

SAND Networks Systems – Application Note

Configuring Watchout for use with a SandBox or Sand Port

Watchout can send and receive DMX data to/from a SandNet device using the Art-Net protocol. Watchout's DMX universes are numbered from 0 to 255. Table 1 shows the translation from Watchout's universe number to the Art-Net standard's subnet/universe numbering scheme.

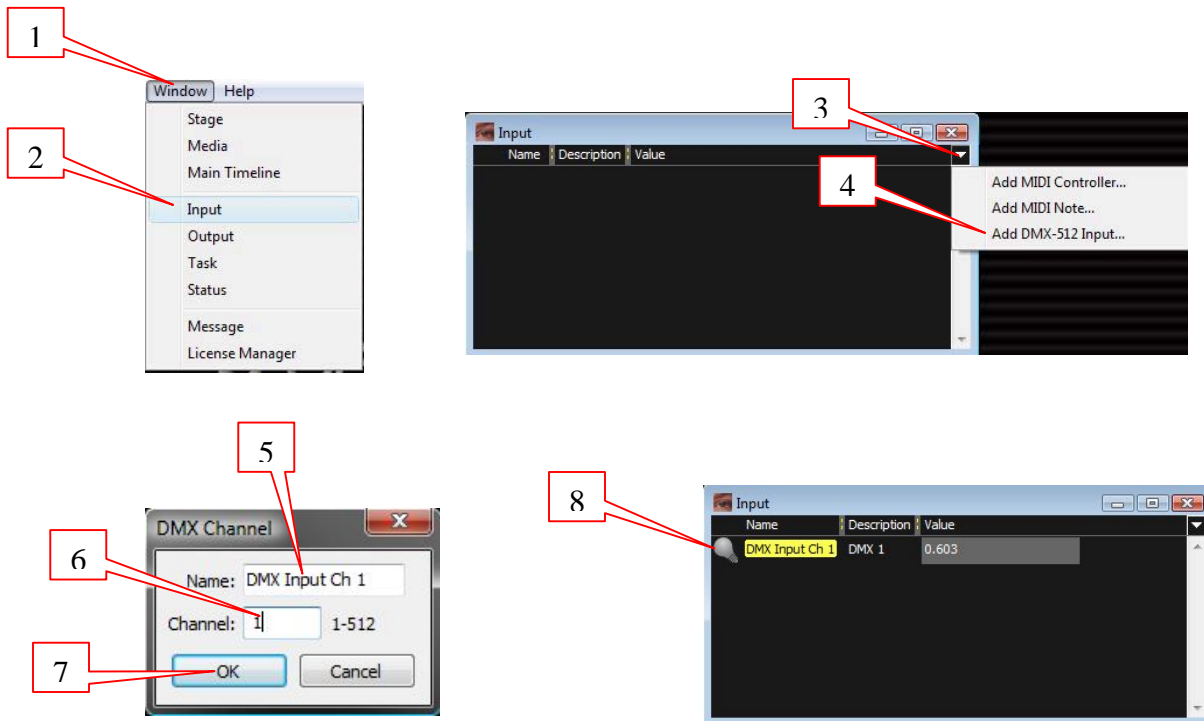
By default, Watchout is set to receive DMX universe 0 (Art-Net Subnet 0; Universe 0) and to transmit on DMX universe 1 (Art-Net Subnet 0; Universe 1). To change this default, follow these steps:

1. Select "File" menu.
2. Select "Preferences".
3. Select "Control" tab.
4. Enter new value in "Receive" and/or "Transmit" field; (an integer from 0 – 255.)
5. Click "OK".

Use the SAND Device Browser utility to configure the SAND Device's DMX ports to match Watchout's settings. For example, setting port 1 to DMX in, Art-Net, subnet 0, universe 0, and port 2 to DMX Out, Art-Net, subnet 0, universe 1 will match the default Watchout settings.

Configuring a DMX input channel in Watchout:

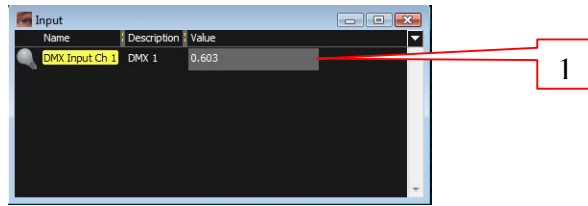
1. Select "Window" menu.
2. Select "Input".
3. Click menu arrow on right upper side of input window.
4. Select "Add DMX512 Input..."
5. Enter desired text in "Name" field; e.g. "DMX Ouput Ch. 1" ..
6. Enter desired channel number in "Channel" field; 1 – 512.
7. Click "OK"
8. Channel number, name, and value will now appear it the input window.



To configure additional DMX input channels you repeat the above steps.

Control a DMX channel value in the input window.

1. Move cursor to the 'Value' field for the desired channel in the input window.
2. Press and hold left mouse button.
 - a. run cursor up or right to increase DMX value.
 - b. run cursor down or left to decrease DMX value.



Note that Watchout represents the DMX value as a number between 0.000 and 1.000.

Note that DMX input is "last action takes precedence" between the external DMX input and the onscreen manipulation of the value.

Configuring a DMX output channel in Watchout:

1. Select "Window" menu.
2. Select "Output".
3. Click menu arrow on right upper side of output window.
4. Select "Add DMX512 Output..."
5. Enter desired text in "Name" field; e.g. "DMX Output Ch. 1".
6. Enter desired channel number in "Channel" field; 1 – 512.
7. Click "OK"
8. Channel number, name, and value will now appear in the output window.

Control the DMX channel value in the output window.

1. Move cursor to the 'Value' field for the desired channel in the output window.
2. Press and hold left mouse button.
 - a. run cursor up or right to increase DMX value.
 - b. run cursor down or left to decrease DMX value.

Note that DMX output is last action takes precedence between the program and the onscreen manipulation of the value.

Table 1 – Watchout Universe to Art-Net Universe Map.

Watchout Universe	Art-Net Subnet	Art-Net Universe
0	0	0
1	0	1
2	0	2
3	0	3
4	0	4
5	0	5
6	0	6
7	0	7
8	0	8
9	0	9
10	0	10
11	0	11
12	0	12
13	0	13
14	0	14
15	0	15
16	1	0
17	1	1
18	1	2
19	1	3
20	1	4
21	1	5
22	1	6
23	1	7
24	1	8
25	1	9
26	1	10
27	1	11
28	1	12
29	1	13
30	1	14
31	1	15
32	2	0
33	2	1
34	2	2
35	2	3
36	2	4
37	2	5
38	2	6
39	2	7
40	2	8
41	2	9
42	2	10
43	2	11
44	2	12
45	2	13
46	2	14
47	2	15
48	3	0
49	3	1
50	3	2

Watchout Universe	Art-Net Subnet	Art-Net Universe
51	3	3
52	3	4
53	3	5
54	3	6
55	3	7
56	3	8
57	3	9
58	3	10
59	3	11
60	3	12
61	3	13
62	3	14
63	3	15
64	4	0
65	4	1
66	4	2
67	4	3
68	4	4
69	4	5
70	4	6
71	4	7
72	4	8
73	4	9
74	4	10
75	4	11
76	4	12
77	4	13
78	4	14
79	4	15
80	5	0
81	5	1
82	5	2
83	5	3
84	5	4
85	5	5
86	5	6
87	5	7
88	5	8
89	5	9
90	5	10
91	5	11
92	5	12
93	5	13
94	5	14
95	5	15
96	6	0
97	6	1
98	6	2
99	6	3
100	6	4
101	6	5

Watchout Universe	Art-Net Subnet	Art-Net Universe
102	6	6
103	6	7
104	6	8
105	6	9
106	6	10
107	6	11
108	6	12
109	6	13
110	6	14
111	6	15
112	7	0
113	7	1
114	7	2
115	7	3
116	7	4
117	7	5
118	7	6
119	7	7
120	7	8
121	7	9
122	7	10
123	7	11
124	7	12
125	7	13
126	7	14
127	7	15
128	8	0
129	8	1
130	8	2
131	8	3
132	8	4
133	8	5
134	8	6
135	8	7
136	8	8
137	8	9
138	8	10
139	8	11
140	8	12
141	8	13
142	8	14
143	8	15
144	9	0
145	9	1
146	9	2
147	9	3
148	9	4
149	9	5
150	9	6
151	9	7
152	9	8

Watchout Universe	Art-Net Subnet	Art-Net Universe
153	9	9
154	9	10
155	9	11
156	9	12
157	9	13
158	9	14
159	9	15
160	10	0
161	10	1
162	10	2
163	10	3
164	10	4
165	10	5
166	10	6
167	10	7
168	10	8
169	10	9
170	10	10
171	10	11
172	10	12
173	10	13
174	10	14
175	10	15
176	11	0
177	11	1
178	11	2
179	11	3
180	11	4
181	11	5
182	11	6
183	11	7
184	11	8
185	11	9
186	11	10
187	11	11
188	11	12
189	11	13
190	11	14
191	11	15
192	12	0
193	12	1
194	12	2
195	12	3
196	12	4
197	12	5
198	12	6
199	12	7
200	12	8
201	12	9
202	12	10
203	12	11

Watchout Universe	Art-Net Subnet	Art-Net Universe
204	12	12
205	12	13
206	12	14
207	12	15
208	13	0
209	13	1
210	13	2
211	13	3
212	13	4
213	13	5
214	13	6
215	13	7
216	13	8
217	13	9
218	13	10
219	13	11
220	13	12
221	13	13
222	13	14
223	13	15
224	14	0
225	14	1
226	14	2
227	14	3
228	14	4
229	14	5
230	14	6
231	14	7
232	14	8
233	14	9
234	14	10
235	14	11
236	14	12
237	14	13
238	14	14
239	14	15
240	15	0
241	15	1
242	15	2
243	15	3
244	15	4
245	15	5
246	15	6
247	15	7
248	15	8
249	15	9
250	15	10
251	15	11
252	15	12
253	15	13
254	15	14
255	15	15