AdvancedPunch Pro Firmware Release Document

1.1 Scope of the Delivery

Delivery of AdvancedPunch Pro (Sparta) firmware. The firmware is currently in development for pre-production of the FX version of AdvancedPunch Pro. The firmware is common with the DFA version AdvancedPunch Pro already released into production. FX printer software has limited version numbers available (16-32) so all firmware versions will be reported to the printer as version 16 until initial release. The version number is defined by the addition of the communication firmware and the main firmware both currently at version 8. To distinguish the file names for the versions they will be named with the DFA version numbers.

1.2 Software Package Contents

The package contents will be in the form of a zip file that includes 2 files in the form XM_XX_XX & XC_XX_XX.BIN. The release notes will be included as a PDF file.

1.3 Firmware Release Details

Main or Comm	Deliverable (File Name)	Delivered To	Version		Change Description	Date
			DFA	FX		
Main	XM_01.01.BIN	FX	01.01	8	i) Jam timers updated for line speed ranges instead of 1 set for all line speeds. ii) Bypass motor now starts at the same time as the align home move to ensure correct speed is reached before the paper arrives. iii) Bypass jam timers calculated of the maximum bypass sheet length and sheet line speed. iv) Punching will not occur if the chip tray is out but punch mode is selected.	10/06/2014

Main or Comm	Deliverable (File Name)	Delivered To	Version		Change Description	Date
			DFA	FX		
Comm	XC_01.01.BIN	FX	01.01	8	i) Log files can be downloaded to USB from the service menu. ii) Initialize does not occur if a sensor is already covered at power up or door close. iii) Die cycle menu added to the service menu. iv) For FX, Status 6 is now sent at a position of 25.3mm form the exit plane. v) For FX "DFA STATUS" has been renamed to "I/O SIGNALS" and CO has been removed. vi) "PAPER SIZE" (ANSI or ISO) option has been moved to the user menu. A notice to restart the printer is displayed if size is changed.	10/06/2014
Main	XM_08.01	FX	01.02	8.01	i) Version number 8.01 reported to communication controller. ii) Skew detection restarts after defined step count not S8 detection.	
Comm	XC_08.01	FX	01.02	8.01	i) Maximum bypass length default now 488mm ii) Version number reports communication version (8.01) + main version number to LCD screen (16.02) but reports the main integer to IFM (16)	
Comm	XC_08.02	FX	01.02	08.02	S6 level is set for correct version through the duration of diagnostic mode.	

Main or Comm	Deliverable (File Name)	Delivered To	Version		Change Description	Date
			DFA	FX		
Main	XM_8.02	FX	1.02	08.02	i) Sparta initialization allowance delay reduced. ii) Skew detection starts after timer based on speed. Timer is started when align home starts. iii) Align home starts 3msec later to allow for the trail edge of the sheet to move out of rollers to allow for more roller compression.	12/16/2014
Comm	XC_8.03	FX	1.02	08.03	i) S6 level is set for correct version through the duration of diagnostic mode has been removed. ii) Function tests (AC motor and alignment) now exit to service menu correctly. iii) Sparta initialization allowance delay reduced.	12/16/2014
Main	XM_8.03	FX	1.03	08.03	Eliminated E451 & E452 when die is removed.	02/19/2015
Comm	XC_8.04	FX	1.04	08.04	Communication error upload window reduced to around 10ms	02/19/2015
Main	XM_02_00	Xerox	2.00	08.03	Combined 157ppm code	02/26/2015
Comm	XC_02_00	Xerox	2.00	08.04	Combined 157ppm menu option	02/26/2015
Comm	XC_02_01	Xerox	2.01	08.05	Improved LCD contrast	03/25/2015
Main	XM_08_04	FX	2.01	08.04	Adds startup initialization delay to ensure 24v has been reached by the PSU.	06/01/2015

Main or Comm	Deliverable (File Name)	Delivered To	Version		Change Description	Date
			DFA	FX		
Main	XM_08_05	FX	2.01	08.05	Waits for board type indication from comm before power up delay is done.	06/03/2015
Comm	XC_08_06	-	2.01	08.06	Set S0-S7 low when C1-C7 are low.	06/10/2015
Main	XM_08_06	FX	2.02	08.06	i) Changes MAX DEFAULT BYPASS to 488mm ii) Resets/ enables skew sensors in 157ppm DFA mode quicker in time for next sheet. iii) Optimized T3Interrupt() so it uses less processor cycles and to ensure a solenoid output does not get corrupted if the T3Interrupt is interrupted by a higher priority interrupt. This improvement would only make improvements at page rates close to 157ppm.	03/04/2016
Comm	XC_08_07	FX	02.02	08.07*	i) Added CDM width commands C4/C5 ii) Added true DFA communications	05/24/2016
Main	XM_08_07	FX	02.02	08.07	i) Added CDM width commands C4/C5	05/24/2016
Comm	XC_08_08	FX	02.03	08.08	Corrected upload issue through USB.	07/13/2016
Main	XM_08_08	FX	02.02	08.08	Added double punch capability	06/16/2017
Comm	XC_08_09	FX	02.03	08.09	Added double punch capability	06/16/2017
Main	XM_08_09	FX	02.03	08.09	Fixed alignment not working in main 08.08	09/07/2017

* This version can only be upgraded via the USB type B female on the main control board.