SHARP

MX-M182D
MX-M232D

Technical Handy Guide

APRIL 2015

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20/04/2015

PRODUCT SPECIFICATION

SHARP

	MX-M182D	MX-M232D
General Specification		
Type:	Desktop	
Original Paper Size:	Max. A3	
Printed Paper Size:	Max. A3 – Min. A6R	
Standard Paper Capacity:	1 x 250 + Bypass (100) sheets	2 x 250 + Bypass (100) sheets
Maximum Paper Capacity:	4 x 250 + B(100) sheets	4 x 250 + B(100) sheets
Paper Weight:	56-90 g/m^2 (Bypass 56-200 g/m^2)	
Output Capacity:	250 sheets (Face down) without Job Shifting	
Warm-up Time:	25 sec (or less)	
Resolution:	600 dpi	
Memory:	STD: 128MB (Max. 256MB with Opt: **MX-EB14**)	
Duplex:	STD: 56-90 g/m^2	
Dimensions (WDH):	591 x 574 x 495 mm	591 x 574 x 595 mm
Weight:	29.6 kg	35 kg
Average Monthly Volume:	2-5K, Max 15K	
Environmental		
Power Consumption:	Max. 1.2kW	Max. 1.2kW
TEC Value (Measured):	2.01kWh	2.31kWh
Noise (Measured):	Operating: 65db (Max.): Waiting 32db	Operating: 66db (Max.): Waiting 32db
Copier Specification		
Copy Speed (Max.):	18 ppm (A4), 11 ppm (A3)	23 ppm (A4), 12 ppm (A3)
SOPM / E-Sort:	Yes / Yes	
First Copy Time:	7.2secs or less	5.9secs or less
Continuous Copy:	Max. 999	
Scan Resolution:	600 x 600 dpi	
Zoom Range:	25 – 400 % with 10 preset ratios (50 – 200% using SPF/RSPF)	
Document Feeder		
Type:	Opt: **AR-RP10** [RSPF]	
Original Capacity:	40sheets	
Max. Replacement Speed:	18 opm (Copy), 23 opm (Fax)	23 opm (Copy & Fax)
SPLC Printer	**STD**	
Print Speed (Max.):	18 ppm (A4), 9 ppm (A3)	23ppm (A4), 11 ppm (A3)
PDL (Emulation):	SPLC (GDI with JBIG compression)	
Interface:	USB 2.0	
Supported OS:	Windows® 2000, Windows® XP*, Windows® Vista*, Windows® 7* Windows® 8*, Windows® 8.1* (*32/64bit)	
Bundled Utility Software:	Sharp Status Window	

	MXM182D	MXM232D
PCL Printer		
Requirement:	Opt: **MX-NB12**	
Print Speed (Max):	18 ppm (A4), 11 ppm (A3)	23 ppm (A4), 12 ppm (A3)
PDL (Emulation):	Standard: PCL6, Opt: Postscript 3 [**MX-PK10**]	
Interface:	STD: USB2.0, 10/100BaseTX	
Protocol:	TCP/IP	
Memory:	STD: 256MB	
Supported OS:	Windows® 2000 / XP*/ Vista*, Windows® 7*, Windows® 8*, Windows® 8.1*, Windows® Server 2003* / 2008* / 2008R2 / 2012 / 2012R2 (*32/64bit). Mac OSX 10.2.8, 10.3.9, 10.4.x, 10.5.x, 10.6.x, 10.7.x, 10.8.x , 10.9.x, 10.10.x (with **MX-PK10**)	
Bundled Utility Software:	Status Monitor	
USB Scanner	**STD: Colour**	
Resolution (Max):	75/100/150/200/300/400/600 dpi (Setting range: 50 to 9,600 dpi – TWAIN)	
I/F:	USB 2.0	
Duplex:	Opt: **AR-RP10** [RSPF] required	
Destination:	TWAIN compliant application, WIA compliant application	
Bundled Utility Software:	Sharpdesk 3.3, Button Manager	
Network Scanner		
Requirement:	Opt: **MX-NB12**	
Type:	Colour	
Resolution (Max):	75/100/150/200/300/400/600 dpi	
I/F:	10/100BaseTX	
Duplex:	Opt: **AR-RP10** [RSPF] required	
Destination:	Desktop (Sharpdesk), FTP, E-Mail, USB Memory	
Bundled Utility Software:	Sharp Status Monitor, Sharpdesk 3.3 (3 licenses)	
Facsimile		
Requirement:	Opt: **MX-FX13** and **MX-XB17** or **MX-NB12**	
Communication:	Super G3 Max. 33,600 bps	
Document size:	Max. A3 – Min. A5 and Long original (max 800 mm)	
Compression:	MH, MR, MMR, JBIG	
Dial Registration:	One touch: 50 destinations / speed dial: 300 destinations	
Broadcast Transmission:	Yes Max.200 destinations	
PC Fax:	Yes (Windows OS only)	
Inbound Routing:	Supported (Email & PDF only) Opt: **MX-NB12** is required	

PRODUCT OPTIONS

SHARP

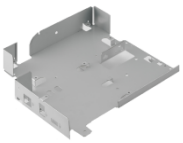
AR-VR7
Platen Cover

AR-RP10/SP10
Document Feeder (RSPF/SPF)

MX-TR10
Job Separator Tray

MX-M182D

MX-M232D



MX-XB17
Fax Mounting Kit.

MX-FX13
Fax Expansion Kit.

MX-USX1/5, MX-US10/50/A0
Sharpdesk v3.3 License Kit(s)

MX-NB12
Network Expansion Kit.

AR-D36
1 x 250 sheet Cassette

AR-D37
2 x 250 sheet Cassette

MX-PK10
Postscript 3 Expansion

Machine Options		
Model	Description	Comment
AR-D36	1 x 250 sheet paper feed unit	*Maximum of 4 x 250 sheet paper feed units can be installed (includes standard paper feed unit on main body).*
AR-D37	2 x 250 sheet paper feed unit	
AR-SP10	Document Feeder (SPF)	
AR-RP10	Document Feeder (RSPF)	
AR-VR7	Document cover	
MX-TR10	Job separator	
MX-NB12	Network Printing (PCL) & Scanning Expansion Kit	
MX-PK10	PostScript 3 kit	*MXNB12 is required*
MX-FX13	Facsimile expansion kit	*Requires MXXB17 or MXNB12*
MX-XB17	Facsimile mounting kit	*Only required when installing MXFX13 without MXNB12.*
MX-EB14	Expansion memory board (128MB)	*For E-Sort function*
MX-USX1	Sharpdesk Additional license kit (1 license)	
MX-USX5	Sharpdesk Additional license kit (5 licenses)	
MX-US10	Sharpdesk Additional license kit (10 licenses)	
MX-US50	Sharpdesk Additional license kit (50 licenses)	
MX-USA0	Sharpdesk Additional license kit (100 licenses)	

The MX-M182/232D consumable system is **SRU** – **S**ervice **R**eplaceable **U**nits. The toner unit is supplied as a cartridge that the customer can change, and the technician changes both Drum and Developer at 50000 copies/prints (Approx).

CONSUMABLES		**MXM182D, MXM232D**
Product Code	Description	Approx. Life
MX-235GT	Toner cartridge (A4 @ 6%)	16k (Normal)
MX-235GV	Developer	50k
AR-205DM	OPC Drum *(including Fixing plate only)*	50k
MX-235UH	Upper Heat roller	150k

DEVELOPER SET-UP

- [ ] **Sim 25-02** Auto Developer Adjustment.
  Toner Cartridge must be installed before execution.

PRODUCT ACTIVATION & FIRMWARE UPGRADE

- [ ] Activation of Optional Product(s).
- [ ] **Sim 22-14** Check Firmware version(s):- *Upgrade to latest version.*

INITIAL SETUP

- [ ] **Sim 21-01** Maintenance Cycle Setting:- *Set to 4 = 50K.*
- [ ] **Sim 26-01** Job Separator Tray Installation:- *Yes/No.*
- [ ] **Sim 26-06** Machine Destination.
- [ ] Set cassette size by adjusting the guides in the cassette.

  Paper Size Setting:-

  Hold the PAPER SIZE SETTING key for 5 seconds.
  Use the ORIGINAL SIZE ENTER key to scroll to the correct paper size.
  Press START key.

PRINT ENGINE IMAGE SKEW & OFF CENTRE

- [ ] **Sim 64-01** Image Writing (Skew) Adjustment:- *Select 1 (Grid Pattern).*
- [ ] **Sim 50-10** Image Off Centre Adjustment. *Check All Cassettes.*

COPY IMAGE QUALITY

- [ ] Check Image Quality (Copy Mode) – Density, Magnification, Lead Edge & Void.

  If NG, perform the following adjustments as required:-

  - [ ] Sim 46-02 Copy Density Adjust. (600dpi).
  - [ ] Sim 48-01 Magnification Adjustment (OC & SPF)
    Text Lamp = Main Scan.
    Photo Lamp = Sub Scan.
  - [ ] Sim 50-01 Lead/Rear Edge, Loss & Void Adjust.
  - [ ] Sim 50-12 OC & SPF Off Centre Adjust.
  - [ ] Sim 48-05 SPF Magnification Adjustment [AR-RP10]:-
    AE Lamp = Surface Mag.
  - [ ] Sim 53-08 SPF Scanning Position Adjust [AR-RP10]:-
    AE Lamp = Automatic Adjust.
    Text Lamp = Manual Adjust.

PERIPHERAL / OPTION CONFIGURATION

FAX OPTION – MX-FX13

- ☐ **Sim 66-02** Fax SW Setting (Destination).
- ☐ **Sim 66-10** Fax Memory Clear (For Extended Memory).

Consumable Schedule:

			50K	100K	150K	200K	250K	300K
Process	MX-235GV	Developer	✓	✓	✓	✓	✓	✓
	AR-205DM	OPC Drum	✓	✓	✓	✓	✓	✓
Fuser	MX-235UH	Upper Heat Roller Kit	x	x	✓	x	x	✓

Maintenance Schedule:

Interval Check 50K	100K	150K	
			Process Section:
☐	☐	☐	Replace Developer [MX-235DV]
X	X	☐	Replace DV Side Seal F [PSHEZ0656QSZZ]
X	X	☐	Replace DV Side Seal R [PSHEZ0657QSZZ]
☐	☐	☐	Replace OPC Drum [AR-205DM]
			Replace Drum Fixing Plate B [LFIX-0007QSZ1]
☐	☐	X	Replace Drum Cleaner Blade [UCLEZ0009QSZ2]
☐	☐	☐	Replace Drum Separator Pawl Unit [CTME-0046US51 x 4]
☐	☐	X	Main Charge Unit [CHLDZ0035US59]
☐	☐	X	Main Charge Guide Sheet R [PSHEP0135QSZ2]
X	X	☐	Process Frame Unit [CFRM-0021US74] (includes Cleaner Blade, Main Charge Unit & Drum Separation Pawls)
☐	☐	☐	Check/Clean LSU Dustproof Glass
☐	☐	☐	*Sim 25-02 Auto Developer Adjustment*
☐	☐	☐	*Sim 42-01 Clear Developer Counter*
☐	☐	☐	*Sim 24-07 Clear Drum Counter*
☐	☐	☐	*Sim 20-01 Clear Maintenance Counter*
			Transfer Section:
☐	☐	☐	Check/Clean Transfer Wire.
☐	☐	☐	Check/Clean Transfer Paper Guide.
			Paper Feed & Transport:
☐	☐	X	Check/Clean PF Roller (Cassette & Bypass Tray
X	X	☐	Replace Cassette PF Roller(s) [NROLR0170QSZZ]
X	X	☐	Replace Cassette Separation Sheet [PSHEZ0712QSZZ]
☐	☐	☐	*Sim 24-01 Clear Jam Counter (if required).*
☐	☐	☐	*Sim 24-06 Clear PF Counter when P/F Rollers are replaced*

Interval Check 50K	100K	150K	
			Fuser Section:
X	X	☐	Replace Upper Heat Roller [MX-235UH]
X	X	☐	Replace Fuser Cleaning Pad [CPLTM0255QS03]
X	X	☐	Check/Clean Pressure Roller.
☐	☐	☐	Check/Clean Fuser Separation Pawls
			SPF:
☐	☐	☐	Check/Clean/Replace PF Rollers
☐	☐	☐	Clean all RSPF/DSPF sensors.
			General:
☐	☐	☐	Clean all optics, CCD, and white reference plate.
X	X	☐	Replace VOC Ozone Filter [PFiLZ0017QSZ2]
			Image Quality:
☐	☐	☐	*Sim 46-02 Adjust Copy Exposure Density (600dpi)*

System I/F	Print / Scan Function					
	SPLC	PCL6	PS	USB Scan	Network Scan	Scan to USB Memory
MX-M182D, MX-M232D Standard Machine						
USB 2.0	✓	X	X	✓	X	X
MX-M182D, MX-M232D with optional MX-NB12						
USB 2.0	X	✓	✓*1	✓	X	✓
10/100Base	X	✓	✓*1	X	✓	

Note:

✓*1 For PS support, the MX-PK10 is required.

OPERATING SYSTEM SUPPORT

SHARP

MX-M182D MX-M232D	Windows Client			Windows Server				Apple OSX	
	8.1 32/**64**	8 32/**64**	7, Vista 32/**64**	2008 32/**64**	2008R2 **64**	2012 **64**	2012R2 **64**	10.8 10.9	10.10
SPLC [GDI]	✓ WHQL	✓ WHQL	✓ WHQL						
PCL5									
PCL6	✓*1 WHQL	✓*1 WHQL	✓*1 WHQL	✓*1 WHQL	✓*1 WHQL	✓*1 WHQL	✓*1 WHQL		
PS	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL		
PPD	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL	✓*2 WHQL	✓*2	✓*2
GPD (PCL)									
XPS									
PC-Fax	✓*3	✓*3	✓*3	✓*4	✓*4	✓*4	✓*4		
Sharpdesk v3.3 Composer	✓	✓	✓						
SAP									
Airprint (Native)									
Button Manager	✓	✓	✓						
Twain Scan [USB]	✓ WHQL	✓ WHQL	✓ WHQL						
Scan to Sharpdesk v3.3	✓	✓	✓						
Scan to Folder									
Scan to FTP	✓*1	✓*1	✓*1	✓*1	✓*1	✓*1	✓*1	✓*1	✓*1
Sharp OSA Network Scan Tool									
SRDM	✓*1	✓*1	✓*1	✓*1	✓*1	✓*1	✓*1		

Notes:

*1 MX-NB12 is required.

*2 MX-NB12 & MX-PK10 are required.

*3 MX-FX13 is required. (For network printing, MX-NB12 is also required).

*4 MX-FX13 & MX-NB12 are required.

All MX-M182/232D series machines have an optional Coin Vend Interface PWB (CV_AUD I/F PWB) and Harness that must be installed, before connecting a third party vendor device. Once enabled, the vending device activates various signals to indicate paper sizes and operation.

Part Description	Part Code	QTY Required
CV_AUD I/F PWB UNIT	CPWBN0275QS31	1
CV_AUD Harness	DHAI-0704QSPZ	1
Screw (M3x6)	XHBS730P06000	2
Band	LBNDJ0037FCZ1	1

CV_AUD I/F PWB UNIT (CPWBN0275QS31)

CV_AUD Harness (DHAI-0704QSPZ)

Before connecting a third party auditor, the device should confirm to the following:-

1. The auditor interface should be optically isolated from the copier.
2. The device should be Power Supply Unit independent.
3. The device power supply unit should be a plug top adapter, not internal.
4. The plug top adapter should have a reinforced insulation barrier.
5. The audit device **MUST** comply and display the relevant safety approval mark (C-Tick, CE or equivalent).

To enable coin vend function, execute Simulation 26-03 and select Coin Vendor Mode (set to 1):-

Connector Signals [CV_AUD I/F PWB UNIT]		
CN-101 Pin No.	Signal Name	Detail
1	+24 vdc	Maximum current 100 mA
2	GND	Ground, connected to pin 3 for 'enable loop'
3	/CV_COPY	Enables ready status of copier
4	/CV_COUNT	Paper exit copy signal (Late billing pulse)
5	/CV_START	Copy start paper feed clutch signal (Early billing pulse)
6	/CV_CA	Clear-all signal
7	NOT USED	N/A
8	/CV_DPX	Duplex signal (Duplex model only)
9	/CV_SIZE0	Copy paper size indicator
10	/CV_SIZE1	Copy paper size indicator
11	/CV_SIZE2	Copy paper size indicator
12	/CV_SIZE3	Copy paper size indicator

Paper Size Signals				
SIZE3 (PIN 12)	SIZE2 (PIN 11)	SIZE1 (PIN 10)	SIZE0 (PIN 9)	PAPER SIZE
0	0	0	0	**NIL**
0	0	0	1	**A3**
0	0	1	0	**A4**
0	0	1	1	**LT (8.5" X 11")**
0	1	0	0	**B4**
0	1	0	1	**LG (8.5" X 14")**
0	1	1	0	**WLT (11" X 17")**
0	1	1	1	**INV (5.5" X 8.5")**
1	0	0	0	**B5**
1	0	0	1	**EXTRA**
1	0	1	0	**A5**
1	1	0	0	**A4-R**
1	1	0	1	**B5-R**
1	1	1	0	**LT-R**
1	1	1	1	**NOT USED**

MX-PK10 Postscript 3 Expansion Kit

With the above option, you should receive an operation manual. The front of the operation manual details a unique code which when registered, provides an activation key which unlocks the Postscript function within the device.

For **MX-M182/232D**, the MX-PK10 Postscript Option is registered against the **Machine Serial Number.**

Procedure:

1. Make a note of the Machine Serial Number upon which the MX-PK10 is to be installed.

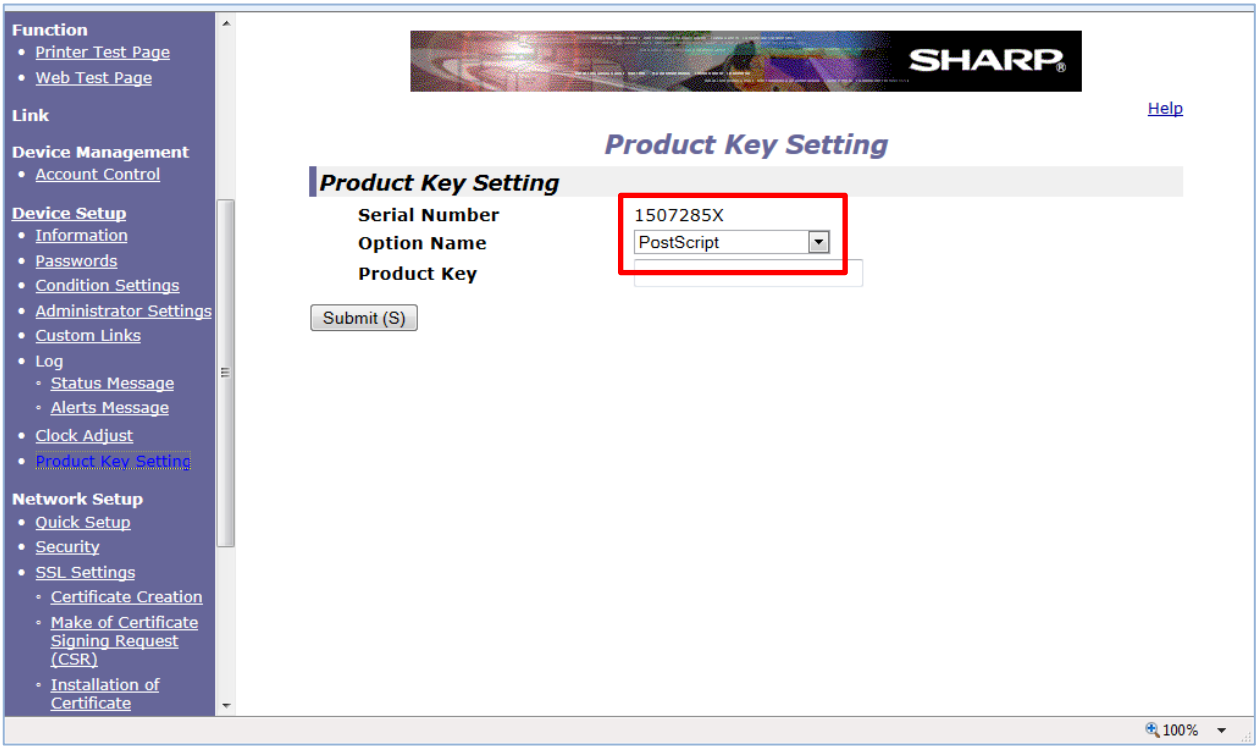
   It is recommended to acquire the serial number by accessing the MX-NB12 webpage - Enter the IP Address of the device within a web browser:-

   Example: **http://192.168.0.182**

   Select *Product Key Setting* and note the displayed serial number.

   Note: The MX-NB12 administrator username & password will be required:-

   Default Username: admin
   Default Password:- Sharp



2. Note the Application Number from the front of the MX-PK10 Operation Manual.

3. Access the following URL, with the username and password indicated:-

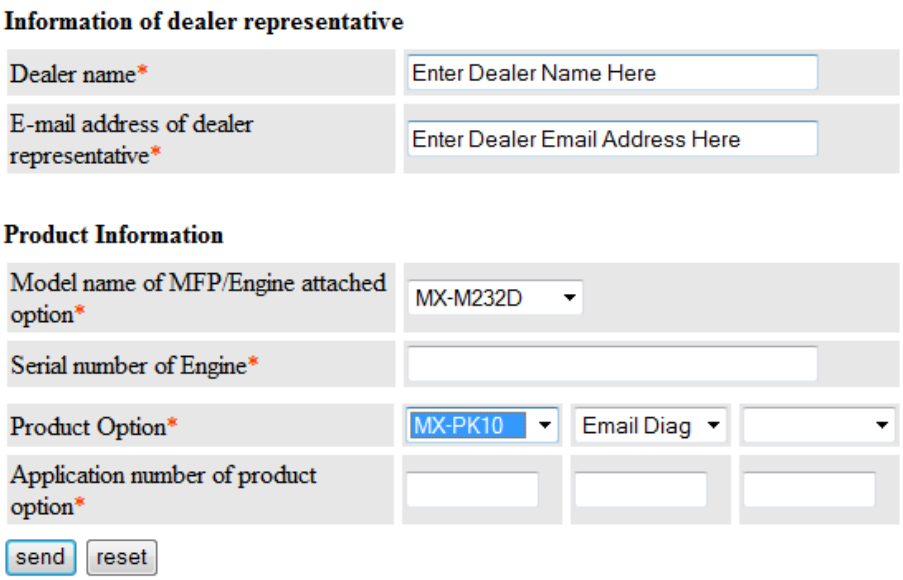
   http://dse-pub.sharp.co.jp/key/

   User Name: keyuser
   Password: key000323

4. Select your region (country).

5. Register the MX-PK10 by completing the following Web form:-

   Caution:
   For MX-M182/232D, the MX-PK10 is registered against the Machine Serial Number, which must be entered in the *Serial Number of Engine* Field – (Do not enter the MX-NB12 Serial Number).



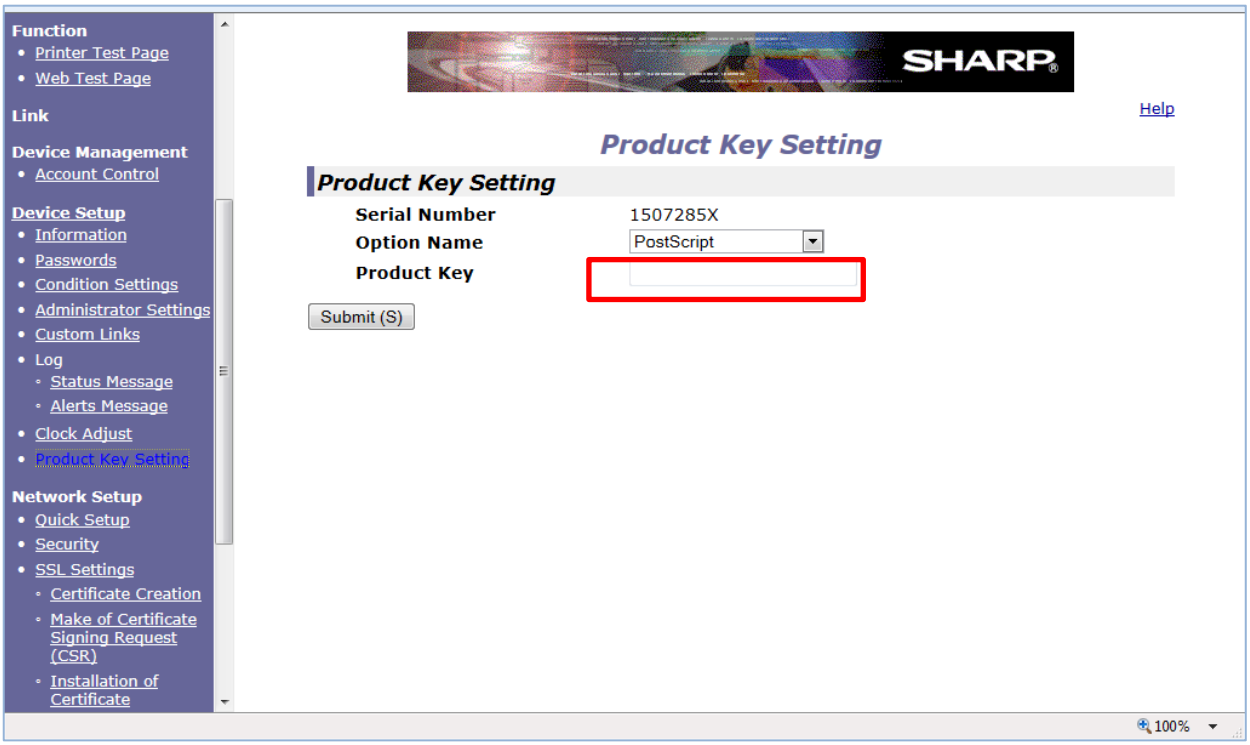
   Note:
   When inputting the data, please ensure that the prefix letter of the Application Number is entered in UPPERCASE. Also, if the machine serial number ends in X or Y, they must also be entered in UPPERCASE**.**

6. Click *Send*.

7. The Product Activation Key will then be displayed. An E-mail confirmation is also sent to the E-Mail address of the dealer representative.

8. Open the web page of the MX-NB12 by entering the IP address of the device and click *Admin Mode,* followed by *Product Key Setting.*

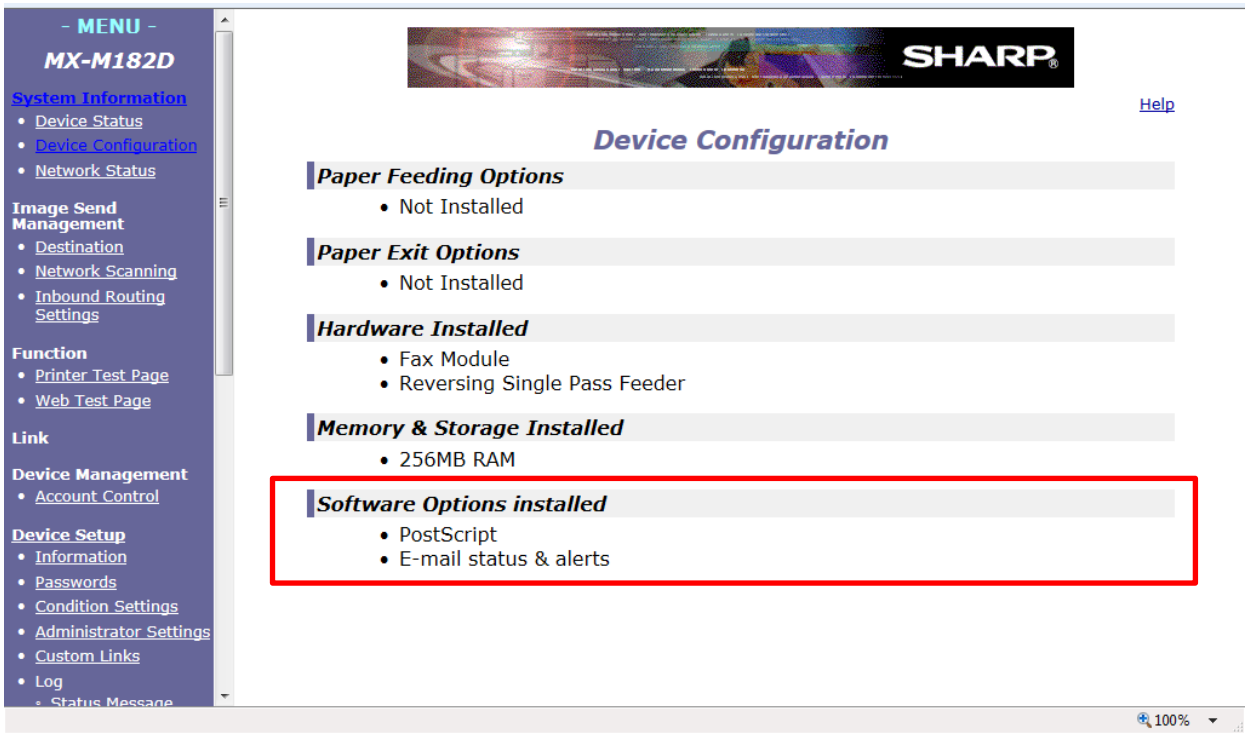
9. From the drop down menu, select Postscript and enter the MX-PK10 Product Key within the *Product Key* field. Click *Submit*:-



10. Power cycle the copier.

11. To confirm the MX-PK10 is activated, re-enter the IP address of the MX-NB12 into the Web Browser and click *Device Configuration.*

12. The MX-PK10 should be listed under *Software Options Installed.*



MX-PK10 Activation is complete.

General:

In preparation for downloading the new firmware from a PC to MX-M182/232D series, it is necessary to install a software driver on the PC to allow the transfer of the firmware via USB.

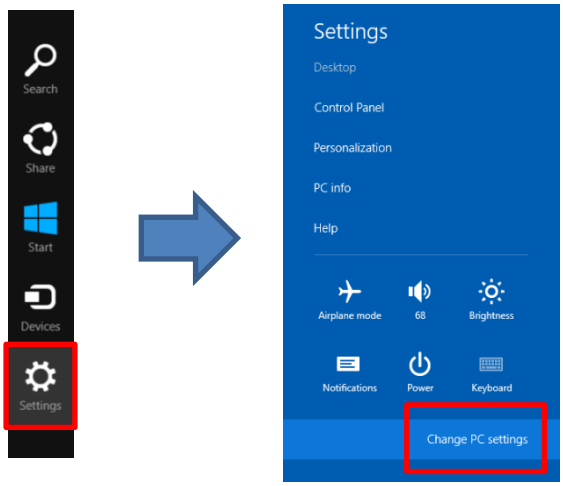
Once the driver has been installed, it will then be possible to connect to the MX-M182/232D using the Integrated Maintenance (Download) program.

Note: The USB driver does not need to be installed each time the Maintenance Program is run/executed.

Windows 8/8.1 Pre-Requisite:

As the Download USB driver is not Microsoft certified, installation will only be possible once the Driver Signature Enforcement Policy of Windows 8 or 8.1 is disabled:-

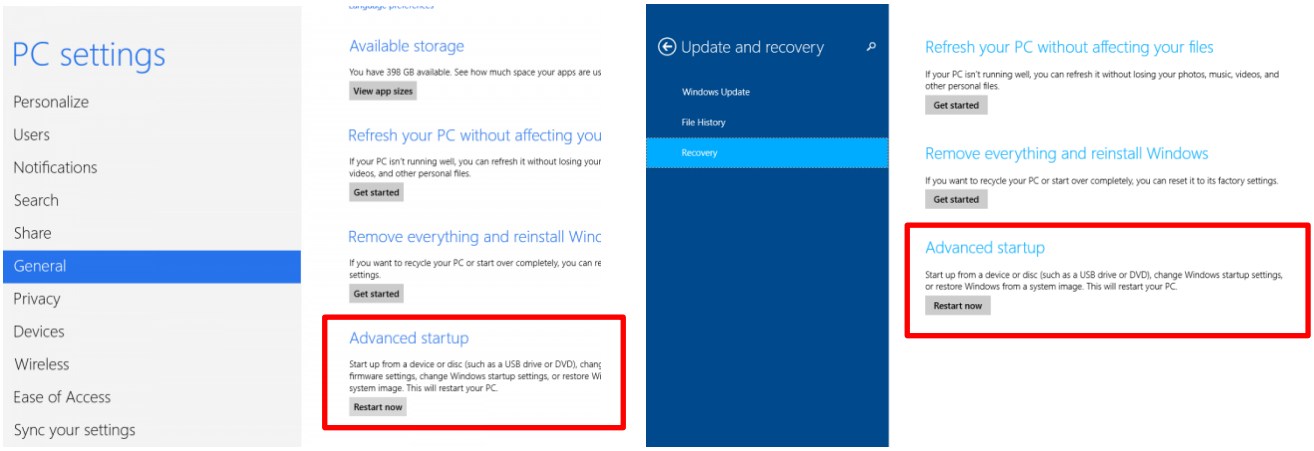
1. Open the Windows 8/8.1 Charms bar by positioning the mouse to the bottom right hand corner, click *Settings*, then *Change PC Settings*:-



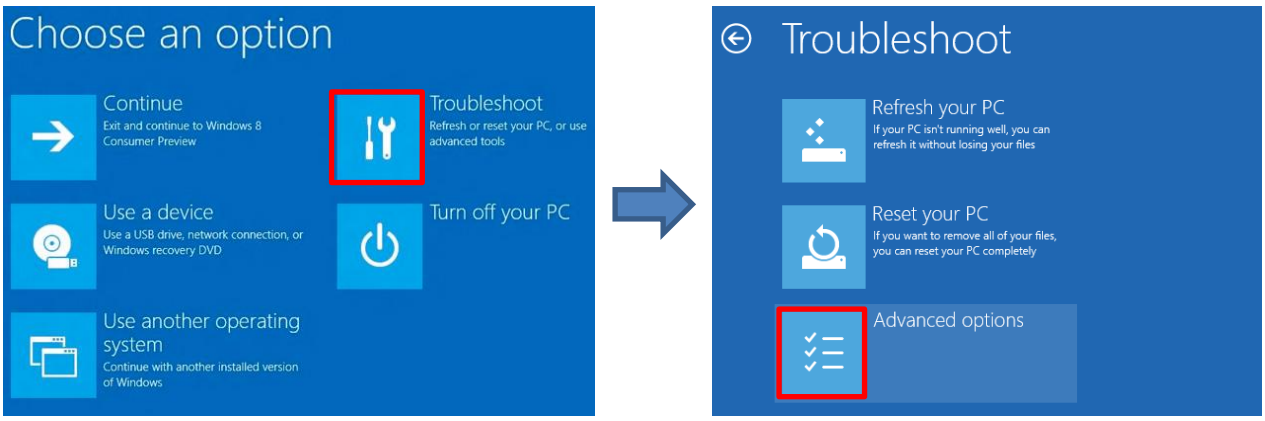
2. For **Windows 8:-**
   Select *General* from the left menu. Scroll the right target window to the bottom and select *Restart Now* under *Advanced Startup.*

   For **Windows 8.1***:-*
   Select *Update and Recovery* from the left menu, and select *Restart Now* under *Advanced Startup.*

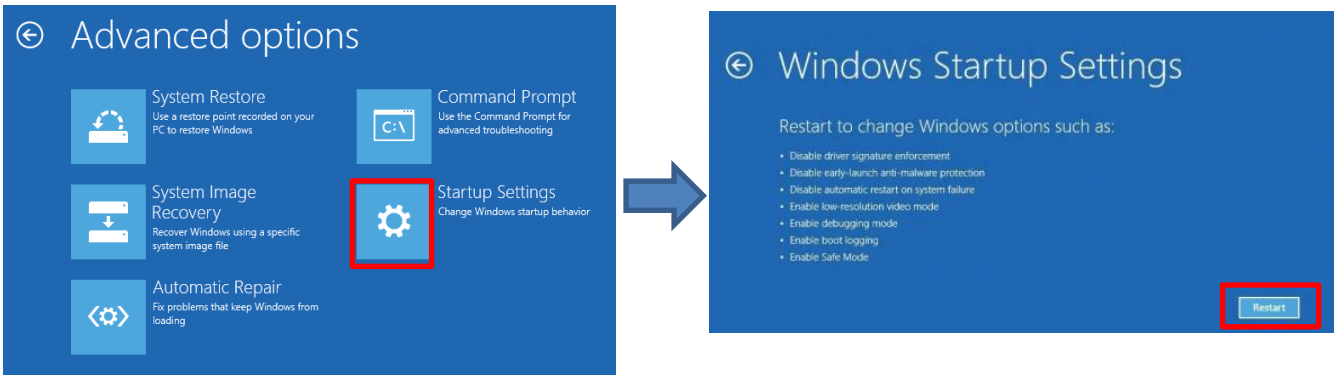
Windows 8: Windows 8.1



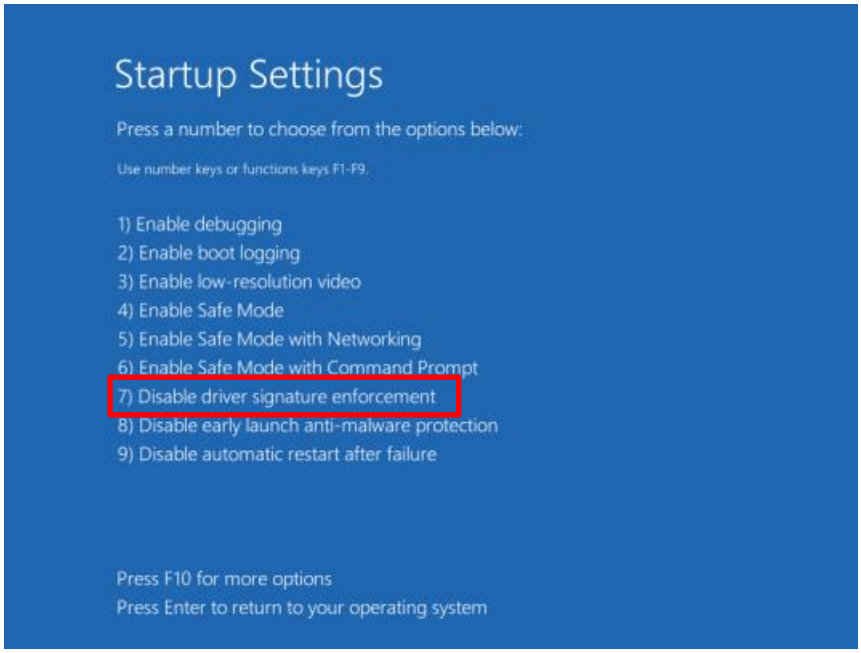
3. Select *Troubleshoot* from the *Choose an option* screen, then *Advanced Options*:-



4. From the *Advanced Options* menu, select *Startup Settings*, then Restart from the *Windows Startup Settings* menu:-



5. Select *7) Disable driver signature enforcement* by pressing the number 7 key on your keyboard.



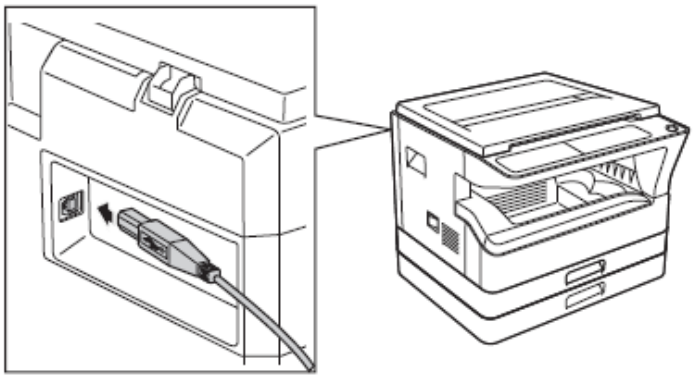
6. Once Windows 8 / 8.1 restarts, follow the USB Driver Installation Procedure as normal.

USB Driver Installation Procedure:

The following procedure describes the USB driver installation on Windows 8.1 (x64). Administrative privileges will be required:-

1. Power on the MX-M182/232D and put the copier into *Download* Mode by executing Simulation **49-01** (The AUTO/TEXT/PHOTO key indicators will be lit).

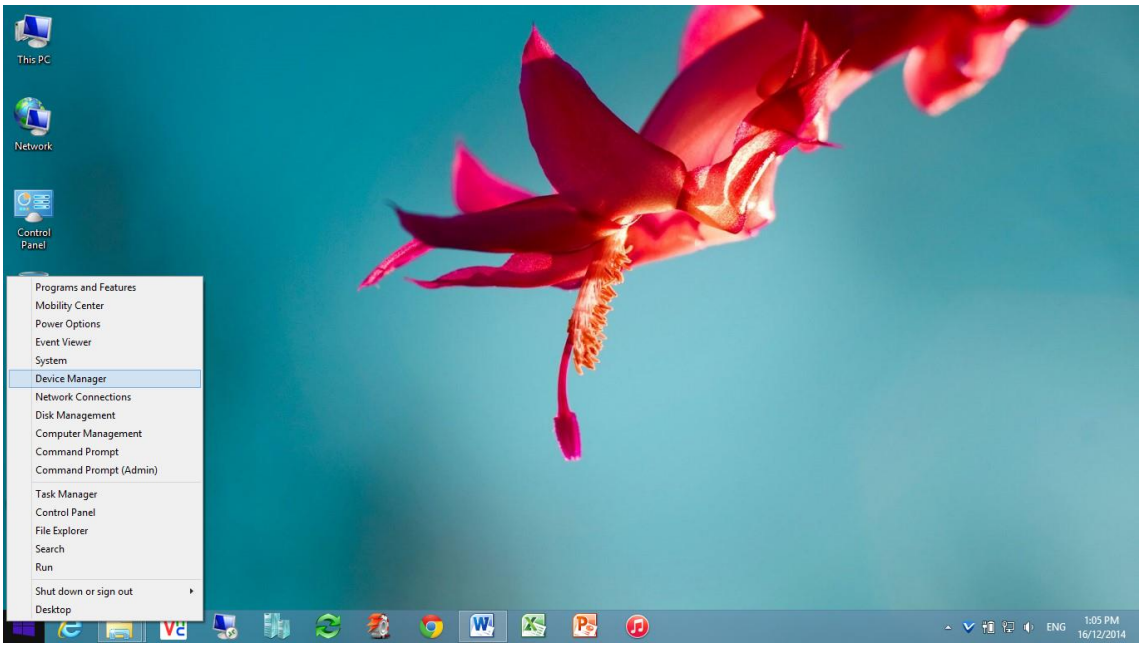
2. Connect an "A to B" type USB cable between the PC and USB port (as shown below):-



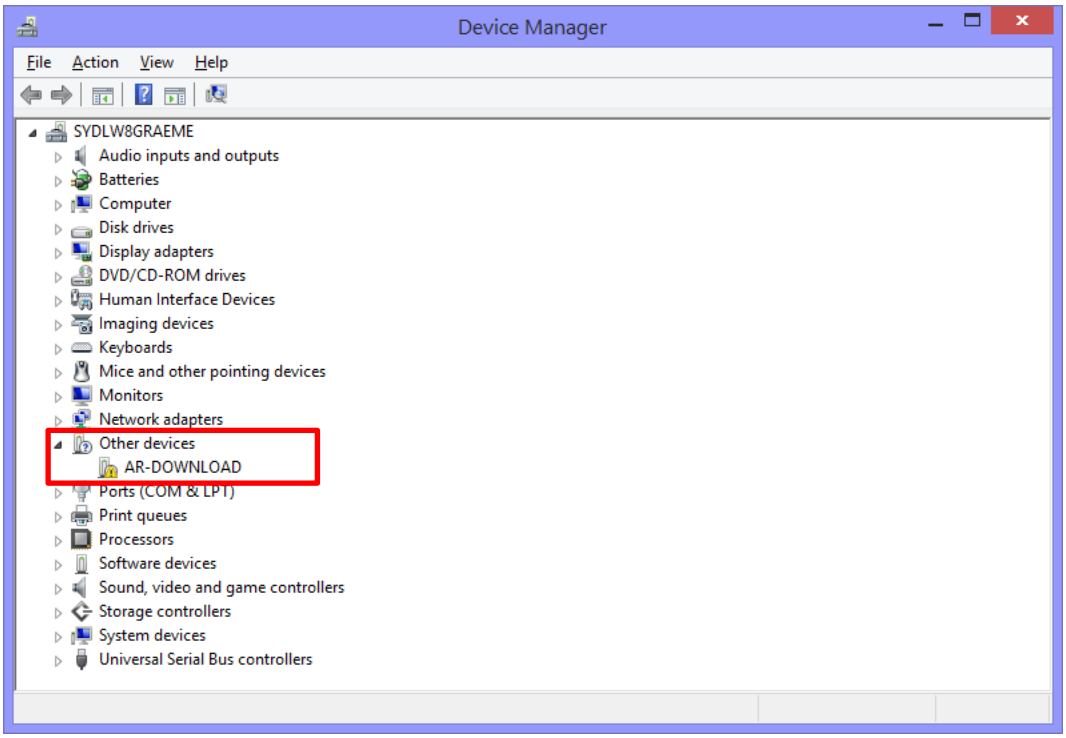
3. The "*Driver Software Installation*" wizard will identify "*DOWNLOAD*" as a new device and will try to install the device driver. If no device driver is found, the following message may appear:-

4. Click *Close.*

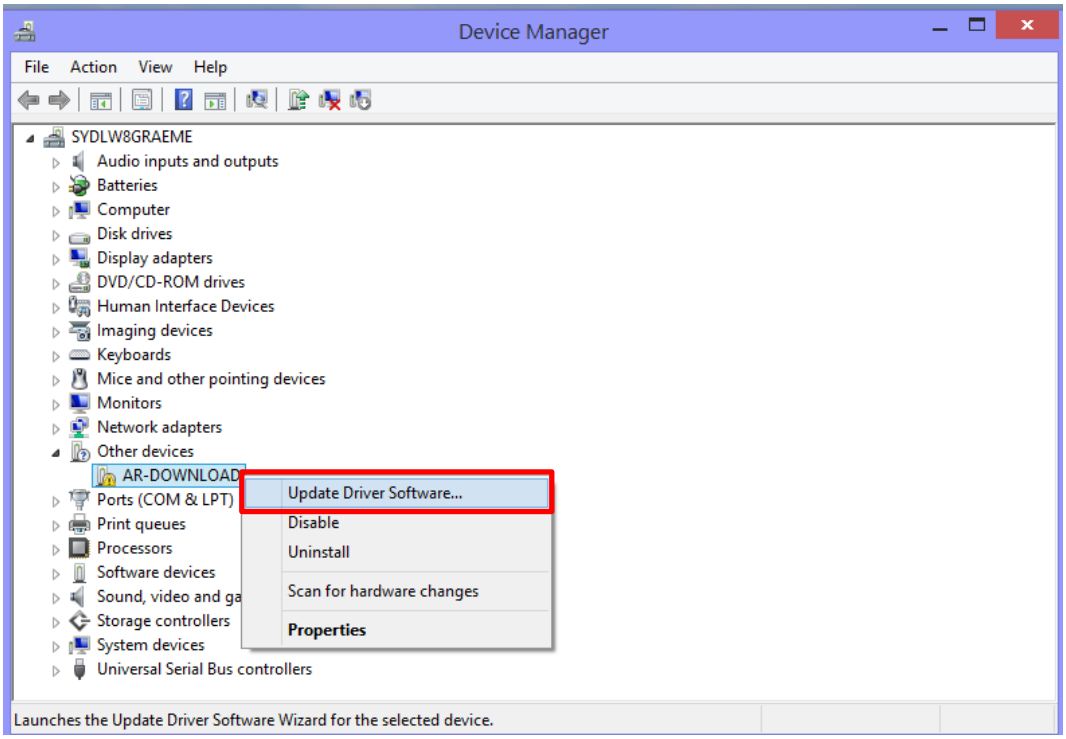
5. Launch *Device Manager* (example shown below: Right Click on *START* & select *Device Manager):-*



6. *DOWNLOAD* should now be listed under *Other Devices* (as shown below):-

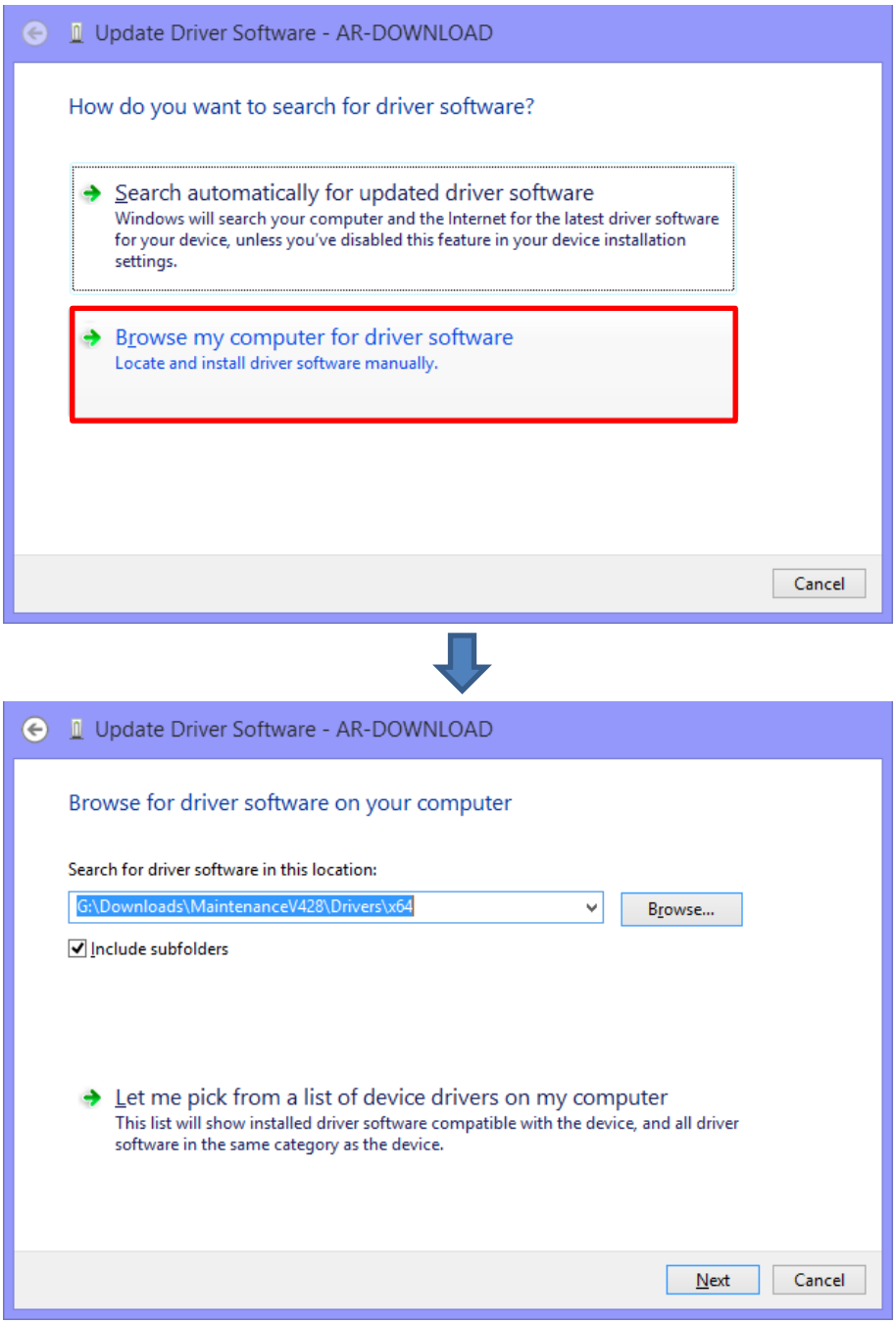


7. Right click *DOWNLOAD* and select *Update Driver Software:-*

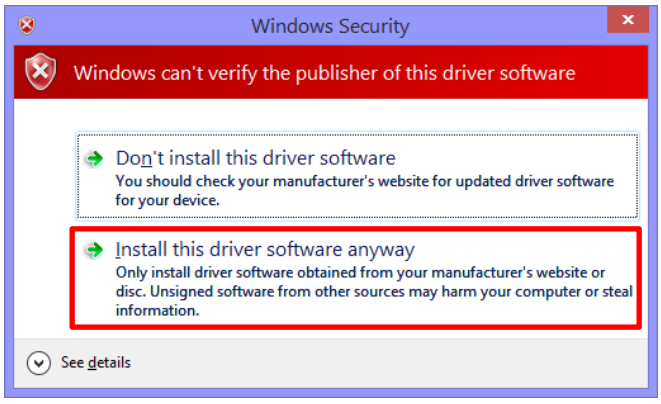


8. Select *Browse my computer for driver software* and navigate to the folder/location that contains the correct USB driver for the Operating System being used:-

Windows XP 32bit OS:	2kXp folder
Windows Vista/7/8/8.1 32bit OS:	Vista folder
Windows XP/Vista/7/8/8.1 64bit OS:	x64 folder

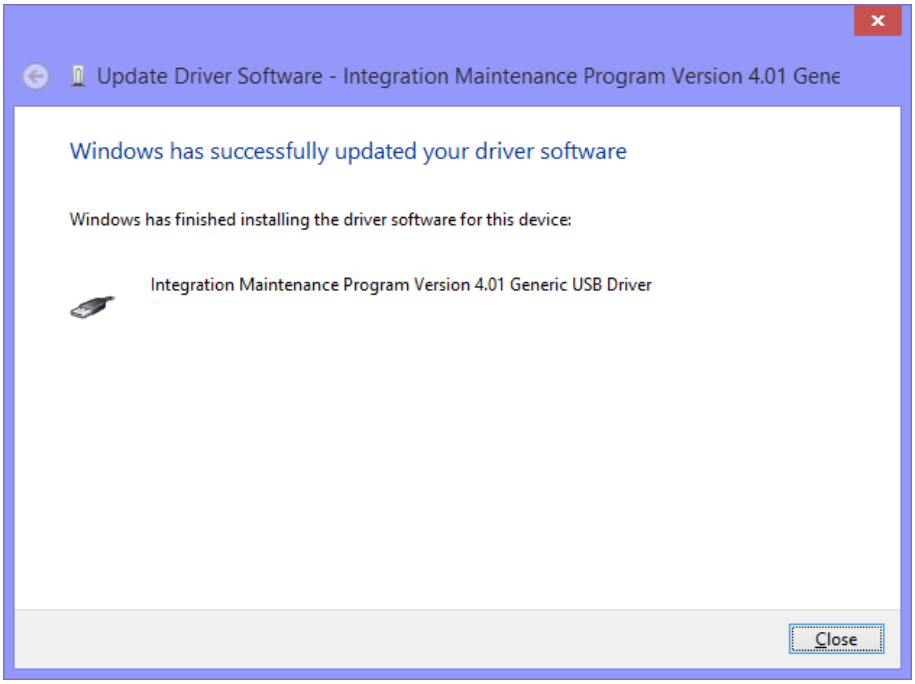


9. Click *Next.*
   If Windows cannot verify the driver publisher, the following message will appear.
   Select *Install this driver software anyway:-*

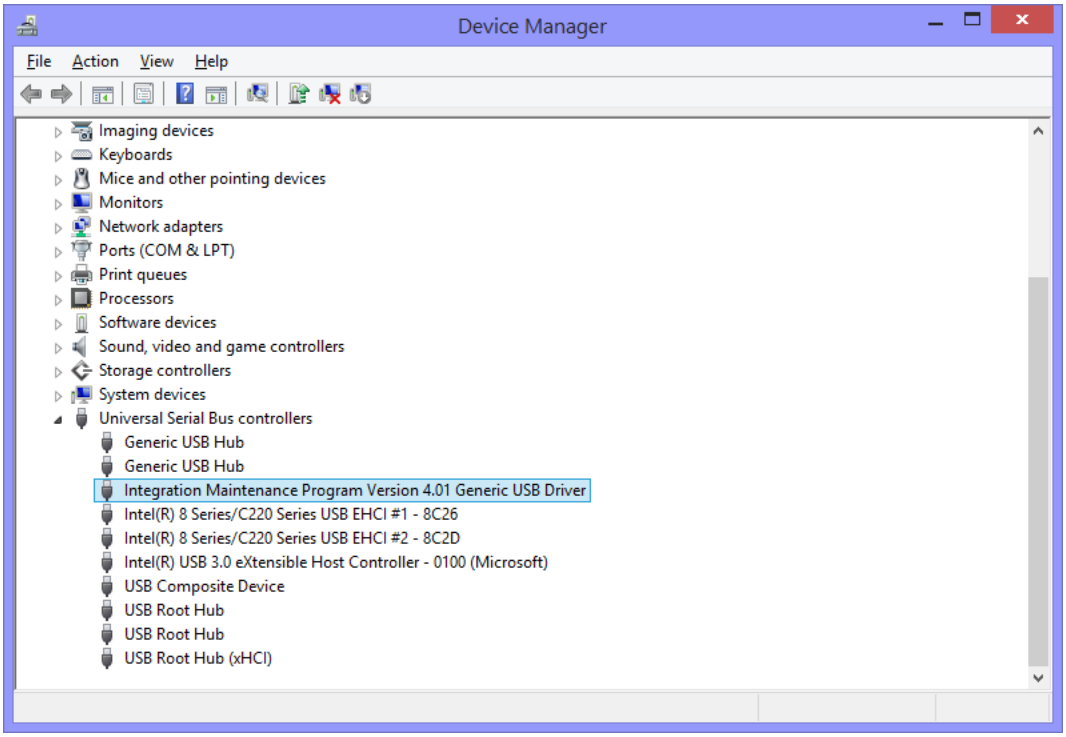


10. The *DOWNLOAD* driver will now be installed:-

11. When the *DOWNLOAD* driver has been installed successfully, click *Close:-*



12. Once the DOWNLOAD driver has been successfully installed, it will be identified as *Integration Maintenance Program Version 4.01 Generic USB Driver* under *Universal Serial Bus controllers* within Device Manager (as shown):-



USB Driver Installation is Complete – It will now be possible to run the Maintenance Program and upgrade the Engine firmware.

MX-M182D, MX-M232D Main Engine & FAX:

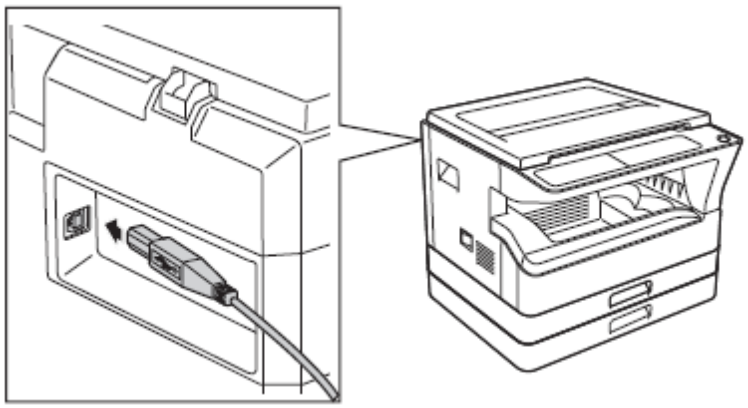
Requirement:

- PC with USB Port using compatible Windows OS (Windows® XP/Vista/7/8/8.1 x86 & x64).
- USB "A to B" type cable.
- USB Driver (Maintenance Tool) Pre Installed.
- Integrated Maintenance Tool & Updated Firmware.

Procedure:

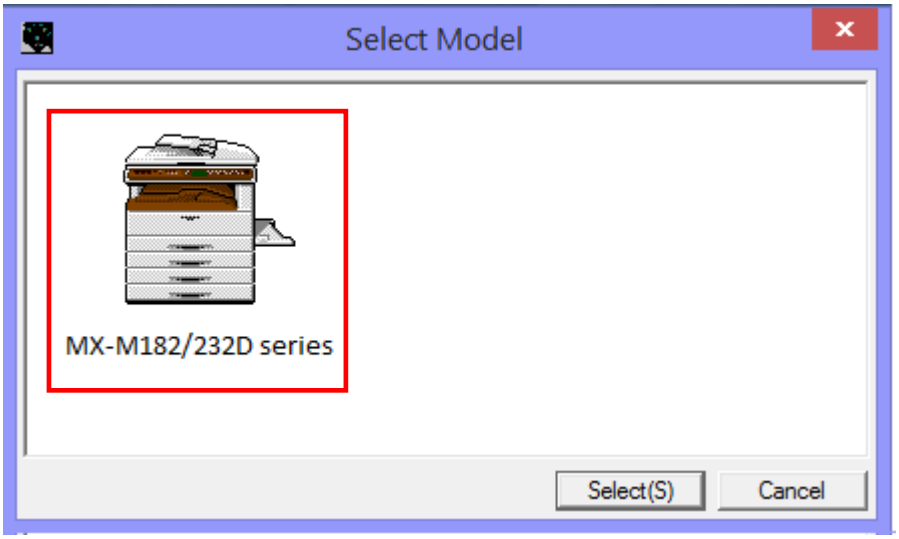
1. Presuming the *DOWNLOAD* USB driver (for the Maintenance Tool) is already installed on the PC, power on the MX-M182/232D and put the copier into *Download* Mode by executing Simulation **49-01.**

2. Connect an "A to B" type USB cable between the PC and USB port as indicated below:-

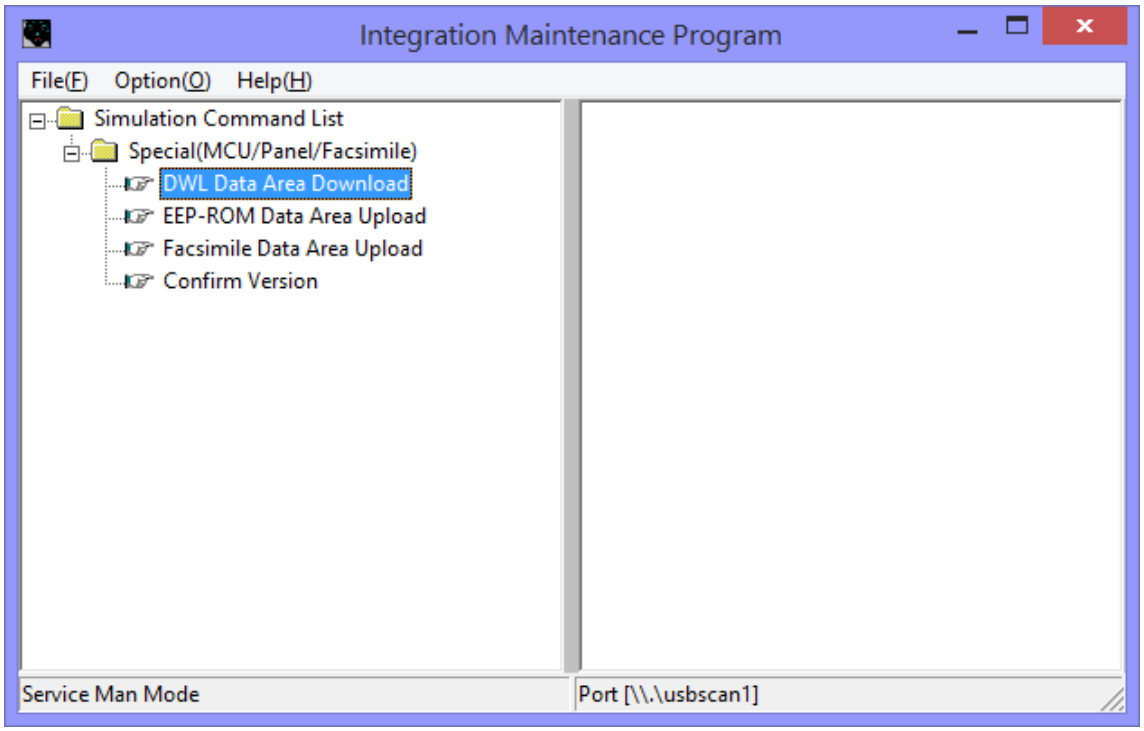


3. Launch the *Integrated Maintenance Tool*.

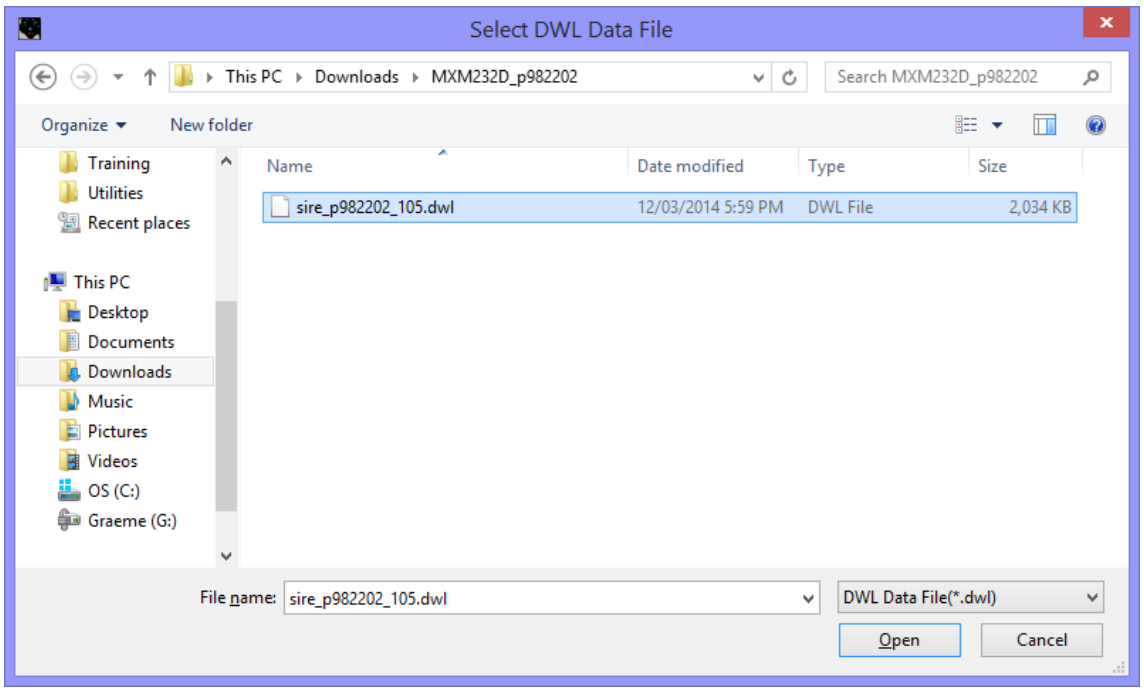
   Select the MX-M182/232D model series and click *Select:*-



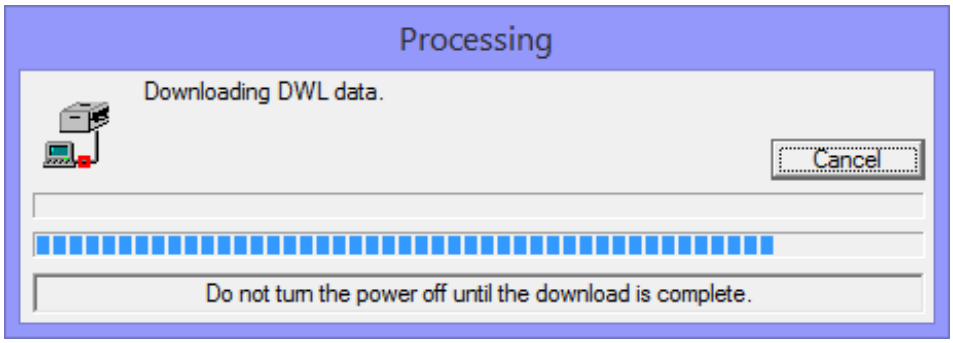
4. Expand the *Simulation Command List* and double click *DWL Data Area Download* from within the *Special (MCU)* menu:-



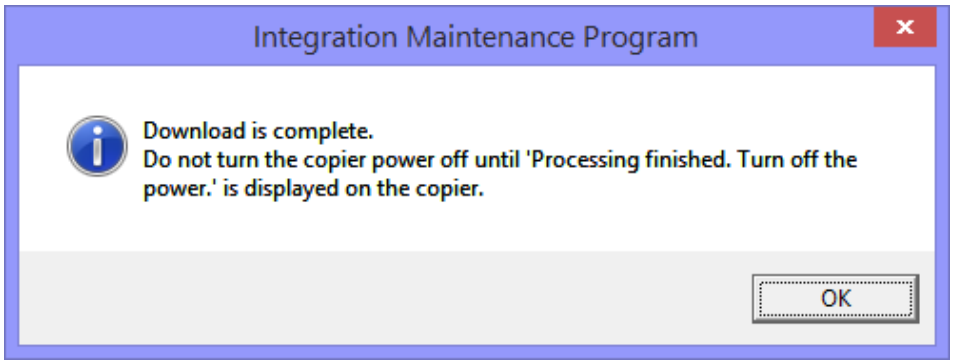
5. Browse to the location of the updated Engine or FAX firmware (*.dwl). Click *Open* to commence the firmware download:-



6. Firmware download will now commence:-



7. Once the transfer of the firmware is complete, the *Download is Complete* window should appear – click *OK*:-



8. When *Processing Finished* is displayed on the copier panel, power off the machine and disconnect the USB cable.

   Caution:
   Do **NOT** power off the copier or remove the USB cable **before** *Download Complete (Processing Finished)* is indicated on the copier panel.

9. Power on the machine. To check the firmware has updated successfully, execute Simulation **22-14**.

MX-M182/232D Firmware Upgrade is Complete.

MX-NB12 Network Expansion Kit.

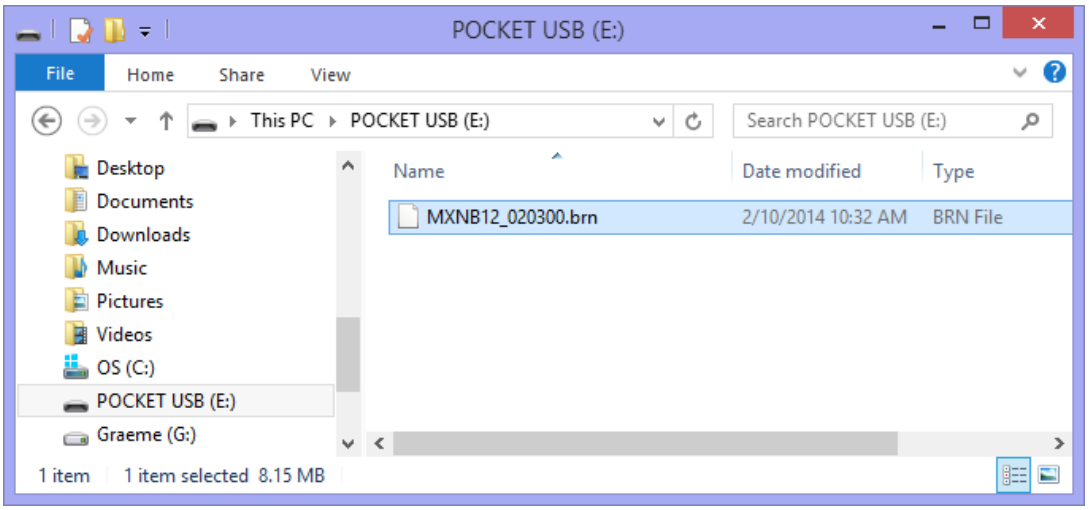
Requirement:

- USB Memory Device (Formatted with FAT or FAT32).
- MX-NB12 Firmware (*.brn).

IMPORTANT NOTE
Never insert a USB memory device containing the MX-NB12 firmware before powering on the machine.

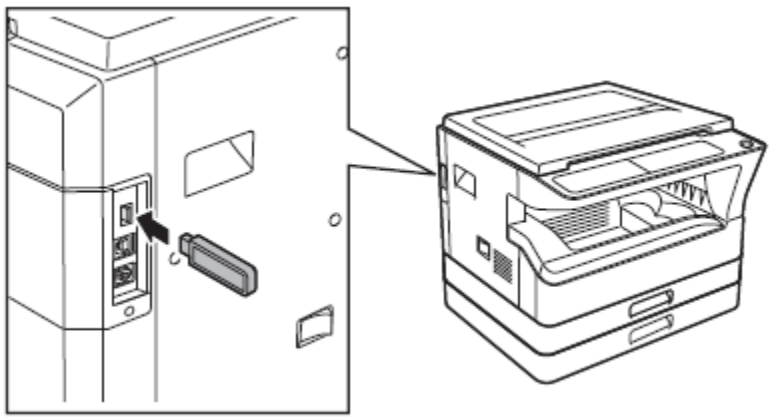
Procedure:

1. Using a PC, copy the MX-NB12 firmware (*.brn) onto the root directory of a USB memory device (as indicated below):-



2. Power ON the MX-M182/232D.

3. After approximately 30 seconds (to allow the MX-NB12 to boot), insert the USB memory device containing the MX-NB12 firmware into the USB Device Port on the MX-NB12:-



Cont'd

4. Execute Simulation 49-02 (Network Expansion Firmware Download mode).

   "Download Mode" should now be displayed on the Operation Panel.

5. The firmware upgrade should now start automatically.

   To indicate the firmware upgrade procedure has started, Do not turn the Power OFF will be displayed:-

   Caution:

   - During firmware upgrade, do not perform any key operation on the operation panel.
   - Do Not power off the MX-M182/232D until the firmware upgrade procedure is completed.
   - If *ERR* is displayed, check if the USB memory device is "write protected" or has a hidden partition.

6. When 'Processing finished – Turn off the power" is displayed on the operation panel, the firmware upgrade procedure is complete.

7. Power OFF the MX-M182/232D and remove the USB memory device from the machine, before powering back ON.

   Note:
   When powering ON for the first time after a firmware upgrade, the MX-NB12 may take up to 60 seconds to initialise, before network connectivity is available.

MX-NB12 Firmware Upgrade is Complete.

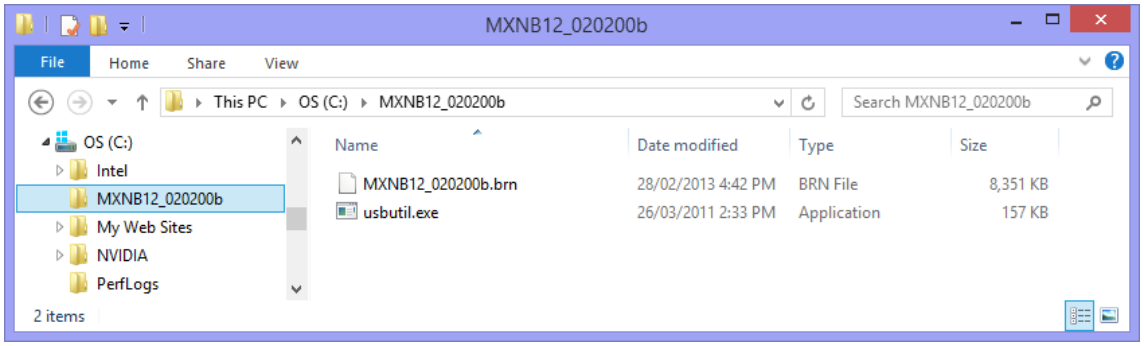
The following procedure describes how to install MXNB12 firmware using a Windows PC (via USB connection) in case of a firmware update failure (or corruption) using SIM49-2.

Requirement:

- MXNB12 installed on MXM182D or MXM232D.
- Windows PC.
- USB Printer Cable.
- USB Firmware Update Tool (usbutil).
- MXNB12 Firmware (*.brn).

PROCEDURE:

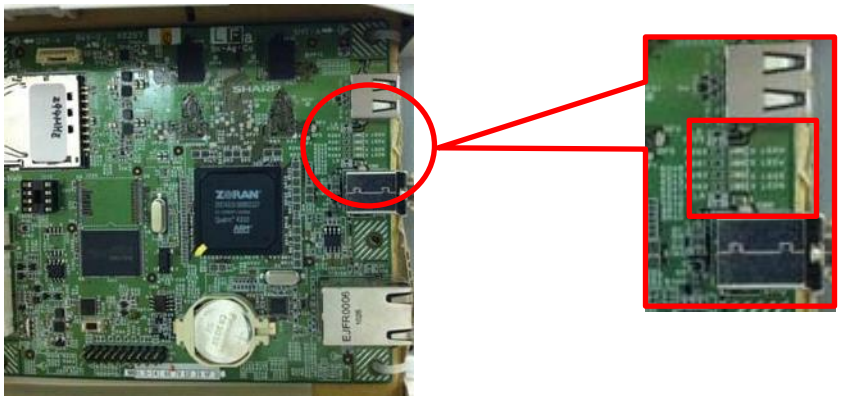
1. Download and Unzip MXNB12 Firmware (*.brn) and USB Tool (usbutil) into the same local folder (as shown):-



2. Remove the MFP Rear Cover (MXNB12).

3. Check the indication of the four LEDs on the MXNB12 when the MFP is powered ON.

   The Four LEDs will keep blinking if the firmware update failed (corrupted):-

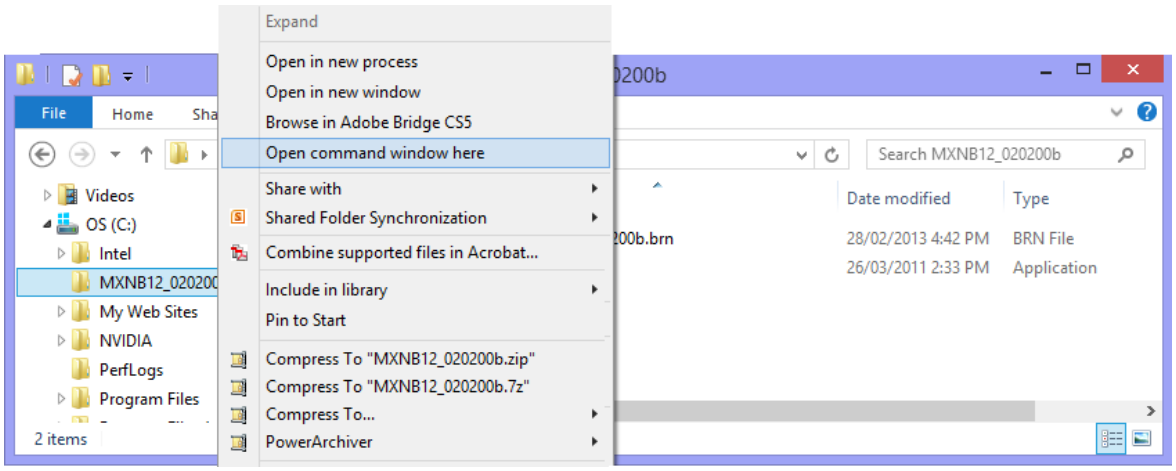


4. Power OFF the MFP device.

5. Connect the MXNB12 and Windows PC via a USB cable:-

6. Using Windows Explorer, browse to the location of the Folder containing the MXNB12 Firmware (*.brn) and USB Tool (usbutil).

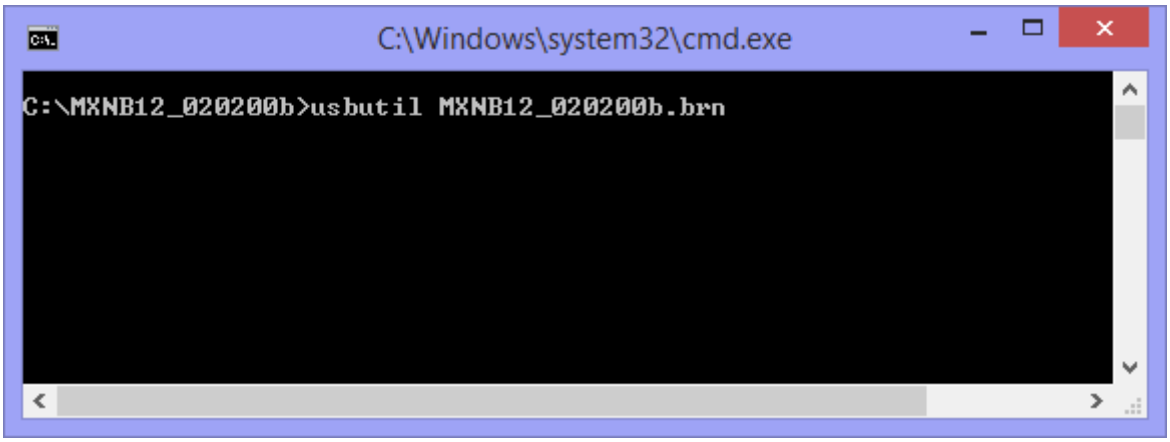
7. With the *SHIFT* & *CTRL* keys depressed, right click on the Folder and select *Open command window here:-*



8. Enter the following DOS Command but **DO NOT PRESS ENTER & EXECUTE YET:-**

   usbutil <filename of MXNB12 firmware>

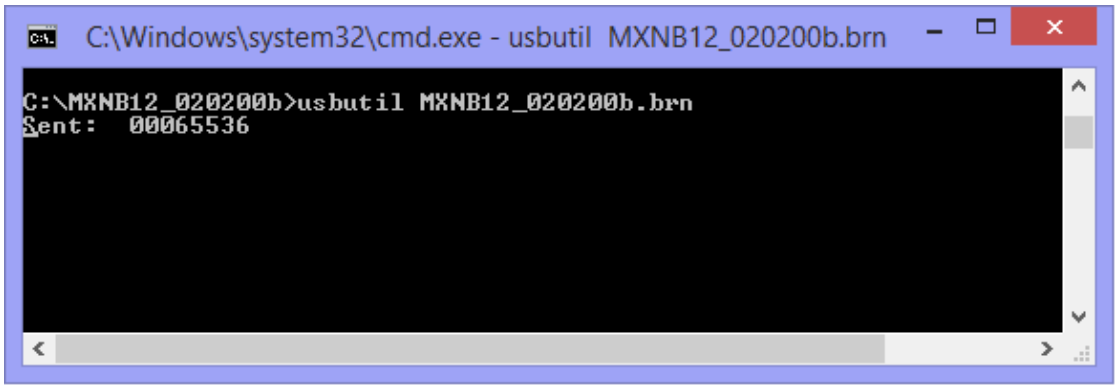
   Example shown: usbutil MXNB12_020200b.brn



9. Power ON the MFP Device.

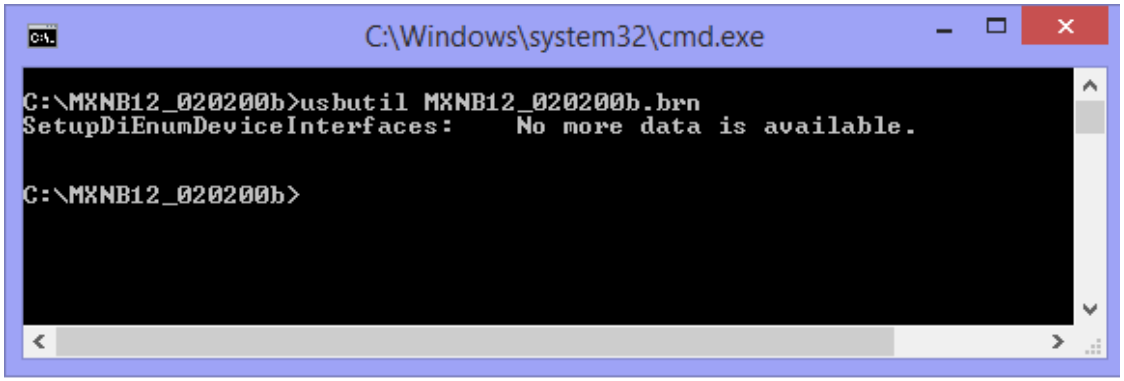
10. After approx. 6 seconds, Press *ENTER* to execute the command (usbutil):-

    Once the command is executed, the size written will appear under Sent (number) and will eventually stop once the filesize of the firmware has been reached:-



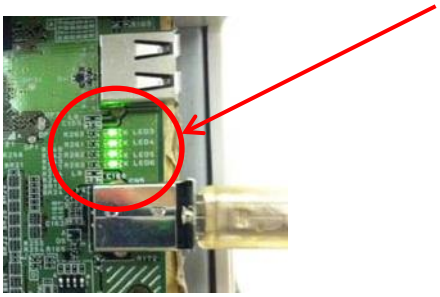
Note:
During Firmware writing, the four LEDs on the MXNB12 will light & blink at a regular interval.

Caution:
If the command is executed right after the MFP device is powered ON (without waiting approx. 6 seconds), a *SetupDiEnumDeviceInterfaces* error will occur (as indicated below). In this case, reboot the MFP device and start the firmware update process over again.



11. Once the number in *SENT* stops counting, wait for a period of time and check the status of the four LEDs on the MXNB12.

    If the firmware update has been completed, all four LEDs will blink simultaneously.



12. Reboot the MFP device. Check and confirm the MFP & MXNB12 boot up as per normal.

Firmware Recovery is complete.

Enabling/Disabling DHCP

1. Enter System Settings menu – Press *Special Function* key, then scroll to *System Settings*
   Note: The MFP Admin password will be required.

2. Select *Network*, then Enable or Disable *DHCP*. Press *OK*.

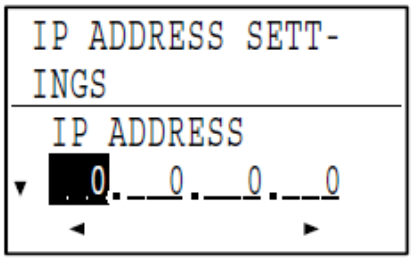
3. Power OFF the MX-M182/232D. After 5 seconds, Power ON the device.

Setting/Changing the IP Address:

1. Enter *System Settings* menu (as described above).

2. From *Network* menu, select *IP Address Setting* and enter the *IP Address*, *Subnet Mask* & *Default Gateway* addresses.

   Use the *Numeric, Scroll, Back, CA* & *Special Function* keys to navigate and enter the IP Address information.



[▼][▲] keys	These move the cursor up and down to select "IP ADDRESS", "SUBNETMASK", and "DEFAULT GATEWAY".
[◄][►] keys	These move the cursor left and right.
Numeric keys	These are used to enter numbers.
[C] key (C)	Use this to cancel an entry.
[BACK] key	This cancels an entry and returns you to the previous screen.
[CA] key (CA)	This cancels the setting and returns the display to the base screen of the mode that was in effect before the system settings were entered.
[SPECIAL FUNCTION] key	This cancels the setting and returns the display to the base screen of the mode that was in effect before the system settings were entered.

3. Once all addresses have been entered, press *OK*.

4. Power OFF the MX-M182/232D. After 5 seconds, Power ON the device.

   Note:
   As with other Sharp devices, it is also possible change the IP address configuration via the MX-NB12 Web Page.

Engine Firmware:

Firmware ROM	MX-M182D	MX-M232D	MX-M182D	MX-M232D
	Up to & including Nov'13 production		From Dec'13 production onwards only. Supports Energy Star v2.0	
MCU	98.22.01	98.22.02	10.00.01	10.00.02
PNL	21.00.00			
Fax Expansion Kit [MX-FX13]	01.00.00			
Network Expansion Kit [MX-NB12]	02.03.00b			

Print Driver:

Driver	Windows OS x86 2008, XP, 7, 8, 8.1	Windows OS x64 2008(R2), 2012(R2), XP, 7, 8, 8.1
SPLC **	03.00.14.27 [WHQL]	03.00.14.27 [WHQL]
PCL6	02.00.20.21 [WHQL]	02.00.21.21 [WHQL]
PS	02.00.17.19 [WHQL]	02.00.18.19 [WHQL]
PPD	1.0.0.2 [WHQL]	1.0.0.2 [WHQL]
PC-FAX	3.8.3.0	
Button Manager AA ** (For Standard M/C only)	3.01.011.004.018	
Button Manager AB ** (When MX-NB12 is installed)	3.01.012.004.018	

Note: ** Not supported on Windows Sever 2003, 2008(R2) or 2012(R2).

For the latest Firmware and Print Driver version(s),
please refer to the ***SHARP*** Support Website.

The following pages contain information regarding test simulations. For a detailed description for each test simulation, please refer to the MX-M182/232D Service Manual.

Entry Code: 

1 Scanner Self Test

1	Scanner operations test
2	Scanner sensor check

2 SPF Self Test

1	SPF ageing test.
2	SPF sensor check
3	SPF output check (motor, clutch, solenoid)
8	SPF paper feed solenoid operation check
9	RSPF reverse solenoid operation check
11	SPF PS release solenoid operation check

3 Shifter/Job Separator Self Test

2	Shifter/Job Separator sensor status
3	Shifter operation check
4	Job separator operation check
11	Shifter home position check

5 Lamp Operation & Test

1	Operation panel test
2	Heater lamp & cooling fan load check
3	Copy lamp check

6 System Load Operation & Test

1	Paper feed/transport solenoid check
2	Resist roller solenoid check

7 Device Aging Operation & Test

1	Warm up display & aging with jam detection
6	Interval ageing cycle timer set up
8	Shifting with warm up display

8 High Voltage Operation Test

1	Developer bias output
2	MHV/Grid output (High Mode)
3	MHV/Grid output (Low Mode)
6	Transfer charger output

9 Duplex Operation & Test

1	Duplex motor forward rotation check
2	Duplex motor reverse rotation check

9 Duplex Operation & Test

4	Duplex motor RPM adjustment
5	Duplex motor switchback time adjustment

10 Toner Motor Operation & Test

-	Toner motor operation check

14 Clear / Cancel

-	Trouble cancel (excluding U2/PF trouble).

16 U2 Clear / Cancel

-	U2 trouble cancel

20 Maintenance Counter Clear / Cancel

1	Maintenance counter clear

21 Maintenance Cycle Configuration

1	Maintenance cycle setting

22 Data Output & Check

1	Counter data display.
3	Jam history data display.
4	Jam total counter display
7	Key operator code display
9	Paper feed counter display
13	CRUM type display
14	P-ROM version display
15	Trouble memory display
22	SPF jam counter display

24 Data Counter & Clear

1	Jam/trouble counter clear
2	Trouble counter clear
4	SPF/RSPF counter clear.
5	Duplex print counter clear
6	Paper Feed counter clear.
7	Drum correction counter clear.
8	Copy counter clear
9	Printer counter clear
13	Scanner counter clear
14	SPF/RSPF jam total counter clear
15	Scanner mode counter clear

25 Toner Monitor & Polygon Check

1	Main motor operation check
2	Auto developer adjustment
10	Polygon motor operation check

26 Device Configuration

1	Job separator setting
2	Size setting
3	Auditor setting
4	Copier duplex setting
5	Count mode setting
6	Destination setting
7	Machine condition check
8	Manual transfer countermeasure setting
18	Toner save mode setting
20	Job separator paper exit mode setting
22	Language setting clear
30	CE mark conformity control ON/OFF
31	Bypass tray setting (coin vendor mode)
36	Cancel of stop at maintenance life over
37	Cancel of stop at developer life over
39	Memory capacity check (MCU)
42	Transfer ON/OFF timing control setting
43	Side void amount setting
51	Copy temporary stop function setting
54	LCD contrast PWM duty setting
56	Life correction ON/OFF setting
60	Fax key enable/disable setting
69	Toner near end environment setting
73	Toner save display setting
74	Total counter display change setting

30 Sensor Operation & Test

1	Main unit sensor check

41 OC Cover Operation & Adjustment

1	Document size detection sensor check
2	Document size detection level adjustment
3	Document size sensor detection check
4	OC 20 degrees detection level adjustment

42 Developer Maintenance Counter

1	Developer counter clear

43 Fuser Setting & Adjustment

1	Fuser temperature setup 1 (Normal, Ready, Heavy modes).

43 Fuser Setting & Adjustment

2	Fuser temperature setup 2 (Suspend, resume & cool down).
3	Fuser temperature setup 3 (Pre heat).
4	Fuser temperature setup 4 (Job start)
12	Standby mode fusing fan rotation setting
13	Fusing paper interval control allow / inhibit

44 Process Control Data

1	Toner density control correction enabled
16	Toner density correction data check
34	Transfer current setting

46 Copy & Image Density Adjustment

2	Copy density adjustment (600dpi)
10	Copy exposure adjustment (text) 600dpi
11	Copy exposure adjustment (photo) 600dpi
12	Copy density adjustment in FAX mode
13	FAX mode density adjustment (normal)
14	FAX mode density adjustment (photo)
15	FAX mode density adjustment (fine)
16	FAX mode density adjustment (super fine)
19	Exposure mode setting (Gamma / AE)
20	SPF/RSPF exposure adjustment
29	Image contrast adjustment (600dpi)
30	AE limit setting
31	Image sharpness adjustment
39	FAX image adjustment

48 Magnification & Motor Adjustment

1	Magnification ratio adjustment (Copy)
5	RSPF Sub scan magnification adjustment.
8	FAX magnification ratio adjustment (scan)
9	FAX magnification ratio adjustment (print)

49 Firmware Upgrade

1	Flash ROM program writing mode
2	NNB Download mode (MXNB12)

50 Image Position Adjustment

1	Lead edge adjustment value (copy image).
6	Print image adjustment SPF (top margin)
8	FAX lead edge adjustment
10	Print centre deviation adjustment
12	Document off-centre adjustment
18	Memory reverse adjustment (Duplex copy)
19	Rear edge void adjustment (Duplex copy)

51 Resist Roller Adjustment

2 Resist roller adjustment

53 Document Feeder Adjustment

8 SPF scanning start position.

61 LSU Writing Adjustment/Test

2 Laser power correction ON/OFF
3 HSYNC output check

63 CCD Operation & Adjustment

1 Shading correction data display

64 Self Test Print

1 Self print test

65 Operation Panel Self Test

10 Key reception time setting display
11 Info lamp setting

66 Fax Control Settings & Adjustments

1 Fax Soft SW setting
2 Initialise Fax Soft SW setting
3 Modem controller memory check
4 Fax signal line check (Max level)
6 Fax list print (confidential registration
7 Fax Memory Printout (all data)
10 Fax All memory clear
11 Voice signal check (line/speaker 300bpsx)
13 Register dial number for Sim 66-14/15/16
17 DTFM signal to send to line (Max level)
21 Print various registration information
24 Fast memory data clear
30 Tel/LIU sensor status check
31 ON/OFF setting of output port (Tel/LIU)
32 Received data check (comparison)
33 Busy Tone/CNG/CED/FNET detect signal check
34 Display time required for sending test image data
37 Speaker sound volume adjustment
38 Time setting/check
42 PC program writing
43 PIC adjustment value writing
52 Pseudo ringer check

67 USB Speed Adjustment

50 USB reception speed adjustment

CE

00 Network communication error
01 Network card is not installed or defective
02 The specified server is not found
03 Specified server does not communicate
04 The FTP account/password is invalid
05 The FTP server directory is invalid
06 The email address is invalid
09 Image file size exceeds upper limit set.
10 TX method assigned cannot be used.
11 Memory full (Scan Data):-
18 RTC battery error

CH

Door Open
Flash Developer cartridge not installed

E7

01 Duplex model memory error
02 LSU trouble
06 Image data decode error
10 Shading trouble (Black correction)
11 Shading trouble (White correction)
16 Abnormal laser output
91 Decode error (FAX print)
93 Data communication error (FAX scan)

F2

40 ATC sensor abnormality
64 Toner supply abnormality
70 Improper cartridge:-

- Identification error.
- Model error.
- Type error.
- Destination error.
- Data abnormality.
- Misc error.

74 CRUM chip communication error

F5

02 Copy lamp abnormality

F6

00 Fax board communication trouble
10 Fax board error

F6

80 Fax board communication trouble (Protocol)
81 Fax board communication trouble (Parity)
82 Fax board communication trouble (Overrun)
84 Fax board communication trouble (Framing)
88 Fax board communication trouble (Time out)
99 Fax language error

F9

00 MX-NB11 communication trouble

H2

00 Thermistor open (MAIN)
01 Thermistor open (SUB)

H3

00 Heat roller high temperature (MAIN)
01 Heat roller high temperature (SUB)

H4

00 Heat roller low temperature

H5

01 5 continuous detections of POUT not reached jam

L1

00 Scanner feed trouble.

L3

00 Scanner return trouble.

L4

01 Main motor lock detection.
11 Shifter motor trouble
32 PSFAN lock detection

L6

10 Polygon motor lock detection.

L8

01 No full wave signal.

U1

03 Fax board battery error

U2

04 EEPROM communication error
11 Counter check sum error (EEPROM)

U9

00 Panel board communication trouble
80 Panel board communication trouble (Protocol)
81 Panel board communication trouble (Parity)
82 Panel board communication error (Overrun)
84 Panel board communication error (Framing)
88 Panel board communication error (Time out)
99 Panel language error

COMMUNICATION REPORT MAIN CODE:

The communication report code is composed of the following: Communication Report: XX (XXXX);

The Upper 2 digits of the Communication Report Code:	Communication report code of 00 - 90 (Refer to communication report main code).
The Lower 4 digits of the Communication Report Code:	Refer to communication report sub code 1.
The Upper 2 digits:	Communication report sub code 1 (Refer to Communication report sub code 1).
The Lower 2 digits:	Communication report sub code 2 (Refer to Communication report sub code 2).

Note:
The communication report sub code 1 and sub code 2 are in hexadecimal notation. (The others are in decimal notation.)

Report Code	Final Receive Signal (Send side)	Final Receive Signal (Receive side)
0	Abnormal signal	Abnormal signal
1	NSF, DIS	(SID), (SUB), NSS, DCS
2	CFR	(PWD), (SEP), NSC, DTC
3	FTT	EOP
4	MCF	EOM
5	PIP, PIN	MPS
6	RTN, RTP	PRI-Q
7	No signal, DCN	DCN
8	PPR	PPS-EOP
9		PPS-EOM
10		PPS-MPS, PPS-NULL
11	RNR	RR
12	CTR	CTC
13	ERR	EOR-Q
14		PPS-PRI-Q
16	Abnormal signal	Abnormal signal
17	NSF, DIS	SID, SUB, NSS, DCS
18	CFR	PWD, SEP, NSC, DTC
19	FTT	PPS-EOP
20	MCF	PPS-EOM
21	PIP, PIN	PPS-MPS, PPS-NULL
22	RTN, RTP	PRI-Q
23	No signal, DCN	DCN
24	PPR	
25	RNR	RR
26	CTR	CTC
27	ERR	EOR-Q
28		PPS-PRI-Q
29	V.8 Phase-1	V.8 Phase-1
30	V.8 Phase-2	V.8 Phase-2
31	V.8 Phase-3	V.8 Phase-3

Report Code (Result)	Result Displayed	Communication Interruption Content
0 - 31	Refer to “previous table”.	Depends on the point of communication interruption. For 16 or later, V.34 mode communication.
33	BUSY	The calling side cannot establish connection with the remote party.
34	CANCEL	A communication interruption command is made during sending/receiving. The interruption key is pressed for interruption of input. <Send/Receive/Polling/Bulletin board>
35	NG35 XXXX	Power is failed during sending/receiving. <Send/Receive/Polling/Bulletin board>
38	MEM. FULL	Memory over during reception. <Receive/Polling> Print is not made during reception in acting reception inhibit. <Receive/Polling>
42	LENGTH OVER	The receive data length of one page exceeds the limit. <Receive/Polling>
44	ORIGINAL ERROR	A document jam occurs in direct sending. <Send>
46	NO RESPONSE	The FAX signal from the remote party is not detected within T1 time. <Send/Polling> (When in recall, however, the recall setting in case of a communication error is valid.)
48	OK	Normal end of communication
	OK REPLY RECEIVE	OK in Internet FAX send with reception confirmation.
49	NO RX POLL	The called side does not have polling function in polling reception. <Polling> The called side has no data to send. <Polling>
50	RX POLL FAIL	In polling reception, DCN is received for DTC. <Polling> In polling sending, there is no send data. <Bulletin board>
51	PASS # NG	In poling sending, the allow number is not matched. <Bulletin board> In polling sending, the system number is not matched. <Bulletin board>
56	NO REL RX	1) In relay command sending, DCN is received for NSS. <Send> 2) In relay command reception, a remote station number which is not registered is specified. <Receive> 3) In F code relay broadcasting, an F code relay command is received.<Receive>
59	RX NO F-CODE POLL	In F code polling (calling), the remote machine has no DIS bit 47 (polling function). <Polling> In F code polling (calling), the called side has no send data. (DIS bit 9 is 0.)<Polling>
60	NO F-CODE POLL	In F code polling (calling), DCN is received for SEP. <Polling> In bulletin board, there is no send data for SEP. <Bulletin board>
61	RX POLL # NG	In bulletin board, the sub address (bulletin board number (SEP)) is not matched. <Bulletin board>
62	F POLL PASS # NG	In bulletin board, the pass code (PWD) is not matched. <Bulletin board>
63	NO F FUNC	In F code sending, the remote machine has no DIS bit 49 (sub address function). <Send> (Check that the remote machine conforms to F code.)
64	NO F-CODE	In F code sending : <Send> DCN is received for SUB. --- Check the box number. DCN is received for SID. --- Check the box number and pass code. In F code receiving : <Receive> "F code relay broadcasting" or "F code confidential reception" is "Inhibited with soft SW."
67	F PASS # NG	In F code receiving, the pass code (SID) is not matched. <Receive>
68	BOX NO. NG	In F code reception, a box number which is not registered is specified. (SUB is not matched.) <Receive>
69	MEMORY OVER	Memory over in quick online sending <Send>

When the communication result is OK, the communication sub code 1 and the communication sub code 2 are 0000.

COMMUNICATION REPORT SUB CODE 1:
The communication report sub code 1 (upper 2 digits) are always indicated as *00*.

COMMUNICATION REPORT SUB CODE 2:-

Report Code 2	Communication Interruption Content	Send / Receive
02	EOL time up	Receive
03	Carrier detection time up	Receive
06	Memory image decode error	Receive
07	Memory image decode error	Send
08	Time up between frames in phase C (Report code is 0 or 16.)	Send/Receive
11	Polarity reversion detection	Receive
12	Invalid command reception	Receive
13	Time up (1-minute timer/6-second time)	Receive
14	PUT error	Receive
15	In V.34 mode, time up is generated when shifting from Primary to Control.	Receive
16	In V.34 mode, time up is generated when shifting from Control to Primary.	Receive
20	Polarity reversion detection	Send
21	Invalid command reception	Send
22	Fall-back retry number over	Send
23	Command retry number resend over	Send
24	Time up (T5 timer)	Send
25	Time up (T5 timer) in V.34 mode	Send
26	In V.34 mode, time up is generated when shifting from Primary to Control.	Send
28	When sending the FSK signal, no response of send completion is sent back from the MODEM chip within a certain time. (V.34, other than V.34)	Send

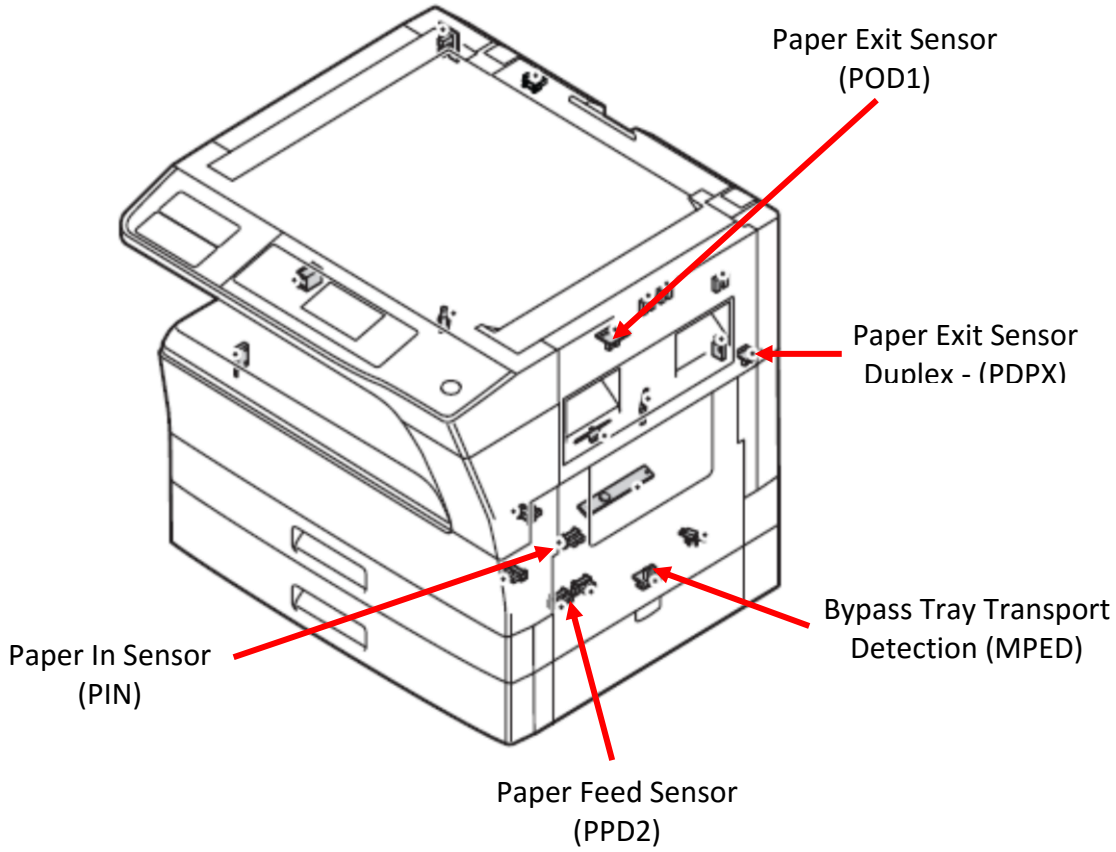
When sub code 2 is *08* or *30* and the communication report is *OK*, the report code is *00* or *16*.

Special Functions – System Settings:

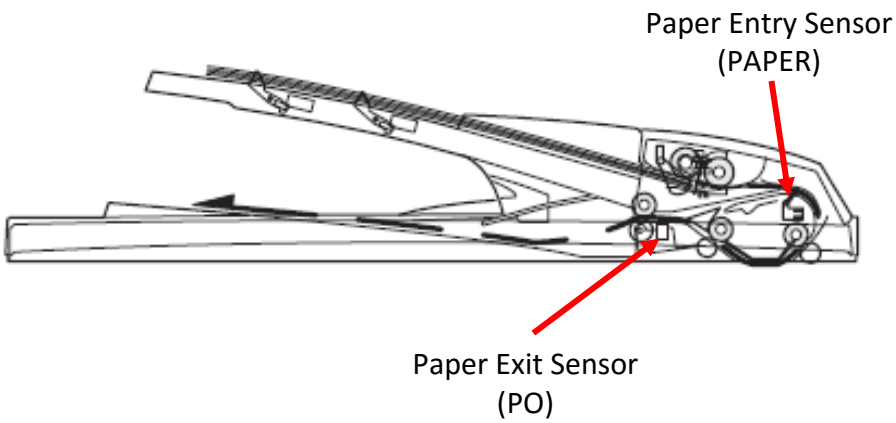
MX-M182D, MX-M232D		
Mode	System Settings	Set Value (* Default)
ADMIN CONTROL	ADMINISTRATOR PASSWORD CHANGE	00000
ACCOUNT CONTROL	AUDITING MODE	Copier*, Printer* & Scanner*
	TOTAL/ACCOUNT	
	RESET ACCOUNT	Reset 1 ACC / Reset All ACC
	ACCOUNT NUMBER CONTROL	Enter / Delete / Change
	ACCOUNT LIMIT	Max. 50,000
	ACCOUNT NUMBER SECURITY	No* / Enable (1 min wait)
	CANCEL JOBS OF INVALID ACCOUNT	Cancel* (Not inhibited)
DEVICE CONTROL	WAITING COPY LAMP SETTING	On* / Off
	OFFSET FUNCTION	Upper Tray* / Centre Tray*
	MEMORY FOR PRINTER	30, 40, 50*, 60, 70%
	USB2.0 MODE	Full speed mode /High speed mode
	RETURN FROM COPY MODE TIMING	0, 10, 30*, 60sec
OPERATION SETTINGS	AUTO CLEAR	0, 10, 20, 60*, 90, 120sec
	DISABLE DISPLAY TIMEOUT	Enable* / Disable
	LANGUAGE SETTING	
	MESSAGE TIME	Short (3sec), Normal (6sec)*, Long (9sec)
	KEY TOUCH SOUND	Off, Short*, Long
	KEY TOUCH SOUND AT INITIAL POINT	Off* / Enable
	KEY PRESS TIME	Minimum* 0.5, 1.0, 1.5, 2.0sec
	DISABLE AUTO KEY REPEAT	Off* / Enable
	DISABLE PAPER SIZE SET	Off* / Enable made.)
ENERGY SAVE	AUTO POWER SHUT-OFF	Off / Enabled*
	AUTO POWER SHUT-OFF TIMER	5*, 30, 60, 120, 240min
	PREHEAT MODE	1*, 5, 30, 60, 120, 240min
	PRINTER AUTO POWER SHUT OFF	Off* / Enable
	TONER SAVE MODE	Off* / Enable
COPY SETTINGS	EXPOSURE ADJUST	Level 1, 2, 3*, 4, 5
	MARGIN DEFAULT	AB system: 0, 5, 10*, 15, 20mm
	ERASE ADJUST	AB system: 0, 5, 10*, 15, 20mm
	ID CARD SETTING	A4 Size / A5-A3 Size
	CARD SHOT DEFAULT	AB system Y: 54mm, X: 86mm
	DEFAULT TRAY SET	Tray 1*, 2, 3, 4, BYPASS TRAY
	DEFAULT EXPOSURE	Auto*, TEXT, PHOTO
	STREAM FEEDING	Off* / Enable
	ROTATION COPY	Off / Enabled*
	SORT AUTO SELECT	No sort, Sort*
	PHOTO MODE DEFAULT	Pattern 1*, 2
	LIMIT OF COPIES	99 copies / 999*copies
	DISABLE AUTO PAPER SELECTION	Off* / Enable
	DISABLE 2-SIDED COPY	Off* / Enable

MX-M182D, MX-M232D with MX-NB12			
Mode	System Setting	Setting	Description
NETWORK	ENABLE DHCP	**YES**, NO	Enable this setting if the machine will use an IP address that is assigned by a DHCP server. If DHCP is used, the IP address assigned to the machine may change automatically on occasion. If this happens, printing will not be possible. Change the port setting of the printer driver to the new IP address.
	IP ADDRESS SETTING • IP Address • Subnet Mask • Default Gateway		If the machine will be assigned a permanent IP address, use these settings to enter the IP address, subnet mask, and default gateway.
PRINTER	NOTICE PAGE		Select whether or not a Notice Page is printed when printing is not successful due to a memory full (or other) error.
	FORCED OUTPUT OF PRINT		When no tray has the specified size of paper, this setting is used to select whether or not the print job will be printed on the closest size of paper.
	OUTPUT TRAY		Specifies the output tray. When the printer driver is used to print, the setting in the printer driver has priority. (This setting is only available if a job separator tray is installed.)
SCANNER	DISABLE USB SCAN		Select whether or not scanning from a computer and scanning from the machine are disabled when a USB connection is used. When "YES" is selected, USB scanning is disabled.
	NEW DEFAULT	COLOUR MODE	This is used to change the default settings for the colour mode, format, and resolution.
		FORMAT	
		RESOLUTION	

MAIN ENGINE:



DOCUMENT FEEDER:



GENERAL SPECIFICATION		
Model	Symptom	Advice
ALL	What is the difference between Button Manger AA and Button Manager AB?	For standard machine only (via USB2.0 port), use Button Manager AA for Push/Twain Scan. When MX-NB12 is installed, USB scanning is also possible using Button Manager AB.
ALL	Unable to use the Bypass Tray when the machine is in Coin Vend Mode	To enable the bypass tray when using coin vendor mode, execute Sim 26-31 and change the value from 1 (default) to 0 or 2 as follows:- 0 = Manual Paper Feed enabled. 1 = Manual Paper Feed disabled (default). 2 = Manual Paper feed enabled + A3 change.

GENERAL / MISC		
MX-NB12	Is it possible to fix the NIC speed on AR5618/5623D & MXM182/232D series when the MXNB12 Network Expansion is installed?	It is possible to fix the NIC speed by installing a Special ROM (v02.02.00a) for the MXNB12. Once the MFP is rebooted following the installation of the special ROM, a Menu to set the Speed and Duplex Mode is displayed within the General tab of Network Setup (Web Page).
	Is it possible to reset the MXNB12 back to factory default?	1. Copy the file "FlashEepClear.act" (available on the support website – Repair Hints) to the root directory of a blank USB Memory Device. 2. Power ON the MXM182/232D. 3. Once the MXNB12 has initialised, insert the USB Memory Device (containing the above file) into the MXNB12 USB Device Port and execute SIM 49-02 to perform a firmware update. 4. Once the firmware upgrade procedure is complete, power OFF the MXM182/232D and remove the USB memory device. 5. Power on the MXM182/232D (The FlashROM/EEPROM setting area is then initialised with factory default settings). Note: If there are any additional files or folder located on the USB memory device, the reset to factory default setting will not execute normally.
ALL	Stretched printing and paper jams after firmware update.	MXM182 & MXM232D use different firmware for each model, not a shared firmware. This symptom can occur if the wrong firmware is incorrectly flashed into the machine. Upgrade the firmware again using the correct version to correct the issue.

FIRMWARE		
ALL	Unable to install AR-DOWNLOAD (USB Device Driver) for the Maintenance Tool when performing a firmware upgrade on Windows 8 or 8.1.	As this USB device driver is not certified, disable the Driver Signature Enforcement by following the procedure below, prior to installation:- 1. Open Settings, select PC Settings. 2. From the General Menu, select Advanced Setup - The OS will restart at this point. 3. From the Boot Menu selection, click Troubleshoot (Refresh/Advanced Tools). 4. Select Advanced Options, Start Up Settings and then Restart. 5. Select Option 7 - Disable Driver Signature Enforcement. Once the OS has started, install the driver as per the normal installation procedure and perform the firmware upgrade.

FACSIMLE		
MX-FX13	Fax option will not receive faxes (no ring) and unable to perform a Main Engine or Fax firmware upgrade.	This symptom may be due to the failure of the PIC program installed on the MXFX13 Fax Main PWB. After MXFX13 installation, execute Sim 66-42 to re-write the PIC program

PRINTER		
MX-NB12	Machine appears to Hang during printing/scanning (Network connection appears unstable).	Upgrade the MX-NB12 firmware to ROM version 02.03.00b (or higher). Also, check/disable SNMP from Network Setup-Security-Port Control – Server Port menu (Web Page) for troubleshooting purposes.
ALL	After performing an OS upgrade from Windows 8 to 8.1 or Server 2012 to 2012R2, the "Features" information within the printer properties is not displayed (Blank).	This is caused by the OS upgrade. If you change the Printer Name or change/reset the Port properties of the queue, the Features information will return
MX-NB12 MX-PK10	Unable to install OSX10.8 Drivers - Cannot be opened because it was not downloaded from the Mac APP Store error message	For additional security, OSX 10.8 Mountain Lion implemented “Gatekeeper”, which can be set to restrict the installation of applications/drivers from a specific source (eg Mac App Store). From the Security & Privacy menu (System Preferences), change the "Allow Applications Downloaded From" setting to Mac App Store and identified developers or Anywhere.

IMAGE SEND		
ALL	After performing an OS upgrade from Windows 8 to 8.1, Button Manager is no longer available	This is caused by the OS upgrade. To overcome this issue, perform one of the following:- 1. Re-register Button Manager to the Scanner Driver a. Right click Start and Click the Control Panel > View device and printers. b. Right Click on the target MFP and select Scan properties. c. Click the Events tab. d. Under Select an event, select the required Button Manager for Start This Program. 2. Uninstall and reinstall the MFP Scanner Driver (Not Button Manager). Then check the Events Tab within the Scanner Driver Properties so that Button Manager is selected for Start This Program.
MX-NB12	Scan to Email operation fails (corrupt PDF attachment and/or Address Book will not open correctly).	For MX-M182/232D series, the MX-NB12 firmware must be upgraded to v02.01.00 (or higher) to support full functionality. Check the firmware version of the MX-NB12 firmware using Sim 22-14 - ensure to upgrade if v01.01.00 is currently installed.
	When performing a Scan to USB function or firmware upgrade, the machine indicates *ERR*.	The USB memory device must be formatted using FAT or FAT32 with a single partition In addition, ensure no hidden partitions are present and the memory device is not “write protected”.

Note: Excludes Part Change/Correction Information.

Description	Model
Maintenance tool software version update [April 2015]	All
Rom version upgrade (including revision history)	MX-NB12
Firmware recovery of network expansion	MX-NB12
Rom version upgrade for field support only.	All
Sharp Remote Device Manager [SRDM] v1.4	MX-NB12
MCU PWB & ROM version upgrade to support Energy Star 2.0	All
Registry growth when using an auto created printer under a Citrix or terminal services environment.	MX-NB12
Measure to prevent damage caused by overvoltage when connecting USB cable.	All
New service part to eliminate the static charge on the USB port	All
Improvement for L4-11 Shifter Motor Trouble	All
Sharp Remote Device Manager [SRDM] v1.3	MX-NB12
Change of colour of the heater lamp connector / harness	MX-M182/232D
Pay extra attention when installing cartridge guide AS to DV unit	MX-M182/232D
Rom version upgrade	MX-M182/232D
Service parts for coin vendor & external auditor	All
Rom version upgrade (including revision history)	MX-NB12
Maintenance tool software version update [February 2012]	All
Sharp Remote Device Manager (SRDM) v1.2	MX-NB12
Countermeasures against front & rear magnification difference when scanning from the RSPF	MX-RP10

Operating System Support Reference:

GDI	Graphic Display Interface.
SPLC	Sharp Printer Language Control (GDI).
-	Sharp Advanced Printing Language (GDI)
PCL	Printer Command Language
PS	Postscript 3
PPD	Postscript Printer Description.
GPD	Generic Printer Description (PCL).
XPS	XML Paper Specification (Page Description Language)
SRDM	Sharp Remote Device Manager
✓	Print Driver / Application / Operation are available and supported.
✓	Windows Vista/2008 or Windows 7 Drivers / Application are supported.
	Print Driver / Application / Operation are not available or supported under *Windows OS*.
	Print Driver / Application / Operation are not available or supported under *Apple OSX.*
WSUS	Digitally Certified Print Driver is installed automatically using Plug & Play via Windows Update server.
WHQL	WHQL (Windows Hardware Quality Lab) Digitally Certified Print Driver for specified Windows Operating System is supported.
09/15	Current Release/Support Schedule - Month/Year [English only].

Note: Release schedule is subject to change without prior notice.

Useful Links (Web Addresses):

Support Website:
MFP Firmware
Service Documentation
Print Drivers
Utility Software - https://secure.sharp.eu/login.html?tp=partnersite-se

Product Information:
(Document Solution Centre):- http://www.sharp.se

Product Key Registration:- https://dse-pub.sharp.co.jp/key/

User Name: keyuser
Password: key000323

Information contained within this guide is subject to change without prior notice.

This Handy Guide is not a substitute for the official Sharp Service manuals.
It is for use by Sharp qualified service technicians with the intention of improving the efficiency of Sharp MFP Devices.

All the latest fault finding information, firmware and printer drivers can be found on the *SHARP* Support Website.