

Pixel Protocols Cheat Sheet

ENTTEC Pixel Controllers — [OCTO](#), [DIN PIXIE](#), [PIXELATOR MINI](#), [PIXELATOR MINI MK2](#), [PLINK INJECTOR](#) & [IP PLINK INJECTOR](#)

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	✗
NS108E	✗	✗	✗	✗	✗	✗	16 Bits	✓	✗	5V	✗

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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)
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	✗
TLS3001	✗	✗	✗	✗	✗	✗	12 Bits	✓	✗	5 - 17V	✓ (SOP14 only)
TM1803	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
TM1804	✓	✓	✓	✓	✓	✓	8 Bits	✓	✗	5 - 24V	✗
TM1809	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗
TM1814	✓	✓	✓	✓	✓	✓	8 Bits	✗	✓	5 - 32V	✗
TM1824	✗	✗	✗	✗	✗	✗	8 Bits	✗	✓	5 - 24V	✗
TM1829	✗	✗	✗	✗	✗	✗	8 Bits	✓	✗	5 - 24V	✗

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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	✗
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	✓

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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	✗