















M-Ticketing Optimization Commands
Based on Hand Held Product 5xx0-series engines
(config barcodes can only be used by 5x80 devices)

	Value	Default	Explanation
<i>Symbologies settings (no linear)</i>			
 DEFAULT.	DEFAULT	n/a	Set imager to factory default
 TERMID0. OR  TERMID130.	TERMID0 / TERMID130	n/a	Set 5x80 in RS232 mode (TERMID0) or USB Com-port mode (TERMID130)
 ALLENA0.	ALLENA0	n/a	Disable all symbologies
 AZTENA1;IDMENA1;QRCENA1;PDFENA1.	AZTENA1	1	Enable Aztec code
	IDMENA1	1	Enable Data Matrix code
	QRCENA1	0	Enable QR code
	PDFENA1	1	Enable PDF417 code
<i>Illumination settings</i>			
 SCNLED0.	SCNLED0	1	Turn off red illumination LEDs (SCNLED1 to turn it on again)
 SCNAIM0.	SCNAIM0	2	Turn off green aimer LEDs (SCNAIM2 to turn it on again)

<i>Exposure settings</i>			
 EXPSTAR200, EST100, EMX600.	EXPSTAR200	90	Increase target white value to allow longer exposure time, resulting in more bright images where it is more easy to find a barcode.
	EXPEST100	60	Increase the start exposure time. This command skips the short exposure-time, that results in too dark images anyway.
	EXPEMX600	420	Increases the maximum exposure time.
<i>Decoding settings</i>			
 Decoding timers	DECTMN1500	400	Allow a longer search time (msec)
	DECTMX2500	1400	Allow a longer decoding time. This number must be higher than the DECTMN value.
 DECCTL0.	DECCTL0	3	Disable the use of automatic decoding agresivness and use manual (see DECVIG settings). Only works in Manual Trigger Mode (TRGMOD0).
 DECVIG2.	DECVIG0 = use every 4 th pixel DECVIG1 = use every 2 nd pixel DECVIG2 = use every pixel DECVIG4 = special setting	0	Always use DECVIG in combination with DECCTL0 A DECCTL value of 4 uses a special combination of vigor and timeout for the initial decode attempts. The combinations of settings were designed to achieve "snappiness" by using fast algorithms initially then more thorough (but slower) algorithms in later images. Only works in Manual Trigger Mode (TRGMOD0).
<i>Image settings (only required for test purposes when connected to a host-device (PC))</i>			
 IMGVGA0.	IMGVGA0	1	Set image to 752x480 pixels
	IMGSHPF	n/a	Transfer last image in bitmap (.bmp) format. Default is jpg

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Additional note

The above commands is a set of configurations to help you improve reading with your OEM device. You need to test which commands gives you an improvement. If a command decreases the read performance, than do not use that config-setting.

The commands DECTMN and DECTMX gives our 5x80 more time to find the barcode and decode it. It can be a difference between "No Read" and a "Good Read". In case the presented bar code is of a good quality (e.g. resolution of 2 screen-pixels per barcode element) than you don't need such a large timeout setting.

Lower DECTMN and DECTMX values increases the Time To Read.