Pixel Protocols Cheat Sheet

ENTTEC Pixel Controllers — OCTO, DIN PIXIE, PIXELATOR MINI, PIXELATOR MINI MK2, PLINK INJECTOR & IP PLINK INJECTOR

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Protocol	OCTO	DIN PIXIE	Pixelator Mini	Pixelator Mini Mk2	PLink Injector	IP PLink Injector	Color Resolution	RGB	RGBW	Voltage	Redundancy
APA102	✅	❌	❌	❌	❌	❌	8 Bits	✅	❌	5V	❌
APA102C	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	5V	❌
APA104	✅	✅	✅	✅	✅	✅	8 Bits	✅	❌	5 - 12V	❌
APA105	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	5 - 24V	❌
APA109	❌	❌	❌	❌	❌	❌	8 Bits	❌	✅	5V	❌
Adafruit Pixie	❌	❌	❌	❌	❌	❌	8 Bits	✅	✅	5 - 24V	❌
CS8812	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	12V	✅
DM412	❌	❌	❌	❌	❌	❌	16 Bits	✅	✅	5V	❌
FW1906	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	5 - 24V	❌
GS8206	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	5 - 24V	✅
GS8208	✅	✅	✅	✅	✅	✅	8 Bits	✅	❌	12V	✅
HD107S	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	5V	❌
HD108	❌	❌	❌	❌	❌	❌	16 Bits	✅	❌	5V	❌
ICND2110	❌	❌	❌	❌	❌	❌	16 Bits	✅	❌	5 - 10V	❌
INK1003	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	5 - 12V	❌
LB1908	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	12V	✅
LPD6803	❌	❌	❌	❌	❌	❌	5 Bits	✅	❌	5 - 12V	❌
LPD8803	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	5 - 12V	❌
LPD8806	❌	❌	❌	❌	❌	❌	8 Bits	✅	❌	5 - 12V	❌
MBI6020	❌	❌	❌	❌	❌	❌	10 Bits	✅	❌	5 - 12V	❌
MBI6023	❌	❌	❌	❌	❌	❌	10 Bits	✅	❌	5 - 12V	❌
MY9221	❌	❌	❌	❌	❌	❌	16 Bits	✅	❌	5 - 24V	❌
MY9231	❌	❌	❌	❌	❌	❌	16 Bits	✅	❌	5 - 24V	❌
MY9291	❌	❌	❌	❌	❌	❌	16 Bits	✅	✅	5 - 24V	❌

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Protocol	OCTO	DIN PIXIE	Pixelator Mini	Pixelator Mini Mk2	PLink Injector	IP PLink Injector	Color Resolution	RGB	RGBW	Voltage	Redundancy
NS108E	✗	✗	✗	✗	✗	✗	16 Bits	✓	✗	5V	✗
P9412	✗	✗	✗	✗	✗	✗	8 Bits	✗	✓	5 - 24V	✗
P943	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 17V	✓
P9813	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
P9883	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 17V	✓
QED3001	✗	✗	✗	✗	✗	✗	12 Bits	✓	✗	5 - 32V	✓ *(SOP14 only)*
SJ1221	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	12V	✓
SK6805	✗	✗	✗	✗	✗	✗	8 Bits	✓	✓	5V	✗
SK6812	✓	✓	✓	✓	✓	✓	8 Bits	✓	✓	5V	✗
SK6813	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5V	✗
SK6818	✗	✗	✗	✗	✗	✗	8 Bits	✗	✓	5V	✗
SK6822	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5V	✓
SK9822	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5V	✗
SM16703	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
SM16704	✗	✗	✗	✗	✗	✗	8 Bits	✗	✓	5 - 24V	✗
SM16712	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
SM16714	✗	✗	✗	✗	✗	✗	8 Bits	✗	✓	5 - 15V	✗
SM16716	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
SM16803	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 30V	✗
SM16804	✗	✗	✗	✗	✗	✗	8 Bits	✗	✓	5 - 30V	✗
TLC5973	✓	✓	✓	✓	✓	✓	16 Bits	✓	✗	5V	✗
TLS3001	✗	✗	✗	✗	✗	✗	12 Bits	✓	✗	5 - 17V	✓ *(SOP14 only)*
TM1803	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
TM1804	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5 - 24V	✗

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Protocol	OCTO	DIN PIXIE	Pixelator Mini	Pixelator Mini Mk2	PLink Injector	IP PLink Injector	Color Resolution	RGB	RGBW	Voltage	Redundancy
TM1809	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
TM1812	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5V	✗
TM1814	✓	✓	✓	✓	✓	✓	8 Bits	✗	✓	5 - 32V	✗
TM1824	✗	✗	✗	✗	✗	✗	8 Bits	✗	✓	5 - 24V	✗
TM1829	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
TM1903	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
TM1914	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✓
TM1934	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✓
TX1818	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	12V	✓
UCS1903	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5 - 12V	✗
UCS1904	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
UCS2603	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 28V	✓
UCS2903	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5 - 24V	✗
UCS2904	✓	✓	✓	✓	✓	✓	8 Bits	✗	✓	5 - 24V	✗
UCS2912	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
UCS5603	✗	✗	✗	✗	✗	✗	12 Bits	✓	✗	5 - 30V	✓
UCS7604	✓	✗	✗	✓	✗	✗	16 Bits	✓	✓	5 - 30V	✓
UCS7804	✗	✗	✗	✗	✗	✗	8 Bits	✓	✓	5 - 30V	✗
UCS8903	✓	✓	✓	✓	✓	✓	16 Bits	✓	✗	5 - 24V	✗
UCS8904	✓	✓	✓	✓	✓	✓	16 Bits	✗	✓	5 - 24V	✗
UCS9812	✗	✗	✗	✗	✗	✗	16 Bits	✓	✗	5 - 24V	✗
WS2801	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5V	✗
WS2808	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	12V	✓
WS2811	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5 - 12V	✗

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Protocol	OCTO	DIN PIXIE	Pixelator Mini	Pixelator Mini Mk2	PLink Injector	IP PLink Injector	Color Resolution	RGB	RGBW	Voltage	Redundancy
WS2811 V1.4	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 12V	✗
WS2812	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5 - 12V	✗
WS2812B	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5 - 12V	✗
WS2813	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5 - 12V	✓
WS2814	✗	✗	✗	✗	✗	✗	8 Bits	✗	✓	5 - 12V	✓
WS2815	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	12V	✓
WS2815B	✗	✗	✗	✗	✗	✗	8 Bits	✓	✓	12V	✓
WS2816A	✗	✗	✗	✗	✗	✗	16 Bits	✓	✗	5V	✓
WS2816B	✗	✗	✗	✗	✗	✗	16 Bits	✓	✗	5V	✓
WS2816C	✗	✗	✗	✗	✗	✗	16 Bits	✓	✗	5V	✓
WS2818	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5 - 24V	✓
WS2818A	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5V	✓
WS2818B	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 12V	✓
WS2851	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	12V	✗