Suggested Material Settings for Aurora 8-50w

Matrerial	Marking Result	Speed (mm/s)	Power %	Frequency KHz	Fill Mode	Line Interval (mm)	Number of Passes
304 Stainless Steel	Black	200	10	100	Bi-directional	0.02	10
	White	1000	20	60	Bi-directional	0.02	1
Carbon Steel	Black	100	10	50	Cross-Hatch	0.02	1
	White	900	20	60	Bi-directional	0.02	1
Note：(White) The white marking result on carbon steel is more like gray color							
Brass	Black	100	30	50	Bi-directional	0.02	1
	White	500	20	50	Bi-directional	0.02	1
Note：(black) No Black marking result on aluminum							
Aluminium Sheet	Black	/	/	/	/	0.02	/
	White	900	20	60	Bi-directional	0.02	1
Note：(black) No Black marking result on aluminum							
ABS	Black	500	10	50	Bi-directional	0.02	1
	White	/	/	/	/	0.02	/
Note：(White) No White result on white ABS							
Mirror Finished Stainless Steel	Black	100	20	90	Bi-directional	0.02	10
	White	700	20	70	Bi-directional	0.02	1
Galvanized Iron Sheet	Black	100	50	50	Bi-directional	0.02	1
	White	1000	20	50	Bi-directional	0.02	5
Slate	White	200	20	60	Bi-directional	0.02	1
	Black	/	/	/	/	0.02	/
Note：(black) No black marking result on SLATE, and the high temperature will make the material melt and solidify							
Magnesium Sheet	White	1000	28	75	Bi-directional	0.02	1
	Black	100	40	50	Bi-directional	0.02	1
Nickel Sheet	White	1000	30	55	Bi-directional	0.02	1
	Black	100	40	60	Bi-directional	0.005	1
Titanium Sheet	Gray	500	15	80	Bi-directional	0.03	5
	Black	100	12	80	Bi-directional	0.03	10
Black Acrylic Sheet	White	1000	20	50	Bi-directional	0.02	2
Note：Marking on the black acrylic comes out dark green							

Suggested Material Settings for Aurora 8-50w

Titanium Plate Coloring

Color	Speed mm/s	Power %	Frequency kHz	Bi-directional	Line Interval	Passes
White	1200	25	75	Off	0.03	1
Note：Defocus by 1mm						
Black	100	12	80	On	0.03	10
Light Blue	100	17.5	100	Off	0.01	1
Note：Defocus by 1mm						
Dark Blue	100	21.7	100	Off	0.05	1
Note：Defocus by 1mm						
Purple	1200	25	75	On	0.03	1
	100	16	100	On	0.0137	1
Note：(1) Speed mm/s1200 : Purple requires two parameters to be superimposed: Mark on Ti with this parameter first (2) Speed mm/s100: Superimposed this parameter to get the purple color						
Golden Yellow	100	17	100	Off	0.03	1
Silver	500	15	80	On	0.03	5
Note： Mirror-like Effect						

Website： www.thunderlaser.com **Email：** tech@thunderlaser.com

Suggested Material Settings for Aurora 8 Mopa-100w

Matrerial	Marking Result	Speed (mm/s)	Power %	Frequency KHz	Pulse Width (ns)	Fill Mode	Line Interval (mm)	Number of Passes
304 Stainless Steel	Black	400	50	842	2	Bi-directional	0.02	1
	White	1000	10	100	150	Bi-directional	0.02	1
Carbon Steel	Black	200	50	2500	20	Bi-directional	0.02	1
	White	1200	14	50	200	Bi-directional	0.02	1
Brass	Black	200	100	474	2	Bi-directional	0.005	1
	White	1800	100	842	2	Bi-directional	0.02	1
Aluminium Sheet	White	1000	15	50	150	Bi-directional	0.02	1
ABS	Black	1800	30	30	350	Bi-directional	0.02	1
Mirror Finished Stainless Steel	Black	400	50	842	2	Bi-directional	0.02	1
	White	1000	10	100	150	Bi-directional	0.02	1
Galvanized Iron Sheet	Black	200	20	3000	2	Bi-directional	0.02	2
	White	1000	10	50	200	Bi-directional	0.02	2
Slate	White	1600	95	420	2	Bi-directional	0.02	1
Magnesium Sheet	White	2000	50	650	2	Bi-directional	0.02	1
	Black	200	40	1250	2	Bi-directional	0.02	5
Nickel Sheet	White	400	20	27	500	Bi-directional	0.02	1
	Black	200	30	65	350	Bi-directional	0.02	1
Titanium Sheet	White	800		160	13	Bi-directional	0.02	1
	Black	100	20	320	13	Bi-directional	0.02	1
Black Acrylic Sheet	White	1800	10	632	130	Bi-directional	0.02	1
Gold	White	1000	30	310	13	Bi-directional	0.02	1
Silver	White	1600	60	1250	2	Bi-directional	0.02	1
PU leatherette	Black	1000	10	1300	45	Bi-directional	0.02	1
PET	Black	1200	15	48	250	Bi-directional	0.02	1
PBT	Black	1000	12	50	350	Bi-directional	0.02	1
Glass	/	/	/	/	/	/	/	/

Suggested Material Settings for Aurora lite-50w

Matrerial	Marking Result	Speed (mm/s)	Power %	Frequency KHz	Fill Mode	Line Interval (mm)	No. of Passes
304 Stainless Steel	Black	200mm/s	10%	100KHZ	Bi-directional	0.02mm	10
	White	1700mm/s	20%	50KHZ	CrossHatch	0.02mm	1
Carbon Steel	Black	100mm/s	10%	50KHZ	CrossHatch	0.02mm	1
	White	900mm/s	20%	60KHZ	Bi-directional	0.02mm	1
Brass	Black	100mm/s	50%	50KHZ	Bi-directional	0.02mm	1
	White	400mm/s	30%	50KHZ	Bi-directional	0.02mm	1
Aluminium	White	3500mm	80%	50KHZ	Bi-directional	0.02mm	1
ABS	Black	1000mm/s	20%	50KHZ	Bi-directional	0.04mm	1
Mirror Finished Stainless Steel	Black	100mm/s	20%	90KHZ	Bi-directional	0.02mm	1
	White	1000mm/s	30%	80KHZ	Bi-directional	0.04mm	1
Galvanized Iron Sheet	Black	100mm/s	40%	100KHZ	Bi-directional	0.028mm	1
	White	800mm/s	50%	100KHZ	Bi-directional	0.0423mm	1
Slate	White	200mm/s	20%	60KHZ	Bi-directional	0.02mm	1
Magnesium Sheet	White	4000mm/s	40%	100KHZ	Bi-directional	0.02mm	1
	Black	100mm/s	40%	50KHZ	Bi-directional	0.02mm	1
Nickel Sheet	White	3000mm/s	30%	50KHZ	Bi-directional	0.02mm	1
	Black	100mm/s	40%	60KHZ	Bi-directional	0.005mm	1
Titanium Sheet	Ice mirror	1000mm/s	20%	100KHZ	Bi-directional	0.02mm	5
	Dark Blue	100mm/s	10%	90KHZ	Bi-directional	0.001mm	1
Black Acrylic Sheet	White	3500mm	15%	100KHZ	Bi-directional	0.02mm	2
Gold	White	1000mm/s	35%	50KHZ	CrossHatch	0.02mm	3
Silver	White	1000mm/s	30%	50KHZ	CrossHatch	0.02mm	1
	Black	50mm/s	70%	50KHZ	Bi-directional	0.01mm	3
PU leatherette	Black	1000mm/s	25%	50KHZ	Bi-directional	0.045mm	1
PET	Black	4000mm/s	45%	50KHZ	Bi-directional	0.02mm	1
PBT	Black	3000mm/s	40%	100KHZ	Bi-directional	0.02mm	1