

Nemonic

Printer SDK commands

(Android)

V 1.0.9

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History

Ver	내용	비고
1.0.0	Draft	
1.0.1	Fixed bug about getPrinterStatus on printing	
1.0.2	Fixed bug about disconnected BLE not working when Bluetooth is disabled.	
1.0.3	Fixed bug about connect BTC wrong result when connect a printer already connected.	
1.0.4	Slightly improved printing speed for Nemonic AI printer.	
1.0.5	Improved MIP-001, MIP-001L, MIP-101 printer connection.	
1.0.6	Add print quality printing options.	
1.0.7	Fixed bug about print result for Nemonic AI printer.	
1.0.8	Fixed bug about print complete result. Improved BLE connection.	
1.0.9	Add manual print timeout. Change auto print timeout for Nemonic AI.	

1. Summary

This document describes the printer control SDK for Nemonic printers.

Scan printer(NPrinterScanController)

Basic

1. int startScan()

Start scan.

return: Start scan result (NResult).

2. void stopScan()

Stop scan.

3. boolean isInScan()

Whether scanning.

return: Whether scanning.

Callback(INPrinterScanControllerCallback or NPrinterScanControllerCallback)

1. void deviceFound(NPrinter printer)

Called when a printer is found.

printer: Printer information found.

Control printer(NPrinterController)

Basic

1. int connect(NPrinter printer)

Connect the printer selecting Bluetooth mode automatically depending on the printer type.

printer: Printer to connect to.

return: Connect result (NResult).

2. void disconnect()

Disconnect printer.

3. int getConnectState()

Get connection state.

return Connection state.

4. void cancel()

Cancel image transfer or template settings.

5. void setPrintTimeout(boolean enableAuto, int manualTime)

Set print timeout.

enableAuto: Whether to enable automatic timeout.

manualTime: Manual timeout time.(Applies only when enableAuto is false.)

6. int print(NPrintInfo printInfo)

Print images.

If the width is not 576 pixels, it will be resized.

And after resizing, there are height restrictions for each printer model as shown below.

- Nemonic(MIP-001): 2240
- Nemonic Label(MIP-001L): 2240
- Nemonic mini(MIP-101): 2240
- Nemonic AI(MIP-201): 2000

printInfo: Information for printing.

return: Print result (NResult & NPrinterStatus).

7. int setTemplate(Bitmap image, boolean withPrint, boolean enableDither)

Set a template for the printer.

If the width is not 576 pixels, it will be resized.

And after resizing, there are height restrictions for each printer model as shown below.

- Nemonic(MIP-001): 900
- Nemonic Label(MIP-001L): 900

- Nemonic mini(MIP-101): 900
- Nemonic AI(MIP-201): 2000

image: Image to set as template.

withPrint: Whether to print after setting a template.

enableDither: Whether to process image dither.

return: Template setting result (NResult & NPrinterStatus).

8. int clearTemplate()

Initializing the template of the printer.

return: Template initialization result (NResult).

9. int getPrinterStatus()

Get printer status.

return: Printer status (NPrinterStatus or NResult(<0)).

10. int getCartridgeType()

Get cartridge type.

return Cartridge type (NCartridgeType or NResult(<0)).

11. NResultString getPrinterName()

Get printer Bluetooth name.

return: Printer Bluetooth name(value: printer Bluetooth name,
result: NResult).

12. int getBatteryLevel()

Get battery level.

return: Battery level (level or NResult(<0)).

13. int getBatteryStatus()

Get battery status.

return: Battery status (status or Nresult(<0)).

14. int getDefaultConnectDelay()

Get default delay after connecting.(Only Nemonic AI printer)

return: Default delay after connecting (milly second).

15. int getConnectDelay()

Get delay after connecting.(Only Nemonic AI printer)

return: Delay after connecting (milly second).

16. void setConnectDelay(int delay)

Set delay after connecting.(Only Nemonic AI printer)

As the time decreases, the faster the connection speed.

As the time increases, the stability of the connection increases.

delay: Delay after connecting (milly second).

Callback(INprinterControllerCallback or NPrinterControllerCallback)

1. void disconnected()

Called when the printer is disconnected due to external factors.

2. void printProgress(int index, int total, int result)

Called to notify the progress of each print image when printing multiple images.

index: Current print completion index (start from 0).

total: Total number of printing images.

result: Print result of the currently printed index.

3. printComplete(int result)

Called when all printing is complete.

result: Print result.

Object

NPrinter

1. boolean isEmpty()

Whether the printer information is empty.

return: Whether the printer information is empty.

2. boolean isValid()

Whether the printer information is a Nemonic product.

return: Whether the printer information is a Nemonic product.

3. void reset()

Reset printer information.

4. String getName()

Get printer Bluetooth name.

return: Printer Bluetooth name.

5. void setName(String name)

Set printer Bluetooth name.

name: Printer Bluetooth name.([A-Za-z0-9]{4,20}(MIP201:
[A-Za-z0-9]{4,13}))

6. boolean checkName(String name)

Check printer Bluetooth name validation.

name: Printer Bluetooth name.

return Printer Bluetooth name valid.

7. static boolean checkName(NPrinterType type, String name)

Check printer Bluetooth name validation.

type: Printer type.

name: Printer Bluetooth name.

return: Printer Bluetooth name valid.

8. static boolean checkNameWithoutCartridgeType(NPrinterType
type, String name)

Check printer Bluetooth name without cartridge type(using setting
printer name).

type: Printer type.

name: Printer Bluetooth name.

return: Printer Bluetooth name valid.

9. String getAddress()

Get Mac address.

return: Mac address.

10. boolean setAddress(String address)

Set Mac address.

address: Mac address.

return: Mac address valid.

11. boolean validateAddress(String address)

Check Mac address valid.

address: Mac address.

return Mac address valid.

12. NPrinterType getType()

Get printer type.

return: Printer type.

13. void setType(NPrinterType type)

Set printer type.

type: Printer type.

14. boolean isLabel()

Label printer or not(It does not refer to a Nemonic Label product(MIP-001L)).

return: Label printer or not.(When the result is false, it does not mean that it is not a Nemonic Label product (MIP-001L)).

15. boolean isMini()

Whether the printer is Nemonic mini printer.

return: Whether the printer is Nemonic mini printer.

16. boolean isFixedPaperSize()

Whether it is a fixed length cartridge type.

return: Whether it is a fixed length cartridge type.

17. boolean isSupportedBattery()

Whether the printer supports batteries.

return: Whether the printer supports batteries.

18. void setCartridgeType(NCartridgeType type)

Set cartridge type.

type: Cartridge type.

19. NCartridgeType getCartridgeType()

Get cartridge type (based on printer name).

return Cartridge type.

20. int getWaitTimeForPrint(int height, int copies)

Get print time.

height: Print image height.

copies: Print copies.

return: Print time (msec).

21. boolean equals(Object obj)

Whether it is the same printer (based on Mac address).

obj: Other NPrinter object for comparison.

NPrintInfo

1. boolean isEmpty()

Whether the images for printing are empty.

return: Whether the images for printing are empty.

2. NPrintInfo setPrinter(NPrinter printer)

Set the printer for generating print data.

printer: The printer for creating print images (Connected or connectable printer).

return: Object itself.

3. NPrinter getPrinter()

Get the printer for generating print data.

return: The printer for generating print data.

4. NPrintInfo setPrintQuality(NPrintQuality quality)

Set the print quality. (Only Nemonic AI firmware 1.03 or later.)

quality: Print quality.

return: Object itself.

5. NPrintQuality getPrintQuality()

Get the print quality.

return: Print quality.

6. NPrintInfo setImage(Bitmap image)

Set the image for printing.

image: The image for printing.

return: Object itself.

7. Bitmap getImage()

Get the image for printing.

return: The image for printing.

8. NPrintInfo setImages(Bitmap[] images)

Set the images for printing.

images: The images array for printing.

return: Object itself.

9. NPrintInfo setImage(List<Bitmap> images)

Set the images for printing.

images: The images array for printing.

return Object itself.

10. List<Bitmap> getImages()

Get the images for printing.

images: The images list for printing.

return: Object itself.

11. NPrintInfo setCopies(int copies)

Set copies.

copies: Copy quantity.

return: Object itself.

12. int getCopies()

Get copies.

return: Copy quantity.

13. NPrintInfo setEnableLastPageCut(boolean enable)

Set enable last page cut.

enable: Enabled or not.

return Object itself.

14. boolean isLastPageCutEnable()

Whether to cut the last page.

return: Whether to cut the last page.

15. NPrintInfo setEnableDither(boolean enable)

Set enable dither processing.

enable: Enabled or not.

return: Object itself.

16. boolean isEnableDither()

Whether to enable print image dither processing.

return: Whether to enable print image dither processing.

17. `NPrintInfo setEnableCheckPrinterStatus(boolean enable)`

Set enable checking printer status.

enable: Enable or not.

return: Object itself.

18. `boolean isCheckPrinterStatus()`

Whether to check printer status when printing.

return: Whether to check printer status when printing.

19. `NPrintInfo setEnableCheckCartridgeType(boolean enable)`

Set enable checking cartridge type.

enable: Enabled or not.

return: Object itself.

20. `boolean isCheckCartridgeType()`

Whether to check the cartridge type when printing.

return: Whether to check the cartridge type when printing.

21. `NPrintInfo setEnableCheckPower(boolean enable)`

Set enable checking about power.

enable: Enabled or not.

return: Object itself.

22. boolean isCheckPower()

Whether to check battery when printing.

return: Whether to check battery when printing.

23. Bitmap getPrintImage()

Get the image for printing.

return: The image for printing.

24. List<Bitmap> getPrintImages()

Get the images for printing.

return: The images for printing.

NResultString

1. int getResult()

Get result

return: Result (NResult).

2. void setResult(int result)

Set result.

result: Result (NResult).

3. String getValue()

Get value.

return: Value.

4. void setValue(String value)

Set value.

value: Value.

Define

NBatteryStatus

1. NO_CHARGING

Normal battery level without charging.

2. LOW_NO_CHARGING

Low battery level for printing without charging.

3. CHARGING

Normal battery level with charging.

4. LOW_CHARGING

Low battery level with charging.

NCartridgeType

1. NONE

None.

2. WHITE

White sticky cartridge.

3. YELLOW

Yellow sticky cartridge.

4. GREEN

Green sticky cartridge.

5. BLUE

Blue sticky cartridge.

6. PINK

Pink sticky cartridge.

7. L1

3x1 label cartridge.

8. L2

3x2 label cartridge.

9. L3

3x3 label cartridge.

10. L4

3x4 label cartridge.

11. M1

3x1 Nemonic mini cartridge.

12. M2

3x2 Nemonic mini cartridge.

13. M3

3x3 Nemonic mini cartridge.

14. M4

3x4 Nemonic mini cartridge.

NConnectState

1. DISCONNECTED

Disconnected state.

2. CONNECTING

Connecting state.

3. CONNECTED

Connected state.

4. DISCONNECTING

Disconnecting state.

NPrinterStatus

1. OK

Ok.

2. OUT_OF_PAPER

Out of paper.

3. COVER_OPENED

Over opened.

4. OVERHEAT

Overheat.

5. PAPER_JAM

Paper jam.

NPrinterType

1. NONE

None.

2. NEMONIC

Nemonic (MIP-001).

3. NEMONIC_LABEL

Nemonic Label (MIP-001L).

4. NEMONIC_MINI

Nemonic mini (MIP-101).

5. NEMONIC_MIP201

Nemonic AI (MIP-201).

NPrintQuality

1. LOW_FAST

Low quality and fast speed.

2. MIDDLE

Middle quality and middle speed.

3. HIGH_SLOW

High quality and slow speed.

NResult

1. OK

Ok.

2. TIMEOUT

Timeout.

3. CANCELED

Canceled.

4. BATTERY_LOW

Battery low.

5. BATTERY_NEED_CHARGE

Battery needs charging.

6. PAPER_NOT_MATCHED

Paper not matched.

7. BLUETOOTH_UNSUPPORTED

Bluetooth not supported.

8. BLUETOOTH_DISABLED

Bluetooth disabled.

9. BLUETOOTH_NO_PERMISSION

No Bluetooth permission.

10. BLUETOOTH_RESETTING

Bluetooth resetting.(only iOS)

11. CANCELED_OR_BLUETOOTH_DISABLED

Bluetooth connection canceled or disabled.(only iOS)

12. BLUETOOTH_UNKNOWN

Bluetooth unknown.(only iOS)

13. LOCATION_NO_PERMISSION

No location permission.(only Android)

14. LOCATION_DISABLED

Location disabled.(only Android)

15. SCAN_FAILED

Printer scan failed.

16. NO_SELECTED_PRINTER

No selected printer.

17. NOT_CONNECTED

Not connected.

18. ALREADY_CONNECTED

Already connected.

19. NOT_FOUND

Bluetooth device not found.(only iOS)

20. NOT_CONNECTABLE

Bluetooth is not connectable.(only iOS)

21. SOCKET_ERROR

Socket error.(only Android)

22. CONNECT_ERROR

Connect error.

23. CONNECT_FAILED

Connect failed.

24. SESSION_ERROR

Session error.

25. CONNECT_SERVICE_NOT_FOUND

Connect service not found.

26. CONNECT_UNSUPPORTED_MODE

Unsupported connect mode.

27. IO_RECEIVE_ERROR

IO receive error.

28. IO_SEND_ERROR

IO send error.

29. SEND_FAILED

Send failed.

30. UNKNOWN

Unknown.

31. INVALID_PARAMETER

Invalid parameter.

32. NOT_MATCHED_PRINTER_TYPE

Not matched printer type.

33. NO_CALLBACK

No callback.

34. NOT_MATCHED_COMMAND_RESULT_FORMAT

Not matched printer command result format.

35. INVALID_PRINTER_NAME

Invalid printer name.

36. INVALID_PRINTER_RESULT

Invalid printer result.

37. PRINTER_RESULT_FAILED

Printer result failed.

38. UNSUPPORTED_DEVICE

Unsupported device.

