

<b>Express Panel Cabling</b>	<b>22</b>
<b>Module Cabling</b>	<b>23</b>
<b>Chapter 4: Networking</b>	<b>24</b>
<b>Networking Prerequisites</b>	<b>24</b>
<b>Control Options</b>	<b>24</b>
Avenue Touch Screen Control Panels	24
Express Panel	24
Avenue PC Control Software	25
<b>Four Approaches to Networking Avenue Systems</b>	<b>25</b>
1. Ethernet Star Configuration	26
2: Ethernet Hub with AveNet Groups and Control Panels	27
3: Direct Connection of Two AveNet Groups Over IP	28
4: AveNet Interconnection Only	29
<b>Configuring Each Frame's System Control Module</b>	<b>30</b>
3RU Frames	30
1RU Frames	30
5030 and 5035 Front Panel Controls and Indicators	31
Control Module Configuration Menus	32
Enabling AVIP (AveNet over IP)	33
Setting the AveNet Address	33
Setting the AveNet Lower and Upper Addresses	34
Setting the IP Address	34
<b>Avenue Security Overview</b>	<b>39</b>
User Levels	39
Module Lock	40
<b>SNMP Monitoring</b>	<b>46</b>
Upgrading For SNMP Monitoring	46
SNMP Function Table	47

<b>Chapter 5: Operations</b>	<b>48</b>
<b>Local Operation</b>	<b>48</b>
<b>Avenue PC Operation</b>	<b>48</b>
<b>Avenue Express Panel Menus and Operation</b>	<b>48</b>
<b>Avenue Touch Screen Panel Menus and Operation</b>	<b>48</b>
Home Menu	49
Touch Screen Calibration and Adjustment	50
Select Frame/Module Menu	52
Virtual Modules	57
Configuration Menu	57
<b>Avenue Touch Screen Troubleshooting</b>	<b>60</b>
To Reset the Touch Screen on a 3RU Frame	60
To Reset the Touch Screen on a Tabletop Control Panel	60
<b>Specifications</b>	<b>61</b>
Avenue 1RU Frame with 5010 Power Supply	61
Avenue 3RU Frame with 5020 Power Supply	61
<b>Warranty</b>	<b>62</b>
<b>Factory Service</b>	<b>62</b>

# Chapter 1: Avenue System Description

## Introduction

This chapter provides an overall description of Avenue components available as part of the Avenue Signal Integration System.

The Avenue system includes modules for up/down/cross conversion, audio embedding, synchronization, video conversion, routing, noise reduction, protection switches, test signal generators and more. Avenue signal processing modules are used worldwide in broadcast, mobile, satellite, cable, worship and post production facilities. Avenue is a tray-based signal integration system housed in a 3RU or 1RU frame. Any combination of 1.5 Gb/s HD, 3 Gb/s HD, SD, MPEG, analog video and audio processing modules can be used together in the same frame. All modules are hot swappable. Because of the universal backplane, no special rear connectors are needed.

For facilities using both fiber and coaxial cables, Avenue provides a complete and simple solution. The Avenue Intersection frame is just 1RU and holds 10 optical modules. It can be used independently or tied to an Avenue 3RU frame.

Built-in networking lets you tie your Avenue system together, streamlining control and monitoring. All frames and modules in the system can be accessed from multiple locations in a facility, as well as from remote locations via the Internet. Comprehensive management and control is achieved by using any combination of Avenue Control Panels and/or Avenue PC software. Front edge/local controls are also available for each module.