

# LTC 8780 Series Data Converter Units

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Invented for life



- ▶ Designed for various applications utilizing Allegiant Series Switchers
- ▶ Converts Allegiant Bi-Phase control code to RS-232 and RS-232 to Bi-Phase
- ▶ Provides satellite address decoding
- ▶ Signal distribution mode provides 15 separate outputs

The LTC 8780 Series are accessory units that convert the Allegiant system's Bi-Phase control code into RS-232, or convert RS-232 back to Bi-Phase code. They provide the capability of transmitting the control code over conventional RS-232 transmission mediums such as phone modems, fiber optics, microwaves, etc. The unit accepts the Bi-Phase control code generated by an Allegiant main CPU bay, Bosch Series DVRs, Signal Distribution units, and LTC 8569 Series Code Merger units.

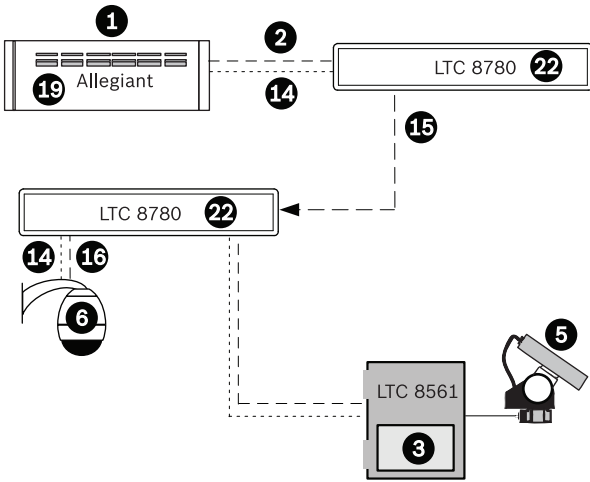
The LTC 8780 Series are also designed to perform the Satellite selector functions in an Allegiant satellite system configuration. In addition, using its integral signal distribution capability, the LTC 8780 Series can function as remote distribution units for driving up to 120 receiver/driver devices connected to its 15 outputs. As a distribution unit, wiring can be in either a star or daisy chain configuration, and each output is capable of driving eight (8) daisy chained receiver/driver loads, at up to 1.5 km (5000 ft) away using 1 mm<sup>2</sup> (18 AWG) shielded twisted pair (Belden 8760 or equivalent).

## Certifications and approvals

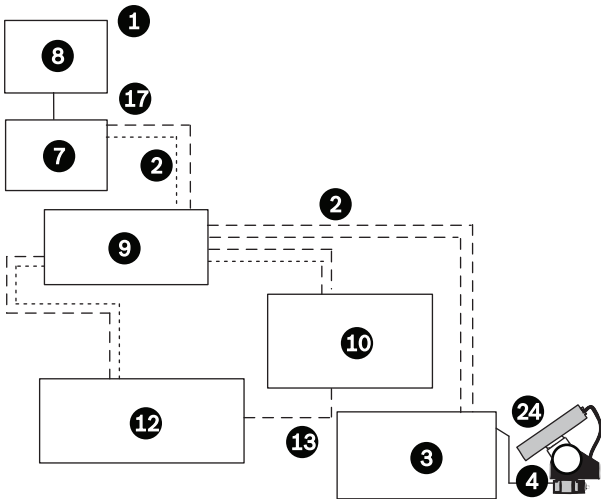
Electromagnetic Compatibility (EMC)	Complies with FCC Part 15, ICES-003, and CE regulations
Product Safety	Complies with CE regulations, UL, CSA, EN, and IEC Standards

Region	Certification
Europe	CE

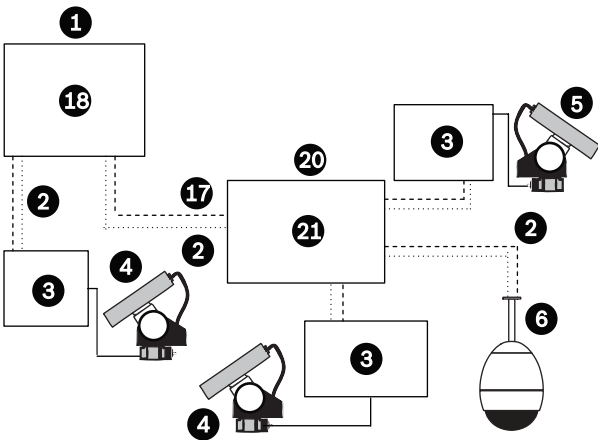
**Installation/configuration notes**



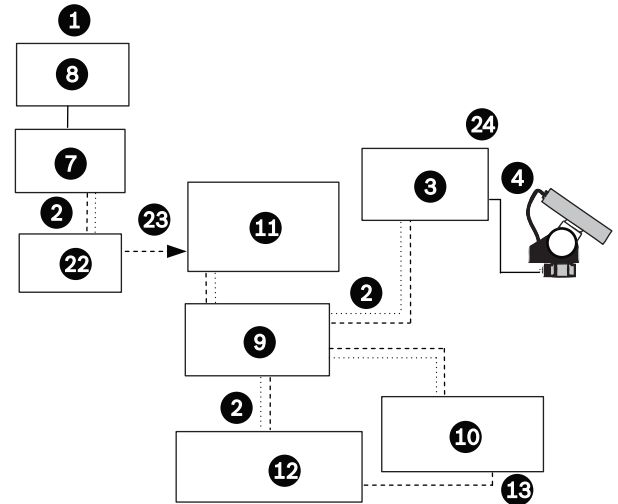
Code Conversion Application (Figure 1)



Satellite Address Decoder Application (Figure 2)



Configured as a Remote Signal Distribution Unit (Figure 3)



Code Conversion Combined with Satellite Address Decoding (Figure 4)

**Legend for Figures 1, 2, 3 and 4:**

- 1 Main Switcher Control Site
- 2 Bi-Phase Code
- 3 Receiver/Driver
- 4 Pan/Tilt Camera
- 5 Remote Pan/Tilt/Zoom Camera Site
- 6 Typical AutoDome Series Camera
- 7 Signal Distribution Unit
- 8 Main Allegiant Matrix Switcher
- 9 Code Merger Unit
- 1 Data Converter Unit Configured as Satellite Selector
- 0
- 1 Data Converter Unit Configured for RS-232 to Bi-Phase
- 1
- 1 Satellite Allegiant Matrix Switcher
- 2
- 1 RS-232 (Satellite Commands Only)
- 3
- 1 Shielded Twisted Pair Cable
- 4
- 1 Conventional Asynchronous Simplex RS-232 Transmission Link
- 5
- 1 Bi-Phase Code Out
- 6
- 1 Up to 1.5 km (5000 ft) Using 1 mm<sup>2</sup> (18 AWG) Shielded Twisted Pair (Belden 8760 or Equivalent)
- 7
- 1 Allegiant Matrix System or the Output of a Controller/Follower
- 8

- 1 Allegiant Matrix System or the Output of a Controller/Follower  
9 Generating Control Code
- 2 Up to 1.5 km (5000 ft) Using 1 mm<sup>2</sup> (18 AWG) Shielded Twisted  
0 Pair
- 2 Data Converter Unit Configured for Signal Distribution  
1
- 2 Data Converter Unit Configured for Bi-Phase to RS-232  
2
- 2 Conventional RS-232 Link  
3
- 2 Satellite Site  
4

### Technical specifications

#### Electrical

Model No.	Rated Voltage	Voltage Range
LTC 8780/50	230 VAC, 50/60 Hz	198 to 264
LTC 8780/60	120 VAC, 50/60 Hz	108 to 132
Power at Rated Voltage	4 W	
Indicators	Power: Green LED Code In: Green LED RS-232 In: Green LED Code Out: Red LED RS-232 Out: Red LED	
Connectors		
Inputs	Bi-Phase control code: One (1), 15-pin connector (mating connector supplied) RS-232: One (1), 9-pin male connector (pin compatible with industry standard modem cable (mating cable not supplied))	
Outputs	Bi-Phase control code: Three (3), 15-pin connectors providing a total of 15 separate Bi-Phase outputs (mating connectors supplied) Console: One (1), 9-pin male connector (mating cable compatible with Allegiant Console port supplied)	
AC Input	3-wire power cord with grounded plug; 1.8 m (6 ft) long	

#### Mechanical

Construction	Steel chassis with sheet metal cover and plastic bezel
Finish	Charcoal
Dimensions (W x D x H)	223 x 280 x 40 mm (8.77 x 11 x 1.59 in.)
Weight	1.6 kg (3.5 lb)

#### Environmental

Temperature	Operating: -18°C to 50°C (0°F to 122°F) Storage: -40°C to 60°C (-40°F to 140°F)
Humidity	10% to 90% relative, non-condensing
Vibration	3 g swept sine wave, 15 Hz to 2000 Hz
Shock	30 g, 11 ms, ½ sine
Options	
LTC 9101/00 Rack Kit	For mounting one or two units in an EIA 48 cm (19 in.) rack
Height	One (1) standard rack unit
Width	One (1) standard rack unit

#### Ordering information

##### LTC 8780/50 Data Converter Unit

Allegiant biphas control code to RS-232, 230 VAC, 50 Hz  
Order number **LTC 8780/50**

##### LTC 8780/60 Data Converter Unit

Allegiant Biphas control code to RS-232, 115 VAC, 60 Hz  
Order number **LTC 8780/60**

#### Accessories

##### LTC 9101/00 Rack Kit

Rack kit for up to two half rack products, with blank, 1.75-inch high  
Order number **LTC 9101/00**

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