Using a Memory Card

Chapter Objectives

This chapter describes:

- supported memory cards.
- using the memory card retainer.
- loading application from a memory card.
- loading application on a memory card.
- storing font files on a memory card.
- removing a memory card.

Supported Memory Cards

Memory cards are available to transfer application files to/from a PanelView terminal with a memory card slot. The PanelView 300 Micro terminal does not support a memory card.

PanelView terminals running firmware 3.0 (or later) and computers with an ATA card drive support the following cards.

- 4M flash ATA card (Cat. No. 2711-NM24)[1]
- 8M flash ATA card (Cat. No. 2711-NM28)[1]
- 16M flash ATA card (Cat. No. 2711-NM216)[1]
- 64M flash ATA card (Cat. No. 2711-NM232)

All PanelView terminals and computers with a DataBook TMB240 or TMB250 card drive support these cards:

- 256K flash memory card (Cat. No. 2711-NM11)[1]
- 1M flash memory card (Cat. No. 2711-NM12)[1]
- 2M flash memory card (Cat. No. 2711-NM13)[2]
- 4M flash memory card (Cat. No. 2711-NM14)[2]
- 10M flash memory card (Cat. No. 2711-NM15)[2]

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[1] No longer available.
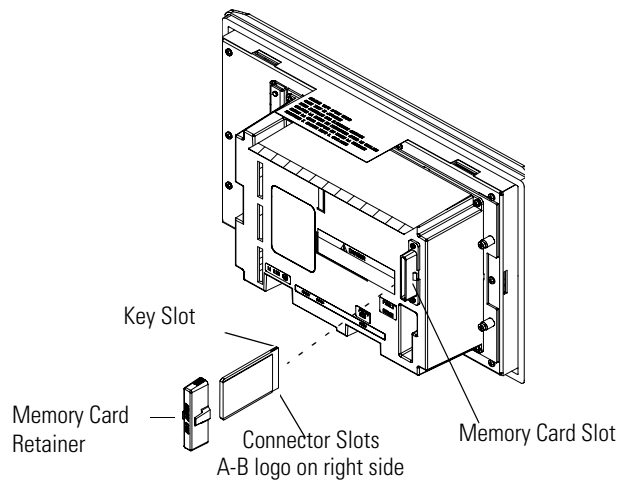
[2] Limited availability.

Use the Memory Card Retainer

A memory card retainer (catalog no. 2711-NMCC, -NMCD, -NMCE) is shipped with all PanelView terminals, except the PV300 Micro terminal and the PV1400 terminal. It is required for:

- UL508 installations.

- vibration/mechanical shock environments.

- CE certified installations.

- installations where the application uses a font file on a memory card, and the card must remain in the terminal during operation.

The following illustration shows the memory card and the memory card retainer. The card loads in the back of the terminal with the key slot on top.

Memory Card and Memory Card Retainer

Key Slot

Memory Card Retainer

Connector Slots
A-B logo on right side

Memory Card Slot

| TIP | The back of the PanelView 900 terminal is shown above. The location of the card slot will vary between the different terminals. |

The memory card retainer protects against:

- electrical shock from loose high voltage wires in an electrical enclosure per UL508.

| **ATTENTION** | When permanently installing a memory card in an electrical enclosure, the memory card retainer must be used to avoid accidental contact of high voltage leads to metal surfaces on the card. Failure to use the retainer could result in physical injury or damage to the terminal. |

- electrostatic discharge (ESD) up to 15KV.

| **ATTENTION** | Without the memory card retainer installed, electrostatic discharge could reset or damage the PanelView terminal. |

- accidental removal or ejection of the memory card from the card slot.

| **ATTENTION** | Accidental removal of an ATA flash card from the card slot could result in damage to the card. |

Load Application from a Memory Card

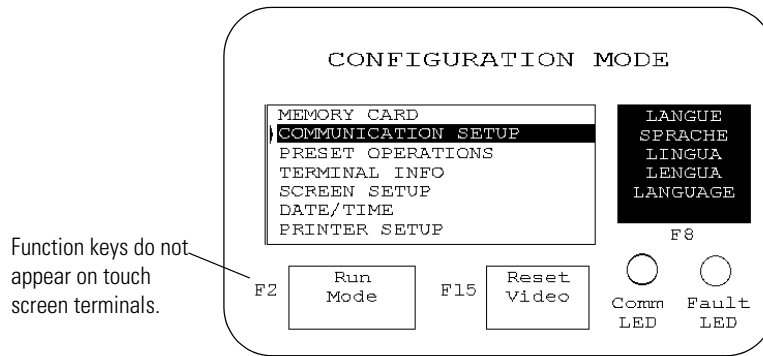The procedure below shows how to load an application on a memory card into the PanelView terminal.
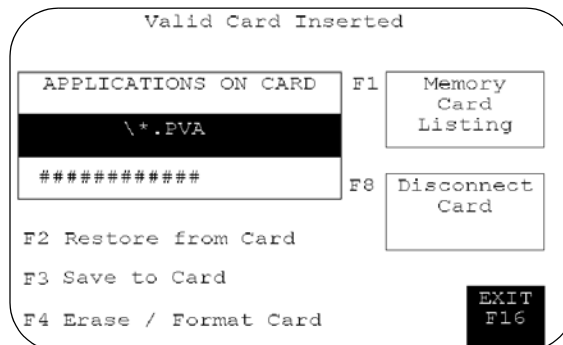

WARNING

⚠️

Explosion Hazard - Do not install or remove memory card unless power has been switched off or the area is known to be non-hazardous.

Follow these steps to load an application from a memory card.

1. Insert the memory card in the card slot of the terminal.

   If the terminal does not have an application loaded, the Configuration Mode menu appears. Skip step 2.

2. Open the Configuration Mode menu by simultaneously pressing the Left ◄ and Right ► arrows (on keypad terminals), or the Goto Config. Screen button (on touch screen terminals).

```
              CONFIGURATION MODE

   MEMORY CARD                      LANGUE
   COMMUNICATION SETUP              SPRACHE
   PRESET OPERATIONS                LINGUA
   TERMINAL INFO                    LENGUA
   SCREEN SETUP                    LANGUAGE
   DATE/TIME
   PRINTER SETUP                      F8

         Run              Reset      ◯      ◯
   F2    Mode     F15     Video     Comm   Fault
                                    LED    LED
```

Function keys do not appear on touch screen terminals.

3. Select Memory Card and press the Enter ↵ key.

```
              Valid Card Inserted

   APPLICATIONS ON CARD     F1    Memory
                                   Card
         \*.PVA                   Listing

   ###########             F8   Disconnect
                                   Card
   F2 Restore from Card

   F3 Save to Card

   F4 Erase / Format Card              EXIT
                                       F16
```
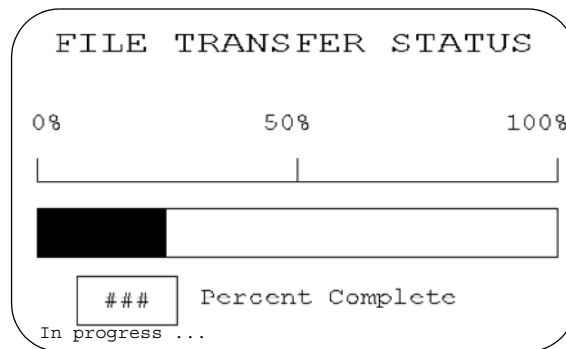
4. Press Memory Card Listing, [F1] on keypad terminals, until the application file you want to load is displayed.

5. Press Restore From Card, [F2] on keypad terminals, to begin the transfer.

Because this operation overwrites the current application in the terminal, you are prompted to abort or continue.

Proceed with download?
F1 - Abort|
F2 - Continue

The terminal displays the status of the transfer.

```
  FILE  TRANSFER  STATUS

0%              50%           100%
 |_____|_____|

 ┌────────┬──────────────────────┐
 │████████│                      │
 └────────┴──────────────────────┘
     ┌─────┐
     │ ### │  Percent Complete
     └─────┘
In progress ...
```

6. When the transfer is complete, the PanelView terminal checks the validity of the application, resets and runs the application.

Load Application on a Memory Card

The steps below show how to load an application in the terminal onto a memory card.
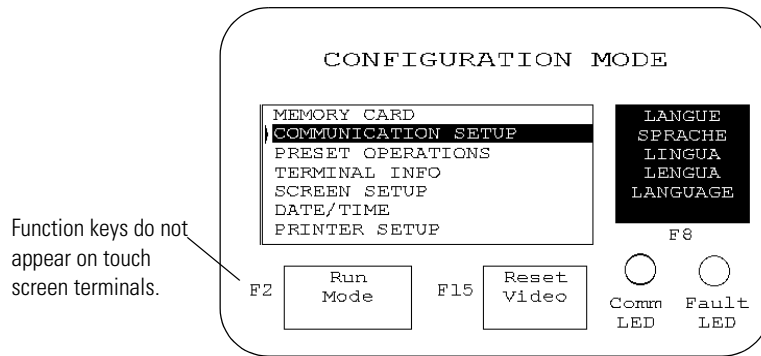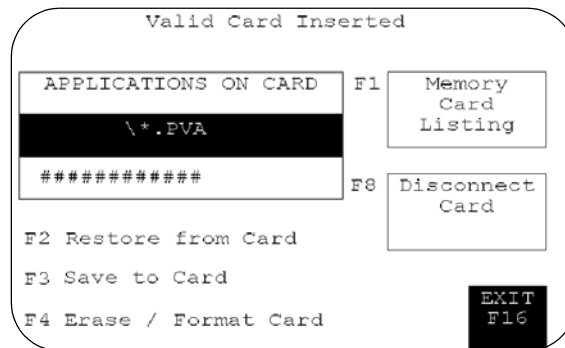
WARNING ⚠	Explosion Hazard - Do not install or remove memory card unless power has been switched off or the area is known to be non-hazardous.

Follow these steps to transfer an application to a memory card.

1. Insert the memory card into the card slot of the terminal.

2. Open the Configuration Mode menu by simultaneously pressing the Left ◄ and Right ► arrows (on keypad terminals), or the Goto Config. Screen button (on touch screen terminals).

Function keys do not appear on touch screen terminals.

```
          CONFIGURATION MODE

  MEMORY CARD                    LANGUE
  COMMUNICATION SETUP            SPRACHE
  PRESET OPERATIONS              LINGUA
  TERMINAL INFO                  LENGUA
  SCREEN SETUP                   LANGUAGE
  DATE/TIME
  PRINTER SETUP                     F8

        Run              Reset
  F2    Mode     F15     Video
                                Comm    Fault
                                LED     LED
```

3. Select Memory Card and press the Enter ↵ key.

```
           Valid Card Inserted

  APPLICATIONS ON CARD    F1   Memory
                               Card
       \*.PVA                  Listing

  ############            F8   Disconnect
                               Card
  F2 Restore from Card

  F3 Save to Card

  F4 Erase / Format Card             EXIT
                                     F16
```

4. If necessary, press Erase/Format Card, [F4] key on keypad terminals, to format or erase a 2711-NM11, 2711-NM12, 2711-NM13, 2711-NM14, or 2711-NM15 memory card.

IMPORTANT	Do not perform this operation on a 2711-NM2xx ATA card (where xx is size in megabytes). The card becomes inoperable.

Because this operation erases all data on the memory card, you are prompted to abort or continue.

> Format erases entire card?
> F1 - Abort
> F2 - Continue

5. Press Save to Card, [F3] on keypad terminals, to transfer the application in the terminal to the card.
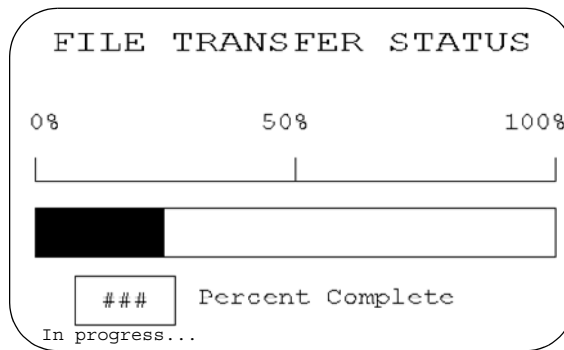
If the application already exists on the memory card, you are prompted to abort or continue.

> The .PVA file exits:
> F1 - Abort
> F2 - Upload with new PVA file

The terminal displays the status of the transfer.

```
FILE  TRANSFER  STATUS

0%              50%              100%
|_____|_____|

████████████
┌─────┐
│ ### │   Percent Complete
└─────┘
In progress...
```

When the transfer is complete, the application file name appears in the Applications on Card list.

6. Press Memory Card Listing, [F1] key on keypad terminals, to scroll through the list.

> **TIP** If you upload a file that exists on the memory card, the uploaded file name is altered with a sequential digit as a suffix. For example, Control.pva becomes Control0.pva.

For files with eight character names, a digit overwrites the last character. For example, Motorcon.pva becomes Motorco0.pva.

Store Font Files on a Memory Card

Memory cards also store font files for languages used by PanelView terminal applications. The font file contains the character set for the language.

The memory card containing the font file must be inserted in the PanelView terminal while the application is running. The terminal uses the font file to display characters on the application screen.

To view the name of the font file used by an application, select Terminal Info from the Configuration Mode menu.

Because the memory card must remain in the terminal while the application is running, we recommend that you use the memory card retainer (Cat. No. 2711-NMCC, 2711-NMCD, 2711-NMCE) to secure the card in the card slot. The retainer ensures the card is not accidentally removed or dislodged during terminal operation.

Remove a Memory Card

Follow the procedure below to remove a memory card from the PanelView terminal. Failure to follow this procedure may result in damage to the card.

1. Select Memory Card from the Configuration Mode menu.

2. Press the Disconnect Card button.

   This ensures that all files are closed on the card. A message prompts you to remove the card from the slot. You can continue or abort the operation.

3. Press the Continue button.

4. Remove the memory card from the card slot.

   On PV1400 terminals, press the Memory Card Eject button.

Running Applications

Chapter Objectives

This chapter describes operating procedures common to most applications.

- Screen security
- Push button operation
- Control lists
- Numeric entry controls
- ASCII entry controls
- Screen selectors
- List indicators
- Multistate indicators
- Alarms
- Printing
- Time or date
- Message displays
- Numeric data displays
- Bar graphs
- Analog gauges

Application Information

The application designer is responsible for documenting the operation of an application. Before running the application, you should understand what processes are being controlled and monitored.

ATTENTION	Do not press multiple touch screen objects at the same time. Pressing multiple objects simultaneously may result in unintended operation.

Important Information for PanelView 300 Micro Terminal Operations

The Up/Down and Left/Right cursor keys on the PanelView 300 Micro terminal may be assigned as additional function keys. It is the responsibility of the application designer to inform the operator of the assigned functions.

If cursor keys are assigned as function keys, the following (applies to the currently active screen):

- List Selectors and Increment / Decrement objects are disabled if the Up or Down cursor keys are used as function keys.