In a big boost for digital cinema, the nation's third-largest theater chain has agreed to install thousands of systems over the next two years.

Carmike Cinemas Inc. would become the first theater chain to undertake the mass conversion to digital, putting 2,300 digital projection systems in its auditoriums by October 2007. Carmike has theaters in 37 states but none in California.

The deal, valued at more than $150 million, involves software company Access Integrated Technologies Inc., or AccessIT, and projector maker Christie Digital Systems Inc.

There are only about 100 screens with digital projection equipment today. The technology promises crisper pictures and sound as well as dramatically lower distribution costs. Studios are working with digital-system makers to help finance the roll-out, which could potentially cost billions of dollars.

While the Carmike deal covers fewer than 10% of the nation's 36,000 movie screens, it represents by far the largest commitment by a theater owner.

Industry analysts said Monday that the agreement established Cypress-based Christie and Morristown, N.J.-based AccessIT as the dominant suppliers of digital cinema systems.

"Most of the [deals] have been bits and pieces," said industry analyst Dennis McAlpine. "I think this is the one that says, 'OK, everyone is going to have some digital.'"

Movie studios in recent months have signed deals with Christie and AccessIT or with Technicolor Inc. to help offset the cost of installing digital cinema systems. The studios help finance the technology and hope to recoup the expenditure through lower distribution costs.

"I think it does complete the other side of the picture," said Bill Mead, publisher of DCinemaToday.com, a website that tracks digital exhibition.

Universal Pictures distribution President Nikki Rocco said: "It's great to see exhibition is jumping on the band wagon" and looking at digital cinema "as if it is imminent."

Last week, a trio of movie theater chains — AMC Entertainment Inc., Cinemark USA Inc. and Regal Entertainment Group — signaled ambitions to deploy digital cinema systems. The chains have agreed to use a joint venture, National CineMedia, to develop a business plan to reduce the cost of purchasing equipment for their combined 13,000 screens and establish a financing model.

AccessIT and Christie plan to install digital systems on at least 4,000 screens over two years, with a goal of expanding the plan to 10,000 screens. The first 150 systems are being installed at multiplexes owned by Ultrarstar Theaters Inc. in San Diego and Riverside counties as well as theaters owned by Emagine Entertainment Inc. in Detroit.

The Carmike deal calls for digital cinema systems in nearly all of the Columbus, Ga.-based company's about 2,500 screens. In exchange, Carmike will pay service fees to Christie and AccessIT to manage the systems over the next decade.

Christie President Jack Kline declined to specify the fees, but suggested that they were in line with fees charged to maintain existing 35-millimeter systems.

Carmike executives said they expected digital cinema to help them take advantage of 3-D programming and live sporting events as well as bolster the number of movies screened by eliminating bulky and expensive 35-millimeter film.

"Small town America doesn't play about half the movies the studios release each year because the cost of the print itself excludes us from making a profitable deal," Carmike President Michael Patrick said. "We also think the public will have a tremendous amount of curiosity in seeing and hearing what digital gives you.

"When we are unshackled from 35-millimeter prints, it will allow us to play one movie in more auditoriums," Patrick added.

Tony Rhead, entertainment vice president at Carmike, said his company also spoke to Technicolor but chose to go with the Christie coalition because Technicolor appeared to be "months behind Christie..... In my opinion it will probably be six to nine months before they are ready."

A Technicolor executive said his company planned to start deploying a couple of hundred digital cinema systems in three to four months as a test to ensure the equipment works properly.

"There can be no risk to the box office in this transition of technology," said Joe Berchtold, a Technicolor president.