USER'S
MANUAL

AMB-218 Series

*Flat Panel Industrial
Display Panels*
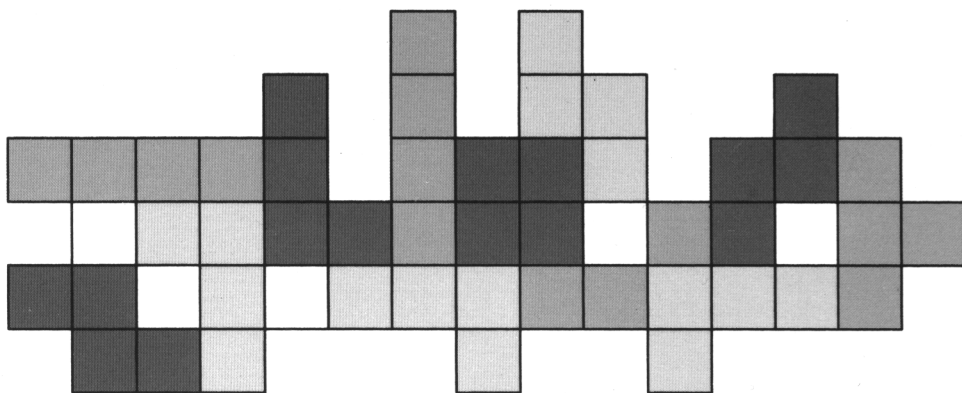
Table of Contents

About This Manual

The manual is made to help you understand how to set up and use the AMB-218 series industrial display panels. It is divided into two chapters and one appendix . Chapter one gives you an overview of the display panels. Chapter two tells you how they are basically constructed and what procedures you should take for system setup or upgrading. Appendix A presents you an exploded diagram on the display panels.

But before we come to all that the first thing you should do when you receive your unit is check if it is the right version you ordered. The series has two versions respectively named as: AMB-218C, AMB-218T (please refer to the display selection table in section 1.3 for details). Then you should also check if the package contains the following items. You should contact your dealer immediately if any of them is missing or damaged:

* One AMB-218 industrial display panel
* One graphic card
* One SCSI II-36 cable
* One accessory box
* One user's manual

Chapter 1 Overview

1.1 General

The AMB-218 series industrial display panels are ideal VGA interface specially designed for use in the industrial field. They come equipped with either a 10.4" color TFT or D_STN LCD; two sealed membrane keypads (one with 59 data keys and the other with 10 function keys). They also come with a graphic card, which is for you to install on your motherboard or passive backplane in your PC. The card also carries SCSI II-36 cable which enables your PC to communicate with the display panels at up to 6 meters away. No additional power source is required to run the display panels as the power coming from the graphic card is already enough.

On the front panel which is made of aluminum alloy, you can also see brightness and contrast controls. Removing the screw with a chain you can see a connector via which you can attach an external keyboard. On the back of the display panels you will see three connectors: the SCSI II-36, DIN-5, and DB-9, via them you can link the display panels up with your PC.

1.2 Features

* Heavy-duty steel chassis, aluminum alloy front panel
* 10.4" color TFT or DSTN LCD display
* 59-data key and 10-function key keypads on the front panel
* Analog resistive touchscreen (option)
* ISA-bus (default) graphic card
* SCSI II-36 cable (1.8 meters)
* Brightness and contrast controls, external keyboard connector on the front panel
* SCSI II-36, DIN-9, and DB-9 connectors on the back panel
* 19" rack mount

1.3 Specification

* **General**
  Construction: heavy-duty steel chassis, aluminum alloy front panel
  Dimensions: 483mm(W)x266mm(H)x41.2mm(D)
  Weight: 5.6 kgs
* **Front panel**
  59-data key and 10-function key keypads
  Brightness control and contrast controls
  External keyboard connector
* **Display**
  (refer to the selection table)
* **Environmental**
  Operating temperature: 0°C to 45°C
  Storage temperature: -20°C to 60°C
  Relative humidity: 5 to 95%, non-condensing
  Altitude: 10,000 ft (3000 meters)
  Vibration: 5 to 17 Hz, 0.1" double-amplitude displacement
  17 to 500 Hz, 1.5 G peak to peak
  Shock: 10 G peak acceleration (11 msec. duration)
  Safety: meets UL/CSA/TUV
  EMI: meets FCC/VDE Class A

* **Display Selection Table**

Item	Color D_STN	Color TFT
Diagonal	10.4"	**10.4"**
Display area	211.2(H) x158.4(V)	214.2(H) x164.4(V)
Resolution	640 x 480	640 x 480
Color or Gray scale	256 colors	16 colors

  **AMB-218C: with Color D_STN
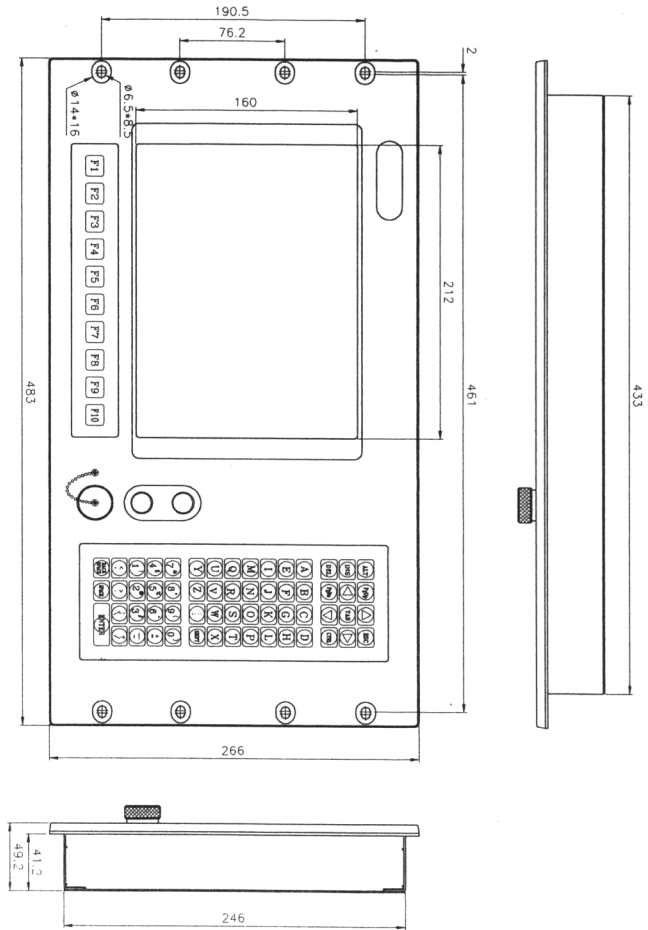 AMB-218T: with Color TFT
  (When you opt for a touchscreen, the above model names will be attached
  with a T, AMB-218TT for an example)

* **Touchscreen** (option)
  (refer to the touchscreen user's guide which will be included in the package
  if you opt for a touchscreen)

4

1.4 Dimensions

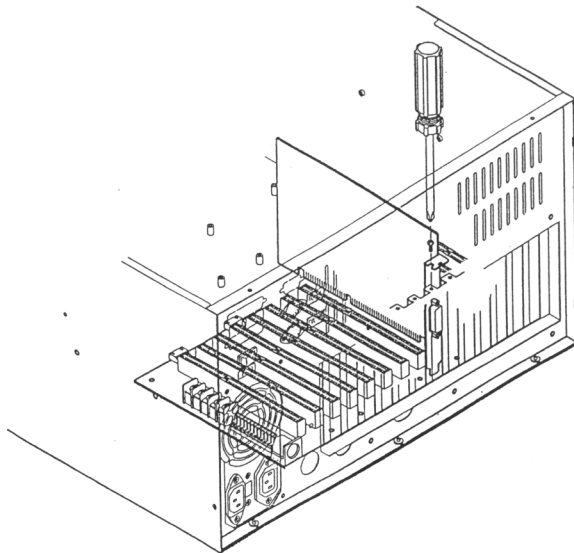# Chapter 2   System Setup

2.1 General

The AMB-218 series display panels are very easy to set up for operation, all you have to do is install the graphic card on your PC's motherboard or passive backplane, and connect the SCSI II-36 cable from the graphic card to the display panels. As we have said before, no additional power source is required to run them, the power coming through the graphic card is already enough.

But before you come to install the graphic card you should first make sure that: *you have shut down your PC and unplugged all the power cables from it. If you haven't, do it now. Also remember henceforth that each time you want to take off the graphic card for whatever purpose, you should shut down again your PC and unplug all the power cables from it.*
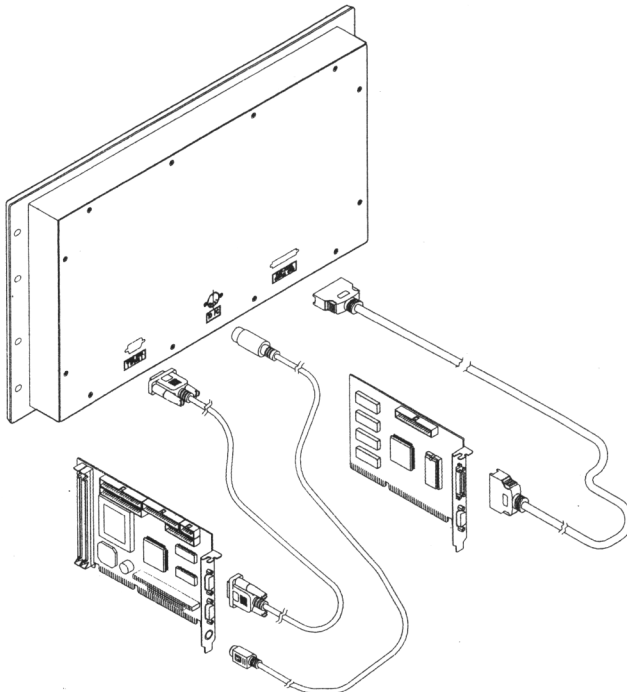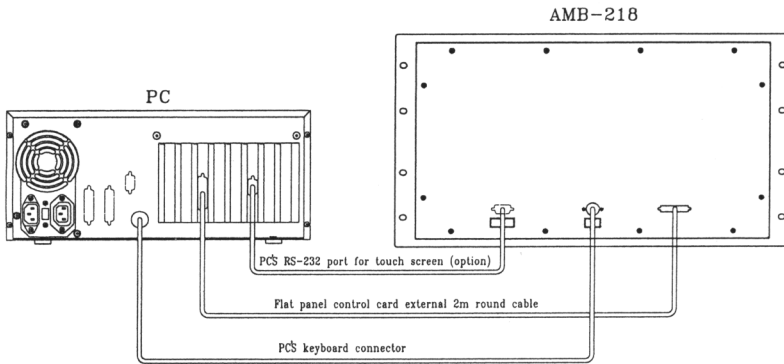
2.2 Install the graphic card

To link the display panels up with your PC you should first install the graphic card on your PC's motherboard or passive backplane. The installation will take the following steps to complete:
1. Choose a proper slot and remove its anti-dust leaf
2. Slide the graphic card into the slot with its mounting bar going down the leaf's groove
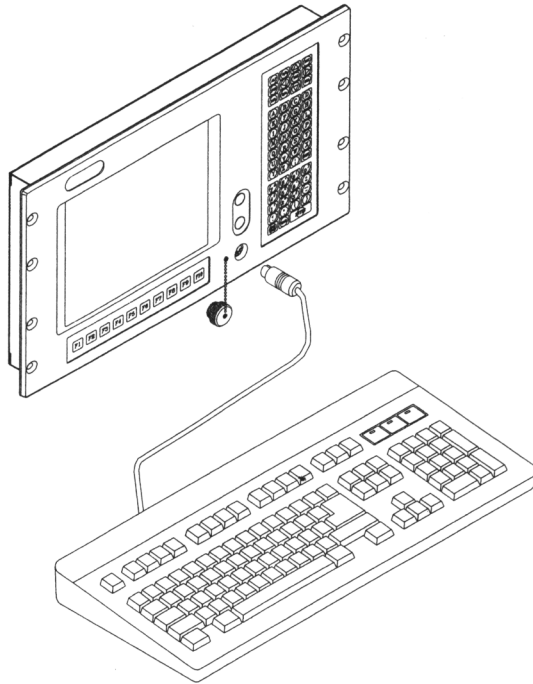3. Drive the screw back to secure

2.3 Connection to your PC

The display panels provide three connectors on their back. From the lower right one you can connect the SCSI II-36 cable to the graphic card you have installed in your PC. From the lower middle one you can connect a DIN-5 cable (option) to the motherboard in your PC. And from the lower left one you can connect a DB-9 (option with touchscreen) cable to the motherboard in your PC.

AMB-218

PC

PC's RS-232 port for touch screen (option)

Flat panel control card external 2m round cable
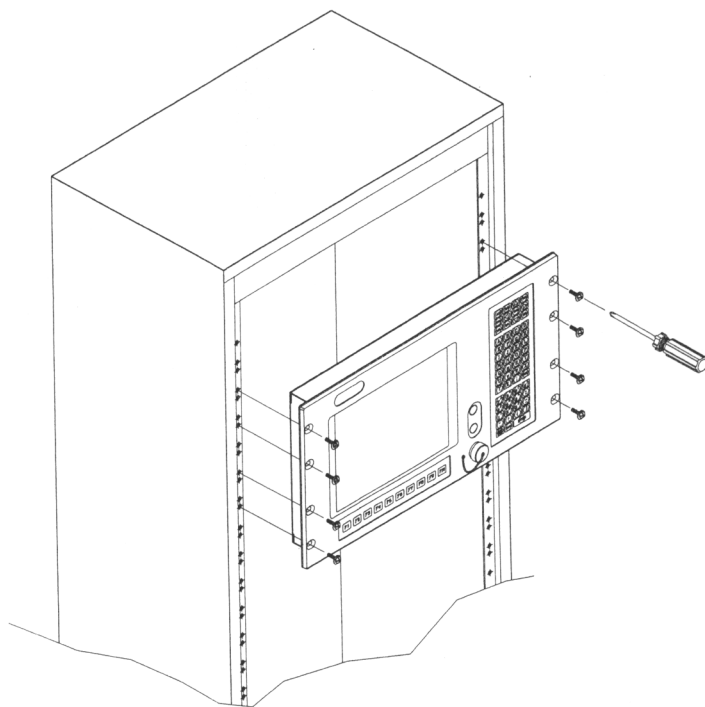
PC's keyboard connector

2.4 The keyboard connector on the front panel

Removing the screw with a chain you will see a connector inside. This is for you to connect an external keyboard to the display panels and work together with your PC.

The display panels are small and light, they can be placed almost anywhere. They were also designed to be mounted within a 19" rack cabinet. The drawing placed here below will show you the details about how they can be mounted within the cabinet.

218-EXP.DWG