

# Bachmann Spectrum On30 2-4-4-2

## Whistle Selections:

B&O 3 Chime (Default)	0
Peanut Whistle	1
D&RGW Single Chime	2

## Air Compressor:

Single Phase

## Exhaust Chuff:

Light Steam



Please note the CVs listed in bold are only active if the Tsunami Sound module is plugged into the DCC decoder. For more information on the plug in sound module please refer to Bachmann Trains

## Configuration Variable Defaults

CV #	Description	Default value	CV #	Description	Default value
1	Primary address Control	03	<b>119</b>	<b>Effect Processor Select</b>	<b>00</b>
2	V Start	00	<b>128</b>	<b>Master Volume Control</b>	<b>225</b>
3	Baseline Acceleration Rate	06	<b>129</b>	<b>Whistle Volume Control</b>	<b>225</b>
4	Baseline Braking Rate	05	<b>130</b>	<b>Bell Volume Control</b>	<b>92</b>
7	Manufacturer Version ID	Read Only	<b>131</b>	<b>Exhaust Volume Control</b>	<b>96</b>
8	Manufacturer ID	141	<b>132</b>	<b>Air Pump Volume</b>	<b>48</b>
10	BEMF Cutout	00	<b>133</b>	<b>Dynamo Volume Control</b>	<b>32</b>
11	Packet time Out Value	00	<b>134</b>	<b>Blower Volume</b>	<b>16</b>
12	Alternate Power Source	01	<b>135</b>	<b>Rod Clank Volume Control</b>	<b>32</b>
13	Analog Mode Functions	00	<b>136</b>	<b>Steam Release Volume Control</b>	<b>128</b>
14	Analog Function enable 1	03	<b>137</b>	<b>Coupler Volume Control</b>	<b>128</b>
15	CV Unlock Code	00	<b>139</b>	<b>Brake Squeal Volume</b>	<b>128</b>
16	CV Lock Code	00	<b>140</b>	<b>Brake Release Volume</b>	<b>64</b>
17	Extended Address	192	<b>141</b>	<b>Snifter Valve Volume</b>	<b>64</b>
18	Extended Address	03	<b>142</b>	<b>Johnson Bar/ Power Reverse</b>	<b>64</b>
19	Consist Address	00	<b>143</b>	<b>Pop Valve</b>	<b>128</b>
21	Consist Function Group	00	<b>145</b>	<b>Blower Draft</b>	<b>128</b>
22	Consist Function Group 2	00	<b>146</b>	<b>Water Stop Volume</b>	<b>96</b>
23	Consist Acceleration Rate	00	<b>147</b>	<b>Injector Volume</b>	<b>64</b>
24	Consist Braking Rate	00	<b>148</b>	<b>Coal Shovel Volume</b>	<b>64</b>
25	Speed Table Register	00	<b>149</b>	<b>Wrench Volume</b>	<b>00</b>
29	Configuration Register 1	06	<b>150</b>	<b>Oil Can Volume</b>	<b>64</b>
30	Error information		<b>151</b>	<b>Grease Gun Volume</b>	<b>00</b>
	Alternate mode selection	04	<b>153</b>	<b>7 Band Equalizer</b>	<b>00</b>
33	FL (f) Output Location	03	<b>154</b>	<b>62 Hz Cut/ Boost</b>	<b>128</b>
34	FL (r) Output Location	03	<b>155</b>	<b>125 Hz Cut/ Boost</b>	<b>128</b>
35	F1 Output Location	08	<b>156</b>	<b>200 Hz Cut/Boost</b>	<b>128</b>
36	F2 Output Location	04	<b>157</b>	<b>500 HZ Cut/Boost</b>	<b>128</b>
37	F3 Output Location	16	<b>158</b>	<b>1K Hz Cut/Boost</b>	<b>128</b>
38	F4 Output Location	32	<b>159</b>	<b>2K Hz Cut/Boost</b>	<b>128</b>
39	F5 Output Location	00	<b>160</b>	<b>4KHz Cut/ Boost</b>	<b>128</b>
40	F6 Output Location	00	<b>161</b>	<b>Reverb</b>	<b>00</b>
41	F7 Output Location	00	<b>162</b>	<b>Reverb Output Level</b>	<b>128</b>
42	F8 Output Location	00	<b>163</b>	<b>Reverb Delay</b>	<b>255</b>
43	F9 Output Location	01	<b>164</b>	<b>Reverb Gain</b>	<b>64</b>
44	F10 Output Location	04	<b>169</b>	<b>Whistle Reverb</b>	<b>00</b>
45	F11 Output Location	128	<b>170</b>	<b>Bell Reverb</b>	<b>00</b>
46	F12 Output Location	16	<b>171</b>	<b>Steam Exhaust Reverb</b>	<b>00</b>
47	Analog Whistle Control	00	<b>172</b>	<b>Air Compressor Reverb</b>	<b>00</b>
49	Hyperlight Effects F0(f)	142	<b>193</b>	<b>Automatic Bell-on Set Point</b>	<b>15</b>
50	Hyperlight Effects F0(r)	141	<b>194</b>	<b>Automatic Bell -off Set Point</b>	<b>24</b>
51	Hyperlight Effects FX5	00	<b>195</b>	<b>Grade Crossing Sensitivity</b>	<b>04</b>
52	Hyperlight Effects FX6	00	<b>196</b>	<b>Brake Squeal Sensitivity</b>	<b>03</b>
59	Flash Rate	03	<b>197</b>	<b>Analog Mode Sound Config.</b>	<b>06</b>
60	Crossing Hold Time	04	<b>198</b>	<b>DCC Mode Auto Sound Config</b>	<b>08</b>
61	F11 Braking Rate	00	<b>201</b>	<b>Probability Fireman Fred</b>	<b>64</b>
62	Transponding Control	00	<b>202</b>	<b>Probability Fred's Wrench</b>	<b>32</b>
63	Analog Mode Motor Start Volt.	20	<b>203</b>	<b>Probability Fred's Grease Gun</b>	<b>16</b>
64	Analog Mode Max Volt.	180	<b>204</b>	<b>Probability Fred's Oil Can</b>	<b>32</b>
66	Forward Trim	128	<b>205</b>	<b>Probability Fred's Injector</b>	<b>64</b>
67-94	Speed Table	Varies	<b>206</b>	<b>Probability Fred's Blower</b>	<b>32</b>
95	Reverse Trim	128	<b>207</b>	<b>Probability Locomotive Pop Off</b>	<b>16</b>
105	User Identifier #1	---	209	Kp Coefficient	45
106	User Identifier #2	---	210	Ki Coefficient	10
<b>112</b>	<b>Sound Configuration</b>	<b>64</b>	212	Motor Control Intensity	255
<b>113</b>	<b>Quiet Mode Timeout Period</b>	<b>00</b>	213	Motor Control Sample Period	15
<b>114</b>	<b>Bell Ring Rate</b>	<b>14</b>	214	Motor Control Aperture Time	15
<b>115</b>	<b>Whistle Selection</b>	<b>00</b>			
<b>116</b>	<b>Exhaust Control/ Chuff Rate</b>	<b>82</b>			