY                        | 0DB1 D0 F5    | BNE #0DAB    |
| 0D2E 10 F7    | BPL #0D27                  | 0DB3 B4 C0    | STY #C0      |
| 0D30 A9 41    | LDA #41 "A" ablegen        | 0DB5 E6 C2    | INC #C2      |
| 0D32 8D 02 07 | STA #0702                  | 0DB7 A5 C2    | LDA #C2      |
| 0D35 A9 2A    | LDA #2A "x" ablegen (=2A!) | 0DB9 C5 C1    | CMP #C1      |
| 0D37 8D 03 07 | STA #0703                  | 0DBB D0 D8    | BNE #0D95    |
| 0D3A A9 11    | LDA #11                    | 0DBD A9 00    | LDA #00      |
| 0D3C 8D 48 07 | STA #0748                  | 0DBF 85 D0    | STA #D0      |
| 0D3F A9 FC    | LDA #FC                    | 0DC1 A9 FF    | LDA #FF      |
| 0D41 8D 49 07 | STA #0749                  | 0DC3 8D 01 1C | STA #1C01    |
| 0D44 20 E9 F5 | JSR #F5E9                  | 0DC6 A2 05    | LDX #05      |
| 0D47 85 3A    | STA #3A                    | 0DC8 50 FE    | BVC #0DC8    |
| 0D49 20 BF F7 | JSR #F7BF                  | 0DCA B8       | CLV          |
| 0D4C A5 22    | LDA #22                    | 0DCB CA       | DEX          |
| 0D4E 89 12    | CMF #12                    | 0DCC D0 FA    | BNE #0DCB    |
| 0D50 D0 09    | BNE #0D5B                  | 0DCE A2 08    | LDX #08      |
| 0D52 A9 07    | LDA #07                    | 0DD0 A4 C0    | LDY #C0      |
| 0D54 85 31    | STA #31                    | 0DD2 50 FE    | BVC #0DD2    |
| 0D56 A9 01    | LDA #01                    | 0DD4 B8       | CLV          |
| 0D58 8D 58 04 | STA #0458                  | 0DD5 B9 00 06 | LDA #0600, Y |
| 0D5B A5 22    | LDA #22                    | 0DD8 8D 01 1C | STA #1C01    |
| 0D5D 20 4B 12 | JSR #F24B                  | 0DDB CB       | INX          |
| 0D60 85 C1    | STA #C1                    | 0DDC CA       | DEX          |
| 0D62 8A       | TXA                        | 0DDD D0 F3    | BNE #0DD2    |
| 0D63 0A       | ASL                        | 0DDF 84 C0    | STY #C0      |
| 0D64 0A       | ASL                        | 0DE1 A2 0B    | LDX #0B      |
| 0D65 0A       | ASL                        | 0DE3 50 FE    | BVC #0DE3    |
| 0D66 0A       | ASL                        | 0DE5 B8       | CLV          |
| 0D67 0A       | ASL                        | 0DE6 A9 55    | LDA #55      |
| 0D68 85 C0    | STA #C0                    | 0DEB 8D 01 1C | STA #1C01    |
| 0D6A AD 00 1C | LDA #1C00                  | 0DEB CA       | DEX          |
| 0D6D 29 9F    | AND #9F                    | 0DEC D0 F5    | BNE #0DE3    |
| 0D6F 05 C0    | ORA #C0                    | 0DEE A2 05    | LDX #05      |
| 0D71 8D 01 1C | STA #1C00                  | 0DF0 50 FE    | BVC #0DF0    |
| 0D74 A9       | LDA #CE                    | 0DF2 B8       | CLV          |
| 0D76 8D 01 1C | STA #1C00                  | 0DF3 A9 FF    | LDA #FF      |
| 0D79 A9       | LDA #FF                    | 0DF5 8D 01 1C | STA #1C01    |
| 0D7B 8D 01 1C | STA #1C03                  | 0DF8 CA       | DEX          |
| 0D7E 8D 01 1C | STA #1C01                  | 0DF9 D0 F5    | BNE #0DF0    |
| 0DB1 A9       | LDA #00                    | 0DFB A0 BB    | LDY #BB      |
| 0DB3 85 C0    | STA #C0                    | 0DFD 50 FE    | BVC #0DFD    |
| 0DB5 85 D0    | STA #D0                    | 0DFF B8       | CLV          |
| 0DB7 AD 01 04 | LDA #04F1                  | 0E00 B9 00 06 | LDA #0600, Y |
| 0DBA 85 16    | STA #16                    | 0E03 8D 01 1C | STA #1C01    |
| 0DBC AD 02 04 | LDA #04F2                  | 0E06 CB       | INX          |
| 0DBF 85 17    | STA #17                    | 0E07 D0 F4    | BNE #0DFD    |
| 0D91 A5 22    | LDA #22                    | 0E09 50 FE    | BVC #0E09    |
| 0D93 85 18    | STA #18                    | 0E0B B8       | CLV          |
| 0D95 A5 12    | LDA #C2                    | 0E0C B1 30    | LDA (#30), Y |
| 0D97 85 19    | STA #19                    | 0E0E 8D 01 1C | STA #1C01    |
| 0D99 85 16    | EOR #16                    | 0E11 CB       | INX          |
| 0D9B 85 17    | EOR #17                    | 0E12 D0 F5    | BNE #0E09    |
| 0D9D 85 18    | EOR #18                    | 0E14 A2 0B    | LDX #0B      |
| 0D9F 85 1A    | STA #1A                    | 0E16 50 FE    | BVC #0E16    |
| 0DA1 20 34 F9 | JSR #F934                  | 0E18 B8       | CLV          |
| 0DA4 A2 00    | LDX #00                    | 0E19 A9 55    | LDA #55      |
| 0DA6 A4 C0    | LDY #C0                    | 0E1B 8D 01 1C | STA #1C01    |
| 0DAB B5 24    | LDA #24, X                 | 0E1E CA       | DEX          |
| 0DAA 99 00 06 | STA #0600, Y               | 0E1F D0 F5    | BNE #0E16    |
| 0DAD CB       | INX                        |               |              |

10M Speicherprogramm  
 10M Speicherprogramm

Filenamen + ID  
 umkopieren

"A" ablegen  
 "x" ablegen (=2A!)

5x \$FF  
 SYNC

8x Header

11x \$55

5x \$FF  
 SYNC

68x 00  
 left

256x Daten  
 Bytes

8x \$55



# MAD FORMAT

```

:0F52 4C A4 0E JMP #0EA4 nächste Disk
:0F55 4D 2D 45 00 03 0D 20 0D M-ESCM M
:0F5D 01 04 20 06 0F 12 0D 01 AD EDMA
:0F65 14 20 21 20 02 19 20 0D T BY M
:0F6D 01 04 20 10 12 0F 04 15 AD PRODU
:0F75 03 14 09 0F 0E 13 2E 2E CTIONS..
:0F7D 2E 20 20 20 20 20 20 63
:0F85 63 63 63 63 63 63 63
:0F8D 63 63 63 63 63 63 63
:0F95 63 63 63 63 63 63 63
:0F9D 63 63 63 63 63 63 63
:0FA5 63 20 20 20 20 20 20 14 - T
:0FAD 08 05 20 06 01 13 14 05 HE FASTE
:0FB5 13 14 20 05 12 0D 01 ST FORMA
:0FBD 14 20 10 12 07 20 05 16 T PRG EV
:0FC5 05 12 20 0D 01 04 05 20 ER MADE
:0FCB 06 0F 12 20 20 20 20 14 FOR T
:0FD5 08 05 20 31 35 34 31 20 HE 1541
:0FDD 21 20 09 0D 10 12 0F 16 ! IMPROV
:0FE5 05 04 20 02 19 20 16 09 ED BY VI
:0FED 0B 09 0E 07 20 2F 10 12 KING /PR
:0FF5 0F 1B 19 0F 0E 20 2B 09 OXYON (I
:0FFD 0E 09 14 2F 12 05 13 05 NIT/RESE
:1005 14 20 19 0F 15 12 20 04 T YOUR D
:100D 12 09 16 05 20 01 06 14 RIVE AFT
:1015 05 12 20 15 13 09 0E 07 ER USING
:101D 20 14 08 09 13 20 2E 10 TITEL

```

Titel  
text

```

:10B6 F7 00 FF 00 00 00 00 03 70r0000C
:10BE 00 00 00 00 00 00 00 02 4B 000000BK
:10C6 00 00 00 00 00 00 00 00 00 00000000
:10CE 00 00 00 05 0F 00 00 3C 0000 0000<
:10D6 03 00 00 00 00 00 60 08 0000PH-H
:10DE F0 9F 00 00 00 00 00 00 00000000
:10E6 45 FA 00 00 00 00 09 1B E 000000
:10EE 40 01 02 30 00 00 00 04 0000000D
:10F6 0C 00 27 00 4C 00 84 84 L0 0000
:10FE 84 84 84 84 84 85 85 85
:1106 85 85 85 86 86 86 86 86
:110E 86 86 00 00 00 00 00 00 00000000

```

Müll

```

:1035 00 00 0D 08 19 16 00 0D 00MHYV0M
:103D 37 08 00 00 00 00 00 00 7H0000000
:1045 37 08 03 0D 00 00 00 00 7H1 00000
:104D 00 01 08 05 0F 05 0F B 00000000
:1055 0F 00 A0 00 A0 00 00 00 00 00 00 00 I
:105D 07 00 00 00 00 00 00 00 00 00 00 00
:1065 08 00 00 00 00 00 00 04 H0000000D
:106D 00 00 00 00 00 00 19 00 00000000
:1075 00 00 4C 00 00 00 00 00 00 00 00 00
:107D 00 00 00 00 00 00 00 0D 00000000M
:1085 37 08 19 00 00 00 00 0C 7HY00000L
:108D 80 00 00 00 00 37 00 44 00000070D
:1095 08 E6 7A 00 02 E6 7B AD H00 000000+

```

Müll

```

:1096 E6 7A 00 00 INC #7A
:1098 D0 02 BNE #109C
:109A E6 7B INC #7B
:109C AD 0A 08 LDA #080A
:109F D9 0A CMP #0A
:10A1 B0 00 BNE #10A3
:10A3 D9 20 CMP #20
:10A5 F0 EF BFC #1096
:10A7 38 BFC #1096
:10A8 E9 30 SBC #30
:10AA 38 SEC
:10AB E9 D0 SBC #D0
:10AD 60 RTS

```

Charge-  
Routine

Was macht  
denn die  
da?

```

:10AE 80 4F C7 58 10 00 00 00 00 00 00 00

```

Müll