

FEATURES

- **Powerful, scalable Intel-based platform (Pentium® Pro)**
- **Multi-tasking/multi-user**
- **User friendly graphical user interface**
- **Downloads addressable operating parameters to one-way and two-way set-tops**
- **Works with all of our analog and advanced set-tops, including CFT-2200s**
- **STARVUE® and STARFONE® IPPV systems compatibility**
- **Supports the ANIC-A, MA/SC, RAID and passive failover**

INTRODUCTION

The ACC-4000 Family of Controllers represents the latest development in a long tradition of access controller design. The new releases of the ACC-4000 Lite, ACC-4000 Classic and ACC-4000 RAID offer a full spectrum of systems requirements. The **ACC-4000 Lite** is the ideal access controller for systems with less than 30,000 set-tops. Fully featured like the ACC-4000 Classic, the ACC-4000 Lite is the perfect low cost companion for smaller system operators. The **ACC-4000 Classic** is the natural evolution of a staple product in the cable industry. The ACC-4000 Classic features a hardware and software operating environment with improved power, including our state-of-the-art Software Application. The **ACC-4000 RAID** employs a Redundant Array of Independent Disks serving as a high-end solution in a family of robust and reliable controllers.



Advantages

Powerful

The ACC-4000 Access Controllers are Intel® based and incorporate a server platform designed to meet the growing needs of cable operations. The standard tower configuration includes three 2 GB Hard Drives, 64MB of Error Correcting Code RAM (for single-bit error correction and double-bit error detection), one 3.5" Floppy Drive, one 2.0-5.0 GB QIC Tape Drive for Database backups, a SVGA 17" Monitor, a Port Multiplexer and a Remote Diagnostics Modem.

Scaleable

Based on a common, *fast!!!* Pentium® Pro platform architecture (Digital's Priors™ HX6200), the ACC-4000 Family forms a highly scaleable set of controllers to keep pace with an operator's changing environments. The Priors™ HX6200 expansion capabilities include up to 1 GB of ECC memory, 6 PCI and 5 EISA slots and a total of 11 bays just to name a few.

Robust

The ACC-4000 controllers are all configured with an intelligent UPS System. The UPS System includes software to safeguard and orderly shutdown the operating system in the event of a power failure or brownout. The UPS kit also includes a Telco Surge Protector for the Diagnostics Modem. The Multiplexer comes equipped with its own surge protector.

Flexible

The controllers are located at the Central Office or a local cable headend and operate in stand-alone mode as slaves to a Business System. All major third party Business System Vendors and operator-specific billing Systems already support the 'Analog WireLink' communication protocol used by the ACC-4000 controllers.

Supports a wide range of analog addressable terminals

The ACC-4000 Family of Controllers is fully compatible with the complete range of our addressable set-tops. It is also designed to two-way STARVUE® and STARFONE® terminals with the addition of a modem kit. Compatibility with emerging technologies is built-in. Our current software release supports advanced analog settops such as the CFT-2200 and Music Choice (TM).

Operator Friendly

The ACC-4000 Lite, Classic and RAID all feature a straightforward, user-friendly Graphical User Interface ensuring easy integration into new or existing addressable systems.

Hardware Operating Environment

Up to Three Hard Drives

The ACC-4000 Classic and RAID are configured with three 2 GB hard drives, while the ACC-4000 Lite has one.



The first drive in the ACC-4000 Classic stores the operating system, the second the database and the third drive serves as a spare, used for database backup, to ensure that the system is continuously on-line.

Streaming Tape Drive

The high capacity streaming tape drive accepts tapes up to 5.0 GB. The drive handles loading the initial system software and routine database backups. In addition, it is ideal for installing software upgrades as new enhancements are made available to users.

Diagnostics Modem

All platforms include a Modem for our service engineers to communicate with any controller installed in the field and to perform remote diagnostics so that necessary remedial steps are accomplished without an on-site visit. *(Always connect the Modem to a separate, dedicated line that is not part of the PBX system in the cable office).*

Printer

The ACC-4000 Classic and RAID packages include the WorldWide Printer Kit, a color inkjet printer used for printing the many reports available to the user through the operating system.

ANIC-A Ready

The ACC-4000 controllers support the ANIC-A, our newly released rack-mountable component. When present, the ANIC-A connects to the ACC-4000 Lite, Classic or RAID via an Ethernet 10Base-T link. The separation allows more than one ANIC-A to be assigned to a single controller thereby increasing data throughput between a controller and its set-tops.

WireLink Addressable Control

The controllers operate in a stand-alone mode or under the control of a Business System (also referred to as Subscriber Management System). The WireLink Ports are provided standard with each controller package. Our 'Analog WireLink' protocol is given to the interface provider upon execution of a Trade Secret License Agreement.

Software Operating Environment

The ACC-4000 Lite, Classic and RAID ship with Sybase® 's powerful relational database package, SCO® UNIX®, and Unify ACCELL® 's Graphical User Interface software.

Software Application

The ACC-4000 Family includes our **powerful** Software Application, a pinnacle in Software Research and Development designed by our World Class Engineering Team. The Software Application controls all subscriber authorizations, terminal features, channel maps, service codes, packages, impulse and one-way events, message management and extensive reporting. Moreover, the Software Application is constantly being updated with improved functionality. The Software Application used in the ACC-4000 Lite is feature-identical to that in the ACC-4000 Classic. However, the Software Application in the ACC-4000 Lite is customized for systems with a maximum of 30,000 set-tops.



Customer Service: the ServiPac® Program

Our comprehensive range of Customer Service options include:

- Motorola (BCS) Certified Classroom Training Seminar
- On-Site Installation and Overview Training
- Hardware Platform Warranty
- Telephone Support (Standard and Emergency)
- Technical Literature Retrieval System
- Preventive On-Site Maintenance
- On-Site Security Implementation
- Emergency On-Site Service
- Minor Software Updates
- Code Objects and IR Blaster Code Downloads.

These Customer Service options may be purchased individually or as part of one of the following packages:

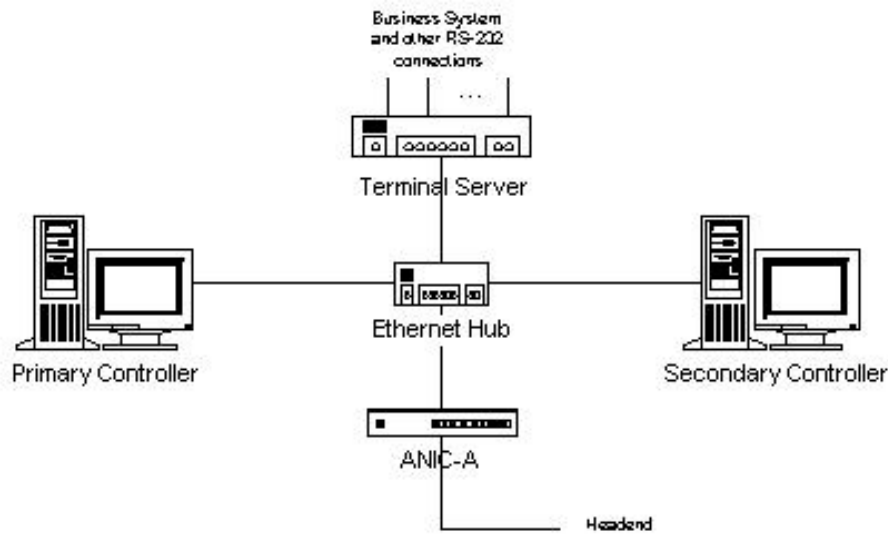
- Initial ServiPac®
- ServiPac® Silver
- ServiPac® Gold
- ServiPac® Platinum.

All of the ACC-4000 Controllers include the Initial ServiPac®. The ACC-4000 Classic also includes one year of the ServiPac Silver, and the RAID includes one year of the ServiPac Gold.

ACC-4000 Family Options: Passive Failover and Master Console.
Passive Failover

In Passive Failover, two machines run simultaneously, one being the mirror image of the other. Should the primary machine fail, the secondary controller would take over the overall access control function.

In this configuration, all RS-232 communications (WireLink, Remote Terminals, StarFone Modems) are connected to a Terminal Server residing on the controllers' Ethernet network, as shown below:



Master Console

In a multi-controller environment, the Master Console software centralizes and helps manage the following operations:

- System Administration
- Network Utilities
- Configuration Utilities
- System Administration
- Viewer Logger Information
- Report Generation
- Database Optimizations
- Data Collection
- Controller Time Synchronization
- Controller Time Accuracy.

Specifications

Analog Addressable Analog Access Controllers[ACC-4000 Lite, Classic and RAID]

	ACC-4000 Lite	ACC-4000 Classic	ACC-4000 RAID
HARDWARE OPERATING ENVIRONMENT			
Server Platform	Digital Prioris™ HX6200	Digital Prioris™ HX6200	Digital Prioris™ HX6200
CPU	Intel® Pentium® Pro	Intel® Pentium® Pro	Intel® Pentium® Pro
Display	SVGA 15" Monitor	SVGA 17" Monitor	SVGA 17" Monitor



Memory	48 MB ECC RAM	64 MB ECC RAM	64 MB ECC RAM
Hard Drive	1 x 2.0 GB Fast-Wide SCSI HD	3 x 2.0 GB Fast-Wide SCSI HD	3 x 2.0 GB Fast-Wide SCSI HD
Hard Drive Controller	Built-in SCSI controller	Built-in SCSI Controller	2 Channel PCI RAID
Controller	Controller	Controller	Controller
Disk Drive	1 x 1.44 MB 3.5" Drive	1 x 1.44 MB 3.5" Drive	1 x 1.44 MB 3.5" Drive
Redundant Power Supply	Option	Option	Standard
Expansion Kit	4 Port Multiplexer, 8 Port Concentrator	4 Port Multiplexer, 8 Port Concentrator	4 Port Multiplexer, 8 Port Concentrator
Surge Protection	APC SU1000	APC SU1000	APC SU1000
	ACC-4000 Lite	ACC-4000 Classic	ACC-4000 RAID
Cable Interface	ANIC-A	ANIC-A	ANIC-A
Printer	Option	Standard	Standard
SOFTWARE OPERATING ENVIRONMENT			
Operating System	SCO® OSE (UNIX®) 3.0	SCO® OSE (UNIX®) 3.0	SCO® OSE (UNIX®) 3.0
Database Manager	Sybase® System 10	Sybase® System 10	Sybase® System 10
Graphical User Interface	Unify ACCELL® 2.5	Unify ACCELL® 2.5	Unify ACCELL® 2.5
SOFTWARE APPLICATION			
Software Application	ACC-4000 Software Release 8.2 or higher (Max. of 30,000 set-tops))	ACC-4000 Software Release 8.2 or higher Standard	ACC-4000 Software Release 8.2 or higher Standard