



AN-06

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OVERVIEW OF EASY PRINT MODE

The Easy Print protocol is much more than just a printing protocol. In its most basic form, Easy Print allows the user to send a command (followed by optional data) to the printer and have the printer execute that command. As part of that execution, the printer may return data to the host. In addition to printing, commands allow paper motion, configuring, and control of peripherals such as the magnetic and smart card readers.

All commands have the same format. They begin with an opening "left curly bracket" or '{' (ASCII 0x7C) and end with a closing "right curly bracket" (ASCII 0x7D). Immediately following the opening '{' is the command. A colon separates the command from any data that follows. The general form of any Easy Print command, then is: {[COMMAND]<:DATA>}

Easy print allows control of the printer down to a single dotline. At the printer's resolution of 8 dots per mm, or approximately 200 dots per inch, one dotline is approximately .005". Most dimensions in Easy Print are in dotlines. For example, a simple command that allows paper to advance or retract would be (the command AHEAD or BACK is followed by the number of dotlines to move paper): {AHEAD:200} or {BACK:50}

There are relatively few Easy Print commands. They fall into four categories

- Paper movement and Misc
- Toggle Protocols
- Printing
- Downloading Fonts and Graphics
- Configuration

COMMAND	MEANING	ORIGINAL MF2/MF3/2t/4t	RADIO READY 2t/3l/4t
PAPER MOVEMENT			
AHEAD:nnn	Advances paper by nnn dotlines	X	X
BACK:nnn	Retracts paper by nnn dotlines	X	X
S	Status (returns a fixed status string)	X	X
SWITCH PROTOCOLS			
DP	Puts printer into configured default protocol		X
LP	Puts printer into Line Printer mode	X	X
ESC	Synonym for LP		X
EMZn	Puts printer into emulation mode EMZn (where n = 1, 2, 3 etc.)		X
EMCn	Puts printer into emulation mode EMCn (where n = 1, 2, 3 etc.)		X
EMPn	Puts printer into emulation mode EMPn (where n =1, 2, 3 etc.)		X
PRINTING			
TP	Prints a self test printout (does not require any data)	X	X
PRINT:data	Prints the data received. Note that the data must be in a particular format (see AN07 for Printing With Easy Print	X	X
DOWNLOADING FONTS AND GRAPHICS			
Easy print is used for downloading fonts and graphics. It is best to use the Windows Configuration Program or the OPDI Suite for downloading, rather than attempt to write the code yourself. Other Application Notes describe this process in detail			
CONFIGURATION			
Easy Print is used to set configuration values into the printer. More detailed information is given in other Application Notes			