



LTC 8782 Series Code Translator



- ▶ Supports many CCTV manufacturers protocols
- ▶ Provides full pan/tilt/zoom (PTZ) code conversions
- ▶ Incorporates front panel diagnostic indicators
- ▶ Convenient EIA 48 cm (19 in.) rack-mount included

The LTC 8782 Series Code Translators are accessory units that convert Biphase code to other manufactures' control codes, or converts other manufactures' codes to Biphase. Many of the most popular protocol codes are supported, including Pelco, Vicon, American Dynamics, Sensormatic, Kalatel, Diamond Electronics, and Javelin. Fixed and variable speed codes are supported where applicable. The LTC 8782 Series Code Translators have four independent outputs. Removable screw terminal blocks are used for input and output connections. Front panel LEDs indicate the status of power, data receive, and data transmit. The translator comes supplied in an EIA 48 cm (19 in.) rack-mount adapter that can hold up to three units.

System Overview

Biphase to "Others" Code

Model No. ¹	Manufacturer's Protocol
LTC 8782/x0-02	American Dynamics–Manchester
LTC 8782/x0-14	Cohu–RS-422
LTC 8782/x0-05	Diamond Electronics–RS-422
LTC 8782/x0-11	Javelin–RS-232
LTC 8782/x0-04	Kalatel–RS-422
LTC 8782/x0-13	PanasonicRS-485
LTC 8782/x0-10	Pelco–RS-422

Model No. ¹	Manufacturer's Protocol
LTC 8782/x0-12	Philips–RCL
LTC 8782/x0-03	Sensormatic–RS-422
LTC 8782/x0-01	Vicon–RS-422

1. x = 6 for 120 VAC and 5 for 230 VAC

"Others" to Biphase Code

Model No. ²	Manufacturer's Protocol
LTC 8782/x0-22	American Dynamics–Manchester
LTC 8782/x0-25	Diamond Electronics–RS-422
LTC 8782/x0-31	Javelin–RS-232
LTC 8782/x0-24	Kalatel–RS-422
LTC 8782/x0-30	Pelco–RS-422
LTC 8782/x0-32	Philips–RCL
LTC 8782/x0-21	Vicon–RS-422

2. x = 6 for 120 VAC and 5 for 230 VAC

Functions

Bosch Biphase Code to “Others”

LTC 8782/x0-02–Bosch Biphase to American Dynamics Manchester

The LTC 8782/x0-02 is a Biphase to American Dynamics code translator to permit control of American Dynamics receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in American Dynamics Manchester protocol. The translator can be programmed by internal switches for the following:

- Offset the Biphase addresses to one of 64 American Dynamics address blocks that support up to 64 cameras each. In large systems, 64 translators can be used to support up to 4,096 cameras.
- Support either fixed or variable speed American Dynamic protocol.

LTC 8782/x0-14–Bosch Biphase to Cohu RS-422

The LTC 8782/x0-14 is a Biphase to Cohu code translator to permit control of Cohu receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in Cohu RS-422 protocol. The translator can be programmed by internal switches for the following:

- Offset the Biphase addresses to one of 8 Cohu address blocks that support up to 223 cameras each. In large systems, eight translators can be used to support up to 1,784 cameras. Cohu code can be set to either "3830" or "MPC" protocol.

LTC 8782/x0-05–Bosch Biphase to Diamond Electronics RS-422

The LTC 8782/x0-05 is a Biphase to Diamond Electronics code translator to permit control of Diamond Electronics receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in Diamond Electronics RS-422 protocol. The translator can be programmed by internal switches for the following functions:

- Offset the Biphase addresses to one of eight (8) Diamond Electronics address blocks that support up to 255 cameras each. In large systems, 8 translators can be used to support up to 2,048 cameras.
- Default iris mode can be set to either Auto or Manual.

LTC 8782/x0-11–Bosch Biphase to Javelin RS-232

The LTC 8782/x0-11 is a Biphase to Javelin code translator to permit control of Javelin receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in Javelin RS-232 protocol. The translator supports 15 Javelin prepositions and the ability to set Javelin camera movement limits.

LTC 8782/x0-04–Bosch Biphase to Kalatel RS-422

The LTC 8782/x0-04 is a Biphase to Kalatel code translator to permit control of Kalatel receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in Kalatel RS-422 protocol. The translator can be programmed by internal switches for the following:

- Either Kalatel Digiplex III or Digiplex II code type can be selected.
- Offset the Biphase addresses to one of four (4) Kalatel Digiplex II address blocks that support up to 96 cameras each. In large systems, four (4) translators can be used to support up to 384 cameras.
- Offset the Biphase addresses to one of 4 Kalatel Digiplex III address blocks that support up to 256 cameras each. In large systems, four (4) translators can be used to support up to 1024 cameras.
- Support output baud rates of 2400 and 4167 for Digiplex II, 2400 and 4800 for Digiplex III.

LTC 8782/x0-13–Bosch Biphase to Panasonic RS-485

The LTC 8782/x0-13 is a Biphase to Panasonic code translator to permit control of Panasonic receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in Panasonic RS-485 protocol. The translator can be programmed by internal switches for the following:

- Offset the Biphase addresses to one of 32 Panasonic address blocks that support up to 96 cameras each. In large systems, 32 translators can be used to support up to 3,072 cameras.
- Support output baud rates of 2400, 4800, 9600, and 19.2K.
- Support either variable or two fixed speed code.

LTC 8782/x0-10–Bosch Biphase to Pelco RS-422

The LTC 8782/x0-10 is a Biphase to Pelco code translator to permit control of Pelco receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in Pelco RS-422 protocol. The translator can be programmed by internal switches for the following:

- Support either Pelco "P" or "D" output code.
- Support up to 256 addresses in "D" code, and 16 or 32 addresses in "P" code.
- Support Pelco output baud rate of 2400 in "D" code.
- Support Pelco output baud rate of 4800 or 9600 in "P" code.
- Support Pelco "turbo speed."

LTC 8782/x0-12–Bosch Biphase to Philips RCL

The LTC 8782/x0-12 is a Biphase to Philips RCL code translator to permit control of Philips RCL receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in Philips RCL protocol. The translator can be programmed by internal switches for either 50 Hz or 60 Hz RCL rates.

LTC 8782x03–Bosch Biphase to Sensormatic RS-422

The LTC 8782/x0-03 is a Biphase to Sensormatic code translator to permit control of Sensormatic receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in Sensormatic RS-422 protocol. The translator can be programmed by internal switches for the following:

- Offset the Biphase addresses to one of 32 Sensormatic address blocks that support up to 256 cameras each. In large systems, 32 translators can be used to support up to 8,192 cameras.
- Support "group" sizes of either 256 or 99.
- Support either Sensormatic variable or two fixed speed code.

LTC 8782/x0-01–Bosch Biphase to Vicon RS-422

The LTC 8782/x0-01 is a Bosch Biphase to Vicon code translator to permit control of Vicon VPS system receivers from Biphase controllers. It receives Biphase code and transmits the appropriate commands in Vicon RS-422 protocol. The translator can be programmed by internal switches for the following:

- Offset the Biphase addresses to one of four (4) Vicon address blocks that support up to 255 cameras each. In large systems, four (4) translators can be used to support up to 1,020 cameras.
- Support output baud rates of 9600 or 4800.

"Others" to Bosch Biphase Code**LTC 8782/x0-22–American Dynamics Manchester to Bosch Biphase**

The LTC 8782/x0-22 is an American Dynamics to Biphase code translator to permit control of Biphase receivers from American Dynamics controllers. It receives American Dynamics Manchester code and transmits the appropriate commands in Biphase protocol. Supports full range of Bosch Biphase Aux and preposition numbers. The translator can be programmed by internal switches for the following:

- Offset the 64 camera American Dynamic address block to one of 32 Biphase address blocks that support up to 64 cameras each. In large systems, 32 translators can be used to support up to 2,048 cameras.
- Accept either fixed or variable speed American Dynamics code.
- Generate either fixed or variable speed Biphase code.

LTC 8782/x0-25–Diamond Electronics RS-422 to Bosch Biphase

The LTC 8782/x0-25 is a Diamond Electronics to Biphase code translator to permit control of Biphase receivers from Diamond Electronics controllers. It receives Diamond Electronics RS-422 code and transmits the appropriate commands in Biphase protocol. The translator can be programmed by internal switches to generate either fixed or variable speed Biphase code.

LTC 8782/x0-31–Javelin RS-232 to Bosch Biphase

The LTC 8782/x0-31 is a Javelin to Biphase code translator to permit control of Biphase receivers from Javelin controllers. It receives Javelin RS-232 code and transmits the appropriate commands in Biphase protocol. The translator can be programmed by internal switches to generate either fixed or variable speed Biphase code.

LTC 8782/x0-24–Kalatel RS-422 to Bosch Biphase

The LTC 8782/x0-24 is a Kalatel to Biphase code translator to permit control of Biphase receivers from Kalatel controllers. It receives Kalatel RS-422 code and transmits the appropriate commands in Biphase protocol. The translator will automatically detect the type of Kalatel input code and indicate the type and baud rate on a front panel LED indicator. Supports full range of Bosch Biphase Aux and preposition numbers. The translator can be programmed by internal switches for the following:

- Generate either fixed or variable speed Biphase code.
- Accept either fixed or variable speed Kalatel code.

LTC 8782/x0-30–Pelco RS-422 to Bosch Biphase

The LTC 8782/x0-30 is a Pelco to Biphase code translator to permit control of Biphase receivers from Pelco controllers. It receives Pelco RS-422 code and transmits the appropriate commands in Biphase protocol. Supports full range of Bosch Biphase Aux and preposition numbers. The translator can be programmed by internal switches for the following:

- Generate either fixed or variable speed Biphase code.
- Accept either Pelco "P" or "D" output code.
- Support either 4800 or 9600 baud in Pelco "P" code.
- Support 2400 baud in Pelco "D" code.

LTC 8782/x0-32–Philips RCL to Bosch Biphase

The LTC 8782/x0-32 is an RCL to Biphase code translator to permit control of Biphase receivers from RCL controllers. It receives Philips RCL code and transmits the appropriate commands in Biphase protocol. The translator can be programmed by internal switches for the following:

- Generate either fixed or variable speed Biphase code.
- Accept latching or normal Aux commands.

LTC 8782/x0-21–Vicon RS-422 to Bosch Biphase

The LTC 8782/x0-21 is a Vicon to Biphase code translator to permit control of Biphase receivers from Vicon VPS controllers. It receives Vicon RS-422 code and transmits the appropriate commands in Biphase protocol. Supports full range of Bosch Biphase Aux and preposition numbers. The translator can be programmed by internal switches for the following:

- Generate either fixed or variable speed Biphase code.
- Accept either fixed or variable speed Vicon code.
- Support either 4800 or 9600 Vicon baud rates.

Certifications and Approvals

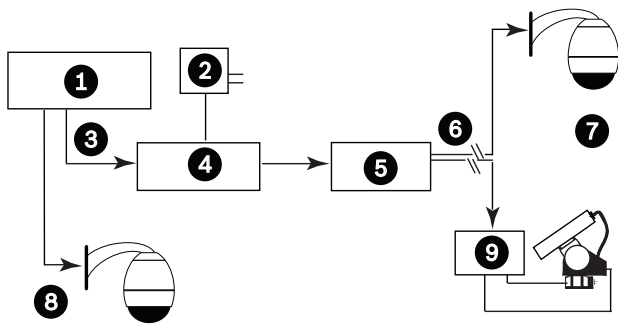
Power Supply

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

LTC 8782 Series Translator

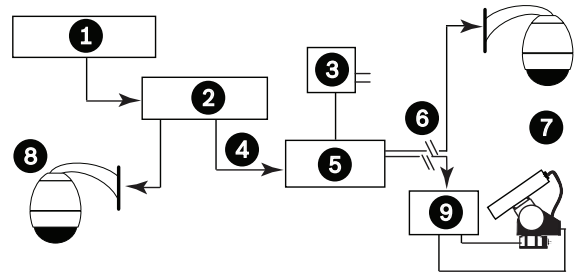
Electromagnetic Compatibility (EMC) Complies with FCC Part 15, ICES-003 and CE regulations

Installation/Configuration Notes



Typical Biphase to "Others" Configuration

#	Description
1	Bosch Controller Generating Biphase Code
2	Biphase Code
3	Power Supply
4	LTC 8782 Translator
5	"Others" Code Distribution
6	"Others" Control Code
7	"Others" Dome and P/T/Z Cameras
8	Bosch Dome Camera
9	"Others" Receiver/Driver



Typical "Others" to Biphase Configuration

#	Description
1	"Others" Controller
2	"Others" Code Distribution Unit
3	Power Supply
4	"Others" Code
5	LTC 8782 Translator
6	Biphase Control Code
7	Bosch Dome and P/T/Z Cameras
8	"Others" Dome Camera
9	Allegiant Receiver/Driver

Parts Included

Qty.	Components
1	Code Translator Unit
1	Power Supply
	LTC 8782/60 Series: TC120PS
	LTC 8782/50 Series: TC220PS
1	Plastic Bezel
1	Rack-mount Hardware Kit
1	Instructions for Use

Technical Specifications

Electrical

Input Voltage (Adapter Included)

LTC 8782/60 Series	120 VAC
LTC 8782/50 Series	230 VAC

Voltage Range

LTC 8782/60 Series	100–132 VAC
LTC 8782/50 Series	198–264 VAC

Translator Model Number Voltage Range @ Specified Current

LTC 8782/x0-01	9–18 VAC/VDC @ 300 ma
LTC 8782/x0-03	
LTC 8782/x0-04	
LTC 8782/x0-05	
LTC 8782/x0-10	
LTC 8782/x0-11	
LTC 8782/x0-12	
LTC 8782/x0-13	

LTC 8782/x0-14	
LTC 8782/x0-02	12–18 VAC/VDC @ 150 ma
LTC 8782/x0-21	
LTC 8782/x0-22	
LTC 8782/x0-24	
LTC 8782/x0-25	
LTC 8782/x0-30	
LTC 8782/x0-31	
LTC 8782/x0-32	

Environmental

Temperature

Operating	4°C to 50°C (39°F to 122°F)
Storage	–40°C to 70°C (–40°F to 158°F)
Humidity	< 90% non-condensing

Mechanical

Finish	Black
Dimensions (H x W x D)	4.1 x 14.0 x 14.0 cm (1.6 x 5.5 x 5.5 in.)
Weight	0.7 kg (1.5 lb)
Rack-mount Kit (included)	For EIA 48 cm (19 in.) rack. One (1) unit high rack kit will hold up to three (3) units across.
Dimensions (H x W)	4.5 x 48.3 cm (1.8 x 19.0 in.)
Connectors	Screw terminals

Ordering Information

LTC 8782/50-01 Code Translator Biphase to Vicon RS-422 translator, to RCL translator 230 VAC, 50/60 Hz	LTC 8782/50-01
LTC 8782/50-02 Code Translator Biphase to American Dynamics Manchester translator, 230 VAC, 50/60 Hz	LTC 8782/50-02
LTC 8782/50-03 Code Translator Biphase to Sensormatic RS-422 translator, 230 VAC, 50/60 Hz	LTC 8782/50-03
LTC 8782/50-04 Code Translator Biphase to Kalatel RS-422 translator, 230 VAC, 50/60 Hz	LTC 8782/50-04
LTC 8782/50-05 Code Translator Biphase to Diamond RS-422 translator, 230 VAC, 50/60 Hz	LTC 8782/50-05
LTC 8782/50-10 Code Translator Biphase to Pelco RS422 code translator, 230 VAC, 50/60 Hz	LTC 8782/50-10
LTC 8782/50-11 Code Translator Biphase to Javelin, 230 VAC, 50/60 Hz	LTC 8782/50-11
LTC 8782/50-12 Code Translator Biphase to RCL translator, 230 VAC, 50/60 Hz	LTC 8782/50-12
LTC 8782/50-13 Code Translator Biphase to Panasonic RS-485 translator, 230 VAC, 50/60 Hz	LTC 8782/50-13
LTC 8782/50-14 Code Translator Biphase to Cohu RS-422 translator, 230 VAC, 50/60 Hz	LTC 8782/50-14
LTC 8782/50-21 Code Translator Vicon RS-422 to Biphase translator, 230 VAC, 50/60 Hz	LTC 8782/50-21
LTC 8782/50-22 Code Translator American Dynamics Manchester to Biphase translator, 230 VAC, 50/60 Hz	LTC 8782/50-22
LTC 8782/50-24 Code Translator Kalatel RS-422 to Biphase translator, 230 VAC, 50/60 Hz	LTC 8782/50-24
LTC 8782/50-25 Code Translator Diamond to Biphase translator, 230 VAC, 50/60 Hz	LTC 8782/50-25
LTC 8782/50-30 Code Translator Pelco to Biphase translator, 230 VAC, 50/60 Hz	LTC 8782/50-30
LTC 8782/50-31 Code Translator Javelin to Biphase, 230 VAC, 50/60 Hz	LTC 8782/50-31
LTC 8782/50-32 Code Translator RCL to Biphase translator, 230 VAC, 50/60 Hz	LTC 8782/50-32
LTC 8782/60-01 Code Translator Biphase to VICON RS-422 translator, 120 VAC, 50/60 Hz	LTC 8782/60-01
LTC 8782/60-02 Code Translator Biphase to American Dynamics Manchester, 120 VAC, 50/60 Hz	LTC 8782/60-02

Ordering Information

LTC 8782/60-03 Code Translator Biphase to Sensormatic RS-422 translator, 120 VAC, 50/60 Hz	LTC 8782/60-03
LTC 8782/60-04 Code Translator Biphase to Kalatel RS-422 translator, 120 VAC, 50/60 Hz	LTC 8782/60-04
LTC 8782/60-05 Code Translator Biphase to Diamond RS-422 translator, 120 VAC, 50/60 Hz	LTC 8782/60-05
LTC 8782/60-10 Code Translator Biphase to Pelco code translator, 120 VAC, 50/60 Hz	LTC 8782/60-10
LTC 8782/60-11 Code Translator Biphase to Javelin, 120 VAC, 50/60 Hz	LTC 8782/60-11
LTC 8782/60-12 Code Translator Biphase to RCL translator, 120 VAC, 50/60 Hz	LTC 8782/60-12
LTC 8782/60-13 Code Translator Biphase to Panasonic RS-485 translator, 120 VAC, 50/60 Hz	LTC 8782/60-13
LTC 8782/60-14 Code Translator Biphase to Cohu RS-422 translator, 120 VAC, 50/60 Hz	LTC 8782/60-14
LTC 8782/60-21 Code Translator Vicon RS-422 to Biphase translator, 120 VAC, 50/60 Hz	LTC 8782/60-21
LTC 8782/60-22 Code Translator American Dynamics Manchester to Biphase translator, 120 VAC, 50/60 Hz	LTC 8782/60-22
LTC 8782/60-24 Code Translator Kalatel RS-422 to Biphase translator, 120 VAC, 50/60 Hz	LTC 8782/60-24
LTC 8782/60-25 Code Translator Diamond to Biphase code translator, 120 VAC, 50/60 Hz	LTC 8782/60-25
LTC 8782/60-30 Code Translator Pelco to Biphase translator, 120 VAC, 50/60 Hz	LTC 8782/60-30
LTC 8782/60-31 Code Translator Javelin to Biphase translator, 120 VAC, 50/60 Hz	LTC 8782/60-31

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