

Milan / Paylink Firmware Version 3.1.11.7 Release Notice.

This is a **Beta** (3) release of the Milan / Paylink Interface firmware - code version **1.11.7**. This is an upgrade that adds support for a number of new devices and fixes the problems discovered since the release of version 1.11.6.

PC code versions.

To obtain all of the new facilities described in this release document the following PC versions are required:

Aesimhei.dll	Version 1.4.0.0 or later
AESWDriver.exe	Version 1.1.3.2 or later
AESW98Driver.exe	Version 1.1.2.2 or later
Aesimhei.h	Dated 10/09/08 or later (See new programming facilities below)

New devices handled by this release.

- This release supports the Merkur 100 note recycler, as a note acceptor and 3 dispenser.
- This release supports the Fujitsu F56 / F53 note dispenser as a number of dispenser devices, one per cassette.
- This release now fully supports the Azkoyen Hopper U series, including in encrypted mode.
- This release will automatically use the new level 3 encryption as used in the new Serial Compact Hopper 3E

Minor enhancements in this release.

- Coin table information is now retrieved from an SR5.
- An UNRECOGNISED_COIN event is now queued when an acceptor reports an undefined queue.
- With this version an auto-route setting of Routed Path = 8 and Default Path = <other> now works with an SR5 - see note below.
- Note acceptors can now be standard cctalk as well as BNV encrypted with CRC or unencrypted with CRC.

Bugs in version 1.11.6 fixed in this release.

- For acceptors that hold routing in RAM the coin routing would be lost on a power cycle. All routing is now restored following an acceptor reset.
- Acceptors that were reset before accepting any coins are now detected and re-set up.
- Some MCL hoppers have the coin value held in bytes 0-5 of device Eeprom. Older release checked byte 1-8, but the SCH3 has the encryption level stored here. This resulted in hoppers erroneously acquiring the value 2 or 3.
- If a dispenser is inhibited whilst paying out, Paylink will now correctly report the in-progress pay out. This goes some way to allowing a payout to be abandoned by inhibiting all dispensers.
- Many bugs fixed in the handling of Azkoyen hoppers. Especially bugs related to unencrypted hoppers with old style 4 byte dispense commands were wrongly treated following a NAK. This problem was introduced in 1.11.6 with the new hopper encryption code.
- Hoppers which do not respond with a NAK to 4 byte dispense are now handled. This particularly applies to Azkoyen hoppers in encrypted mode.
- If a hopper value is reassigned and the hopper is Inhibited at almost the same time, then the new value assignment is lost from the Paylink without comment. The PC shows the value as changed, but the status DISPENSER_VALUE_REASSIGNED is never returned and the actual value is unchanged.
- The SEC meter update code will now allow unlimited increments - previous values only coped with increments < 32K
- The cctalk coin acceptor code now copes with acceptors whose path enables default to zero (off).

Compatibility with 1.11.6

All software in this release can be freely mixed with that in 1.11.7, except that the Aesimhei.h version shown above is required to obtain the new constants etc. (see below.)

Upgrade / Downgrades

Any earlier version of the firmware can be upgraded to this version without any problems. Downgrading to 1.11.x, 1.10.x or 1.9.x will not cause any problems.

SR5 and Dynamic / Auto routing

An SR5 stores internally both the “Routed Path” and the “Default Path”. These stored paths are retrieved by Paylink during start-up. The SR5 switches between these paths by using the concept of overriding the paths, an overridden Routed path is not used, and so the coin route falls back to the Default path.

As part of its design, an SR5 cannot have path 8 overridden. In previous versions this means that an auto-route setting of Routed Path = 8 and Default Path = <other> just does not work.

With this version such a setting now causes Paylink to turn off the “override capable” flag and update the coin routing dynamically - both for the coin involving path 8 and all other coins. Under these conditions, the path settings will no longer be saved by the SR5.

Program Facilities changed.

With the introduction of the new devices, some new statuses and constants have been introduced.

Merkur 100 note recycler

The payout sequence for a Merkur recycler is slow, and requires the notes to be manually removed as they are delivered.

Because of this, Paylink supports the facility to dump a roll into the cash box. To dump a roll:

- the roll to be dumped should be found using ReadDispenserDetails(),
- the Dispenser.Status field changed to DISPENSER_CASHBOX_DUMP
- and WriteDispenserDetails() used to update the record to Paylink.

The dump will be complete when the CoinCount field for the roll is returned by ReadDispenserDetails() as zero.

There are also two new device identity constants:

DP_MERKUR_100	For the acceptor itself
DP_MERKUR_100_PAY	For each one of the recycler rolls.

Fujitsu F56 / F53 note dispenser

The only change for this is the new device identity constants assigned to each of the dispenser’s cassettes:

DP_FUJITSU_F56
DP_FUJITSU_F53