



Wireless Innovations for the Production Floor

## Technical Notes

### Hardware Requirements - Large Screen Display Software LCD and Plasma Screens

Note 105- Rev. 0

## Overview



The display of information on a Plasma or LCD screen must be driven from a P/C that is LAN connected. The minimal P/C requirements are defined below. For multiple screens in a facility, depending upon the information that is displayed on the screens will determine the number of P/Cs required. There are some options when all of the screens are displaying the exact information that you can drive as many four (4) screens from one P/C. With current technology, the multiple screens are driven from a splitter box and depending upon the splitter technology selected there is distance limitation from the splitter box to the screen – either 75’ or 320’. If there are multiple screens in a facility and each of the screens will be displaying different information, each screen will require a LAN connected P/C.

The selection of the size and the type of the display is the responsibility of the customer. It should be noted that Plasma Screens will ghost images- if the same information (image) is displayed on a constant basis. If it is planned that the image displayed on the screen will change continually, then a plasma screen may be a consideration. The LCD screens do not have this ghosting characteristic.

The selection of the screen, installation and cabling is the responsibility of the customer unless contracted otherwise.

Note: This is a not a wireless application. The P/C’s must be LAN connected and there is cabling from the PC or splitter box to the screens.

## Minimum P/C Requirements

### Minimum P/C system requirements for LCD/Plasma Displays

In order to have the correct resolution for your display, you will require a system with a video card that is 8x AGP with a minimum of 128mb of memory. Also since you may want to access the system remotely in order to set up the display it should have Windows XP or better installed.

### Minimum requirements for XP system:

- PC with 300 megahertz or higher processor clock speed recommended; 233 MHz minimum required (single or dual processor system);\* Intel Pentium/Celeron family, or AMD K6/Athlon/Duron family, or compatible processor recommended.

- 128 megabytes (MB) of RAM or higher recommended (64 MB minimum supported; may limit performance and some features).
- 1.5 gigabytes (GB) of available hard disk space.

Since the system will be used to just as a display driver these minimum requirements are just fine.

Video card:

Most panels have a standard resolution of 1366x768 and most will also display, natively 1024x768. However running in this mode will cut down the ability to utilize the displays full capabilities.

With this information in mind you should find a video card that is capable of displaying the standard resolution of the LCD/Plasma display.

Currently both Nvidia and ATI have basic cards that are able to provide this standard.

Nvidia FX5200 is capable of not only the standard resolution but also has settings available to tilt the display 90 degrees at a time to allow the display to be used as a count/goal/actual board.

## Driving Multiple Screens – Same Image

**Below are some of the options for driving multiple screens from one P/C.**

	Option #1	Option # 2	Option #3 Individual P/C
Hardware	Video & Audio Splitter/ Distribution Amplifier	4 Port Cat 5 VGA Video Splitter Plus Remote Receiver [Req. For Each Screen]	P/C
Estimated Cost	Cost of Splitter Box, Individual Monitor Cables, plus P/C [Approx 500.00 plus P/C ]	Cost of Splitter Box [Approx. \$600], Remote [Approx. 400.00 per location] plus P/C	Cost of Individual P/C at Each Location
Distance Limits	75' from Splitter Box	Cat5 Cable -320' from Splitter Box	Up to 75' Cable from P/C