XS t | STD COMMAND SET

Model PIxx / FIxx-120- USB

COMMAND	RESPONSE	FUNCTION
XR<CR>	#<CR>	Reset reader (Same as hardware reset).
XD<CR>	^<CR>	Reset reader to default settings (Rewrites EE memory).
XT<CR>	^<CR>	Test watchdog timer function. *NOTE: Timer will active in approximately 2 Seconds after command is sent. The reader reset cycle takes 2 to 3 seconds.*
@	(No Response)	Resets the watchdog timer to zero. *NOTE: This command is use to signal to the reader that the USB interface is still active. Should be sent at intervals less than the time set by the SW command.*
RM<CR>	mmmmmmm<CR>	Read model number. Returns with a variable length alpha/numeric string.
RV<CR>	vv<CR>	Read code version. Returns with the 4 digit code number.
RI<CR>	iiiii<CR><LF> ... ... iiiii<CR><LF>	Read unit information. Returns with a multi-line response. *NOTE: Each line is terminated with carriage return and line feed.*
RS<CR>	SCd,SFxy,SDxy, ...SArcl,SWdd<CR>	Read formatting and reader operating setup. *NOTE: Refer to Set commands for response interpretation.*
RF<CR>	ff<CR>	Read format settings. *NOTE: Refer to Set Format command for response interpretation.*
RD<CR>	c<CR>	Read card Detects c = Card status. c = "0" No card in reader. c = "1" Card detect at entry. c = "2" Card detected at rear of reader but not at the front. (Could be special function card with punched hole.) c = "3" Card fully inserted.

COMMAND	RESPONSE	FUNCTION

T0<CR>	|1fedddd|2fexxxx<CR>
	|1feddddd<CR>
	|2feddddd<CR>
		Transmit all tracks.
		Track 1 only reader or Track 2 turned off.
		Track 2 only reader or Track 1 turned off.
		         (See SDxy command)
		f = Format found
		    "A" = ANSI/ISO Alpha format data read.
		    "B" = ANSI/ISO BCD format data read.
		    "F" = Failed data check.
		    "N" = No data found.
		
		e = Error code
		    0 = Valid read date check OK.
		    1 = No leading zeros found.
		    2 = No start sentinal found.
		    3 = Parity error detected in data.
		    4 = No end sentinal found.
		    5 = LRC check failed.
		    8 = Track not installed.
		    9 = No data.
		NOTE: T0 always sends with header info.

T1<CR>	dddddd<CR>	Transmit track 1.
T2<CR>	dddddd<CR>	Transmit track 2. *NOTE: T1 and T2 commands send the track data without error checking .*
B1<CR>	bbbbbb<CR>	Transmit track 1 raw data in ASCII binary.
B2<CR>	bbbbbb<CR>	Transmit track 2 raw data in ASCII binary. *NOTE: First bit read is the first bit sent.*
H1<CR>	hhhhhh<CR>	Transmit track 1 raw data in ASCII hexidecimal.
H2<CR>	hhhhhh<CR>	Transmit track 2 raw data in ASCII hexidecimal. *NOTE: The data is sent from the first 1's bit read, with the first 1's bit positioned in the MSB of the first hex digit.* *NOTE: The send raw hex and birnary commands alter the flags set when the card data was read, therefore the T0 command will show a read error if used following these commands.*

COMMAND	RESPONSE	FUNCTION
		NOTE: All of the Set commands ,with exception of the SLx command, save the new setting into the onboard EE memory. The last settings will be restored into the reader following a power-up reset, brownout or the watchdog timer tripping. Further, periodically the reader settings are refreshed from the EE memory. *SETTINGS MAYBE SAVED 100,000 TIMES*
SEx<CR>	^<CR>	Set transmission line termination. x="0" <CR> x="1" <CR><LF> (Default SE1)
SHx<CR>	^<CR>	Set send Header information. (Default SH0) x="0" No header x="1" Send header info preceeding card read data transmission
SWdd <CR>	^<CR>	Set Watchdog timer. (Default SW00) dd="00" to "99" (1-99 Minutes) When set to "00" the timer is turned off *NOTE: The Watchdog timer monitors the USB interface, if data is not received within the set time a hardware reset is generated. Both the reader electronics and USB interface are reset. The reset is performed by turning off the power to the reader for 2 to 3 Seconds.*
SFxy<CR>	^<CR>	Set Format x = Track 1 y = Track 2 (Default SF10) "0" = ANSI/ISO BCD "1" = ANSI/ISO ALPHA "2" = (N/A) "3" = (N/A) "4" = (N/A) "5" = BCD Multi Message "6" = ALPHA Multi Message "7" = BCD & ALPHA "8" = BCD & ALPHA Multi Message "9" = (N/A) *NOTE: Formats 7 and 8 check data for two formats.*

COMMAND	RESPONSE	FUNCTION
SCd<CR>	^<CR>	Set Card read direction. (Default SC3) d = "1" Read on withdrawal, IN to OUT. d = "2" Read on insertion, OUT to IN. d = "0" / "3" Read both directions. *NOTE: The card data must be set to match card read direction and the direction the data is encoded on card. When set for both directions, card detects are not used to determine end of card read, data is sent as soon as the card stops.*
SDxy<CR> SDx<CR>	^<CR>	Set Data direction x = Track 1 y = Track 2 (Default SD33) *(On single track readers x need only be sent)* "0" = Disable track (Do not read this track) "1" = Data forward "2" = Data reverse "3" = Both directions
SLx<CR>	^<CR>	Set Lamps (LEDs at entry) according to x. (Default SL1) *(Does not save to EE memory)* "0" = Lamps off "1" = Lamps on "2" = Flash lamps (1Sec On -Off cycle) *NOTE: The Automatic Lamp Function (see SA command) will turn the lamps On when the card is removed from the reader and Off when fully inserted. SLx lamp selections are over-ridden.*

COMMAND	RESPONSE	FUNCTION
SArcl<CR>	^<CR>	Set Auto transmissions (Default SA101) r = "0" Turn OFF automatic valid read transmissions. r = "1" Turn ON automatic valid read transmissions. c = "0" Turn OFF automatic card detect status change transmissions. c = "1" Turn ON automatic card detect status change transmissions. l = "0" Turn OFF Automatic Lamp function. l = "1" Turn ON Automatic Lamp function. *NOTE: The Automatic Lamp Function will turn the lamps (LEDs) On when the card is removed from the reader and Off when fully inserted.* *NOTE: The automatic card detect function may not report a card detect status change if it occurs during a card read, but it will report the status following the read. Read on insertion (out to in), the change of the front card detect may not be reported.*

COMMAND SET Model PIxx / FIxx-120- USB

COMMAND	RESPONSE	FUNCTION
(N/A)	!c<CR>	Auto card detect change transmission c = Card status c = "0" No card in reader. c = "1" Card detect at entry. c = "2" Card detected at rear of reader but not at the front. (Could be special function card with punched hole.) c = "3" Card fully inserted.
(N/A)	|1fedddd|2fexxxx<CR>	Automatic valid card read transmission. Two track unit with both tracks enabled. *NOTE: With two tracks enabled the header is always sent.*
	|1fedddd<CR> |2fexxxx<CR>	Track 1 only reader or Track 2 disabled. Track 2 only reader or Track 1 disabled. | = Track data header,separator ($7C) f = Format of track data e= Error code dddd = Track 1 data xxxx = Track 2 data
(N/A)	dddddd<CR> xxxxxx<CR>	Automatic valid card read transmission. Single track unit or only one track enabled with header truned off. ddddd = Track 1 data xxxxx = Track 2 data
(N/A)	^<CR>	Acknowledge that the received command is valid and contained no errors
(N/A)	! ...<CR>	Character ($21) used as a header for automatic transmissions to distinguish them from other command responses.
(N/A)	|...<CR>	Charactor ($7C) used as the header and separator for card data transmissions.

COMMAND	RESPONSE	FUNCTION
(N/A)	?<CR>	The received command is not valid
(N/A)	+<CR>	Parity error detected in received character
(N/A)	*<CR>	Communication channel has experienced a framing error or an overrun
(N/A)	%<CR>	Communications has been lost during reception of command string (The next character was not receive within 5 seconds)
(N/A)	#<CR>	System has just experienced a hardware reset
		<CR> Carriage return (Line terminator) <LF> Linefeed The response line terminator may be a carriage return (<CR>) or the combination of a carriage return and a line feed (<CR> <LF>).