

## **SCT-1008**

**CAMERA CONTROL CODE TRANSLATOR  
AD MANCHESTER to BOSCH BIPHASE Ver. 4.1**

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## PRODUCT DESCRIPTION

The SCT-1008 is an American Dynamics to Bosch code translator designed to permit control of Bosch cameras from AD controllers. It receives AD commands in manchester format and converts them to the appropriate Bosch biphase commands. There are four independent biphase outputs.

The SCT-1008 can be configured by setting internal switches to work with either fixed speed or variable speed AD controllers, and fixed or variable speed Bosch receivers. Tilt sensing can also be reversed for compatibility with reverse tilt AD controllers.

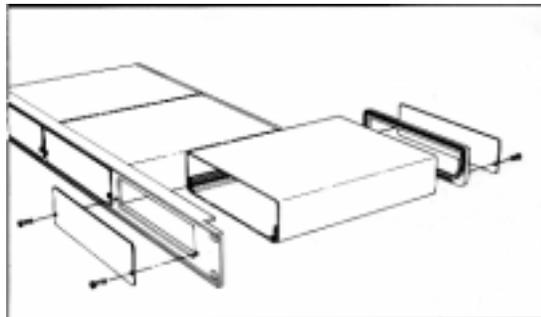
Input and output connections are made with removable screw terminals. Front panel LEDs indicate status of power, receive, transmit, and programming mode.

An optional rack mount frame (one rack unit high) is available.

## SPECIFICATIONS

SIZE:	5.57"W x 1.52H x 5.45D
WEIGHT:	1.5 lbs.
POWER:	12Volt to 15Volt AC or DC at 75ma
INDICATORS:	Front panel LEDs: Power, Rx, Tx, & Pgm
AD MANCHESTER INPUT:	(1) 3-pin screw terminal connector
BIPHASE OUTPUT:	(4) 3-pin screw terminal connectors

To install the case on the rack mount frame, remove the front panel and the plastic bezel. The rack mount frame takes the place of the bezel as shown below.

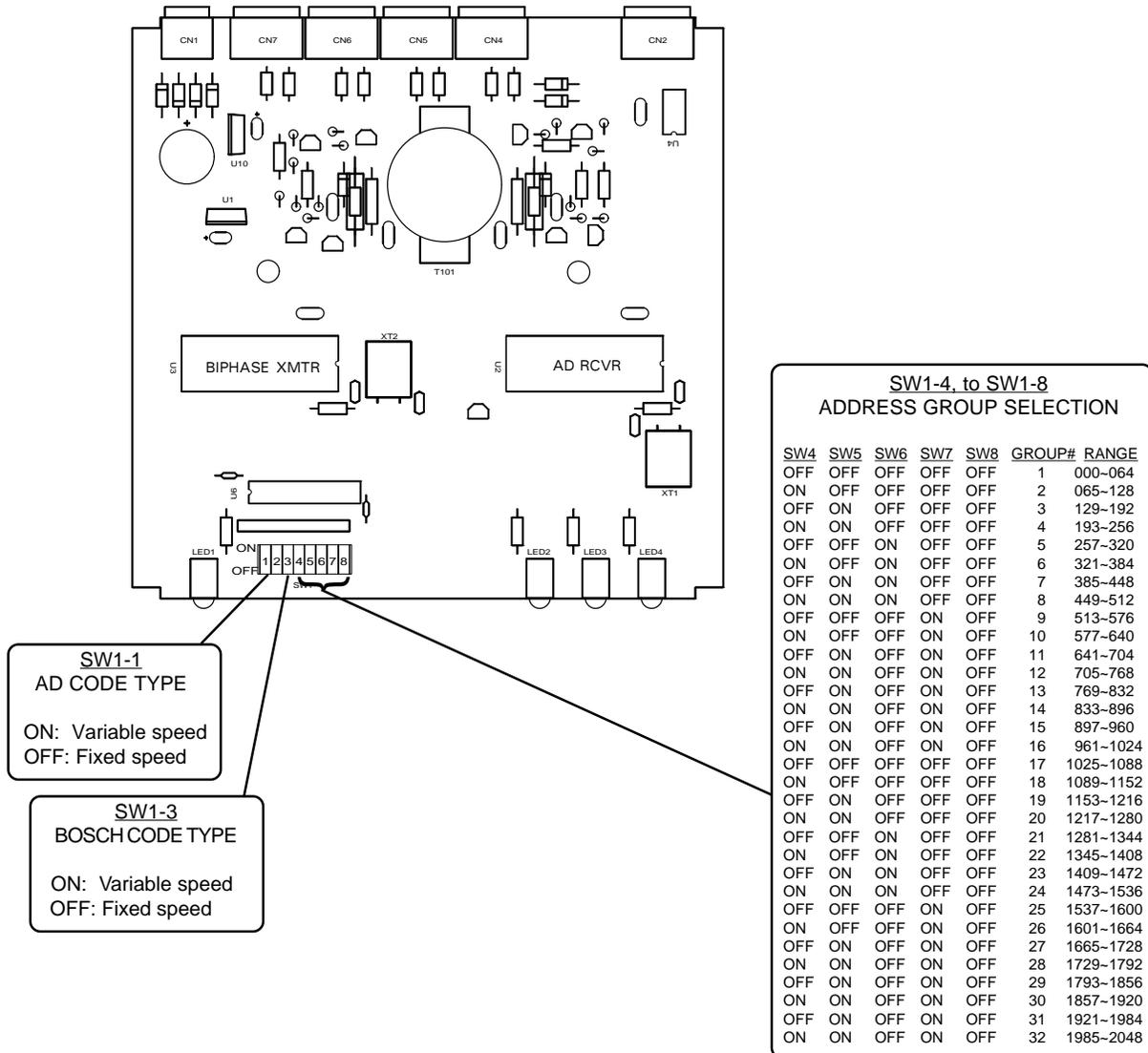


## SETTING THE SWITCHES

To set the configurations switches, remove the back panel, which is secured by two screws. Then slide the cover back to expose the switches. The switches can be changed while the code translator is powered up and the new settings will take effect immediately.

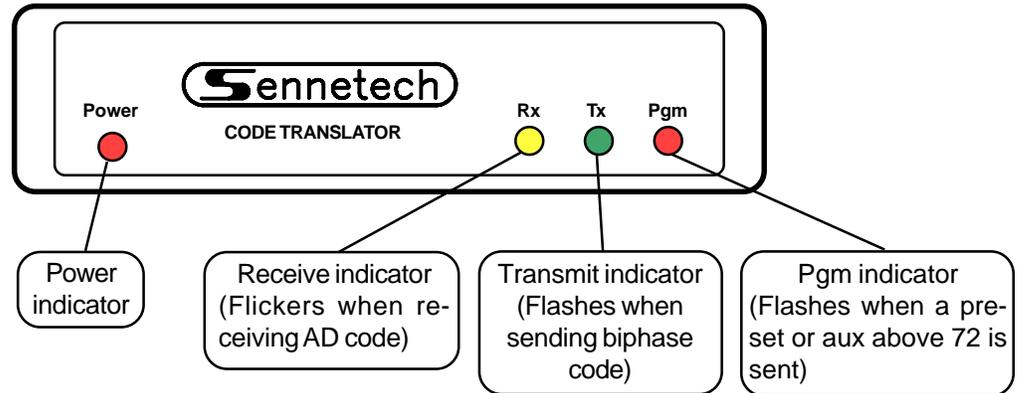
Some old Burle receivers will not work with variable speed Bosch code. For these receivers, the code translator can be configured to send only fixed speed Bosch code.

If it is desired to have the receiver address switches match the video crosspoint number, switches 4~8 can be set to select the AD group number. Then the AD addresses 1~64 will be converted to the Bosch addresses in the selected group number. Note: the code translator must be connected to the AD manchester line sending data to that group.

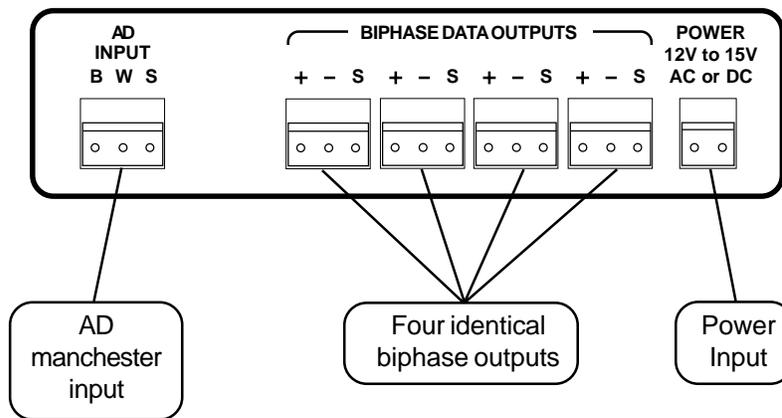


## INSTALLATION

### FRONT PANEL



### REAR PANEL



AD normally sends a continuous stream of "zeroes." When a "one" is detected, the Rx LED is illuminated. If there is steady non-camera data on the line, the LED will glow dimly. When camera data is sent, the LED will flicker. If the LED glows brightly, the translator is detecting "ones" all the time. This could be caused by noise, a bad connection, or one of the two wires being disconnected. If the two AD IN wires are reversed, the Rx LED will indicate normally, however the Tx LED will not flash, which shows that the AD data could not be converted to Bosch commands.

The highest possible camera number in AD manchester code is 64. In an AD system with more than 64 cameras, each group of 64 will have a separate manchester output. Each group of 64 that has a Bosch camera to be controlled will require a code translator.

## OPERATION

AD Pan, Tilt, Zoom, Focus, and Iris commands are converted to the equivalent Bosch commands.

Version 4.0 differs from earlier versions in sending preset and aux commands. The "programming mode" with specific look-up tables is no longer used. Instead, all preset and aux numbers up to 1022 can be sent. Since AD manchester code has only 72 presets and 3 aux on/off commands, an alternate method is used to send these high numbers.

We will use the terms [Set] and [Call] to denote the AD commands to store and recall presets. These correspond to the Bosch Set and Shot commands. To recall preset 1 from an AD keyboard, press [1][Call]. For the aux commands, press the number followed by [Off] or [On].

### Preset Commands

The first 72 preset commands can be commanded directly from the AD keyboard. To send higher numbers, a base number is first stored in memory, then a [Set] or [Call] number from 1~72 is added to that base number to determine the actual preset number.

The base numbers are odd multiples of 50 or multiples of 100.

To store a base number, press [3][On] and then follow with [50~69][Call] using the following table.

[50][Call] stores 50	
[51][Call] stores 150	[61][Call] stores 100
[52][Call] stores 250	[62][Call] stores 200
[53][Call] stores 350	[63][Call] stores 300
[54][Call] stores 450	[64][Call] stores 400
[55][Call] stores 550	[65][Call] stores 500
[56][Call] stores 650	[66][Call] stores 600
[57][Call] stores 750	[67][Call] stores 700
[58][Call] stores 850	[68][Call] stores 800
[59][Call] stores 950	[69][Call] stores 900

If any command other than one from the table is sent following [3][On], no number is stored.

Once a base number is stored, if the very next command to that camera is [1~72][Set] or [Call], that number will immediately be added to the base number and sent. At this point, the base number is cleared so the entire process must be repeated to send another high preset.

Example:

To send the Bosch Set 100 command, use the following sequence:

[3][On]	(Prepare to store a base number)
[50][Call]	(Store the base number 50)
[50][Set]	(Send the Bosch Set 100 command <50+50>)

To send the Bosch Shot 999 command, use the following sequence:

[3][On]	(Prepare to store a base number)
[59][Call]	(Store the base number 950)
[49][Call]	(Send the Bosch Shot 999 command <950+49>)

### Auxiliary Commands

Because AD only has three [On]/[Off] commands, they are not used to send Bosch On/Off commands directly. Instead, pressing [1][On]/[Off] will send a Bosch On/Off command for a stored aux number. To store an aux number, press [2][On] followed by [1~72][Call]. The [1~72] number will be stored and that is the number that will be sent by pressing [1][On]/[Off]. If no aux number has been stored, no commands will be sent. The aux number will stay in memory as long as only [1][On]/[Off] is sent to that camera. If any other command is sent to that camera, the stored aux number will be cleared.

Example:

To send the Bosch On or Off 14 command (used by Autodomes to change autopan speed),

[2][On]	(Prepare to store an aux number)
[14][Call]	(Store the aux number 14)
[1][On]	(Send the Bosch On 14 command)
[1][Off]	(Send the Bosch Off 14 command)

(These commands can be sent until the aux number is cleared.)

### Auxiliary Commands Above 72

The above method works for numbers up to 72. For higher numbers, a base number can first be stored which will be added to the [1~72][Call] number to determine the stored aux number. The base number is stored the same way as it is for high presets, i.e. [3][On] plus [50~69][Call]. Then press [2][On] to signal the code translator that the ensuing [1~72][Call] is to store an aux number, rather than sending a high preset number.

Example:

To send the Bosch On or Off 900 command,

[3][On]	(Prepare to store a base number)
[58][Call]	(Store the base number 850)
[2][On]	(Prepare to store an aux number)
[50][Call]	(Store the aux number 900 <850+50>)
[1][On]	(Send the Bosch On 900 command)
[1][Off]	(Send the Bosch Off 900 command)

(These commands can be sent until the aux number is cleared.)

Again, use [2][On] to store an aux number and use [3][On] to store a base number.

These stored numbers are only applied to commands for the camera address that stored the number. If a base number has been stored for Camera 23, for example, any other camera can be sent a normal preset.

Only one aux number is stored at a time. If an operator has stored an aux number for Camera 23, for example, and then another operator sends the storing sequence for Camera 7, the aux number for Camera 23 is cleared and a new one is stored for Camera 7.

In addition to the Tx indicator, the Pgm indicator flashes whenever the code translator sends a preset or aux command that includes a base number. This can be used to verify that a high preset or high aux is sent.

If the Tx indicator does not flash when an AD [1][On] or [1][Off] command is sent, then there is no aux number stored for that camera number.

