

Sennetech

SCT-1017

**CAMERA CONTROL CODE TRANSLATOR
BOSCH TO DIAMOND ELECTRONICS Ver 1.43**



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PRODUCT DESCRIPTION

The SCT-1017 is a Bosch (Burle) to Diamond Electronics control code translator designed to permit control of Diamond cameras from Bosch Allegiant controllers. It receives Bosch biphasic commands and transmits the appropriate commands in Diamond Electronics RS-422 format (9600 baud E81). There are four independent Diamond outputs.

Bosch addresses above 256 can be down converted to Diamond addresses. Internal switches select one of eight Bosch address groups.

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).

SPECIFICATIONS

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

SETTING THE SWITCHES

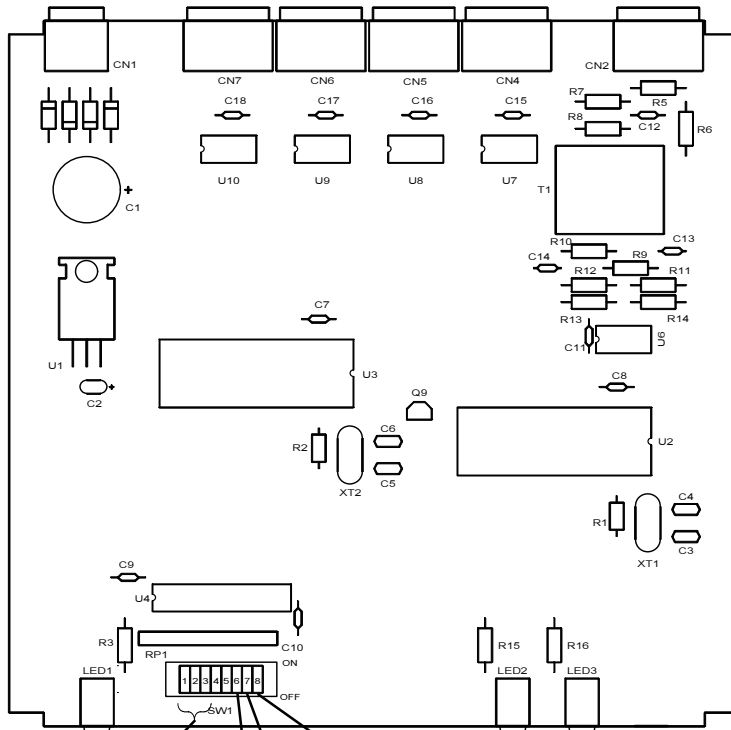
To set the configuration switches, remove the back panel which is secured by two screws. Then slide the cover back to expose the switches. The switches can be changed with power on and the changes take effect immediately.

Switches 1,2, and 3 determine which of the eight groups of Bosch camera addresses will be converted to Diamond addresses.

Switch 6 selects the converted pan speed for fixed speed controllers.

Switch 7 makes it possible for Bosch systems with limited preposition capability to send preshots in the "80s & 90s" to access the menus in Diamond KD6 domes operating in the Maxpro mode.

Switch 8 selects whether the default for each camera as it is selected will be Auto Iris or Manual Iris.



**SW1-1, SW1-2, & SW1-3
ADDRESS GROUP SELECTION**

SW1	SW2	SW3	GROUP#
OFF	OFF	OFF	GROUP 1
ON	OFF	OFF	GROUP 2
OFF	ON	OFF	GROUP 3
ON	ON	OFF	GROUP 4
OFF	OFF	ON	GROUP 5
ON	OFF	ON	GROUP 6
OFF	ON	ON	GROUP 7
ON	ON	ON	GROUP 8

**SW1-6
PAN SPEED SELECT**
Diamond pan speed for fixed speed Burle control systems.

ON: Medium speed
OFF: Slow speed

**SW1-8
DEFAULTIRIS MODE**

ON: Auto Iris
OFF: Manual Iris
(See Iris Notes Section)

**SW1-7
PRESHOT OFFSET**
For Bosch control systems with limited preposition capability, adds 40 to preshot numbers 40 to 99.

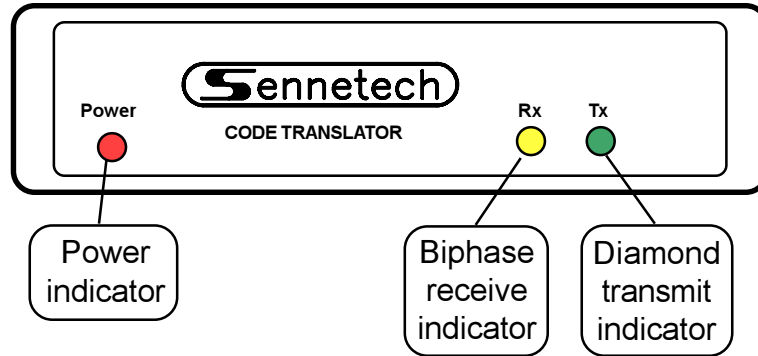
ON: Add 40 to high preshots.
OFF: Convert all preshots directly.

Address Group Conversion

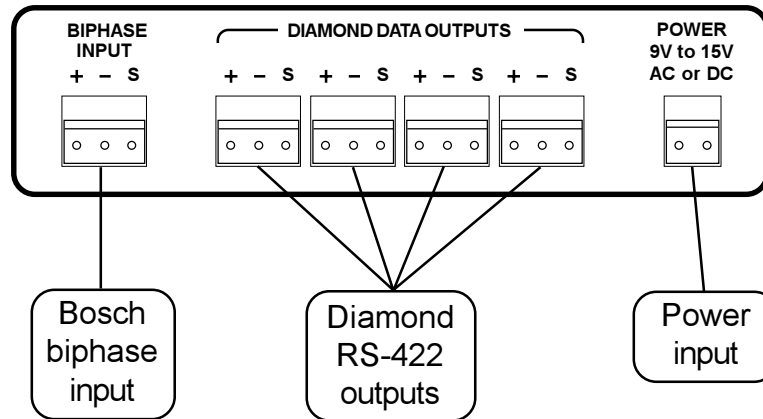
Group#	Bosch Address	to	Diamond Address
1	0001 TO 0256		001 TO 256
2	0257 TO 0512		001 TO 256
3	0513 TO 0768		001 TO 256
4	0769 TO 1024		001 TO 256
5	1025 TO 1280		001 TO 256
6	1281 TO 1536		001 TO 256
7	1537 TO 1792		001 TO 256
8	1793 TO 2028		001 TO 256

INSTALLATION

FRONT PANEL



REAR PANEL



The preferred KD6 control system setting (S4-1) is for the Maxpro control system. The setup menu accessed thru [Shot 90] is much easier to use than the alternate method using the Dome Programming Table.

OPERATION

Pan, Tilt, Zoom, Focus, and Iris commands are converted directly. Additional functions use the following table.

<u>BOSCH COMMAND</u>	<u>DIAMOND COMMAND</u>
ON (1 to 127) ENTER OFF (1 to 127) ENTER	AUX (1 to 127) ON (Except for #3) AUX (1 to 127) OFF (Except for #3)
ON 3 ENTER OFF 3 ENTER	SET CAMERA TO AUTO IRIS (see Iris Notes) SET CAMERA TO MANUAL IRIS (see Iris Notes)
SHOT (1 to 99) ENTER SET (1 to 99) ENTER Note: If configuration switch 7 is [On], preshots above 39 will have 40 added to the #.	RECALL PRESHOT (1 to 99) STORE PRESHOT (1 to 99)
SHOT (200 to 215) ENTER	RUN VECTORSCAN (0 to 15)
SHOT 250 ENTER SHOT 251 ENTER SHOT 252 ENTER SHOT 253 ENTER	CAMERA ID DISPLAY ON CAMERA ID DISPLAY OFF AZIMUTH DISPLAY ON AZIMUTH DISPLAY OFF
SHOT 267 ENTER	INITIALIZE DOME POSITION (FIND HOME)

The following commands will bring up the on-screen menus in the Diamond domes. Use the DOME PROGRAMMING TABLE on the next page to send numbers and characters.

SHOT 256 ENTER	DISPLAY MAIN MENU
SHOT 257 ENTER	DISPLAY GO TO PRESHOT MENU
SHOT 258 ENTER	DISPLAY RUN VECTORSCAN ONCE MENU
SHOT 259 ENTER	DISPLAY RUN V/SCAN CONTINUOUSLY MENU
SHOT 260 ENTER	DISPLAY LIST PRESHOTS MENU / NEXT PAGE
SHOT 261 ENTER	DISPLAY PROGRAM PRESHOT MENU
SHOT 262 ENTER	DISPLAY LIST V/SCAN FILES MENU / NEXT PAGE
SHOT 263 ENTER	DISPLAY LIST V/SCAN FILE CONTENTS MENU
SHOT 264 ENTER	DISPLAY PROGRAM VECTORSCAN FILES MENU
SHOT 265 ENTER	DISPLAY LIST SECTORS MENU
SHOT 266 ENTER	DISPLAY PROGRAM SECTOR ID's MENU

If the menu doesn't give a letter or number option for the finish, use "SHOT 268 ENTER" will send the equivalent code for the "ESC" key.

SHOT 268 ENTER	ABORT / DONE (BACK UP ONE STEP IN THE CONTROL SEQUENCE AND EVENTUALLY RETURN DOME TO MANUAL CONTROL)
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When the menu gives "ENTER" as an option, that is the computer keyboard "Enter key", not the Enter key on the Bosch keyboard. Use the Bosch "SHOT 270 ENTER" command.

DOME PROGRAMMING TABLE

The Diamond SmartScan Domes have onscreen menus and titling that are normally programmed using a computer style keyboard. From the Bosch system, SHOT commands 272 to 346 are used to generate the same (ASCII) codes that a keyboard would send. The following table shows the keycode that is sent for each SHOT command.

COMMAND	CHAR	COMMAND	CHAR	COMMAND	CHAR
SHOT 269 ENTER	BACKSPACE	SHOT 295 ENTER	'	SHOT 321 ENTER	A
SHOT 270 ENTER	ENTER	SHOT 296 ENTER	(SHOT 322 ENTER	B
SHOT 271 ENTER		SHOT 297 ENTER)	SHOT 323 ENTER	C
SHOT 272 ENTER	DELETE	SHOT 298 ENTER	*	SHOT 324 ENTER	D
SHOT 273 ENTER	INSERT	SHOT 299 ENTER	+	SHOT 325 ENTER	E
SHOT 274 ENTER		SHOT 300 ENTER	,	SHOT 326 ENTER	F
SHOT 275 ENTER		SHOT 301 ENTER	-	SHOT 327 ENTER	G
SHOT 276 ENTER		SHOT 302 ENTER	.	SHOT 328 ENTER	H
SHOT 277 ENTER		SHOT 303 ENTER	/	SHOT 329 ENTER	I
SHOT 278 ENTER		SHOT 304 ENTER	0	SHOT 330 ENTER	J
SHOT 279 ENTER		SHOT 305 ENTER	1	SHOT 331 ENTER	K
SHOT 280 ENTER		SHOT 306 ENTER	2	SHOT 332 ENTER	L
SHOT 281 ENTER		SHOT 307 ENTER	3	SHOT 333 ENTER	M
SHOT 282 ENTER		SHOT 308 ENTER	4	SHOT 334 ENTER	N
SHOT 283 ENTER		SHOT 309 ENTER	5	SHOT 335 ENTER	O
SHOT 284 ENTER	RIGHT ARROW	SHOT 310 ENTER	6	SHOT 336 ENTER	P
SHOT 285 ENTER	LEFT ARROW	SHOT 311 ENTER	7	SHOT 337 ENTER	Q
SHOT 286 ENTER	UP ARROW	SHOT 312 ENTER	8	SHOT 338 ENTER	R
SHOT 287 ENTER	DOWN ARROW	SHOT 313 ENTER	9	SHOT 339 ENTER	S
SHOT 288 ENTER	SPACE BAR	SHOT 314 ENTER	:	SHOT 340 ENTER	T
SHOT 289 ENTER	!	SHOT 315 ENTER	;	SHOT 341 ENTER	U
SHOT 290 ENTER	"	SHOT 316 ENTER	<	SHOT 342 ENTER	V
SHOT 291 ENTER	#	SHOT 317 ENTER	=	SHOT 343 ENTER	W
SHOT 292 ENTER	\$	SHOT 318 ENTER	>	SHOT 344 ENTER	X
SHOT 293 ENTER	%	SHOT 319 ENTER	?	SHOT 345 ENTER	Y
SHOT 294 ENTER	&	SHOT 320 ENTER	@	SHOT 346 ENTER	Z

Examples:

- To send the code for the "A" key, press SHOT 321 ENTER.
- To send the code for the "3" key, press SHOT 307 ENTER.
- To send the code for the "Enter" key, press SHOT 270 ENTER.

Remember that SHOT 268 ENTER (ESC) will back you out of a menu.

IRIS NOTES

Each Diamond camera telemetry packet (Pan, Tilt, Zoom, & Focus) also contains iris information. If it is not Iris Open or Iris Close, then it will be either Auto Iris or Manual Iris. You cannot send a pan, tilt, zoom, or focus command without the iris command.

Diamond cameras that are not capable of changing auto iris status are not affected.

Units that can change between auto or manual iris will be affected. Each time a camera is controlled, it will have its iris status updated to either Auto or Manual.

When a camera is selected, the code translator defaults to the setting determined by the configuration switch, either auto iris or manual iris. An individual camera can have its status changed by in the following ways.

If iris open or iris close is pressed, the status of that camera will revert to manual iris.

In a Bosch system, the aux 3 command is used to set the camera's iris mode. Sending "ON 3" will change the selected camera to auto iris. Sending "OFF 3" will change it to manual iris.

The Iris status is only sent along with pan, tilt, zoom, and focus. Pre-position and other non-movement commands are not involved.

So, if you normally want your cameras in auto iris, set switch 1-8 "on". If you normally want your cameras in manual iris, set the switch to "off".

ADDRESS CONVERSION TABLE

GROUP1				GROUP2			
BOSCH	DIAMOND	BOSCH	DIAMOND	BOSCH	DIAMOND	BOSCH	DIAMOND
1	1	101	101	201	201	257	1
2	2	102	102	202	202	258	2
3	3	103	103	203	203	259	3
4	4	104	104	204	204	260	4
5	5	105	105	205	205	261	5
6	6	106	106	206	206	262	6
7	7	107	107	207	207	263	7
8	8	108	108	208	208	264	8
9	9	109	109	209	209	265	9
10	10	110	110	210	210	266	10
11	11	111	111	211	211	267	11
12	12	112	112	212	212	268	12
13	13	113	113	213	213	269	13
14	14	114	114	214	214	270	14
15	15	115	115	215	215	271	15
16	16	116	116	216	216	272	16
17	17	117	117	217	217	273	17
18	18	118	118	218	218	274	18
19	19	119	119	219	219	275	19
20	20	120	120	220	220	276	20
21	21	121	121	221	221	277	21
22	22	122	122	222	222	278	22
23	23	123	123	223	223	279	23
24	24	124	124	224	224	280	24
25	25	125	125	225	225	281	25
26	26	126	126	226	226	282	26
27	27	127	127	227	227	283	27
28	28	128	128	228	228	284	28
29	29	129	129	229	229	285	29
30	30	130	130	230	230	286	30
31	31	131	131	231	231	287	31
32	32	132	132	232	232	288	32
33	33	133	133	233	233	289	33
34	34	134	134	234	234	290	34
35	35	135	135	235	235	291	35
36	36	136	136	236	236	292	36
37	37	137	137	237	237	293	37
38	38	138	138	238	238	294	38
39	39	139	139	239	239	295	39
40	40	140	140	240	240	296	40
41	41	141	141	241	241	297	41
42	42	142	142	242	242	298	42
43	43	143	143	243	243	299	43
44	44	144	144	244	244	300	44
45	45	145	145	245	245	301	45
46	46	146	146	246	246	302	46
47	47	147	147	247	247	303	47
48	48	148	148	248	248	304	48
49	49	149	149	249	249	305	49
50	50	150	150	250	250	306	50
51	51	151	151	251	251	307	51
52	52	152	152	252	252	308	52
53	53	153	153	253	253	309	53
54	54	154	154	254	254	310	54
55	55	155	155	255	255	311	55
56	56	156	156	256	256	312	56
57	57	157	157			313	57
58	58	158	158			314	58
59	59	159	159			315	59
60	60	160	160			316	60
61	61	161	161			317	61
62	62	162	162			318	62
63	63	163	163			319	63
64	64	164	164			320	64
65	65	165	165			321	65
66	66	166	166			322	66
67	67	167	167			323	67
68	68	168	168			324	68
69	69	169	169			325	69
70	70	170	170			326	70
71	71	171	171			327	71
72	72	172	172			328	72
73	73	173	173			329	73
74	74	174	174			330	74
75	75	175	175			331	75
76	76	176	176			332	76
77	77	177	177			333	77
78	78	178	178			334	78
79	79	179	179			335	79
80	80	180	180			336	80
81	81	181	181			337	81
82	82	182	182			338	82
83	83	183	183			339	83
84	84	184	184			340	84
85	85	185	185			341	85
86	86	186	186			342	86
87	87	187	187			343	87
88	88	188	188			344	88
89	89	189	189			345	89
90	90	190	190			346	90
91	91	191	191			347	91
92	92	192	192			348	92
93	93	193	193			349	93
94	94	194	194			350	94
95	95	195	195			351	95
96	96	196	196			352	96
97	97	197	197			353	97
98	98	198	198			354	98
99	99	199	199			355	99
100	100	200	200			356	100

ADDRESS CONVERSION TABLE

GROUP3				GROUP4					
BOSCH	DIAMOND	BOSCH	DIAMOND	BOSCH	DIAMOND	BOSCH	DIAMOND	BOSCH	DIAMOND
513	1	613	101	713	201	769	1	870	101
514	2	614	102	714	202	770	2	871	102
515	3	615	103	715	203	771	3	872	103
516	4	616	104	716	204	772	4	873	104
517	5	617	105	717	205	773	5	874	105
518	6	618	106	718	206	774	6	875	106
519	7	619	107	719	207	775	7	876	107
520	8	620	108	720	208	776	8	877	108
521	9	621	109	721	209	777	9	878	109
522	10	622	110	722	210	778	10	879	110
523	11	623	111	723	211	779	11	880	111
524	12	624	112	724	212	780	12	881	112
525	13	625	113	725	213	781	13	882	113
526	14	626	114	726	214	782	14	883	114
527	15	627	115	727	215	783	15	884	115
528	16	628	116	728	216	784	16	885	116
529	17	629	117	729	217	785	17	886	117
530	18	630	118	730	218	786	18	887	118
531	19	631	119	731	219	787	19	888	119
532	20	632	120	732	220	788	20	889	120
533	21	633	121	733	221	789	21	890	121
534	22	634	122	734	222	790	22	891	122
535	23	635	123	735	223	791	23	892	123
536	24	636	124	736	224	792	24	893	124
537	25	637	125	737	225	793	25	894	125
538	26	638	126	738	226	794	26	895	126
539	27	639	127	739	227	795	27	896	127
540	28	640	128	740	228	796	28	897	128
541	29	641	129	741	229	797	29	898	129
542	30	642	130	742	230	798	30	899	130
543	31	643	131	743	231	799	31	900	131
544	32	644	132	744	232	800	32	901	132
545	33	645	133	745	233	801	33	902	133
546	34	646	134	746	234	802	34	903	134
547	35	647	135	747	235	803	35	904	135
548	36	648	136	748	236	804	36	905	136
549	37	649	137	749	237	805	37	906	137
550	38	650	138	750	238	806	38	907	138
551	39	651	139	751	239	807	39	908	139
552	40	652	140	752	240	808	40	909	140
553	41	653	141	753	241	809	41	910	141
554	42	654	142	754	242	810	42	911	142
555	43	655	143	755	243	811	43	912	143
556	44	656	144	756	244	812	44	913	144
557	45	657	145	757	245	813	45	914	145
558	46	658	146	758	246	814	46	915	146
559	47	659	147	759	247	815	47	916	147
560	48	660	148	760	248	816	48	917	148
561	49	661	149	761	249	817	49	918	149
562	50	662	150	762	250	818	50	919	150
563	51	663	151	763	251	819	51	920	151
564	52	664	152	764	252	820	52	921	152
565	53	665	153	765	253	821	53	922	153
566	54	666	154	766	254	822	54	923	154
567	55	667	155	767	255	823	55	924	155
568	56	668	156	768	256	824	56	925	156
569	57	669	157			825	57	926	157
570	58	670	158			826	58	927	158
571	59	671	159			827	59	928	159
572	60	672	160			828	60	929	160
573	61	673	161			829	61	930	161
574	62	674	162			830	62	931	162
575	63	675	163			831	63	932	163
576	64	676	164			832	64	933	164
577	65	677	165			833	65	934	165
578	66	678	166			834	66	935	166
579	67	679	167			835	67	936	167
580	68	680	168			836	68	937	168
581	69	681	169			837	69	938	169
582	70	682	170			838	70	939	170
583	71	683	171			839	71	940	171
584	72	684	172			840	72	941	172
585	73	685	173			841	73	942	173
586	74	686	174			842	74	943	174
587	75	687	175			843	75	944	175
588	76	688	176			844	76	945	176
589	77	689	177			845	77	946	177
590	78	690	178			846	78	947	178
591	79	691	179			847	79	948	179
592	80	692	180			848	80	949	180
593	81	693	181			849	81	950	181
594	82	694	182			850	82	951	182
595	83	695	183			851	83	952	183
596	84	696	184			852	84	953	184
597	85	697	185			853	85	954	185
598	86	698	186			854	86	955	186
599	87	699	187			855	87	956	187
600	88	700	188			856	88	957	188
601	89	701	189			857	89	958	189
602	90	702	190			858	90	959	190
603	91	703	191			859	91	960	191
604	92	704	192			860	92	961	192
605	93	705	193			861	93	962	193
606	94	706	194			862	94	963	194
607	95	707	195			863	95	964	195
608	96	708	196			864	96	965	196
609	97	709	197			865	97	966	197
610	98	710	198			866	98	967	198
611	99	711	199			867	99	968	199
612	100	712	200			868	100		200

ADDRESS CONVERSION TABLE

GROUP5				GROUP6			
BOSCH	DIAMOND	BOSCH	DIAMOND	BOSCH	DIAMOND	BOSCH	DIAMOND
1025	1	1125	101	1225	201	1281	1
1026	2	1126	102	1226	202	1282	2
1027	3	1127	103	1227	203	1283	3
1028	4	1128	104	1228	204	1284	4
1029	5	1129	105	1239	205	1285	5
1030	6	1130	106	1230	206	1286	6
1031	7	1131	107	1231	207	1287	7
1032	8	1132	108	1232	208	1288	8
1033	9	1133	109	1233	209	1289	9
1034	10	1134	110	1234	210	1290	10
1035	11	1135	111	1235	211	1291	11
1036	12	1136	112	1236	212	1292	12
1037	13	1137	113	1237	213	1293	13
1038	14	1138	114	1238	214	1294	14
1039	15	1139	115	1249	215	1295	15
1040	16	1140	116	1240	216	1296	16
1041	17	1141	117	1241	217	1297	17
1042	18	1142	118	1242	218	1298	18
1043	19	1143	119	1243	219	1299	19
1044	20	1144	120	1244	220	1300	20
1045	21	1145	121	1245	221	1301	21
1046	22	1146	122	1246	222	1302	22
1047	23	1147	123	1247	223	1303	23
1048	24	1148	124	1248	224	1304	24
1049	25	1149	125	1259	225	1305	25
1050	26	1150	126	1250	226	1306	26
1051	27	1151	127	1251	227	1307	27
1052	28	1152	128	1252	228	1308	28
1053	29	1153	129	1253	229	1309	29
1054	30	1154	130	1254	230	1310	30
1055	31	1155	131	1255	231	1311	31
1056	32	1156	132	1256	232	1312	32
1057	33	1157	133	1257	233	1313	33
1058	34	1158	134	1258	234	1314	34
1059	35	1159	135	1259	235	1315	35
1060	36	1160	136	1260	236	1316	36
1061	37	1161	137	1261	237	1317	37
1062	38	1162	138	1262	238	1318	38
1063	39	1163	139	1263	239	1319	39
1064	40	1164	140	1264	240	1320	40
1065	41	1165	141	1265	241	1321	41
1066	42	1166	142	1266	242	1322	42
1067	43	1167	143	1267	243	1323	43
1068	44	1168	144	1268	244	1324	44
1069	45	1169	145	1269	245	1325	45
1070	46	1170	146	1270	246	1326	46
1071	47	1171	147	1271	247	1327	47
1072	48	1172	148	1272	248	1328	48
1073	49	1173	149	1273	249	1329	49
1074	50	1174	150	1274	250	1330	50
1075	51	1175	151	1275	251	1331	51
1076	52	1176	152	1276	252	1332	52
1077	53	1177	153	1277	253	1333	53
1078	54	1178	154	1278	254	1334	54
1079	55	1179	155	1279	255	1335	55
1080	56	1180	156	1280	256	1336	56
1081	57	1181	157			1337	57
1082	58	1182	158			1338	58
1083	59	1183	159			1339	59
1084	60	1184	160			1340	60
1085	61	1185	161			1341	61
1086	62	1186	162			1342	62
1087	63	1187	163			1343	63
1088	64	1188	164			1344	64
1089	65	1189	165			1345	65
1090	66	1190	166			1346	66
1091	67	1191	167			1347	67
1092	68	1192	168			1348	68
1093	69	119	169			1349	69
1094	70	1194	170			1350	70
1095	71	1195	171			1351	71
1096	72	1196	172			1352	72
1097	73	1197	173			1353	73
1098	74	1198	174			1354	74
1099	75	1199	175			1355	75
1100	76	1200	176			1356	76
1101	77	1201	177			1357	77
1102	78	1202	178			1358	78
1103	79	1203	179			1359	79
1104	80	1204	180			1360	80
1105	81	1205	181			1361	81
1106	82	1206	182			1362	82
1107	83	1207	183			1363	83
1108	84	1208	184			1364	84
1109	85	1209	185			1365	85
1100	86	1210	186			1366	86
1111	87	1211	187			1367	87
1112	88	1212	188			1368	88
1113	89	1213	189			1369	89
1114	90	1214	190			1370	90
1115	91	1215	191			1371	91
1116	92	1216	192			1372	92
1117	93	1217	193			1373	93
1118	94	1218	194			1374	94
1119	95	1219	195			1375	95
1120	96	1220	196			1376	96
1121	97	1221	197			1377	97
1122	98	1222	198			1378	98
1123	99	1223	199			1379	99
1124	100	1224	200			1380	100

