
MicroPlus

EPAD Video Controller



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EPAD Manual Revision 1.11

CRS, Inc.

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Revision 2.0 - April 1, 2005

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CET APPAREIL EST CONFORME AUX NORMES CLASS "A" D'INTERFERENCE RADIO TEL QUE SPECIFIER PAR MINISTRE CANADIEN DES COMMUNICATIONS DANS LES REGLEMENTS D'INTERFERENCE RADIO.

ATTENTION

The product that you have purchased may contain a battery that may be recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of the battery into the municipal waste system.

Check with your local solid waste officials for details concerning recycling options or proper disposal.

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EPAD Setup

EPAD Introduction

The compact EPAD Kitchen Video Controller is designed to provide kitchen display capabilities to any ECR or POS system that supports kitchen printers, including most current SAM4s ECRs as well as the SAM4s SPS-2000 touch screen ECR. (The EPAD is the successor to the MPAD Plus Video Controller.)

EPAD Features and Specifications

Processor

- 366MHz Pentium equivalent processor
- AMI system BIOS
- DOS operating system
- 128MB program RAM , 64 MB disk on a module storage memory
- Compact Flash Drive

Ports

- Direct connect up to 115K baud RS232C (COM1 & COM2)
- USB ports
- 640X480 SVGA, 256K colors text and graphics
- 32 station video port expansion
- PS/2 port for Keyboard or KEYPAD bump bar

Reliability

- Requires no host PC to operate
- Universal switching power supply
- Easy redundancy configurations.
- Fault tolerance programming modes.
- 90 day parts & labor warranty

Installation & Support

- 100% plug-n-play, no jumpers or switches

- Easy installation
- Mounting holes provided
- Uses all standard cables and connections
- Built-in on-demand diagnostics, status, and help functions
- PC/AT keyboard port with Mini Din and external connector used for programming & troubleshooting (Not required for standard operation)
- Dimensions 5 "L x 5" W x 1 3/8" H
- Weight 19 oz.
- KEYPAD Dimensions 5.00" L x 5.00" W x 1.00 " H

Certifications

- International product certification (FCC, CE standards)
- RoHS compliant

KDS Software

- Compatible with existing MicroPlus MPAD, MPAD Plus and PC based software.

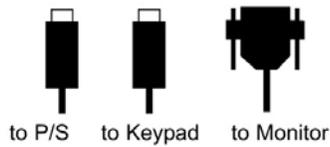
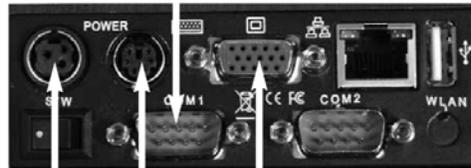
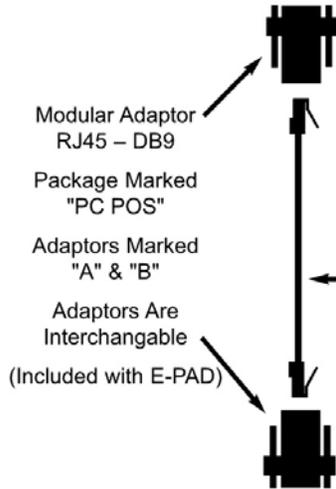
EPAD Contents



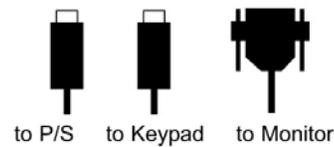
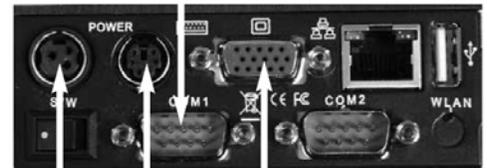
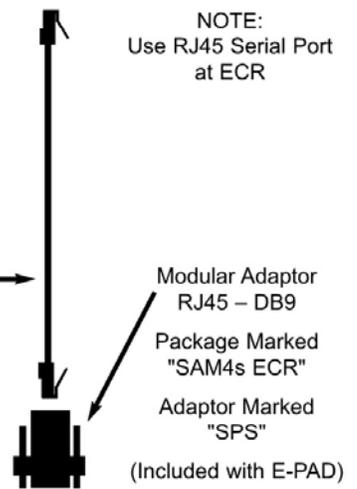
1. EPAD Controller
2. 25 ft CAT5 Shielded Cable
3. Accessory Packages:
 - Adhesive Rubber Feet for counter placement
 - DB9 Female Connector & Tie Downs
 - Bump Bar/Controller Mounting Screws (2-pkgs)
4. MicroPlus EPAD Instruction Document
5. Bump Bar and Cable
6. 10 ft. VGA Video Cable
7. Power Supply
8. Modular Adaptor Package labeled **SAM4s ECRs**
(adaptor is labeled "SPS")
9. Modular Adaptor Package labeled **PC-POS**
(contains 2-adaptors labeled "A" & "B")

Typical EPAD Connection Diagrams

PC-POS Installation



SAM4s ECR Installation



EPAD Installation and Support Notes

Date/Time

The date and time in the BIOS will need to be reset if you want your log files to have the local time and date. To enter BIOS, connect a PS/2 keyboard. Press **CTRL ALT Delete**, and then press **Delete**.

Compact Flash (CF) Notes

- Format the Compact Flash card to FAT. (Can be formatted at the EPAD or at a PC.)
- When installed, the CF is designated as the “D” drive. (The internal drive “D” becomes “E” when the CF is installed.)
- The Compact Flash (CF) can be used for saving and loading data, upgrading the EPAD version, saving the .dat and mxkernel programming for up to 8 videos, and saving report data and log data. (See “EPAD Maintenance” on page 8.)
- When the CF is not active a portion of the internal “C” drive is used as the “D” drive. To activate the CF, power down the EPAD, insert the CF card and then power up. **The CF will not be recognized as a valid drive unless the CF is inserted prior to booting up the EPAD.**
- **Always power off the Epad before inserting or removing the CF.**

Keyboard and Bump Bar Notes

PS/2 Keyboard

When an EPAD is booted up with a PS/2 keyboard attached, the Epad automatically switches the PS/2 keyboard to CAPS mode.

When removing the PS/2 keyboard press the Caps Lock button. By disabling the Caps Lock you will be able to plug in a Bump Bar without rebooting the EPAD and the Bump Bar will function properly.

USB Keyboard

When connecting a USB keyboard, you must switch on the CAPS LOCK function for programming.

Bump Bar Compatibility

- The EPAD is compatible with both the old style and new style bump bar.
- The EPAD is compatible with the 16 key and 20 key old style bump bar.

Factory Reset Option for the EPAD

If for any reason the EPAD loses its factory presets located in the MP_SETUP directory, a Restore Zip File can be loaded from the CF to the internal C drive of the EPAD.

Contact CRS Technical Support for assistance.

EPAD Maintenance

To access the EPAD Maintenance screen, from the 8-grid screen:

1. Type [ALT] [K]
2. Type [ALT] [Q]
3. The EPAD Maintenance screen displays:

```
=== EPAD Maintenance ===
Compact Flash Installed

[A] Alter/Change Device ID
[B] Backup Video Configuration Data To Compact Flash
[C] Display Files on Internal Drive C:
[D] Display Files on Compact Flash D:
[E] EDIT a File
[F] Format Compact Flash
[H] Operational HELP
[I] Configure IP Address CHEF Software
[K] Edit Key Items
[L] Run COM1: Logging Program
[M] Modify Date or Time
[O] Option Programming using .DAT file
[P] Change Priority & Rush Times
[S] Display System Setup Screen
[T] Run Communication Test COM1:
[R] Restore Video Configuration From Compact Flash
[X] Run XMODEM Communication (57600 - 8 - 1 - No Parity)
[*] Calibrate Touch Screen
[Esc] Escape to DOS

Select Entry ....
```

Maintenance Screen Notes

[F] Format Compact Flash:

Follow on-screen instructions.

[L] Run COM1: Logging Program

No operation when selected; logging only will occur. To log in background, see “Logging” on page 11.

[X] Run XMODEM Communication (57600 – 8 – 1 – No Parity)

Use to update EPAD software by Hyperterminal (see page 27.)

[S] Display System Setup Screen

Allows access to register section, see also “ECR Type Selection & Quick Start” on page 9.

ECR Type Selection & Quick Start

Most single EPAD applications require only ECR Type Selection before they are ready to run. This can be started in three different ways and completed with the instructions that follow.

Once the ECR type has been selected, the EPAD, by default, will receive all Kitchen Video Groups (KVG), all registers, and all destinations. At the ECR, all that is required is to route PLUs/Groups to a Kitchen Video Group.

Note: The ECR Type selection procedure also resets the EPAD to default. If you made changes to any configuration files (.dat or MXKERNEL.ini) these files will also be reset to default.

Method 1

The first time the EPAD is powered up it will display a menu from which you choose the register which will be sending the KVS data.

1. Connect a PS/2 keyboard to the EPAD. (Enable the CAPS LOCK.)
2. Use the arrow down key to advance to the setup choice.
3. Press [ENTER] and follow the prompts.

Method 2

If the the EPAD comes up with a register type that is not the correct or you need to change the ECR type supported:

1. Connect a PS/2 keyboard to the EPAD.
2. Power down the EPAD, reboot, press ALT Q,
3. Type MP_SETUP press [ENTER].
4. A directory of all registers supported will display.
5. Choose the desired directory and the EPAD will run setup for this selection.

Method 3

1. After booting up the text message: "setup?" will appear a short time.
2. When this message displays, press the [REFRSH] key on the EPAD Bump bar and then press the [FUNC] key on the Bump bar.
3. A directory of all registers supported displays. With the down arrow key, nagivate to the desired directory.
4. Press the [FUNC] key on the Bump Bar to run Setup and press the [FUNC] key again to save the setup selection.
5. Reboot the EPAD.

Selecting ECR Type Procedure

1. Use the Up and Down Arrow keys to select the system you are using.

```
***** Mpad+ System Setup *****
      POS System Name      Directory
41 Palm Teq                [PALMTEQ ]
42 PC-NET                  [PC_NET ]
43 Penny Lane              [PennyL_M]
44 Plexis                  [M_POS_L ]
45 Pinnacle                [PINN_MP ]
46 RCS (Batch)             [RCS_MPAD]
47 RCS (L-B-L)            [RCSLBL_M]
48 Rest. Manager (Batch)  [ACT_MPAD]
49 Rest. Manager (L-B-L)  [ACT_L_MP]
50 Rest. Manager (L-B-L Touch) [ACTTOUCH]
51 Rest. Mgnager (Batch Touch) [ACTMPADT]
52 Restaurant-Pro         [REST_PRO]
53 RMS TOUCH              [RMS TOUCH]
54 R-Power (BATCH)        [RPOWER ]
55 R-Power (L-B-L)        [RPOWER_L]
56 Sable                   [SABLE_MP]
57 Samsung 650            [SAM650MP]
58 Samsung SPS 1000/2000/7000 [SPS_MPAD]
59 Samsung SPS Elo Touch  [SPSPADT]
60 Samsung SPS Fujitsu Touch [SPSPADTF]
Use The Up & Down Arrows to Select a System
Press [FUNC] or [Enter] to Copy Files or [ESC] to Abort
```

2. With the appropriate system highlighted, press [ENTER].

```
System SETUP for ....Samsung SPS 1000/2000/7000 [SPS_MPAD]
Press [ESC] to abort or any other key to Proceed with SETUP
```

3. Press [ESC] to abort or any key to proceed with setup.

```
System SETUP for ....Samsung SPS 1000/2000/7000 [SPS_MPAD]
Press [ESC] to abort or any other key to Proceed with SETUP
Copy from Directory [SPS_MPAD]
Setup Finished ..... Press <CTL> <ALT> <DEL> to boot system
Press any other key to return to Setup
```

4. Follow the screen instructions: “Setup Finished Press [CTL] [ALT] [DEL] to boot system. Press any other key to return to Setup”.

Version Identification

To access version identification:

1. From the four or eight cell display screen, type ALT K on the PS/2 keyboard.
2. The version will display below the screen title.

Note: Version identification will not display on touch monitor systems.

Logging

Creation of log files is available as a troubleshooting tool. Log data is saved to the EPAD's C drive. (The C drive size is 256mb. The core Epad program uses about 16mb. The remaining memory is free for logging diagnostic data and saving video programming.)

How to Set Up Logging (Using Keyboard)

1. From the 8 grid screen press "ALT K". You will see a Period and Diagnostic menu.
2. Type "L". You can now view data on KVS monitor as the EPAD receives it. The EPAD creates a folder called CRSLOG. (Note that you can now view data.)
3. Press the [ESC] key to return to the 8 grid box. The log will run in the background.
4. Register sales as normal to record to log.

How to Save the Log Data to CF

Log data is stored on the Epad C: drive and must be transferred to the CF.

To transfer the data from the C: drive to the CF use the following command:

1. Connect a PS/2 keyboard to an active EPAD System where logging has been set up and running. Press "ALT Q"
2. Power off the EPAD; insert the CF card.
3. Power on the EPAD.
4. From the 8 grid screen press "ALT K".
5. Press "ALT Q".
6. Press ESC.
7. At the C: prompt type COPY(space)CRSLOG.DAT(space)D
Press [ENTER]. If successful, you should see the message "1 File Copied". If unsuccessful, check to make sure logging has been set up properly.
8. Power off the EPAD; remove the CF card. The log file is named: CRSLOG.dat.

Setup Logging to CF (Using Keypad)

1. Format a CF card to FAT.
2. Power off EPAD, insert the CF card and power up the EPAD.
3. Press the [CLR] key on the Bump Bar 4 times to initiate logging. “LOGGING ACTIVE” will appear in the upper right corner of the KVS monitor.
4. Press the [CLR] key on the Bump Bar 4 times to save log data to the CF and terminate the logging program. “LOGGING CLOSED” will appear in the upper right corner of the KVS monitor.
5. Insert the CF into a CF card reader connected to the PC. The data will be logged in a file named CRSLOG.DAT.

Condiment Indent

Condiments are not indented by default. To turn on this feature, go to the .dat file. Go to the ALPHA 20 area and insert a capital I, the indent command.

See the appendix for other ALPHA 20 options.

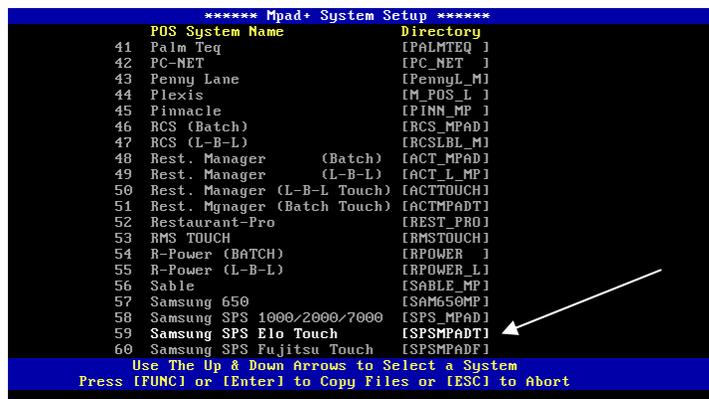
Select Touch Screen Type

SAM4s SPS-1000, SPS-2000 and SER-7000 systems are compatible with Elo touch screens. When an Elo touch monitor is used, the monitor can be used instead of a bump pad.

1. Type: MP_SETUP
2. Select Elo from available Touch Choices

```
***** Mpad+ System Setup *****
  POS System Name      Directory
 41 Palm Teq           [PALMTEQ ]
 42 PC-NET             [PC_NET ]
 43 Penny Lane         [PennyL_M]
 44 Plexis             [M_POS_L ]
 45 Pinnacle           [PINN_MP ]
 46 RCS (Batch)        [RCS_MPAD]
 47 RCS (L-B-L)       [RCSLBL_M]
 48 Rest. Manager      (Batch) [ACT_MPAD]
 49 Rest. Manager      (L-B-L) [ACT_L_MP]
 50 Rest. Manager (L-B-L Touch) [ACTTOUCH]
 51 Rest. Mgnager (Batch Touch) [ACTMPADT]
 52 Restaurant-Pro     [REST_PRO]
 53 RMS TOUCH         [RMSTOUCH]
 54 R-Power (BATCH)    [RPOWER ]
 55 R-Power (L-B-L)   [RPOWER_L]
 56 Sable              [SABLE_MP]
 57 Samsung 650       [SAM650MP]
 58 Samsung SPS 1000/2000/7000 [SPS_MPAD]
 59 Samsung SPS Elo Touch [SPSPADT]
 60 Samsung SPS Fujitsu Touch [SPSPADTF]

Use The Up & Down Arrows to Select a System
Press [FUNC] or [Enter] to Copy Files or [ESC] to Abort
```



3. Press [ENTER], Press [ENTER] again.

When selection is made for Touch Type you **MUST CALIBRATE** the EPAD with the Video Monitor.

During calibration of the monitor you will be prompted to press 4 Touch Zone Targets on the monitor screen. A touch zone target will appear at the lower left, upper left, lower right and upper right corners of the monitor. The 8 grid box must appear in full with a border surrounding the perimeter when viewing the monitor in EPAD video mode.

To Calibrate Monitor

1. Type ALT K
2. Alt K brings you to a menu screen, select calibrate. Follow the on screen calibration instructions.

EPAD Configuration Settings

There are two configuration settings files: MXKERNEL.ini and the system specific .dat file. For example if you are the EPAD with a SAM4s SPS-1000, SPS-7000 or SPS-2000 ECR system, you will use the SPS_1000.dat configuration file.

[System Type].dat

Among other settings, this file determines which registers or Kitchen Video groups to be displayed on the videos.

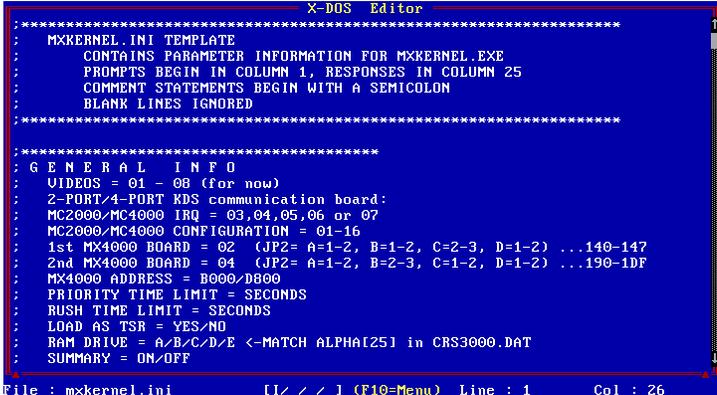
MXKERNEL.ini

Among other settings, this file selects video display type *Regular* or *Elongated*, KEY ITEM descriptors and device ID numbers (for multi-EPAD systems). Refer to the appendix for complete explanations instructions.

By default, MXKernel is set for Device ID #1 and “regular” mode (eight cell grid). The .dat file is set for: All Periods; All Kitchen Video Groups, All registers and All destinations.

Editing Configuration File Settings

1. Type EDIT [file name] and press [ENTER]. The appropriate .dat file or MXKERNEL.ini file will display.

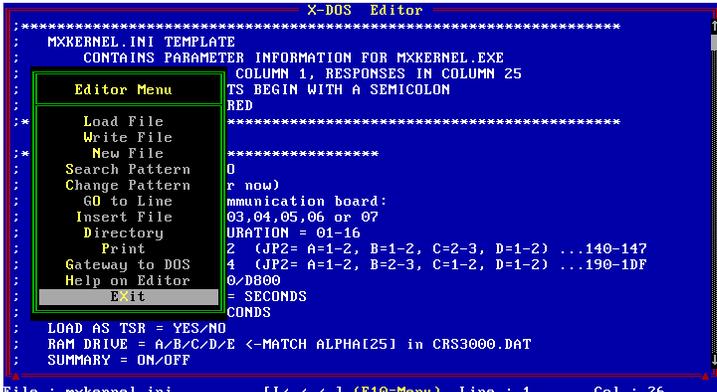


```
***** X-DOS Editor *****
MXKERNEL.INI TEMPLATE
CONTAINS PARAMETER INFORMATION FOR MXKERNEL.EXE
PROMPTS BEGIN IN COLUMN 1, RESPONSES IN COLUMN 25
COMMENT STATEMENTS BEGIN WITH A SEMICOLON
BLANK LINES IGNORED
*****

GENERAL INFO
VIDEOS = 01 - 08 (for now)
2-PORT/4-PORT KDS communication board:
MC2000/MC4000 IRQ = 03,04,05,06 or 07
MC2000/MC4000 CONFIGURATION = 01-16
1st MX4000 BOARD = 02 (JP2= A=1-2, B=1-2, C=2-3, D=1-2) ...140-147
2nd MX4000 BOARD = 04 (JP2= A=1-2, B=2-3, C=1-2, D=1-2) ...190-1DF
MX4000 ADDRESS = B000/D800
PRIORITY TIME LIMIT = SECONDS
RUSH TIME LIMIT = SECONDS
LOAD AS TSR = YES/NO
RAM DRIVE = A/B/C/D/E <-MATCH ALPHA[25] in CRS3000.DAT
SUMMARY = ON/OFF

File : mxkernel.ini [1/ / /] (F10=Menu) Line : 1 Col : 26
```

2. Use PAGE UP, PAGE DOWN, ARROW (UP, DOWN, LEFT, RIGHT) Keys to find the text you wish to edit. Type new text, use Backspace and/or Delete keys to erase old text.
3. After edits are complete, press F10 (Menu).

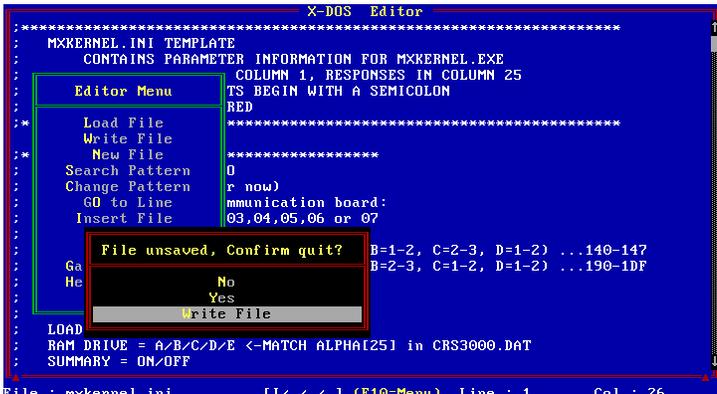


```
***** X-DOS Editor *****
MXKERNEL.INI TEMPLATE
CONTAINS PARAMETER INFORMATION FOR MXKERNEL.EXE
COLUMN 1, RESPONSES IN COLUMN 25
TS BEGIN WITH A SEMICOLON
RED
*****
Editor Menu
Load File
Write File
New File
Search Pattern
Change Pattern
GO to Line
Insert File
Directory
Print
Gateway to DOS
Help on Editor
Exit

LOAD AS TSR = YES/NO
RAM DRIVE = A/B/C/D/E <-MATCH ALPHA[25] in CRS3000.DAT
SUMMARY = ON/OFF

File : mxkernel.ini [1/ / /] (F10=Menu) Line : 1 Col : 26
```

4. Arrow down to select Exit, press [ENTER].



```
***** X-DOS Editor *****
MXKERNEL.INI TEMPLATE
CONTAINS PARAMETER INFORMATION FOR MXKERNEL.EXE
COLUMN 1, RESPONSES IN COLUMN 25
TS BEGIN WITH A SEMICOLON
RED
*****
Editor Menu
Load File
Write File
New File
Search Pattern
Change Pattern
GO to Line
Insert File
Gateway to DOS
Help on Editor
Exit

File unsaved, Confirm quit?
No
Yes
Write File

LOAD AS TSR = YES/NO
RAM DRIVE = A/B/C/D/E <-MATCH ALPHA[25] in CRS3000.DAT
SUMMARY = ON/OFF

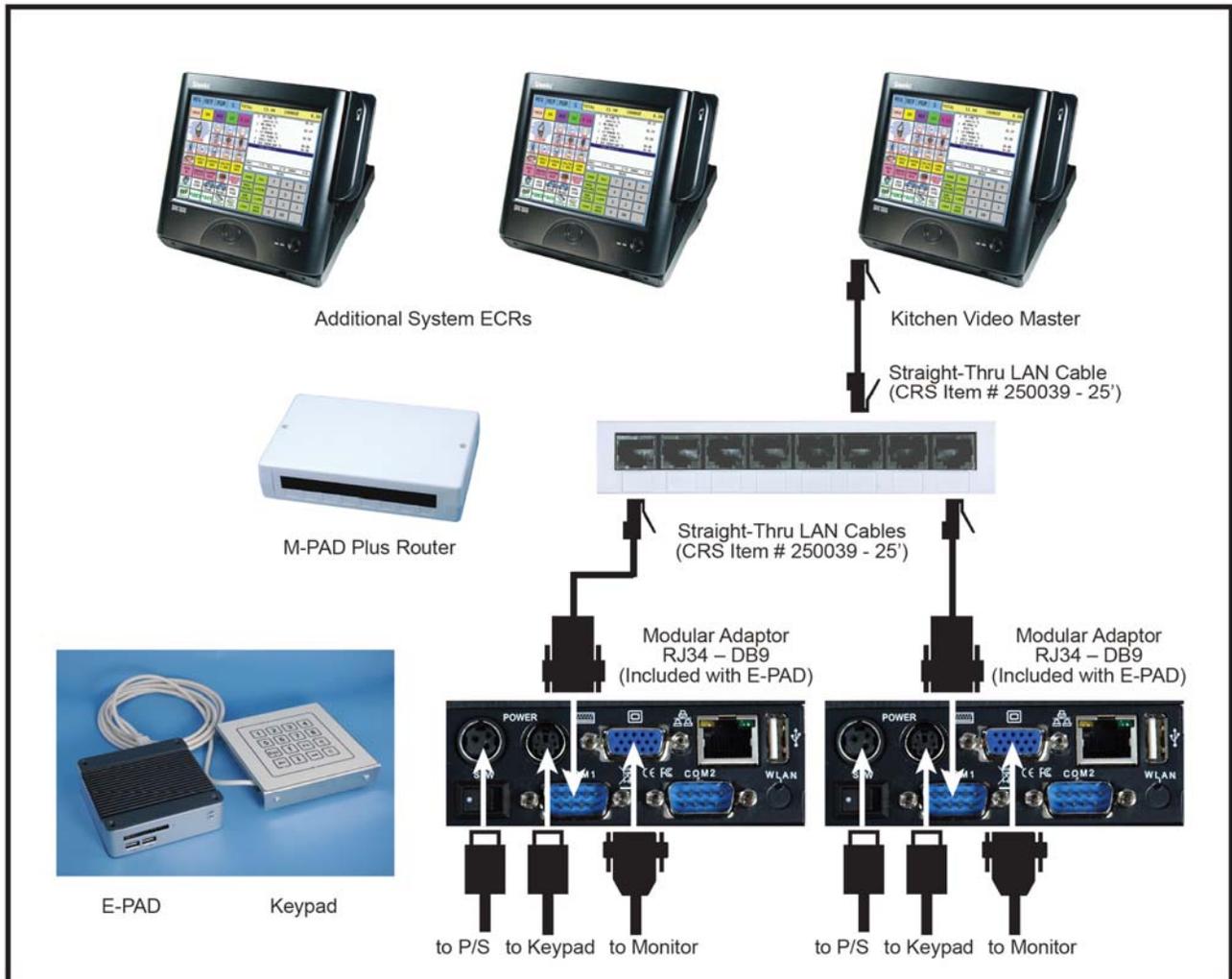
File : mxkernel.ini [1/ / /] (F10=Menu) Line : 1 Col : 26
```

5. Arrow down to select Write File, press [ENTER]. The file will close with your edits saved. The DOS prompt will return.

Set Up with the M-PAD Plus Router

Configuration Diagram

Note: A Y-cable can be used in place of an M-PAD Plus Router where only 2-EPADs are used. Installations using 3 or more EPADs require the M-PAD Plus Router. See “Y-Cable for Two-EPAD Installations” on page 42 for Y-cable construction details.



Cable Configuration

From the ECR use a RJ45 to RJ45 LAN or Network cable. On a SPS2000 use ports 3-5 for the KVS output. Connect the cable from port 3 (for example) to any port of the MPAD Plus Router. The MPAD Plus router has eight RJ45 input/output jacks and NO POWER supply. It is a pass thru device.

From the MPAD Plus Router use a straight thru LAN or networking cable. On the end of the cable that will be connecting to the EPAD use a RJ45 to DB9F modular adaptor with the following configuration. A pre-wired adaptor is included with each EPAD.

Note: If an additional/replacement adaptor is needed, use CRS P/N 202769. This kit will require connections as shown:

RJ-45		DB-9F	
Pin	Color	Pin	Function
4	Red	3	TX
3	Black	2	RX
7	Brown	5	GND
6	Yellow	7	RTS

Prioritization

Prioritization is a feature that allows you to determine the priority in which items are displayed on the video. (For example: appetizers first; entrees second; desserts last.)

Note: The Prioritization feature was removed in the EPAD with TOUCH version to free memory. To determine whether this feature is available on your system:

1. **At the EPAD with a keyboard and a monitor, from the grid screen press “ALT Q”.**
2. **Type DIR and press [ENTER]. In the Directory of files, look for a file in YELLOW text.**

If you have a TOUCH version the file name will be SPSMPADT.exe. If this file is included in the Directory, prioritization has been disabled.

If you have a NON-TOUCH version the file in Yellow text will be SPS_MPAD.exe. This file has the prioritization feature enabled.

If your EPAD includes the file that supports prioritization, the Alpha 31-38 settings in the SPS_1000.dat control the priority of items by kitchen video group.

For video #1, in Alpha 31 enter the kitchen video groups in the order they are to appear on the video. For example, **05,04,03,02,01** would display items in KVG # 05 first, 04 second and so on. You are limited to 6 two digit entries.

Settings in Alpha 31 control for video 1; Alpha 32 controls video 2; and so on, thru Alpha 38 for video 8.

Displaying Key Items

To display the KEY ITEMS, press the [FUNC] or [Fn] key on the keypad. The EPAD will display, in the lower right corner, a summary of all KEY-ITEMS (defined in PROGRAMMING). The numbers represent the combined total of all KEY ITEMS contained in all the current outstanding orders.

The KEY ITEM window may be left active during normal operation and will continue to reflect the total number of each of the KEY ITEM.

To remove the KEY ITEM window press the [FUNC] or [Fn] key again.

Settings for Multiple EPAD Controllers & Router

By using more one than one EPAD controller in a system you can get the effect of a Multi Video system. For example, you can have one video monitor display HOT items, one display COLD items and another monitor display ice cream.

To do this, each EPAD must be programmed with a specific DEVICE ID number in the Mxkernel program area. Then in the .DAT program area the video number matching the Device ID number can be programmed for a specific KV Group or Groups.

As information comes from the ECR it passes through to the MPAD Router. The MPAD router passes ALL of this data to ALL EPADs connected to the MPAD Router. Each EPAD gets ALL of the Data, checks its Device ID#, then checks the video programming and then filters the incoming data and displays data specific to its Video setup.

1. Under Mxkernel.ini

General,

Set each EPAD with the video number 1.

Then set each EPAD with a specific DEVICE ID number.

For example if I have 3 EPADs that I want to use in a system I would set the Device ID number as 1 in the 1st EPAD, 2 in the second EPAD and 3 in the 3rd EPAD.

Save the program setting.

2. Next, using ALT Q, and then the command prompt (edit SPS_1000.dat) go to the Video Routing Parameters.
3. You will see information for video 1,2,3,4, etc.

In this programming area think of the Video number as the DEVICE number you set up in Mxkernel.ini

When Multiple EPADs are used, all EPADs in the system must have the same programming in the xxx.DAT programming area. The programming in the EPAD filters the data coming from the ECRs and displays this data to video. When multiple EPADs are used the ECR information is filtered by DEVICE ID.

For example if 3 EPADs are to be used, each EPAD has their own Device ID that was programmed in the Mxkernel.ini programming.

At EPAD #1, go to edit SPS_1000.dat

Set the parameters for Video 1. This in effect is the parameters for DEVICE ID #1.

With 3 EPADs or 3 Devices in a system, the programming parameters for each device must be present in ALL EPADs for the system to function properly.

- EPAD #1 is Device ID #1 and is Video 1 in the .DAT programming area.
- EPAD #2 is Device ID #2 and is Video 2 in the .DAT programming area.
- EPAD #3 is Device ID #3 and is Video 3 in the .DAT programming area.

As information comes from the ECR it passes through to the MPAD Router. The MPAD router passes ALL of this data to ALL EPADs connected to the MPAD Router.

Each EPAD gets ALL of the Data, checks its Device ID#, then checks the video programming and then filters the incoming data and displays data specific to its Video setup.

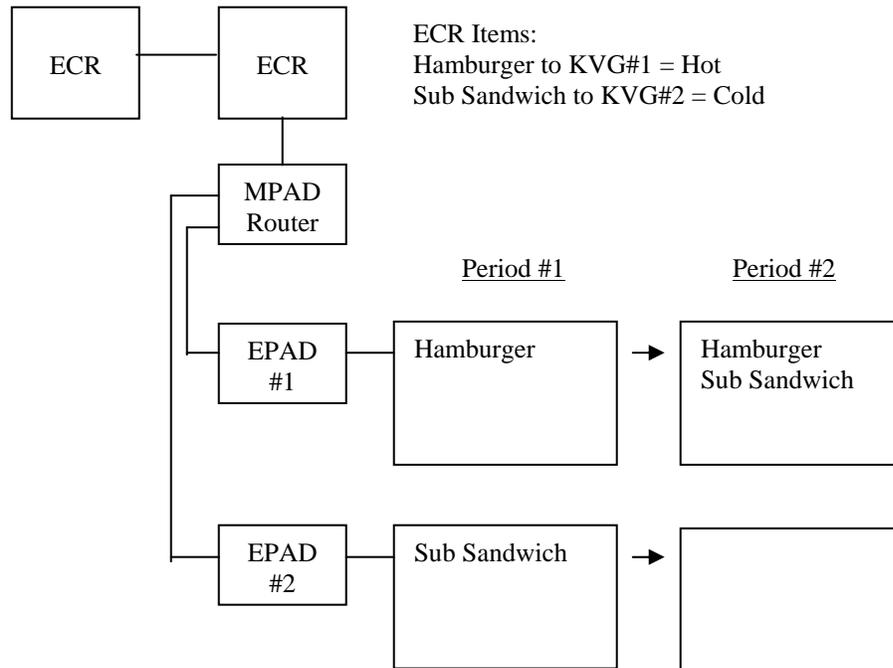
Change Video Routing by Period

When multiple videos are used (MPAD Router and multiple EPAD controllers) restaurants often request the routing of items to change from slow to busy times. For example, a restaurant might have two distinct preparation areas in the kitchen. During busy lunch and diner times, one prep area is designated for “hot” items; one prep area for “cold” items. However, during slow times, the restaurant wants to staff only one prep area and route both “hot” and “cold” items to that area.

This is easily done by:

- Linking items to separate kitchen printer groups for “hot” and “cold” items
- Setting routing instructions in the [System Type].dat file (i.e. sps_1000.dat)
- Setting the current period by sending a PLU descriptor to the EPAD controllers

Typical Configuration Using Periods



In the schematic example above, two ECRs connected by IRC are connected to two EPAD controllers via an MPAD Router. There are two types of menu items. Hot items are linked to Kitchen Video Group #1; cold items are linked to Kitchen Video Group #2. At lunch, hot & cold items are sent to different food prep stations; at all other times, both hot and cold items are sent to prep area #1.

[System Type].dat file Settings

Shown below are default settings and custom setting required for the 2-KVG/2-Period example described above. Note that new and changed information is highlighted:

Default Settings

```
[VIDEO]=1
[ROUTE]=1
[PERIOD]=ALL
[KVG]=ALL
[REG]=ALL
[DEST]=ALL
[END]

[VIDEO]=2
[ROUTE]=1
[PERIOD]=ALL
[KVG]=01
[REG]=ALL
[DEST]=ALL
[END]
```

Custom Settings

```
[VIDEO]=1
[ROUTE]=1
[PERIOD]=1
[KVG]=01
[REG]=ALL
[DEST]=ALL
[END]
[ROUTE]=2
[PERIOD]=2
[KVG]=01, 02
[REG]=ALL
[DEST]=ALL
[END]

[VIDEO]=2
[ROUTE]=1
[PERIOD]=1
[KVG]=02
[REG]=ALL
[DEST]=ALL
[END]
[ROUTE]=2
[PERIOD]=2
[KVG]=01, 02
[REG]=ALL
[DEST]=ALL
[END]
```

Changing .dat File Settings

Caution: .dat file formats are critical. Expected information must appear exactly in the correct line and character position. If the .dat file format is incorrect, the file will not load. You must take extreme care when making changes. If your file becomes corrupted, you can return to default by performing the ECR selection procedure again. (See “EPAD Setup” on page 3.)

When working with files, you may find it useful to mark, copy and paste information so the the correct formats are used. Use the following commands:

ALT M	Mark lines to be copied
ALT B	Copy marked information
ALT R	Insert copied information
ALT D	Delete marked information

Set the Current Period

The EPAD will change periods upon receipt of a PLU descriptor in the format: PERIOD=x, where x is period 1 through 5. For example, if you create a zero amount preset PLU, linked to the appropriate kitchen printer group, with the descriptor PERIOD=2, the EPAD will shift to the routing instructions for period 2. To return to period 1, send a zero amount PLU with the descriptor PERIOD=1.

You may wish to create a macro sequence registering the appropriate PLU, then CASH to set periods. A time activated macro may be programmed for automated period selection.

Split Video by Destination

You can use a destination key at the ECR (i.e. Eat In, Take Out or Drive Thru) to route items to the top or bottom of a video screen. To accomplish this, edits must be made to the appropriate “[System Type].dat” file and the mxkernel.ini file.

[System Type].dat File Settings

1. At the C:/ type: EDIT(space)[System Type].dat. Press <ENTER>. (For example use SPS_1000.dat for a SPS-1000 system.)
2. Input the destination values (1=Eat In, 2=Take Out, 3=Drive Thru) at Alpha 30 to route those items to the bottom of the screen. If there is no destination value in alpha 30, those items will display at the top of the screen.

Alpha 30 of the .dat file will route the destination selection to the bottom of the KVS video and act as a modifier to change the register number. For example, register #1 is changed to register #11 (a value of 10 is added to the register #).

3. Additional registers must be added to the MxKernel file.

Mxkernel File Settings

To edit the Mxkernel.ini file:

1. At the C:/ type: EDIT(space)mxkernel.ini. Press <ENTER>.
2. Page down to view the Register Specific Programming as displayed below:

```
[REGISTER 1]
TYPE                = COUNTER
DISPLAY LOCATION    = TOP
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY

[REGISTER 2]
TYPE                = COUNTER
DISPLAY LOCATION    = TOP
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY

[REGISTER 3]
TYPE                = COUNTER
DISPLAY LOCATION    = TOP
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY

[REGISTER 4]
TYPE                = DRIVE THRU
DISPLAY LOCATION    = BOTTOM
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY

[REGISTER 11]
TYPE                = DRIVE THRU
DISPLAY LOCATION    = BOTTOM
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY
```

3. Note that the default file includes a register #11. If you are using other registers, i.e. #2, #3, etc. you will need to add register #12, #13, etc. to support the destination change for each register. You do not need to enter a “DISPLAY LOCATION” as the Alpha 30 setting overrides this setting. Mark, Copy, Insert and Delete data as necessary to modify the Mxkernel.ini file

Caution: .dat file and .ini formats are critical. Expected information must appear exactly in the correct line and character position. If the .dat file format is incorrect, the file will not load. You must take extreme care when making changes. If your file becomes corrupted, you can return to default by performing the ECR selection procedure again. (See “EPAD Setup” on page 3.)

When working with files, you may find it useful to mark, copy and paste information so the the correct formats are used. Use the following commands:

ALT M	Mark lines to be copied
ALT B	Copy marked information
ALT R	Insert copied information
ALT D	Delete marked information

4. Save changes. Exit and reboot the Epad to reflect your changes.

Split Screen Routing by Register Number

The control of the items going to the top or bottom of the screen is controlled in MXKERNEL.INI

```
...
;*****
; V I D E O S P E C I F I C
...
[VIDEO 1]
MODE = SPLIT
;*****
; R E G I S T E R S P E C I F I C
...
[REGISTER 1]
TYPE = COUNTER
DISPLAY LOCATION = TOP
...
[REGISTER 2]
TYPE = COUNTER
DISPLAY LOCATION = BOTTOM
```

EPAD Operations

EPAD Bump Bar

1	2	3	4
5	6	7	8
ESC 9	↑	Fn	R 0
←	↓	→	C

Receiving Orders

After the EPAD+ has initialized, the standard order screen will display, showing 8 empty order boxes. Each EPAD unit is capable of receiving and displaying up to 150 orders. Orders may be displayed 4 or 8 per screen.

As orders are entered at the ECR / P.O.S system they will appear on the screen in one or more of the boxes. If more orders are received than can be displayed on the screen, an arrow will appear indicating the number of order boxes that are offscreen. To view these orders use the right arrow key. Use the left arrow key to return.

Above each order, is a green timer, indicating how long the order has been pending. Based on system setup options, the timer will turn from green to red, after a predefined number of seconds, indicating that the order has not been processed within the appropriate time.

This allows the manager to easily spot possible production problems. A second time threshold is provided at which the timer will change to blinking red, indicating a problem in filling the order.

Bumping Orders

To remove an order from the EPAD+ screen, press the numeric key (1-8) on the keypad that corresponds to the order to be deleted. If the order occupies more than one box, the order will be highlighted when the numeric key is pressed. To remove the order, press the [C] or [CLR] key. If the EPAD+ is configured for DOUBLE KEY CLEAR, the [C] or [CLR] key is required to delete all orders.

Recalling Orders

As orders are bumped they are stored in a recall queue. Up-to 10 orders are stored. To display a previously bumped order, press the [R] key. Orders will be displayed in the reverse order of deletion (i.e. the most recent order first). Each time [R] key is depressed the next previous bumped order will be displayed. Press the [ESC] key to exit.

If more than one person are to operate the same EPAD+, it may be necessary to MARK the order, he or she is working on such that two people are not working on the same order. This can be accomplished by selecting DOUBLE KEY CLEAR in MXKERNEL programming.

To MARK an order, select the order using one of the numeric keys. Then press one of the 8 numeric keys again. This will cause the first line to be displayed is a different color. The color that is displayed is determined by the numeric entry. Eight colors are available.

To utilize MARK orders feature the EPAD must be configured for DOUBLE KEY CLEAR..

Reports

Another feature of the EPAD+ is the Production Status Report. To display the Production Status Report press the DOWN ARROW or [SUM] key.

The system will display a screen showing the number of orders processed the average order time, process time and total time for those orders as well as order count by 30 second time period up to 12 minutes.

An operator can clear the production status data, by pressing the [C] or [CLR], when the Report is displayed.

To exit the Status Report press the DOWN ARROW or [SUM] again. The EPAD will return to the order screen..

Note: If you wish to print this report...

Connect the DB9 end of a NULL MODEM cable to com port 2 of the Epad. Connect the DB25 end to a printer set at a baud rate 9600. Power up the printer.

Press the Up Arrow on the Epad Bump Bar and the Production Stats will print.

The printer should be turned off after the production report. If the printer is left on and left connected it will print out each order that is sent to the Epad when the order is bumped with the Bump Bar.

KVS Serve Function Key

The SPS-2000 function key #247, *Serve Order*, can be used to bump orders from the video. You can select a specific cell by entering the cell number before touching the *Serve Order* function key.

Appendices

Updating EPAD Flash ROM

There are two methods that can be used to update Flash ROM: by CF card or by using Hyperterminal and a serial connection to a PC (when a CF is not available). Both methods are documented here. The CF update method is recommended.

Batch File Update by CF

Beginning at version 601109 a batch file is included in the upgrade package. The batch file simplifies updates by CF by automating the copy processes. **The upgrade will not interfere with the current EPAD video program.**

Resources Needed for Update

- EPAD Controller & Video Monitor
- Compact Flash Card (CF) formatted to FAT
- PS/2 Keyboard
- EPAD update file including the files: Do_Many.bat and SPS_MPAD.exe. (Download the update package from the appropriate ECR model's support page at www.crs-usa.com.)

To Update

1. Connect the PS/2 keyboard and Video monitor to the EPAD Controller.
2. Copy and paste both the Do_Many.bat and SPS_MPAD.exe files to the Root of a Compact Flash card.
3. Power off the EPAD, insert the Compact Flash card, power up the EPAD.
4. You will see a brief message that the files have been copied. Then the EPAD video monitor will display the 8 grid screen. If you do not see the file copy message, retry from step 3 or call CRS Tech Support for assistance.
5. Power off the EPAD and remove the Compact Flash.
6. Power on the EPAD.
7. When the 8 grid screen comes up on the Video screen, press Alt K on the PS2 keyboard. The version date displays in the upper/center of the KVS monitor. Verify that the version was updated appropriately.

Update by CF (Without Batch File)

Load the desired .exe file to the CF.

1. Power off the EPAD. Attach a PS/2 keyboard and insert the CF into the EPAD. Power up the EPAD.
2. When the 8 grids appear on the video type [ALT] [K] and then type [ALT] [Q] to view the C: prompt.
3. Type COPY(space)D:SPS_MPAD.EXE press [ENTER].
4. To write the new version to the permanent memory at the C prompt type:

Copy(space)D:SPS_MPAD.EXE(space)C:\SPS_MPAD press [ENTER].

Update Using Hyperterminal

If an updated program is necessary, CRS or MICROPLUS will supply the file: “SPS_MPAD.EXE”. This file will need to be sent to the EPAD video controller. To complete this task, you will need:

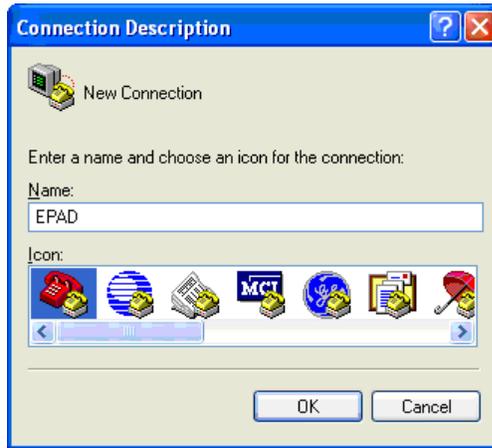
- A PC with Microsoft Hyperterminal program. HyperTerminal is shipped as part of Window XP. If HyperTerminal is not available on your PC, you may wish to search the Internet for a download. Free trial versions are available.
- A standard DB9 to DB9 PC to ECR cable (CRS P/N 522035) with a gender adaptor for the EPAD COM1 connection.
- A PS/2 keyboard and Screen connected to the EPAD.

IMPORTANT NOTE: A backup of the MXKernel.ini and [system type].dat file (for example sps_1000.dat) is recommended. See “Backing-Up Program Files” on page 33”

1. Connect your PC to the EPAD using the cable described above. Connect the PC COM port to the port labeled COM1 on the EPAD.
2. At your PC, start HyperTerminal. Choose **Start, Programs, Accessories, Communication, HyperTerminal**. At the *Default Telnet Program?* Dialog box, click **No**.



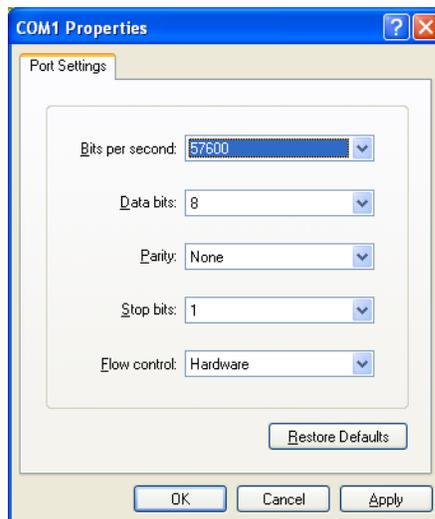
3. The *Connection Description* dialog will display. Enter a new connection name, i.e. EPAD, and click **OK**.



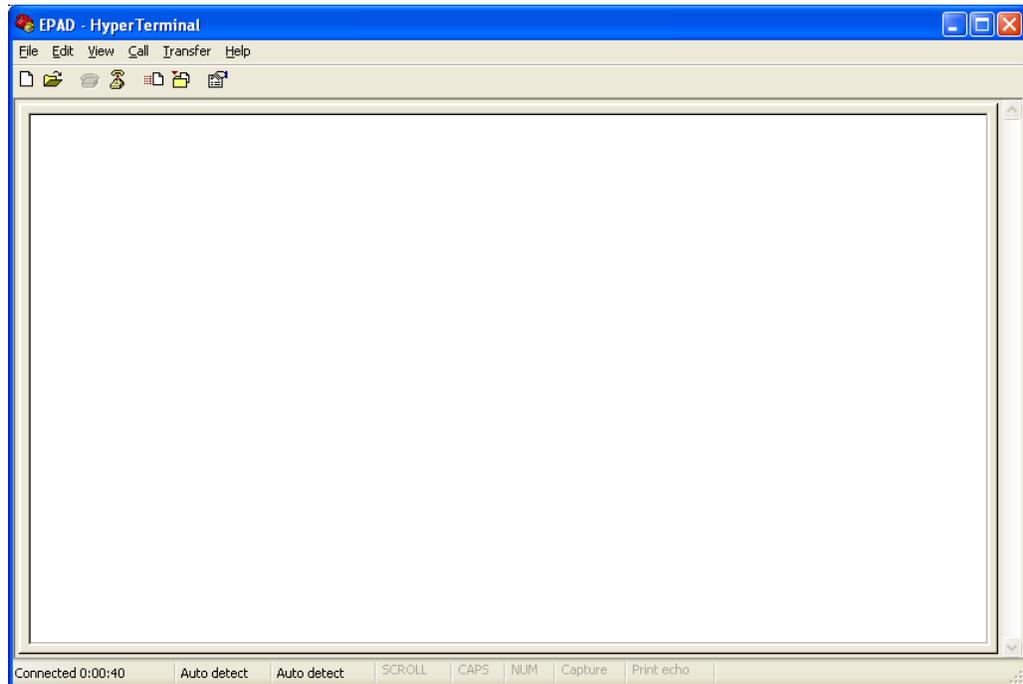
4. The *Connect To* dialog displays. Select the com port you are using and click **OK**.



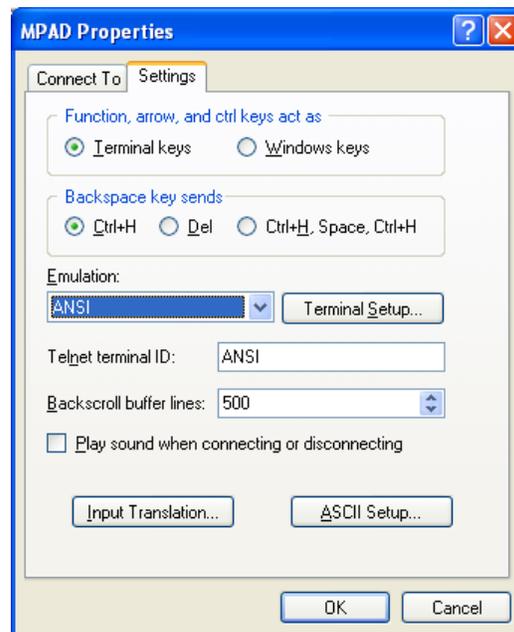
5. The appropriate *COM Properties* dialog box displays. Make the settings as shown: **57600** Bits per second, **8** Data bits, **None** parity, **1** Stop bit, and **Hardware** Flow Control. Click **Apply**.



6. Click **OK**. The HyperTerminal window displays.

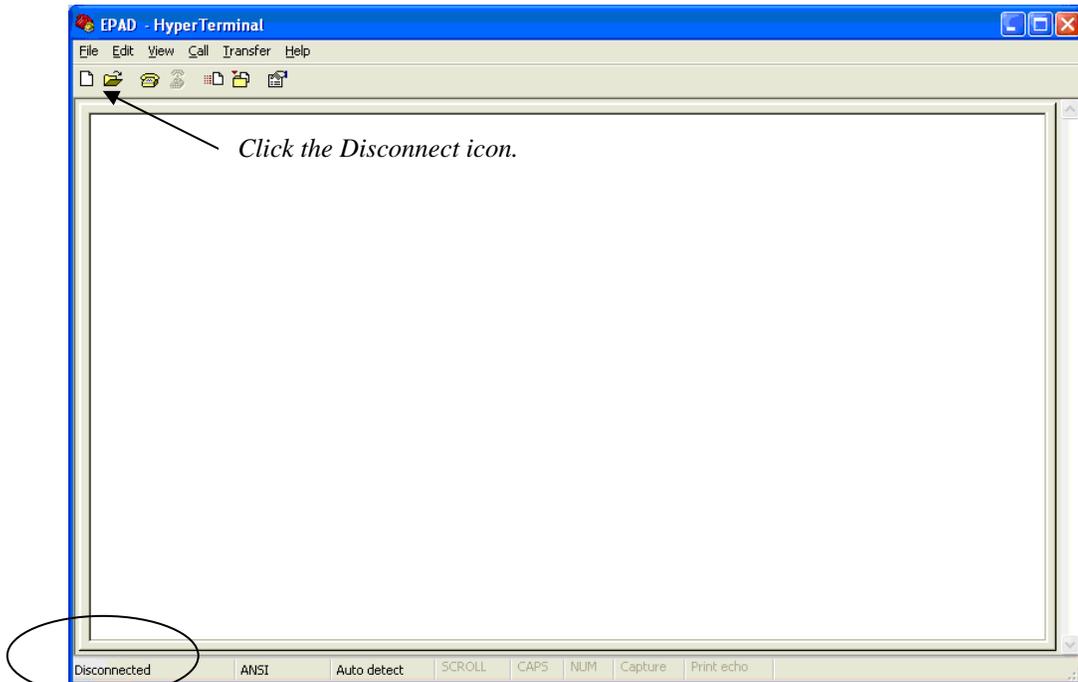


7. Choose **Properties** from the **File** menu. From the *Properties* dialog box click the **Settings** tab.

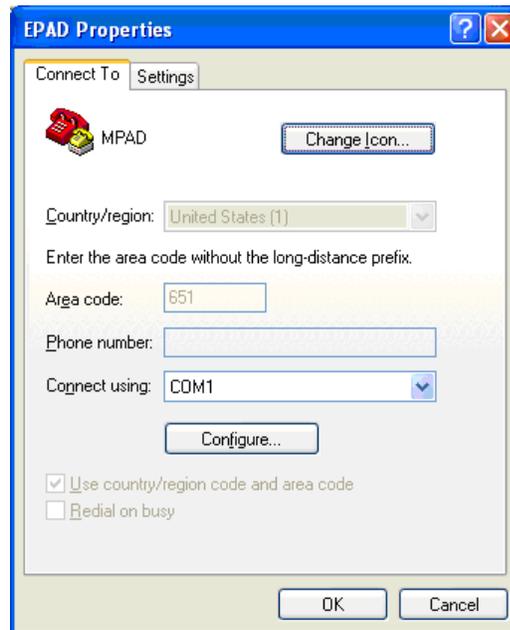


8. At the **Emulation** drop-down list box, select *ANSI*.
9. Click **OK**.

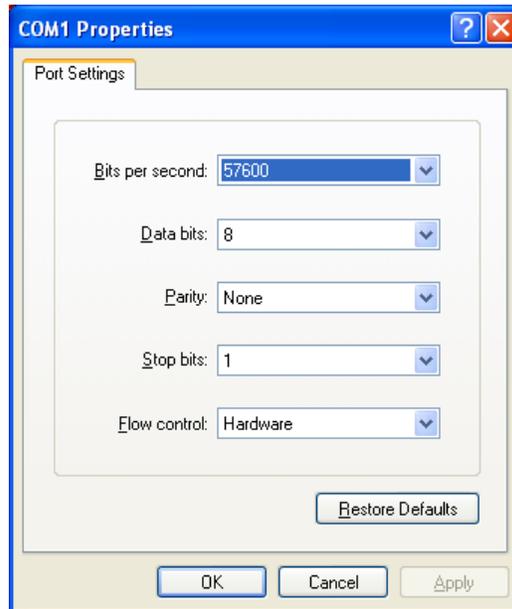
10. At the Hyperterminal window, click the disconnect icon.



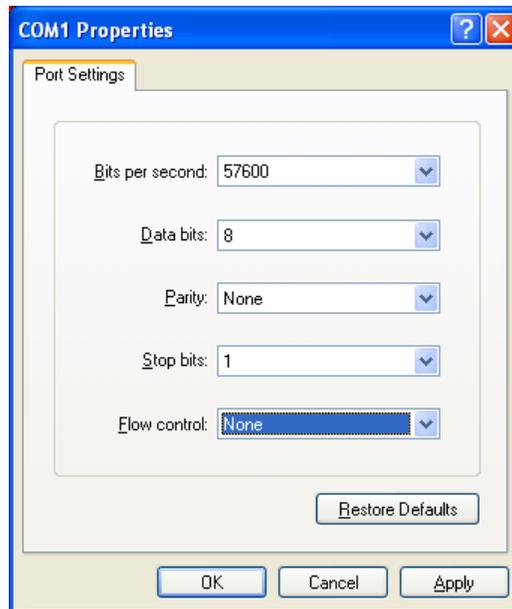
11. Choose **Properties** from the **File** menu.



12. At the *Connect To* tab, click **Configure**.



13. Change the *Flow Control* setting to **None**.



14. Click **Apply**.

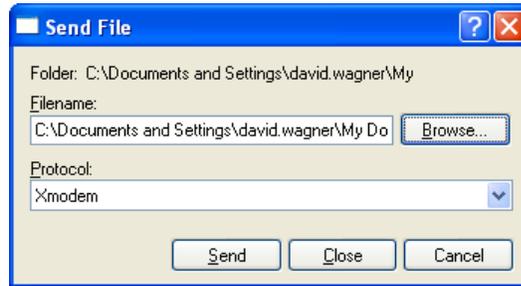
15. Click **OK** to return to the COM Properties dialog, click **OK** again to exit.

16. Click the “connect” icon. 

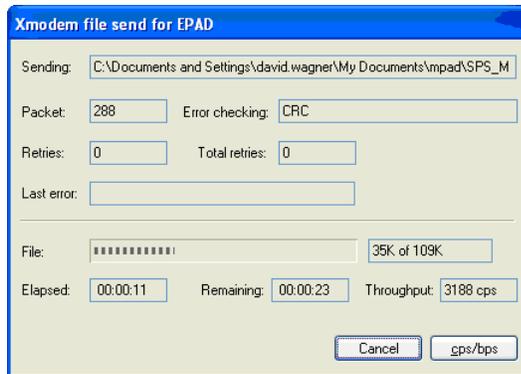
The message “connected” will display in the lower left corner of the HyperTerminal window.

17. Click the “send” icon

The Send File dialog box displays.



18. Click **Browse**. Locate the SPS_MPAD.exe file and click **Open**.
19. At the *Protocol* drop-down list box, select **Xmodem**.
20. Attach a PS/2 keyboard and screen to the EPAD Video Controller.
21. Power up the EPAD controller. Monitor the screen. When the message “Loading MPAD, depress.....” displays, press the <R> key on the keyboard (to receive xModem file transfer.)
22. The message “Enter filename to receive ?” displays. Type “D:SPS_MPAD.EXE”
23. At the PC, click **Send**.
24. At the EPAD keyboard, press [Enter].
25. The *Xmodem file send* dialog monitors the transfer.



26. The dialog closes automatically when the transfer is complete.
27. At EPAD screen, the message “Enter Filename to receive ?” displays.
28. At the EPAD keyboard, press [Enter].
29. Type “COPY D: *.*”, press [Enter].
30. The message “D:\SPS_MPAD.EXE”, “1 File(s) copied” displays.
31. At the C: prompt type: COPY SPS_MPAD.exe C:\SPS_MPAD
(COPYspaceSPS_MPAD.EXEspaceC:\SPS_MPAD)
The spaces must be entered in the correct areas or the file copy will not work.
32. Reboot the EPAD Video Controller. Close HyperTerminal at the PC.

Backing-Up Program Files

Back-Up to CF

You can use the CF to Backup and Restore the program files to the EPAD. To back-up programming files:

1. Power off the EPAD. Insert the CF and power up the Epad.
2. With a PS/2 keyboard press ALT Q to return to the DOS prompt C:
3. Type BACKUP.
4. The system will prompt for a video number. Enter the video number to be saved and the setup file will be written to the compact flash.

Restore from CF

To restore saved files:

1. Power off the EPAD. Insert the CF and power up the Epad.
2. With a PS/2 keyboard press ALT Q to return to the DOS prompt C:
3. Type RESTORE
4. The system will prompt for the video number to be restored. Enter the video number and the setup file will be restored to the EPAD.

Back-up to “C”

You can also back up to and restore from the ‘C’ drive. To save the program files, at the C: prompt type:

```
COPY^ SPS_1000.DAT^ SPS_1000.old  
(Where ^ represents a space)  
Press [ENTER]
```

To save the Mxkernel.ini file, at the C: prompt type:

```
COPY^ mxkernel.ini^ mxkernel.old  
(Where ^ represents a space)  
Press [ENTER]
```

Restore from “C”

To restore the Mpad Plus to your backup files, at the C: prompt type:

```
COPY^SPS_1000.old^SPS_1000.DAT (  
(Where ^ represents a space)  
Press [ENTER]
```

Type:

```
COPY^mxkernel.old^mxkernel.ini  
(Where ^ represents a space)  
Press [ENTER]
```

[System Type].dat

```
*****
;
; Video Routing Parameters:
;
; KVG ..... Kitchen Video Groups (01 to 99... or 00-ALL)
; Note ... KVG 00 = ALL
;
; REG ..... Registers Assigned To The Video (01 to 24 or ALL)
;
; DEST ..... Destinations ( 00 to 04 or ALL)
;
; 00 = Unspecified
; 01 = Eat In
; 02 = Take Out
; 03 = track 1 (drive thru lane 1)
; 04 = track 2 (drive thru lane 2)
;
; PERIOD ... Operation Time Periods (1 to 5) ... Lunch Dinner Etc.
;
;
; ";" IN FIRST POSITION OF LINE = COMMENT LINE
;
; Up to 5 route groups may be assigned to each video
;
;
*****

[VIDEO]=1
[ROUTE]=1
[PERIOD]=ALL
[KVG]=01
[REG]=ALL
[DEST]=ALL
[END]

[VIDEO]=2
[ROUTE]=1
[PERIOD]=ALL
[KVG]=02
[REG]=ALL
[DEST]=ALL
[END]

;[VIDEO]=3
;[ROUTE]=1
;[PERIOD]=ALL
;[KVG]=ALL
;[REG]=ALL
;[DEST]=ALL
;[END]

;[VIDEO]=4
;[ROUTE]=1
;[PERIOD]=ALL
;[KVG]=ALL
;[REG]=ALL
;[DEST]=ALL
;[END]

;[VIDEO]=6
;[ROUTE]=1
;[PERIOD]=ALL
;[KVG]=ALL
;[REG]=ALL
;[DEST]=ALL
;[END]
```

KVG (Kitchen Video Group):
If you are using multiple EPAD controllers, you can enter a specific KV group for the specific MPAD here.

Inactive Devices
Preceed with a semi-colon (;) in multi-EPAD systems. This prevents MPADs not receiving orders from 'beeping' when orders are sent to other MPADs.

```

;*****
;
; VIDEO COLOR ASSIGNMENTS ..... White Background
;
;           0=BLACK 1=BLUE  3=CYAN  2=GREEN  4=RED
;           5=MAGENTA 6=BROWN 7=WHITE 8=GRAY 9=LT/BLUE
;           10=LT/GREEN 11=LT/CYAN 12=PINK  14=YELLOW
;           15=High-Intensity WHITE
;
;           Note ..... Add 128 to color number fo blinking
;
;*****
;           Special Background colors ... Non-Blink
;
;           Add 144 for black background
;           Add 160 for blue background
;           Add 176 for green background
;           Add 192 for Lt. Blue background
;           Add 208 for red background
;           Add 224 for violet background
;           Add 208 for brown background
;
;           Special Background colors ... Blink
;
;           Add 16 for black background
;           Add 32 for blue background
;           Add 48 for green background
;           Add 64 for Lt. Blue background
;           Add 80 for red background
;           Add 96 for violet background
;           Add 112 for brown background
;
;*****
;*****
;
; VIDEO COLOR ASSIGNMENTS ..... Black Background
;
;           0=BLACK 1=BLUE  3=CYAN  2=GREEN  4=RED
;           5=MAGENTA 6=BROWN 7=WHITE 8=GRAY 9=LT/BLUE
;           10=LT/GREEN 11=LT/CYAN 12=PINK  14=YELLOW
;           15=High-Intensity WHITE
;
;           Note ..... Add 128 to color number fo blinking
;
;*****
;           Special Background colors ...Non-Blink
;
;           Add 16 for blue background
;           Add 32 for green background
;           Add 48 for lt-Blue background
;           Add 64 for red background
;           Add 80 for violet background
;           Add 96 for brown background
;           Add 112 for white background
;
;           Special Background colors ... Blink
;
;           Add 144 for blue background
;           Add 160 for green background
;           Add 176 for Lt. blue background
;           Add 192 for red background
;           Add 208 for violet background
;           Add 224 for brown background
;           Add 208 for white background
;

```

Video Color Assignments
You can replace the standard white and black backgrounds with special assignments.


```

[ALPHA37] = / / ; Video 7 prioritization
[ALPHA38] = / / ; Video 8 prioritization
;[ALPHA39] = /SCOREBOARD / ; SCOREBOARD
[ALPHA39] = /N / ; Auto Elec. Journal Y/N & # months or SCOREBOARD
[ALPHA40] = /01,02,03,04 / ; Not .. Can't bump till paid VIDEOS
; 01,02,03,04
[ALPHA41] = / / ; Supress decimal point
[ALPHA42] = /01 / ; registers which bump by order #
[ALPHA43] = /132 / ; Color of TRAINING alpha(+128 for Blinking)
[ALPHA44] = /132 / ; Color of CANCEL alpha
[ALPHA45] = /0 / ; Color of SUBTOTAL alpha
[ALPHA46] = /14 / ; Color of TOTAL alpha
[ALPHA47] = /1 / ; Color of TRAY-SUBT alpha
[ALPHA48] = /0 / ; Color of STORE-1 alpha
[ALPHA49] = / / ; Color of STORE-2 alpha
[ALPHA50] = /132 / ; Color of Message lines (ie. change order/eat-in/takeout)

```

Mxkernel.ini

```
*****
; MXKERNEL.INI TEMPLATE
; CONTAINS PARAMETER INFORMATION FOR MXKERNEL.EXE
; PROMPTS BEGIN IN COLUMN 1, RESPONSES IN COLUMN 25
; COMMENT STATEMENTS BEGIN WITH A SEMICOLON
; BLANK LINES IGNORED
*****

*****
; G E N E R A L   I N F O
; VIDEOS = 01 - 08 (for now)
; 2-PORT/4-PORT KDS communication board:
; MC2000/MC4000 IRQ = 03,04,05,06 or 07
; MC2000/MC4000 CONFIGURATION = 01-16
; 1st MX4000 BOARD = 02 (JP2= A=1-2, B=1-2, C=2-3, D=1-2) ...140-147
; 2nd MX4000 BOARD = 04 (JP2= A=1-2, B=2-3, C=1-2, D=1-2) ...190-1DF
; MX4000 ADDRESS = B000/D800
; PRIORITY TIME LIMIT = SECONDS
; RUSH TIME LIMIT = SECONDS
; LOAD AS TSR = YES/NO
; RAM DRIVE = A/B/C/D/E <-MATCH ALPHA[25] in CRS3000.DAT
; SUMMARY = ON/OFF
; ERROR LOGGING = ENABLED/DISABLED
; BUMP BAR TYPE = MICROPLUS/NCR/SEC
; ALTERNATE PALETTE = ENABLED
*****

[GENERAL]
VIDEOS                = 01
Device ID             = 01
MC2000 IRQ            = 05
MC2000 CONFIGURATION = 17
1st MX4000 BOARD     = 02
2nd MX4000 BOARD     = 04
MX4000 ADDRESS       = B000
PRIORITY TIME LIMIT  = 60
RUSH TIME LIMIT      = 180
LOAD AS TSR          = YES
RAM DRIVE             = A
ERROR LOGGING        = DISABLED
BUMP BAR TYPE        = MICROPLUS
PARK DIRECTION        = UP
PRODUCTION STATS     = DISABLED
;DOUBLE KEY CLEAR    = YES
ALTERNATE PALETTE    = ENABLED
;CONTINUE LINE       = ENABLED
AUTO CLOSE TIMER    = 20
*****
; V I D E O   S P E C I F I C
; MODE = REGULAR/ELONGATED/SPLIT
; TYPE = FOODPREP/EXPEDITER/DISABLED
; KEYITEM = UP TO 10 PER SCREEN
*****

[VIDEO 1]
MODE                  = REGULAR
TYPE                  = FOODPREP
REROUTE VIDEO        = 01
SUMMARY               = OFF
KEYITEM               = Jumbo Burger
KEYITEM               = HDog 1/4 LB
KEYITEM               = Chili Dog
KEYITEM               = SF TACO
KEYITEM               = 7-LAYER BUR
KEYITEM               = NACHO B/G
;ORDER BEEPER        = DISABLED
;AUTO BUMP            = 2

;
;[VIDEO 2]
;MODE                 = REGULAR
;TYPE                 = FOODPREP
```

Device ID:
In single EPAD systems, this value will always be set to 01. If multiple EPAD controllers are used with a router, each will be assigned a unique device ID, i.e. 01, 02, 03, etc.

AUTO CLOSE TIMER:
Note: The Auto Close Timer option is hidden from view. The default timer value was changed in version 05/06/09 from 5 minutes to 20 minutes. This option allows the bumping of forgotten or abandon orders. For example, if an ECR shuts off in the middle of an order, the Auto Close Timer will close the order and allow it to be bumped without having to reboot the KVS system.
Please contact CRS Tech Support for assistance if you wish to change this option.

MODE:
REGULAR = 8 cells; ELONGATED = 4 cells;
SPLIT = 8 cells, but top/bottom split for eat in/drive thru separation.

KEYITEM:
Enter key item descriptors here.

```

;REROUTE VIDEO      = 01
;SUMMARY            = OFF
;KEYITEM            = TACO BEEF
;KEYITEM            = BEAN BURR
;KEYITEM            = BURR SUPRM
;KEYITEM            = DBL DEC TC
;KEYITEM            = SF TACO CX
;KEYITEM            = SF TACO
;KEYITEM            = 7-LAYER BUR
;KEYITEM            = NACHO B/G
;KEYITEM            = PEPPRNI PPP
;KEYITEM            = SUPREME PPP
;ORDER BEEPER      = ENABLED
;AUTO BUMP         = 3
;
;[VIDEO 3]
;MODE              = REGULAR
;TYPE              = EXPEDITER
;TYPE              = FOODPREP
;REROUTE VIDEO    = 01
;SUMMARY          = OFF
;KEYITEM          = TACO BEEF
;KEYITEM          = BEAN BURR
;KEYITEM          = BURR SUPRM
;;KEYITEM         = DBL DEC TC
;KEYITEM          = SF TACO CX
;KEYITEM          = SF TACO
;KEYITEM          = 7-LAYER BUR
;KEYITEM          = NACHO B/G
;KEYITEM          = PEPPRNI PPP
;KEYITEM          = SUPREME PPP
;ORDER BEEPER    = ENABLED
;AUTO BUMP       = 1
;;
;[VIDEO 4]
;MODE              = REGULAR
;TYPE              = FOODPREP
;REROUTE VIDEO    = 01
;SUMMARY          = OFF
;KEYITEM          = TACO BEEF
;KEYITEM          = BEAN BURR
;KEYITEM          = BURR SUPRM
;KEYITEM          = DBL DEC TC
;KEYITEM          = SF TACO CX
;KEYITEM          = SF TACO
;KEYITEM          = 7-LAYER BUR
;KEYITEM          = NACHO B/G
;KEYITEM          = PEPPRNI PPP
;KEYITEM          = SUPREME PPP
;ORDER BEEPER    = ENABLED
;AUTO BUMP       = 8
;
;[VIDEO 5]
;MODE              = REGULAR
;TYPE              = FOODPREP
;REROUTE VIDEO    = 01
;SUMMARY          = OFF
;KEYITEM          = HAMBURGER
;KEYITEM          = COKE
;ORDER BEEPER    = ENABLED
;AUTO BUMP       = 8
;;
;[VIDEO 6]
;MODE              = REGULAR
;TYPE              = FOODPREP
;REROUTE VIDEO    = 01
;SUMMARY          = OFF
;KEYITEM          = HAMBURGER
;KEYITEM          = COKE
;;ORDER BEEPER    = ENABLED
;AUTO BUMP       = 8
;;
;[VIDEO 7]
;MODE              = REGULAR
;TYPE              = FOODPREP

```

```

;REROUTE VIDEO          = 01
;SUMMARY                = OFF
;KEYITEM                = HAMBURGER
;KEYITEM                = COKE
;;ORDER BEEPER         = ENABLED
;AUTO BUMP              = 8

;[VIDEO 8]
;MODE                   = REGULAR
;TYPE                   = FOODPREP
;REROUTE VIDEO         = 01
;SUMMARY                = OFF
;KEYITEM                = HAMBURGER
;KEYITEM                = COKE
;;ORDER BEEPER         = ENABLED
;*****
; R E G I S T E R   S P E C I F I C
;   TYPE = COUNTER/DRIVE THRU
;   DISPLAY LOC's = TOP/BOTTOM
;   ROUTES = Y/N (for each video)
;   ALT ROUTES = Y/N (for eash video)
;*****

[REGISTER 1]
TYPE                = COUNTER
DISPLAY LOCATION    = TOP
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY

[REGISTER 2]
TYPE                = COUNTER
DISPLAY LOCATION    = TOP
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY

[REGISTER 3]
TYPE                = COUNTER
DISPLAY LOCATION    = TOP
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY

[REGISTER 4]
TYPE                = DRIVE THRU
DISPLAY LOCATION    = BOTTOM
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY

[REGISTER 11]
TYPE                = DRIVE THRU
DISPLAY LOCATION    = BOTTOM
ROUTES              = YYYY
ALTERNATE ROUTES   = YYYY

[OTHER]
SOFTMUX            = ENABLED

```

EPAD Compatible Platforms

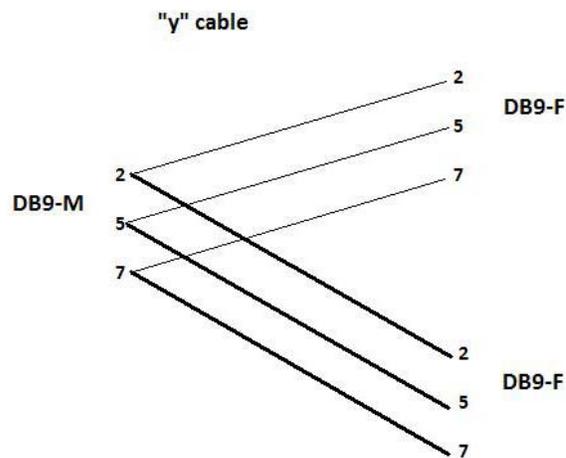
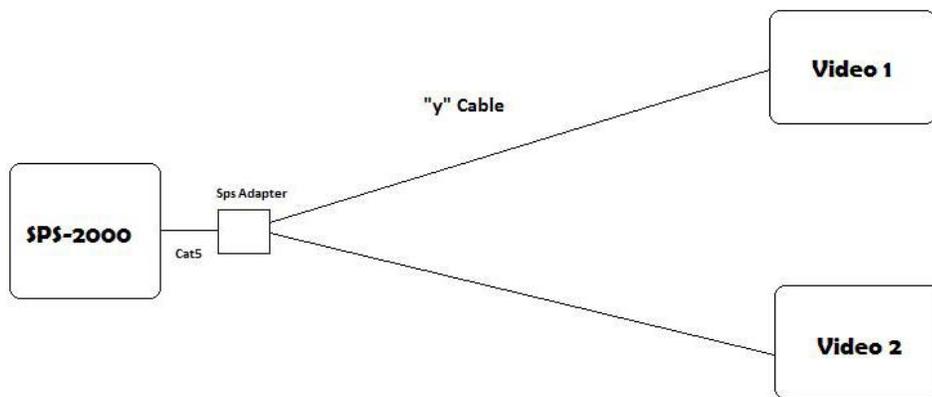
Note: SAM4s ECRs with KP output, i.e. ER-285M, ER-380/380M, ER390/390M, ER-5200 series, ER-600, ER-650R, ER-655 use Samsung 650 (SAM650MP) selection.

MAD+ Compatible Platforms			
** Release 1.18 2/19/08** [SETUP]			
AFJ Systems Format 1	[AFJ_MPAD]	Pinnacle	[PINN_MP]
AFJ Systems Format 2	[AFJ2MPAD]	PixelPoint KP Emulator	[PIXEL_PT]
Aldello/NextPOS (Batch)	[NEXTPOSM]	Quorion	[QUORION]
America POS	[AMERICA]	RCS (Batch)	[RCS_MPAD]
Amigo Systems	[AMIGO]	RCS (L-B-L)	[RCSLBL_M]
Aloha (Batch)	[ALOHA_MP]	Rest. Manager (Batch)	[ACT_MPAD]
Ash Systems Inc.	[ASH_MPAD]	Rest. Manager (L-B-L)	[ACT_L_MP]
BEpoz	[BEPOZ]	Rest. Manager (L-B-L Touch)	[ACTTOUCH]
Black Board	[BLK_B_MP]	Rest. Mgnager (Batch Touch)	[ACTMPADT]
Bump-TO-Video	[BUMP2VID]	Restaurant-Pro	[REST_PRO]
Bump-To With Prod. Screen	[BUMPPROD]	RMS TOUCH	[RMSTOUCH]
Cash Systems Ind.	[CASHSYSI]	R-Power (BATCH)	[RPOWER]
ComCASH	[COMCASHM]	R-Power (L-B-L)	[RPOWER_L]
Casio 5000	[M_POS_L]	Sable	[SABLE_MP]
Casio TK 6000/6500/7500	[TK7500MP]	Samsung 650	[SAM650MP]
Casio 2000/6000/8500(Batch)	[QT2K232M]	Samsung SPS 1000/2000/7000	[SPS_MPAD]
Casio 2000/6000/8500 (LBL)	[QT2KLBLM]	Samsung SPS Elo Touch	[SPSMPADT]
CRS 2000	[CRS2K_MP]	Samsung SPS Fujitsu Touch	[SPSMPADF]
CRS 3000	[CRS 3000]	Samsung 6500 (Batch)	[SAMSUNGMP]
CRS 4000 / NEC 4000/5000	[CRS4K_MP]	Samsung 6500 (L-B-L)	[S6500_MP]
CYPLEX Systems	[CYPLEXMP]	Select Elec. Remote Client	[R_CLIENT]
Digital Dining	[MENUSWDM]	System 3	[SYS3_MP]
DataSym 6000 FF	[DATASYM]	Sharp UP-700	[S_UP700M]
DINERWARE	[DINER_W]	Sharp 750/770	[S750MPAD]
EZ-MINER	[EZMINER]	Sharp 770 (L-B-L)	[S770L_MP]
Future Systems	[FUTURE]	Sharp 3300/3500 (Batch)	[S3300BMP]
Focus Systems	[FOCUS_MP]	Sharp 3300/3500 (L-B-L)	[UP3300MP]
Fidelity Systems GPOS	[GPOS]	Soft-Touch	[S_TOUCHM]
Fiesta Systems	[FIESTAMP]	SPAN Video With Production	[SPANPROD]
FreePOS	[FREEPOS]	Silverware POS	[SILVER_W]
Gala Systems	[GALA_MP]	Software Data Sys TotalCard	[TOT_CARD]
Gilbarco	[GIL_MPAD]	Trade Winds POS	[T_WINDS]
GPOS	[GPOS]	TEC 27/36/3700	[TECQS_MP]
Golden Touch	[GOLDEN_M]	TEC 3600/3700 Post Process	[TECPOST]
Micro\$ale (Batch)	[MIC\$_BMP]	TEC 27/36/3700 KP Emulator	[TEC_PRT]
Micro\$ale (L-B-L) Serial	[MIC\$MPAD]	TEC FS-2600	[FS2600MP]
Micro\$ale (L-B-L) Ethernet	[MIC\$_TCP]	Trim-POS KP Emulator	[TRIM_PRT]
Micros E7 / 3700	[MICROSE7]	Trim-POS Flash-POS	[TRIMFLSH]
Micro POS	[M_POS_L]	Uniwell 850/890/915 (TCP)	[U850_TCP]
NextPOS/Aldello (BATCH)	[NEXTPOSM]	Uniwell 915 (UDP)	[U915_UDP]
Optima Systems	[OPTIMA]	Vectron	[VEC_MPAD]
Order Mate	[ORD_MATE]	Volante	[VOLANTE]
Palm Teq	[PALMTEQ]	Wells POS	[WELLS]
PC-NET	[PC_NET]		
Penny Lane	[PennyL_M]		
Plexis	[M_POS_L]		

Y-Cable for Two-EPAD Installations

When two EPADs (or MPADs) are used, the installer has the option of building a Y-cable to be used in place of an M-PAD Plus Router. If three or more EPAD/MPADs are used the Router must be used.

The diagram below shows the Y-cable construction detail. See “Settings for Multiple EPAD Controllers & Router” on page 18 to make the necessary settings for multiple EPAD operation.



Manual Revision Record

Edition	Date published	Revision contents
V1.0	March 6, 2009	Initial publication
V1.1	March 31, 2009	Corrected “How to Save the Log Data to CF” instructions on page 9.
V1.2	May 7, 2009	Auto Close Timer information added on page 32; saving short term logging on page 9.
V1.3	May 14, 2009	Update logging instructions on page 9.
V1.4	July 23, 2009	Added Update by CF with Batch File
V1.5	Oct. 21, 2010	Info to print production stats report added.
V1.6	Nov.10, 2011	Configuration diagram and adaptor information added. Warranty period corrected.
V1.7	Feb. 8, 2012	Y-Cable Information added.
V1.8	Sept.7 ,2012	Split Video by Destination Information added. EPAD Maintenance screen updated.
V1.9	June 17, 2014	Updated keypad information.
V1.10	August 20,2014	Added video color assignment information to [System Type].dat file example.
V1.11	June 9, 2015	Added Split Screen Routing by Reigster Number.