# Sennetech

# SCT-1031

**CAMERA CONTROL CODE TRANSLATOR**
**KALATEL RS-422 to AD MANCHESTER Ver. 2.1**

**www.sennetech.net**

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# PRODUCT DESCRIPTION

The SCT-1031 is a Kalatel to American Dynamics control code translator designed to permit control of AD cameras from Kalatel controllers. It receives Kalatel RS-422 commands and re-transmits them in AD manchester format. There are four independent manchester outputs.

The code translator will accept Kalatel Digiplex II and Digiplex III control code. The type of code and baud rate are detected automatically.

The manchester output can be limited to fixed speed code for older AD receivers.

The addresses can be offset by 1 to compensate for control systems sending offset addresses. Kalatel addresses can be converted to AD addresses in four groups of 64.

Input and output connections are made with mating screw terminal connectors. Front panel LEDs indicate status of power, receive, and transmit.

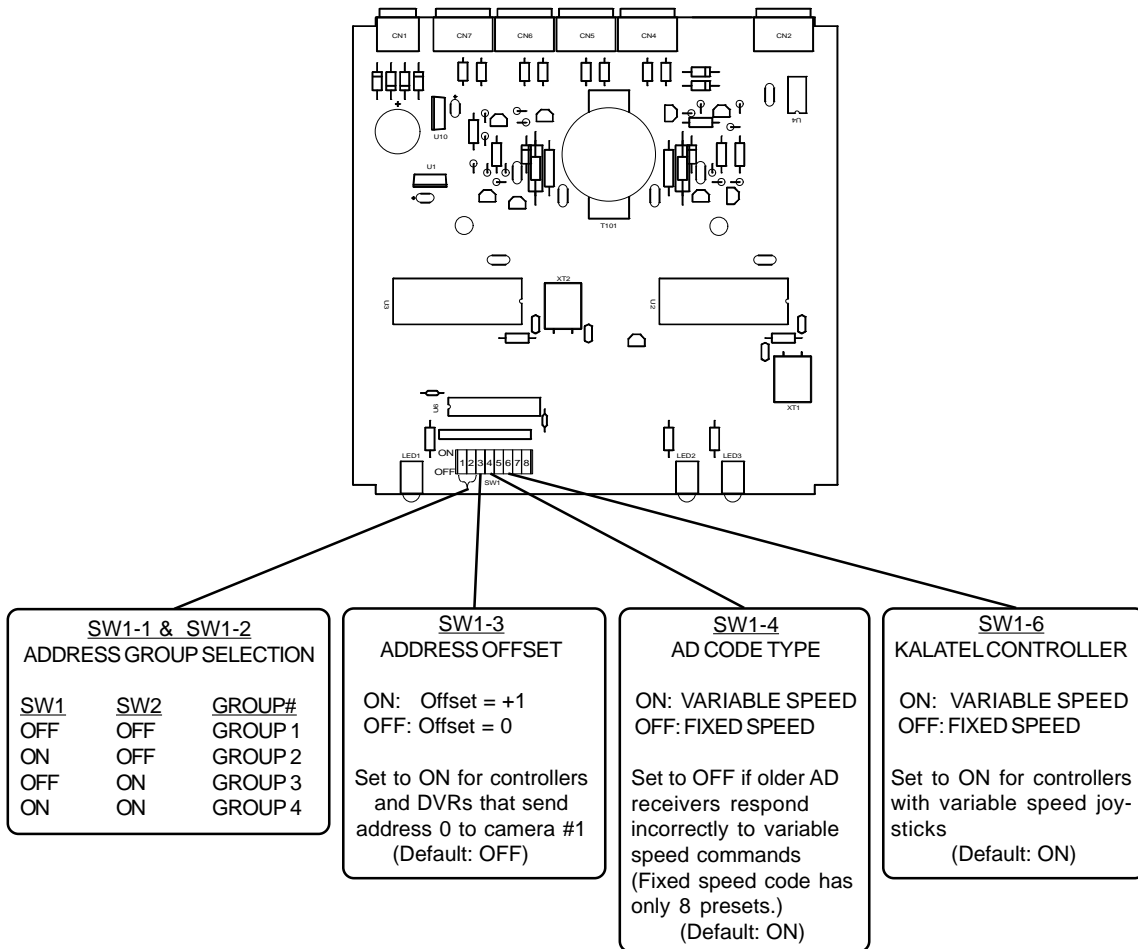There is an optional 19" rack mount panel (one rack unit high).

Version 2.1 changes the conversion for American Dynamics aux commands to more closely match the KTD-405 keyboard layout.

# SPECIFICATIONS

| | |
|---|---|
| SIZE: | 5.57"W x 1.52H x 5.45D |
| WEIGHT: | 1.5 lbs. |
| POWER: | 9Volt to 15Volt AC or DC at 75ma |
| INDICATORS: | Front panel LEDs: Power, Rx, & Tx |
| KALATEL RS-422 INPUT: | (1) mating 3-pin screw terminal connector |
| AD MANCHESTER OUTPUTS: | (4) mating 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.



| SW1-1 & SW1-2 | | |
|---|---|---|
| ADDRESS GROUP SELECTION | | |
| SW1 | SW2 | GROUP# |
| OFF | OFF | GROUP 1 |
| ON | OFF | GROUP 2 |
| OFF | ON | GROUP 3 |
| ON | ON | GROUP 4 |

**SW1-3**
ADDRESS OFFSET

ON:  Offset = +1
OFF: Offset = 0

Set to ON for controllers and DVRs that send address 0 to camera #1
(Default: OFF)

**SW1-4**
AD CODE TYPE

ON: VARIABLE SPEED
OFF: FIXED SPEED

Set to OFF if older AD receivers respond incorrectly to variable speed commands
(Fixed speed code has only 8 presets.)
(Default: ON)

**SW1-6**
KALATEL CONTROLLER

ON:  VARIABLE SPEED
OFF: FIXED SPEED

Set to ON for controllers with variable speed joysticks
(Default: ON)

**Notes:**

Kalatel code is a continuous stream of data, which the code translator automatically locks onto. When the code translator has locked on, the Rx indicator will flash the type of code found.
First it flashes either two or three times for Digiplex II or Digiplex III code, and then it flashes either two or four times for 2400 or 4800 baud.

For Kalatel keypads without joysticks, such as the KTD-301, set SW1-6 OFF. The speed can then be adjusted using the [Slow] and [Fast] keys.

On Kalatel keypads such as the KTD-304, Camera 000 is selected to control a camera whose address switches are set to 0, Camera 001 controls a camera set to 1, and so on.
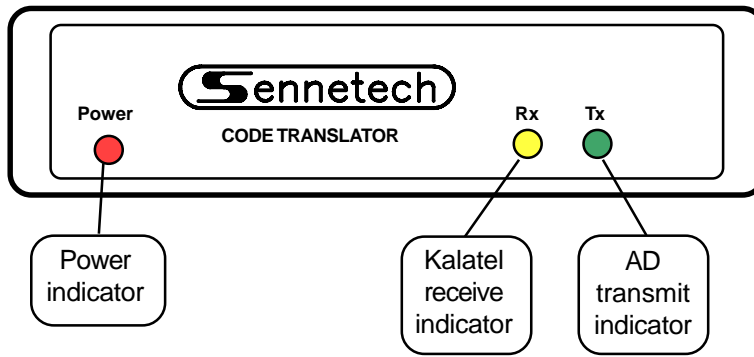
On KTD-405 keypads and some DVRs that support the Kalatel digiplex protocol, Camera 000 can not be selected. The lowest camera number is 1. However, when Camera 001 is selected, the data packet sent to the camera is addressed to 0, data for Camera 002 is addressed to 1, etc.

If the source of Kalatel control code for the code translator is sending addresses offset by 1, setting SW1-3 ON will add 1 to the AD address so that the camera addressed as 1 will be controlled when 001 is selected.
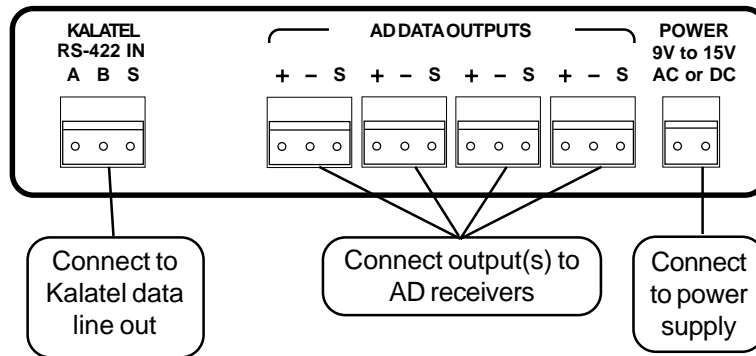
# CONVERSION CHART FOR ADDRESS GROUPS

| **GROUP 1** | | | | **GROUP 2** | | | | **GROUP 3** | | | | **GROUP 4** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| KAL | AD | KAL | AD | KAL | AD | KAL | AD | KAL | AD | KAL | AD | KAL | AD | KAL | AD |
| 1 | 1 | 33 | 33 | 65 | 1 | 97 | 33 | 129 | 1 | 161 | 33 | 193 | 1 | 225 | 33 |
| 2 | 2 | 34 | 34 | 66 | 2 | 98 | 34 | 130 | 2 | 162 | 34 | 194 | 2 | 226 | 34 |
| 3 | 3 | 35 | 35 | 67 | 3 | 99 | 35 | 131 | 3 | 163 | 35 | 195 | 3 | 227 | 35 |
| 4 | 4 | 36 | 36 | 68 | 4 | 100 | 36 | 132 | 4 | 164 | 36 | 196 | 4 | 228 | 36 |
| 5 | 5 | 37 | 37 | 69 | 5 | 101 | 37 | 133 | 5 | 165 | 37 | 197 | 5 | 229 | 37 |
| 6 | 6 | 38 | 38 | 70 | 6 | 102 | 38 | 134 | 6 | 166 | 38 | 198 | 6 | 230 | 38 |
| 7 | 7 | 39 | 39 | 71 | 7 | 103 | 39 | 135 | 7 | 167 | 39 | 199 | 7 | 231 | 39 |
| 8 | 8 | 40 | 40 | 72 | 8 | 104 | 40 | 136 | 8 | 168 | 40 | 200 | 8 | 232 | 40 |
| 9 | 9 | 41 | 41 | 73 | 9 | 105 | 41 | 137 | 9 | 169 | 41 | 201 | 9 | 233 | 41 |
| 10 | 10 | 42 | 42 | 74 | 10 | 106 | 42 | 138 | 10 | 170 | 42 | 202 | 10 | 234 | 42 |
| 11 | 11 | 43 | 43 | 75 | 11 | 107 | 43 | 139 | 11 | 171 | 43 | 203 | 11 | 235 | 43 |
| 12 | 12 | 44 | 44 | 76 | 12 | 108 | 44 | 140 | 12 | 172 | 44 | 204 | 12 | 236 | 44 |
| 13 | 13 | 45 | 45 | 77 | 13 | 109 | 45 | 141 | 13 | 173 | 45 | 205 | 13 | 237 | 45 |
| 14 | 14 | 46 | 46 | 78 | 14 | 110 | 46 | 142 | 14 | 174 | 46 | 206 | 14 | 238 | 46 |
| 15 | 15 | 47 | 47 | 79 | 15 | 111 | 47 | 143 | 15 | 175 | 47 | 207 | 15 | 239 | 47 |
| 16 | 16 | 48 | 48 | 80 | 16 | 112 | 48 | 144 | 16 | 176 | 48 | 208 | 16 | 240 | 48 |
| 17 | 17 | 49 | 49 | 81 | 17 | 113 | 49 | 145 | 17 | 177 | 49 | 209 | 17 | 241 | 49 |
| 18 | 18 | 50 | 50 | 82 | 18 | 114 | 50 | 146 | 18 | 178 | 50 | 210 | 18 | 242 | 50 |
| 19 | 19 | 51 | 51 | 83 | 19 | 115 | 51 | 147 | 19 | 179 | 51 | 211 | 19 | 243 | 51 |
| 20 | 20 | 52 | 52 | 84 | 20 | 116 | 52 | 148 | 20 | 180 | 52 | 212 | 20 | 244 | 52 |
| 21 | 21 | 53 | 53 | 85 | 21 | 117 | 53 | 149 | 21 | 181 | 53 | 213 | 21 | 245 | 53 |
| 22 | 22 | 54 | 54 | 86 | 22 | 118 | 54 | 150 | 22 | 182 | 54 | 214 | 22 | 246 | 54 |
| 23 | 23 | 55 | 55 | 87 | 23 | 119 | 55 | 151 | 23 | 183 | 55 | 215 | 23 | 247 | 55 |
| 24 | 24 | 56 | 56 | 88 | 24 | 120 | 56 | 152 | 24 | 184 | 56 | 216 | 24 | 248 | 56 |
| 25 | 25 | 57 | 57 | 89 | 25 | 121 | 57 | 153 | 25 | 185 | 57 | 217 | 25 | 249 | 57 |
| 26 | 26 | 58 | 58 | 90 | 26 | 122 | 58 | 154 | 26 | 186 | 58 | 218 | 26 | 250 | 58 |
| 27 | 27 | 59 | 59 | 91 | 27 | 123 | 59 | 155 | 27 | 187 | 59 | 219 | 27 | 251 | 59 |
| 28 | 28 | 60 | 60 | 92 | 28 | 124 | 60 | 156 | 28 | 188 | 60 | 220 | 28 | 252 | 60 |
| 29 | 29 | 61 | 61 | 93 | 29 | 125 | 61 | 157 | 29 | 189 | 61 | 221 | 29 | 253 | 61 |
| 30 | 30 | 62 | 62 | 94 | 30 | 126 | 62 | 158 | 30 | 190 | 62 | 222 | 30 | 254 | 62 |
| 31 | 31 | 63 | 63 | 95 | 31 | 127 | 63 | 159 | 31 | 191 | 63 | 223 | 31 | 255 | 63 |
| 32 | 32 | 64 | 64 | 96 | 32 | 128 | 64 | 160 | 32 | 192 | 64 | 224 | 32 | 256 | 64 |

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**FRONT PANEL**



**Power**

**Sennetech**

CODE TRANSLATOR

**Rx** **Tx**

Power indicator

Kalatel receive indicator

AD transmit indicator

**BACK PANEL**



KALATEL
RS-422 IN
A   B   S

AD DATA OUTPUTS

+ – S   + – S   + – S   + – S

POWER
9V to 15V
AC or DC

Connect to Kalatel data line out

Connect output(s) to AD receivers

Connect to power supply

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.
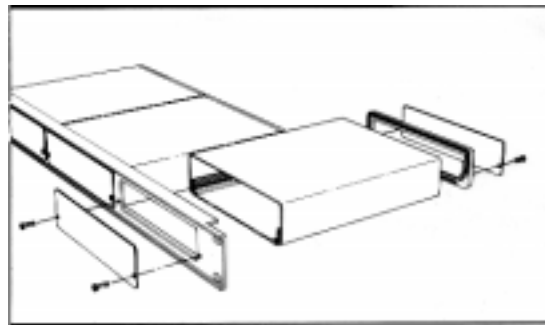


## OPERATION

Kalatel Pan, Tilt, Zoom, Focus, and Iris commands are converted to equivalent AD manchester commands.

**Fixed Speed Controllers**
If the code translator is configured for a fixed speed Kalatel controller, the [Slow] and [Fast] keys on the KTD-301 controller will change the speed value for the pan and tilt commands. (On power-up the translator defaults to a medium speed.)

| | |
|---|---|
| [Slow] | Decrease speed value |
| [Fast] | Increase speed value |

The KTD-301 cannot simultaneously send commands from keys in the same column. Thus, the [Slow] and [Fast] keys will work while pan right is depressed, but [Slow] and pan left will not work at the same time. Likewise, [Fast] will not work while a tilt key is depressed.

**Presets**

| **Kalatel  Command** | **AD Command** |
|---|---|
| Pgm or Store Pset 1~49 | Pgm Preset 1~49 |
| Set or Find Pset 1~49 | Goto Preset  1~49 |

The maximum Kalatel preset # is 63, and the maximum AD preset # is 72. Sensormatic UltraDomes use presets 65~72 for special programming commands. The code translator adds 10 to the presets numbers 50 and up so these functions can be accessed. The following table lists how these commands can be sent from KTD-304 and KTD-405 keyboards.

| **KTD-304** | **KTD-405** | **AD Command** | **Dome Function** |
|---|---|---|---|
| Pgm Pset 55 | Store 55 | Pgm Preset 65 | Reset Dome |
| Pgm Pset 56 | Store 56 | Pgm Preset 66 | Start Dome Configuration Menu (Use Pan/Tilt to move highlight bar, Focus Far to select highlighted item, and Zoom to incr/decr value.) |
| Set 56 | Find 56 | Run Preset 66 | Resume Auto Focus / Auto Iris |
| Set 57 | Find 57 | Run Preset 67 | Flip Dome 180 degrees |
| Pgm Pset 57 | Store 57 | Pgm Preset 67 | Activate/Deactivate V-phase Adjustment |

**Tours/Patterns**

When operated with AD manchester protocol, Sensormatic domes use preset commands to program and run patterns. (Sensormatic patterns use only a single fixed speed.)

| | | | |
|---|---|---|---|
| Pgm Pset 58 | Store 58 | Pgm Preset 68 | Cancel Pattern Programming |
| Pgm Pset 59 | Store 59 | Pgm Preset 69 | Save Pattern Programming |
| Pgm Pset 60 | Store 60 | Pgm Preset 70 | Program Pattern 1 |
| Pgm Pset 61 | Store 61 | Pgm Preset 71 | Program Pattern 2 |
| Pgm Pset 62 | Store [REW] | Pgm Preset 72 | Program Pattern 3 |
| Set 59 | Find 59 | Run Preset 69 | Repeats Following Pattern |
| Set 60 | Find 60 | Run Preset 70 | Run Pattern 1 |
| Set 61 | Find 61 | Run Preset 71 | Run Pattern 2 |
| Set 62 | Find [REW] | Run Preset 72 | Run Pattern 3 |

Example: To program Pattern 1 from a KTD_405 keyboard, position the dome at the pattern starting point, then press [Store][60][Store] and the dome will display the remaining memory. Move the dome through the desired pattern, and then press [Store][59][Store] to save the pattern. To run Pattern 1 repeatedly, press [Find][59] and then press [Find][60].

**Aux Off/On**

AD manchester code has 3 Aux Off and 3  Aux On commands. Kalatel keyboards do not all have the same set of keys.

| **KTD-301** | **KTD-304** | **KTD-405** | **AD Command** |
|---|---|---|---|
| Aux1 | Open | Aux1 [Open] | On 1 |
| Aux2 | Close | Aux2 [Close] | On 2 |
| | Stop | Aux3 [Stop] | On 3 |
| Auto | Auto | Tour  [Hold for 2 sec] | Off 1 |
| Open | Auto focus | Auto focus | Off 2 |
| Alarm | Alarm | Alarm | Off 3 |