



LTC 8016/90 Allegiant® Bilinx Data Interface



- ▶ Bilinx technology interface for Allegiant Series matrix switcher/controllers
- ▶ Up-the-coax Pan/Tilt/Zoom (PTZ), auxiliary, and pre-position control
- ▶ Down-the-coax event reporting
- ▶ Auto-sensing setup for simplified installation
- ▶ Data input allows other devices to control Bilinx PTZ cameras
- ▶ Cascade units to control up to 496 Bilinx cameras

The LTC 8016/90 Allegiant Bilinx Data Interface unit is an accessory used for communicating over-the-coax, with up to 16 Bilinx-capable AutoDome® and/or Dinion™ Series cameras. Compatible with all seven Allegiant Series matrix switcher/controllers, the LTC 8016 provides complete control of pan/tilt/zoom, auxiliaries, and pre-position functions of Bilinx enabled AutoDome Series cameras. In addition, complete programming of Dinion Series cameras and AutoDomes via their on-screen menus is supported.

Functions

Bilinx technology also supports camera-generated event reporting to the Allegiant. This technology allows remote alarm inputs and motion event data to be sent to the Allegiant without the need for additional wiring between the camera site and the main control location. The LTC 8016 is designed so that other Bi-Phase code generating products, like Bosch Digital Videos Recorders, can be used with the unit for control of PTZ functions and camera menu access over the video cable. This high level of flexibility provides a low cost per channel solution whenever control and configuration of remote cameras is needed. With Bilinx technology, installation costs are reduced because no additional data communication cabling to

the camera site is required. Installation time is also reduced; once the cameras and data cable to the LTC 8016 are connected, and its group ID number is set, all other internal settings are configured automatically. Use of the LTC 8016 also reduces camera installation time because there is no need to set AutoDome site addresses. At initial connection of an AutoDome camera to the LTC 8016, its identification is automatically established.

The LTC 8016 is supplied in an enclosure compatible with mounting in an EIA 48 cm (19 in.) rack, requiring only a 1-unit rack height. To support large systems, up to 31 units can be cascaded, comprising up to 496 Bilinx-compatible cameras.

The LTC 8016 can also be used to transmit Bilinx communications over a number of video transmission systems. Example devices include fiber optic links and external balun devices that use CAT5 twisted pair cables for video communication.

Certifications and Approvals

Electromagnetic
Compatibility (EMC)

Complies with FCC Part 15,
ICES-003 and CE regulations

Product Safety

Complies with CE regulations, UL, CSA, EN and
IEC Standards

Technical Specifications

Electrical

Voltage Range 108 to 264 VAC, 50/60 Hz

Power at Rated Voltage 15 W

Maximum Video Signal Distances

Coax Up to 300 m (1000 ft) using standard CCTV-grade RG-59U with copper center conductor and copper braided shield; up to 600 m (2000 ft.) using CCTV-grade RG-11 or RG-6.

Fiber Up to 600 m (2000 ft) using LTC 4630 and LTC 4631 Series fiber optic modules. Note: This distance includes the length of coax cables used between the devices and the fiber optic link.

Other Up to 230 m (750 ft) using CAT5E cable that meets ANSI/TIA/EIA-568-A requirements with NV-211 or NV-214 A-MBNC-to-twisted Balun devices (or similar passive device pair).
Note: When using twisted pair links of this type, some degradation in video quality may be experienced at distances beyond 150°m (500° ft).

Front Panel Indicators

Status / Power LED

Rear Panel Indicators

System Data Link Indicator Green LED

Data Activity Indicator Yellow LED

Bi-Phase Code Indicator Green LED

Bilinx Video Signal Presence One (1) green LED for each of 16 channels

Ethernet Port Green LED indicates link;
Yellow LED indicates activity

Rear Panel Controls

Group ID Three (3) rotary switches

Rear Panel Connectors

Bilinx Video Inputs 16 BNC connectors; accepts standard NTSC/PAL baseband composite video signals or video signals from Bilinx-capable cameras; 0.5–1.4 Vp-p; 75 Ohm terminated; TVS protected inputs provide improved protection against transients

Video Outputs Male 34-pin video ribbon connector; provides 16 video outputs (unity gain using active circuitry); mating 2 m (6°ft) 16-channel LTC 8809/00 cable included

Bi-Phase Data Interface 6-position removable terminal block with "+", "-", and "shield" input connections and "+", "-", and "shield" looping output connections, with attached end-of-line termination resistor

PC Interface Male 9-pin sub D-connector

RS-232 Data Interface¹ Female 9-pin sub D-connector for Allegiant RS-232 interface

RS-485 Data Interface¹ Female 9-pin sub D-connector for Allegiant RS-485 interface port connection

RS-485 'Looping' Data Interface¹ Female 9-pin sub D-connector, for data interface to cascaded LTC 8016 unit

1. One (1), 2 m (6 ft) data interface cable is supplied for use with the Allegiant RS-232 interface, the Allegiant RS-485 interface, or the cascade configuration looping connection.

Ethernet Interface	RJ-45 connector, supporting 10/100 BaseT (reserved for future use)
Power Cord	Two (2) detachable 3-wire IEC cords with grounded plug, 1.83 m (6 ft.); one with European continental plug type and one with US plug type

Environmental

Temperature

Operating 0°C to 50°C (32°F to 122°F)

Storage –10°C to 70°C (14°F to 158°F)

Humidity 0% to 90% relative, non-condensing

Mechanical

Construction Steel chassis with sheet metal cover and plastic bezel

Finish Charcoal case

Dimensions (W x D x H) 440 x 305 x 40 mm (17.3 x 12 x 1.7 in.)

Weight 3.8 kg (8.5 lb)

Rack-mount Kit (included) For mounting unit in an EIA 48 cm (19 in.) rack

Optional Accessories

LTC 8508/01 Ribbon-to-BNC Interface Cable

Interface cable with a 34-pin ribbon cable on one end and 16 male BNC connectors on the other end. This cable is required when the LTC 8016 unit will be connected to control system devices that do not contain a 34-pin ribbon cable connector.

LTC 8807/00 BNC Panel Interface panel used to convert video ribbon cables from up to two LTC 8016 units into 32 standard female BNC connectors. Useful when the LTC 8016 unit will be separated from the control unit beyond the 2 m (6 ft) distance allowed by the video ribbon cable supplied with the unit.

LTC 4630, LTC 4631 Fiber Optic Series modules compatible with Bilinx communication. Available in surface-mount and rack-mount models. Refer to the LTC 4600 Series data sheet for complete information on these products.

NV-211 or NV-214 A-M BNC-to-twisted pair adaptors passive (non-amplified) devices compatible with Bilinx technology, allowing transmission of real-time monochrome or color video over unshielded twisted pair (UTP) telephone wire. Refer to the NV-214 A-M Series data sheet for complete information on these products.

Compatibility

Allegiant Matrix Switchers	Requires an Allegiant CPU firmware 8.6 or later (released May 2004)
AutoDome Cameras	All models manufactured October 2003 (version 5.11), or later
Dinion Cameras	Dinion Series manufactured March 2004, or later
Bi-Phase Devices	Any product generating standard Allegiant Bi-Phase Control Code protocol

Ordering Information

LTC 8016/90 Allegiant® Bilinx Data Interface 896080169001

Ordering Information

Hardware Accessories

LTC 8508/01 Ribbon-to-BNC interface cable for LTC 8016, with a 34-pin ribbon cable on one end and 16 male BNC connectors on the other end, 1 m (3 ft)	896085080101
LTC 8807/00 BNC Panel 32 channel video interconnect panel, for use with up to 2 LTC 8809 video ribbon cables	896088070001
NV-213A BNC-to-Twisted Pair Adaptors Passive (non-amplified) devices compatible with Bilinx technology, allowing transmission of real- time monochrome or color video over unshielded twisted pair (UTP) telephone wire. Refer to the NV-231A Series Data Sheet for complete infor- mation on these products.	899380052201

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