SCT-1006

CAMERA CONTROL CODE TRANSLATOR
KALATEL RS-422 to BOSCH BIPHASE Ver. 4.1

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PRODUCT DESCRIPTION

The SCT-1006 is a Kalatel to Bosch code translator designed to permit control of Bosch cameras from Kalatel controllers. It receives Kalatel commands and transmits the appropriate Bosch commands in biphase code format. There are four independent biphase outputs.

The code translator can be configured to send variable speed biphase code or fixed speed only for compatibility with older Burle receivers.

The code translator will automatically detect the type of Kalatel input code. Upon detection, the Pgm indicator will signal the code type and baud rate.

The code translator is contained in a standard 19" electronic housing (one rack unit high). Input and output connections are made with removable screw terminals. Front panel LEDs indicate status of power, receive, transmit, and diagnostic code.

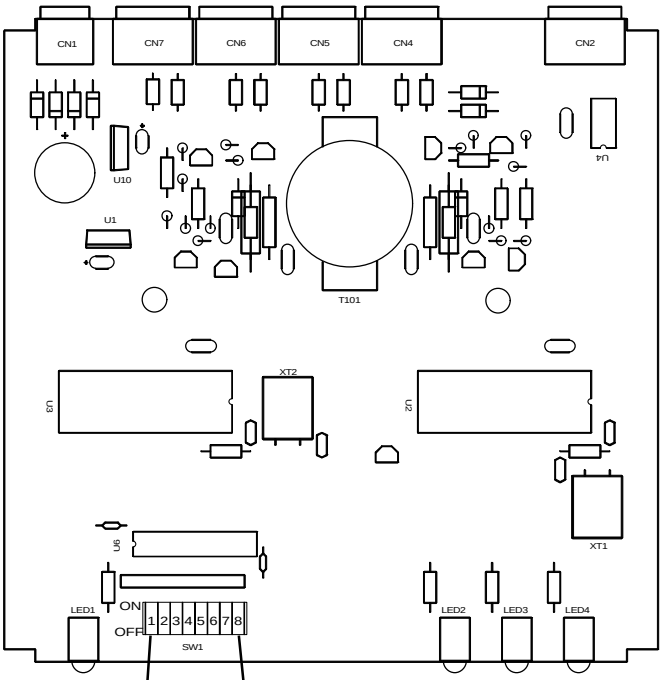
Version 4.1 increases the camera address capability from 256 to 512.

SPECIFICATIONS

SIZE:	19"W x 1.75H x 5.45D
WEIGHT:	1.5 lbs.
POWER:	12Volt to 15Volt AC or DC at 75ma
INDICATORS:	Front panel LEDs: Power, Rx, Tx, & Pgm
KALATEL RS-422 INPUT:	(1) 3-pin screw terminal connector
BOSCH BIPHASE OUTPUTS:	(4) 3-pin screw terminal connectors

SETTING THE SWITCHES

To set the configuration 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.



Switch1-1
Kalatel code type

ON: Variable speed
OFF: Fixed speed

Set to OFF if connecting to KDT301 or any controller without a joystick

Switch1-8
Biphase code type

ON: Variable speed
OFF: Fixed speed

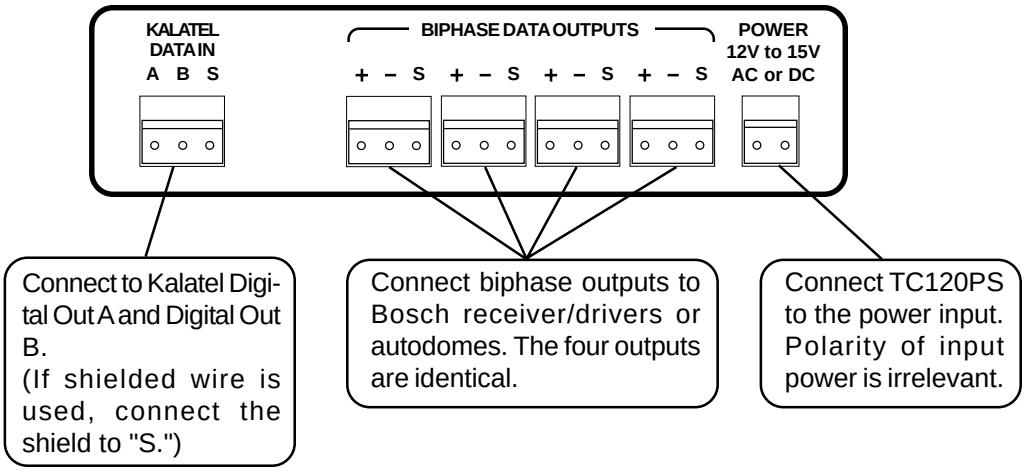
Set to OFF if connecting to older Burle receivers that cannot accept variable speed biphase code

Note for KTD301 controllers:

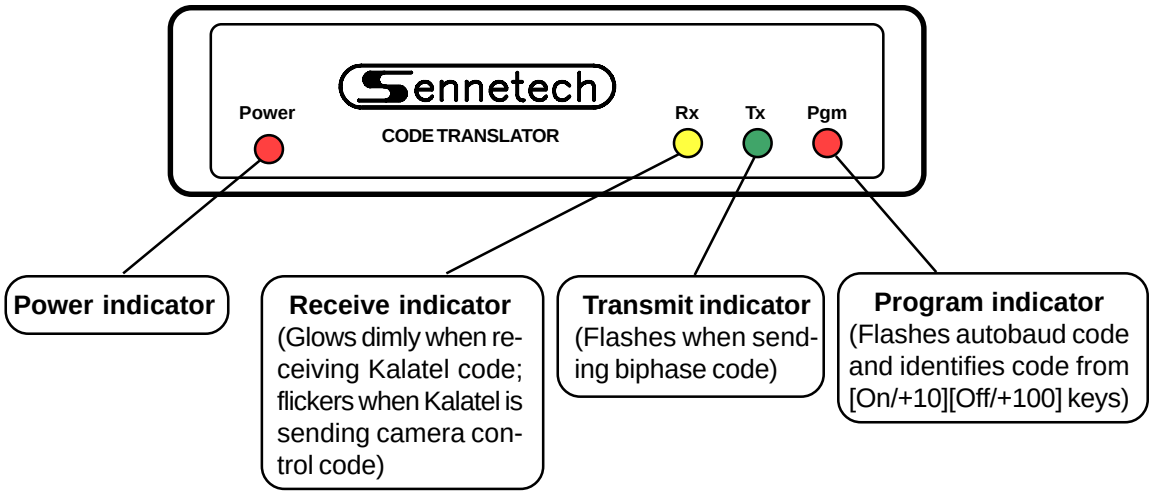
If the code translator is being installed into a system with a KTD301 controller without a joystick, and the receivers have autospeed capability, set the biphase code to fixed speed to utilize the autospeed function.

INSTALLATION

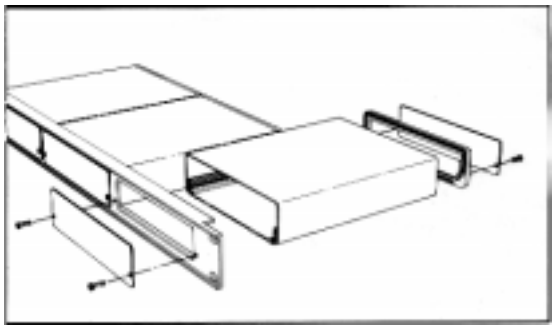
REAR PANEL



FRONT PANEL



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.



The code translator will work with various Kalatel codes; Digiplex II at 2400 or 4167 baud, and Digiplex III at 2400 or 4800 baud. When the Kalatel input lines are connected, the code translator will automatically detect the type of code and flash the Pgm indicator to show what was detected. The first group of flashes (two or three) will indicate Digiplex II or Digiplex III, which will be followed by a second group of flashes (two or four) to indicate 2400 baud or 4167/4800 baud.

Kalatel commands for camera numbers 1~255 will be converted to the equivalent Bosch numbers. Kalatel camera #000 will be converted to Bosch camera #256.

Version 4.1 of the code translator uses a different method than earlier versions to send the extensive set of Bosch pre-position and auxiliary commands. The "Progamming mode" with its look-up tables for specific Bosch commands has been replaced by a method to send any pre-position or Off/On number up to 1023. This new method requires identifying two keys on the keyboard that send specific Kalatel commands. These keys will have two functions. They will be used to build up a subtotal by adding 10 or 100, and if an aux# is stored, they will be converted to Bosch Off & On commands. The Pgm indicator will flash when these keys are pressed to help in identifying them.

The various Kalatel controllers do not all have the same keys. Thus, some controllers have functions not found on other controllers. Also, the keys sending the same code may be labeled differently.

The Kalatel commands that will be converted to Off/On and +10/+100 are:

[Receiver Off / Receiver On]
[Receiver Slow / Receiver Fast]
[Door 1 Open / Door 2 Open].

Once the installer has identified the keys sending one of these sets of commands, it might be helpful to tag them with the labels [Off/+10] and [On/+100].

OPERATION

TERMINOLOGY
We will use **C**apital **L**etters to indicate a command and [Brackets] to refer to a key on the Kalatel controller. [Off/+10] and [On/100] refer to the two Kalatel keys that have been identified to send those commands.

Kalatel Pan, Tilt, Zoom, Focus, and Iris commands are converted to equivalent biphase commands. Kalatel [Auto] is converted to Bosch On 2, which will activate the autopan function in Bosch Autodomes.

PAN/TILT SPEEDS
For variable speed controllers such as the KTD-304, the pan and tilt speeds will be determined by the deflection of the joystick.

For KTD-301 controllers, [Slow] and [Fast] will change the speed values of the Bosch pan and tilt commands if the code translator is configured for fixed speed Kalatel and variable speed Bosch.

PRESETS
The terminology can be confusing because Bosch uses the Set command to program a preset and Kalatel uses the [Set] key to go to a pre-position, which is the Bosch Shot command.

Kalatel [Set][#] is converted to the Bosch Shot# command. Kalatel controllers that are limited to ten (0~9) presets will use a single digit. Controllers that can send higher presets require two digits, for example [Set][0][3] instead of [Set][3].

To program a preset, the Receiver Setup Menu must be accessed on the Kalatel controller by holding [Set] until an access code is requested and then pressing [9][5][1][Seq].
(Note: The Kalatel keypad controller must be programmed with Preset Enable "ON." Access this menu with code [5][7][9][Seq] after holding [Set].)

Preset commands that can be issued from the Kalatel controller directly are converted to Bosch Set and Shot commands.

HIGH PRESET COMMANDS
For higher preset commands, a number can be built up using the [Alarm] and [Off/+10] & [On/+100] keys. The procedure is to build a subtotal by adding 10 or 100 then reaching a total by adding the preset number to the subtotal. The starting subtotal is automatically zero.To add 10 or 100, press and release [Alarm] and then press and release either [Off/+10] or [On/+100]. This can be done repeatedly. Then, if a preset number is sent, it will be added to the subtotal to determine the final number.

Once the preset command is sent, the subtotal is cleared to 0. Pressing [Alarm] twice in succession will also clear the subtotal. This is helpful if the operator loses track of the count.

Example:
To send the Bosch Shot 35 command:

Press [Alarm][Off/+10]	Stores a subtotal of 10
Press [Alarm][Off/+10]	Stores a subtotal of 20
Press [Alarm][Off/+10]	Stores a subtotal of 30
Press [Set][5]	Adds 5 to subtotal and sends Bosch Shot 35
	Clears subtotal to 0

Example:
To send the Bosch Shot 102 command:

Press [Alarm][On/+100]	Stores a subtotal of 100
Press [Set][2]	Adds 2 to subtotal and sends Bosch Shot 102 Subtotal cleared to 0

The subtotal will also be cleared to 0 if any other command (such as Pan or Tilt) is sent before the correct sequence is completed.

AUXILIARY COMMANDS

To send an auxiliary command, an aux# must first be stored. Then, using the two keys identified as [Off/+10] & [On/+100], that number is sent as Bosch Off# or On#. To store an aux#, press and release [Alarm] and [Auto]. Then press [Set][#] to store that number as an aux#.

Example:
To send Bosch Off 4 or On 4:

Press [Alarm][Auto]	Prepare to store an aux#
Press [Set][4]	Store aux# 4
Press [Off/+10]	Send Bosch Off 4 command
Press [On/+100]	Send Bosch On 4 command

The Bosch Off and On commands are not sent just once, but will be repeated as long as the Kalatel key is depressed. This mimics the way it would be sent from a Bosch controller and is useful for those commands that are used to decrease or increase numerical values. As long as the aux# is stored, the operator can switch back and forth between Off and On.

The aux# will be cleared if any command other than [Off/+10] or [On/+100] is sent, or if [Alarm] is pressed again.

If no aux# is stored, the command is not converted and the Tx indicator (green) will not flash.

HIGH AUXILIARY COMMANDS

Higher auxiliary numbers are built up by a method similar to building high preset numbers. A subtotal is created using [Alarm] and [Off/+10] or [On/+100]. When the desired subtotal is reached, press [Alarm][Auto] to prepare to store an aux#. Then, when [Set][#] is pressed, # is added to the subtotal to become the stored aux#.

Example:
To send Bosch Off 43 or On 43:

Press [Alarm][Off/+10]	Store a subtotal of 10
Press [Alarm][Off/+10]	Store a subtotal of 20
Press [Alarm][Off/+10]	Store a subtotal of 30
Press [Alarm][Off/+10]	Store a subtotal of 40
Press [Alarm][Auto]	Prepare to store an aux#
Press [Set][3]	Add 3 to subtotal to store aux# 43
Press [Off/+10]	Send Bosch Off 43 command
Press [On/+100]	Send Bosch On 43 command