# Firmware Product Bulletin

This document will show the various firmware and related term type and payphone types. This can be used for properly upgrading terminals as well as allowing the technician in the field ensure the correct firmware is in the terminal.

If you have any questions please call the 1-800-820-4680 helpdesk.

## Terminal firmware version by terminal type

The following tables list each terminal type currently in the field and the version of software that is required by each.

**Table PB-1: Terminal firmware listings**

| MTR | Version | Term Type | Description |
|---|---|---|---|
| **Multipay Multicard** | | | |
| MTR1.6s | **M12ABX10** | 12 | Multipay Multicard E/F |
| MTR1.6s | **M12ABX11** | 12 | Multipay Multicard E/F |
| MTR1.6 | **M12ABX12** | 9 | Multipay Multicard E/F |
| | | | |
| MTR1.7 | **M06CAA10** | 13 | Multipay Multicard E/S |
| MTR1.7 | **M06CAA17** | 13 | Multipay Multicard E/S |
| MTR1.7 | **M06CAF03** | 13 | Multipay Magstripe E/S |
| MTR1.7 | **M06CFA01** | 14 | Multipay Multicard E/S |
| MTR1.7 | **M06KFA01** | 14 | Multipay Multicard E/F |
| MTR1.7 | **NAA1F03** | 26 | Multipay Multicard E/F |
| MTR1.7 | **NAA1F04** | 26 | Multipay Multicard E/F |
| MTR1.7 | **NAA1J03** | 23-26 | Multipay Multicard E/J |
| MTR1.7 | **NAA1J04** | 26 | Multipay Multicard E/J |
| MTR1.7 | **NAA1J06** | 26 | Multipay Multicard E/J |
| MTR1.7 | **NAA1S03** | 26 | Multipay Multicard E/S |
| MTR1.7 | **NAA1S04** | 26 | Multipay Multicard E/S |
| MTR1.7 | **NAA1S05** | 26 | Multipay Multicard E/S |

**Table PB-1: Terminal firmware listings**

| MTR | Version | Term Type | Description |
|---|---|---|---|
| MTR1.7 | **NAA1S06** | **26** | Multipay Multicard E/S |
| | | | |
| MTR1.9 | **NBA1F01** | **30 (28)** | Multipay Multicard E/F |
| MTR1.9 | **NBA1F02** | **30 (28)** | Multipay Multicard E/F |
| MTR1.9 | **NBA1F03** | **30** | Multipay Multicard E/F |
| MTR1.9 | **NBA1J01** | **30** | Multipay Multicard E/J |
| | | | |
| MTR2.0 | **NCA1S01** | **36** | Multipay Multicard Downloadable |
| MTR2.0 | **NCA1S02** | **36** | Multipay Multicard Downloadable |
| MTR2.0 | **NCA1X01** | **36** | Multipay Multicard Downloadable |
| MTR2.0 | **NCA1X02** | **36** | Multipay Multicard Downloadable |
| MTR2.0 | **NCA1X03** | **36** | Multipay Multicard Downloadable |
| | | | |
| MTR2.11 | **NKA1X01** | **51** | Multipay Multicard Downloadable |
| MTR2.11 | **NKA2X01** | **53** | Multipay Multicard Downloadable |
| MTR2.11 | **NKA2X02** | **53** | Multipay Multicard Downloadable |
| MTR2.11 | **NKA1X02** | **51** | Multipay Multicard Downloadable |
| MTR2.11 | **NKA1X03** | **51** | Multipay Multicard Downloadable |
| | | | |
| **Card only** | | | |
| MTR1.7 | **NAE1F02** | **23** | Card only multicard E/F |
| MTR1.7 | **NAE1J02** | **23** | Card only multicard E/J |
| MTR1.7 | **NAE1S02** | **23** | Card only multicard E/S |
| | | | |
| MTR1.9 | **NBE1F01** | **27** | Card only multicard E/F |
| MTR1.9 | **NBE1S01** | **27** | Card only multicard E/S |
| | | | |
| | | | |

**Table PB-1: Terminal firmware listings**

| MTR | Version | Term Type | Description |
|---|---|---|---|
| **Deskset** | | | |
| MTR1.7 | **MO6KDB02** | **15** | Desk Multicard E/F |
| MTR1.7 | **MO6KDB03** | **15** | Desk Multicard E/F |
| MTR1.7 | **MO6KDB05** | **15** | Desk Multicard E/F |
| MTR1.7 | **MO6KDB07** | **15** | Desk Multicard E/F |
| MTR1.7 | **MO6KDC01** | **15** | Desk Multicard E/F |
| MTR1.7 | **MO6KDC02** | **15** | Desk Multicard E/F |
| MTR1.7 | **MO6CDB01** | **15** | Desk Multicard E/S |
| MTR1.7 | **MO6CDB02** | **15** | Desk Multicard E/S |
| MTR1.7 | **NAJ1S06** | **25** | Desk Multicard E/S |
| MTR1.7 | **NAJ1S07** | **25** | Desk Multicard E/S |
| MTR1.7 | **NAJ1F06** | **25** | Desk Multicard E/F |
| MTR1.7 | **NAJ1J04** | **25** | Desk Multicard E/J |
| MTR1.7 | **NAJ1J06** | **25** | Desk Multicard E/J |
| MTR1.7 | **NAJ1J07** | **25** | Desk Multicard E/J |
| MTR1.7 | **NAJ1S04** | **25** | Desk Multicard E/S |
| MTR1.7 | **NAJ2J01** | **25** | Desk Multicard E/J REL 2 H/W |
| MTR1.7 | **NAJ2J02** | **25** | Desk Multicard E/J REL 2 H/W |
| MTR1.7 | **NAJ2S01** | **25** | Desk Multicard E/S REL 2 H/W |
| MTR1.7 | **NAJ2S03** | **25** | Desk Multicard E/S REL 2 H/W |
| MTR1.7 | **NAJ2S04** | **25** | Desk Multicard E/S REL 2 H/W |
| MTR1.7 | **NAJ2S05** | **25** | Desk Multicard E/S REL 2 H/W |
| MTR1.7 | **NAJ2J03** | **25** | Desk Multicard E/J REL 2 H/W |
| MTR1.7 | **NAJ2S06** | **25** | Desk Multicard E/S REL 2 H/W |
| MTR1.7 | **NAJ2S07** | **25** | Desk Multicard E/S REL 2 H/W |
| | | | |
| MTR1.9 | **NBJ1F01** | **29** | Desk Multicard E/F REL 1 H/W |
| MTR1.9 | **NBF1F03** | **29** | Desk Multicard E/F REL 1 H/W |

**Table PB-1: Terminal firmware listings**

| MTR | Version | Term Type | Description |
|---|---|---|---|
| MTR1.9 | **NBJ1J03** | **29** | Desk Multicard E/J REL 1 H/W |
| MTR1.9 | **NBJ2F01** | **29** | Desk Multicard E/F REL 2 H/W |
| MTR1.9 | **NBJ2F03** | **29** | Desk Multicard E/F REL 2 H/W |
| MTR1.9 | **NBJ2F04** | **29** | Desk Multicard E/F REL 2 H/W |
| MTR1.9 | **NBJ2J03** | **29** | Desk Multicard E/J REL 2 H/W |
| MTR1.9 | **NBJ2J04** | **29** | Desk Multicard E/J REL 2 H/W |
| | | | |
| MTR1.11 | **NJJXS01** | **45** | Desk Multicard E/S REL 2 H/W |
| MTR1.11 | **NJJXS02** | **45** | Desk Multicard E/S REL 2 H/W |
| | | | |
| **Coin only** | | | |
| MTR1.7 | **NAD4J01** | **19** | Coin Only Display E/J |
| MTR1.7 | **NAD4J02** | **19** | Coin Only Display E/J |
| MTR1.7 | **NAD4S02** | **19** | Coin Only Display E/S |
| MTR1.7 | **NAD4S03** | **19** | Coin Only Display E/S |
| MTR1.7 | **NADXS01** | **19, 24** | Coin Only No Display E/S |
| MTR1.7 | **NADXS02** | **19** | Coin Only No Display E/S |
| MTR1.7 | **NADXS03** | **19** | Coin Only No Display E/S |
| MTR1.7 | **NADXS04** | **19** | Coin Only No Display E/S |
| | | | |
| MTR2.0 | **NED2X01** | **38** | Coin Only Display |
| MTR2.0 | **NED4X01** | **38** | Coin Only No Display |
| | | | |
| MTR2.11 | **NKD1X04** | **56** | Coin Only Display |
| | | | |
| **Inmate** | | | |
| MTR1/7i | **M06KEC12** | **15** | Inmate E/F |
| | | | |

**Table PB-1: Terminal firmware listings**

| MTR | Version | Term Type | Description |
|---|---|---|---|
| **NetVenue** | | | |
| MTR2.0 | **NCE2X01** | **36** | Card MAC WEBSTN |
| MTR2.0 | **NCE2X02** | **36** | Card MAC WEBSTN |
| | | | |
| MTR2.0 | **NCE2X03** | **36** | Card NETVENUE |
| MTR2.0 | **NCE3X01** | **36** | Card NETVENUE |
| | | | |
| **Graphic Terminal** | | | |
| MTR2.0 | **NEA1X02** | **40** | Multipay Graphic |
| | | | |
| MTR2.2 | **NEA1S01** | **22** | Multipay Graphic E/S |
| | | | |
| **International** | | | |
| MTR1.7 | **M06KOB02** | | Card Only NETAS |
| MTR1.7 | **M06KOB04** | | Card Only NETAS |
| MTR1.7 | **M06CND04** | | Card Only MACEDONIA/NETAS |
| MTR1.7 | **M06JOB02** | | Card Only JORDAN/NETAS |
| MTR1.7 | **M06CNB02** | | Card Only BOSNIA/NETAS |
| MTR1.9 | **PBAXS02** | **32** | Multipay PERU |
| MTR1.9 | **PBAXS03** | **32** | Multipay PERU |
| MTR1.9 | **PBAXS04** | **32** | Multipay PERU |
| MTR1.9 | **EBA1S01** | **32** | Multipay EQUADOR |
| MTR1.9 | **IBAXS01** | **46** | Multipay INTER'L |
| MTR1.9 | **IBDXS01** | **42** | Coin Only INTER'L |
| MTR1.9 | **IBF4S01** | **33** | Card Only COLOMBIA |
| MTR1.9 | **IBK4S01** | **33** | Deskset COLOMBIA |
| | | | |
| | | | |

**Table PB-1: Terminal firmware listings**

| MTR | Version | Term Type | Description |
|---|---|---|---|
| **Special** | | | |
| MTR2.2 | **NEA3F01** | **22** | Multipay Mondex |
| MTR2.2 | **NEA3F02** | **22** | Multipay Mondex |
| MTR2.2 | **NEA3F03** | **22** | Multipay Mondex |
| MTR2.2 | **NEA3F04** | **22** | Multipay Mondex |
| | | | |
| MTR2.3 | **NFA1S02** | **34** | Multipay E-Purse |

*IMPORTANT NOTE:* **The above list is for general release terminals.**

**For special releases, firmware may be specific to certain versions of the through-hole control PCP. If you are unsure of what replacement firmware you require, contact Millennium GTS for confirmation.**

**If you are attempting to upgrade the version of the terminal to another version, please refer to the upgrade documentation.**
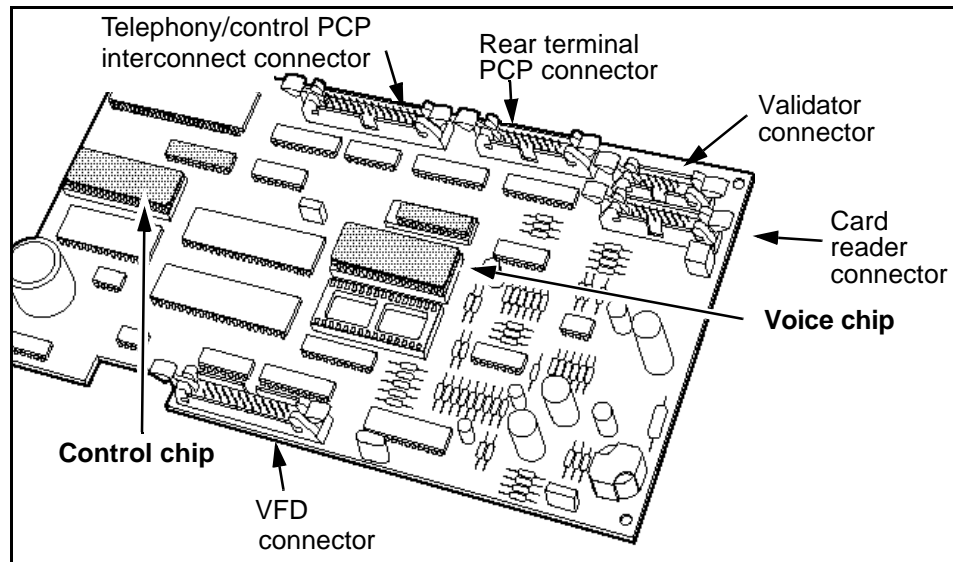
# Multi-pay and Card-only control boards

There are two types of Multi-pay and Card-only control boards in the field.

The older type is the through-hole board, as shown in Figure PB-1. The newest board, which allows electronic updating of firmware, is shown in Figure PB-2, and is called the multi-application control board.
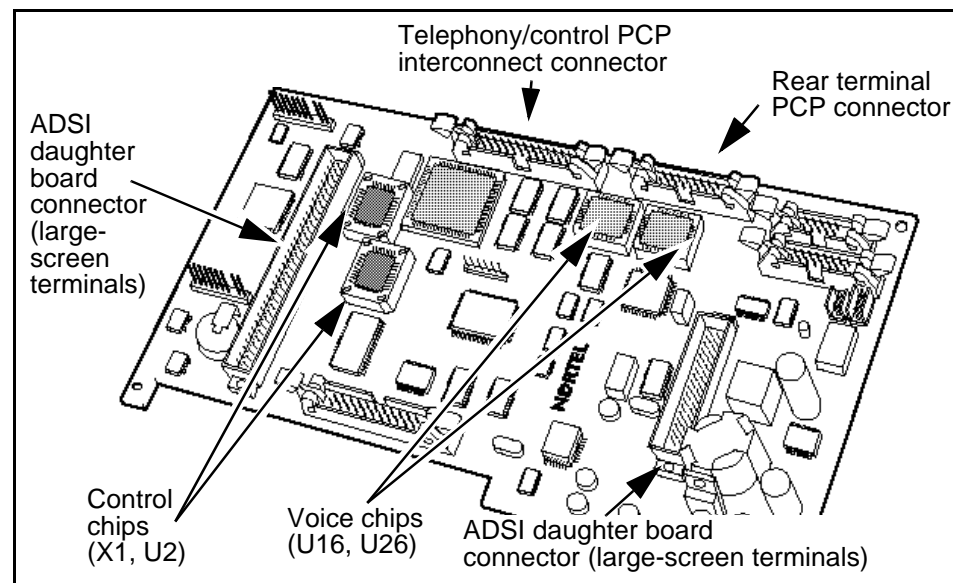
Chip locations on the two types of control boards are shown in the next two figures.

Note that the through-hole control PCP has one firmware and one voice chip, and the multi-application control board has two of each.

**Figure PB-1: Through-hole board — replaceable chips**



**Figure PB-2: Multi-application board — replaceable chips**

| See this Vintage alert | Large-screen terminals |
|---|---|
| | If the control PCP comes from a Graphical terminal, there will be an ADSI daughter board covering the firmware chips. |
| | Remove this board by loosening it at either end and then pulling it off the control PCP. Put the board in an anti-static bag until you are ready to reinstall it. |

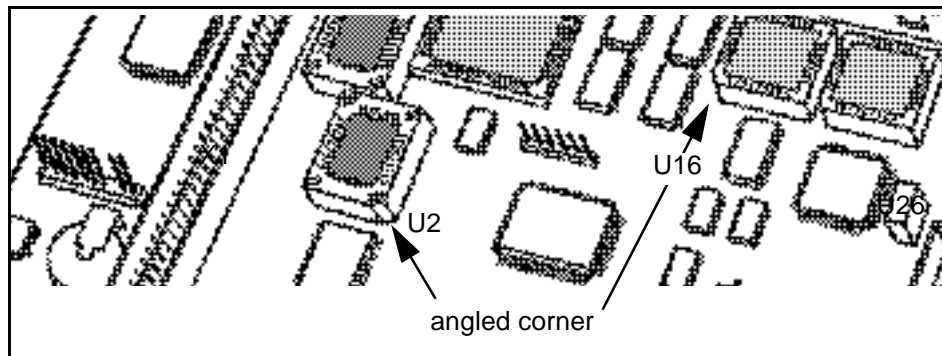Refer to Table PB-1 for the socket numbers for the multi-application control PCP firmware chips.

**Table PB-1: Firmware chip socket locations**

| Control chips | Label | | Socket |
|---|---|---|---|
| Firmware chip #1 | XXXXXX FW2.0A U2 | (loaded device CPC code) (firmware and version code) (socket number) | U2 |
| Firmware chip #2 | XXXXXX FW2.0A X1 | (loaded device CPC code) (firmware and version code) (socket number) | X1 |
| **Voice chips** | | | |
| Voice chip #1 | XXXXXX VW2.0A U16 | (loaded device CPC code) (voiceware and version code) (socket number) | U16 |
| Voice chip #2 | XXXXXX VW2.0A U26 | (loaded device CPC code) (voiceware and version code) (socket number) | U26 |

**Through-hole control PCP:** There is a notch or tab on the socket that matches a notch or tab on the chip. Match these up to ensure the chip is orientated properly in the socket.

**Multi-application control PCP:** An angled corner on the chip matches to an angled corner on the bottom of the sockets. Refer to Figure PB-3.

**Figure PB-3: Lining up the chip in the socket**



U16

U2

U26

angled corner

# Desk terminal control

The desk set has one firmware and one voiceware chip. they are located near the card reader assembly. Refer to the following diagrams.

**Figure PB-4: Desk set control PCP firmware locations**



Control PCP connector

Card reader connector

Card reader lifted off control board

Super Cap

Overhead view of Control PCP with card reader lifted

Overhead view of control PCP with card reader in place

Overhead view of control PCP, with card reader removed, showing position of firmware chips

Firmware chip placement on control PCP

Release 1

Release 2

Voice chip

J5

Control chip

Battery

J5

Voice chip

Control chip