```
GET DATA
  /TYPE=TXT
  /FILE='C:\Users\common\Desktop\Color Correction\p3700_predicitionAnova.csv'
  /DELCASE=LINE
  /DELIMITERS=","
  /ARRANGEMENT=DELIMITED
  /FIRSTCASE=2
  /IMPORTCASE=ALL
  /VARIABLES=
  Display A6
  Model A11
  Bg A6
  Distance F11.9
  index F2.0.
CACHE.
EXECUTE.
UNIANOVA Distance BY Bg Model Display
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=Display Model Bg(BONFERRONI)
  /CRITERIA=ALPHA(0.05)
  /DESIGN=Bg Model Display Bg*Model Bg*Display Model*Display Bg*Model*Display
.
```

Univariate Analysis of Variance

Notes

Output Created		20-May-2013 13:06:22
Comments		
Input	Data	C:\Users\common\Desktop\Color Correction\p3700_predicitionAnova.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	231288
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Distance BY Bg Model Display /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Display Model Bg (BONFERRONI) /CRITERIA=ALPHA(0.05) /DESIGN=Bg Model Display Bg*Model Bg*Display Model*Display Bg*Model*Display.
Resources	Processor Time	0:00:00.905
	Elapsed Time	0:00:00.909

[DataSet1]

Warnings

Post hoc tests are not performed for Model because there are fewer than three groups.

Post hoc tests are not performed for Bg because there are fewer than three groups.

Between-Subjects Factors

		N
Bg	Behind	115644
	front	115644
Model	BinModel	115644
	DirectModel	115644
Display	BigPro	77096
	Phone	77096
	SmallP	77096

Tests of Between-Subjects Effects

Dependent Variable:Distance

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2.306E7	11	2095952.746	20063.254	.000
Intercept	6.721E7	1	6.721E7	643374.832	.000
Bg	2144316.701	1	2144316.701	20526.212	.000
Model	1.045E7	1	1.045E7	100012.525	.000
Display	8139368.031	2	4069684.016	38956.557	.000
Bg * Model	876366.053	1	876366.053	8388.908	.000
Bg * Display	463332.736	2	231666.368	2217.598	.000
Model * Display	577090.791	2	288545.396	2762.066	.000
Bg * Model * Display	406973.387	2	203486.694	1947.852	.000
Error	2.416E7	231276	104.467		
Total	1.144E8	231288			
Corrected Total	4.722E7	231287			

a. R Squared = .488 (Adjusted R Squared = .488)

Post Hoc Tests

Display

Multiple Comparisons

Distance
Bonferroni

(I) Display	(J) Display	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
BigPro	Phone	-1.4069038E1	…	.000	-1.4193665E1	-1.3944410E1
	SmallP	-3.8867732E0	…	.000	-4.0114004E0	-3.7621460E0
Phone	BigPro	1.40690381E1	…	.000	1.3944410E1	1.4193665E1
	SmallP	1.01822648E1	…	.000	1.0057637E1	1.0306892E1
SmallP	BigPro	3.88677325E0	…	.000	3.7621460E0	4.0114004E0
	Phone	-1.0182264E1	…	.000	-1.0306892E1	-1.0057637E1

Based on observed means.
The error term is Mean Square(Error) = 104.467.

*. The mean difference is significant at the 0.05 level.

```
SORT CASES  BY Bg.
SPLIT FILE LAYERED BY Bg.
* Chart Builder.
GGRAPH
```

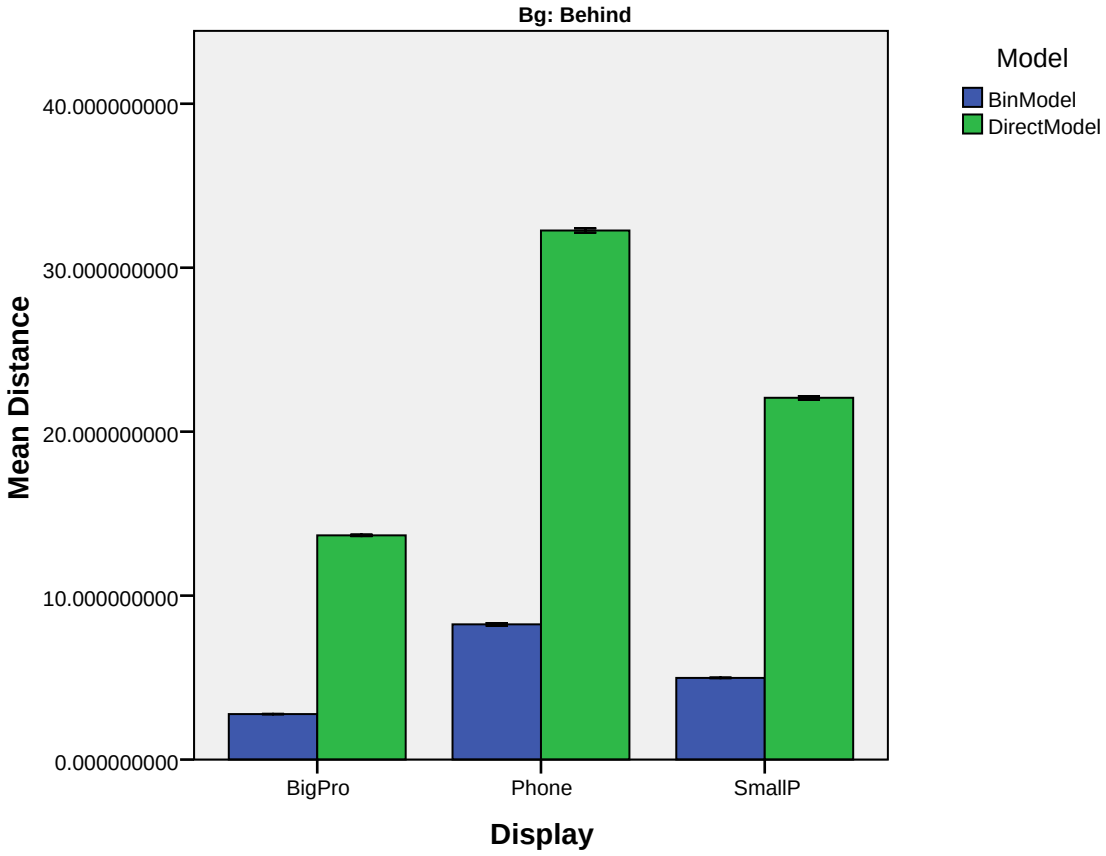
```
  /GRAPHDATASET NAME="graphdataset" VARIABLES=Display MEANSE(Distance, 1)[nam
e="MEAN_Distance" LOW="MEAN_Distance_LOW" HIGH="MEAN_Distance_HIGH"] Model MI
SSING=LISTWISE REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: Display=col(source(s), name("Display"), unit.category())
  DATA: MEAN_Distance=col(source(s), name("MEAN_Distance"))
  DATA: Model=col(source(s), name("Model"), unit.category())
  DATA: LOW=col(source(s), name("MEAN_Distance_LOW"))
  DATA: HIGH=col(source(s), name("MEAN_Distance_HIGH"))
  COORD: rect(dim(1,2), cluster(3,0))
  GUIDE: axis(dim(3), label("Display"))
  GUIDE: axis(dim(2), label("Mean Distance"))
  GUIDE: legend(aesthetic(aesthetic.color.interior), label("Model"))
  GUIDE: text.footnote(label("Error Bars: +/- 1 SE"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: interval(position(Model*MEAN_Distance*Display), color.interior(Mod
el), shape.interior(shape.square))
  ELEMENT: interval(position(region.spread.range(Model*(LOW+HIGH)*Display)),
shape.interior(shape.ibeam))
END GPL.
```

GGraph

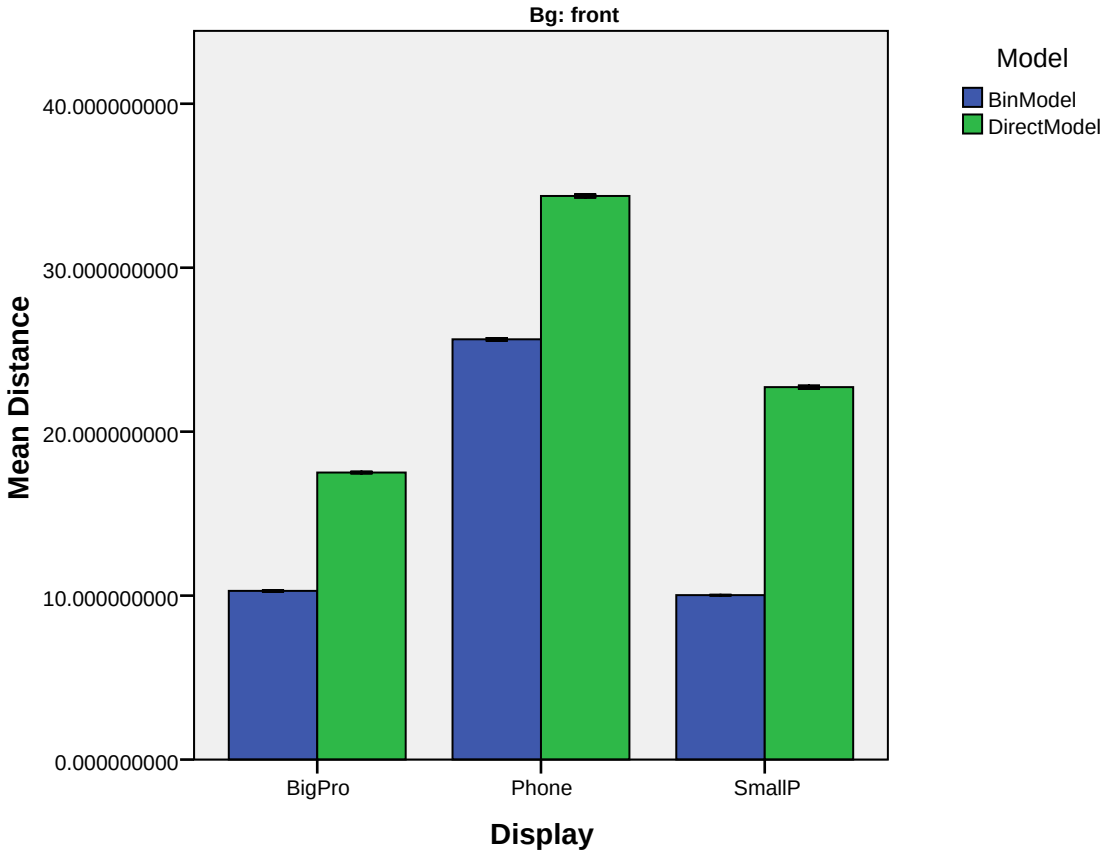
Notes

Output Created		20-May-2013 13:07:46
Comments		
Input	Data	C:\Users\common\Desktop\Color Correction\p3700_predicitionAnova.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	Bg
	N of Rows in Working Data File	231288
Syntax		GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=Display MEANSE(Distance, 1)[name="MEAN_Distance" LOW="MEAN_Distance_LOW" HIGH="MEAN_Distance_HIGH"] Model MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource(id("graphdataset")) DATA: Display=col(source(s), name("Display"), unit.category()) DATA: MEAN_Distance=col(source(s), name("MEAN_Distance")) DATA: Model=col(source(s), name("Model"), unit.category()) DATA: LOW=col(source(s), name("MEAN_Distance_LOW")) DATA: HIGH=col(source(s), name("MEAN_Distance_HIGH")) COORD: rect(dim(1,2), cluster(3,0)) GUIDE: axis(dim(3), label("Display")) GUIDE: axis(dim(2), label("Mean Distance")) GUIDE: legend(aesthetic(aesthetic.color.interior), label("Model")) GUIDE: text.footnote(label("Error Bars: +/- 1 SE")) SCALE: linear(dim(2), include(0)) ELEMENT: interval(position(Model*MEAN_Distance*Display), color.interior(Model), shape.interior(shape.square)) ELEMENT: interval(position(region.spread.range(Model*(LOW+HIGH)*Display)), shape.interior(shape.ibeam)) END GPL.
Resources	Processor Time	0:00:00.655
	Elapsed Time	0:00:00.676

[DataSet1]



Error Bars: +/- 1 SE



Error Bars: +/- 1 SE

```
UNIANOVA Distance BY Bg Model Display
  /METHOD=SSTYPE(3)
  /INTERCEPT=INCLUDE
  /POSTHOC=Display(BONFERRONI)
  /CRITERIA=ALPHA(0.05)
  /DESIGN=Bg Model Display Bg*Model Bg*Display Model*Display Bg*Model*Display
.
```

Univariate Analysis of Variance

Notes

Output Created		20-May-2013 13:10:24
Comments		
Input	Data	C:\Users\common\Desktop\Color Correction\p3700_predicitionAnova.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	Bg
	N of Rows in Working Data File	231288
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		UNIANOVA Distance BY Bg Model Display /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Display (BONFERRONI) /CRITERIA=ALPHA(0.05) /DESIGN=Bg Model Display Bg*Model Bg*Display Model*Display Bg*Model*Display.
Resources	Processor Time	0:00:00.811
	Elapsed Time	0:00:00.812

[DataSet1]

Between-Subjects Factors

Bg			N
Behind	Bg	Behind	115644
	Model	BinModel	57822
		DirectModel	57822
	Display	BigPro	38548
		Phone	38548
		SmallP	38548
front	Bg	front	115644
	Model	BinModel	57822
		DirectModel	57822
	Display	BigPro	38548
		Phone	38548
		SmallP	38548

Tests of Between-Subjects Effects

Dependent Variable:Distance

Bg	Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Behind	Corrected Model	1.232E7	5	2464494.432	19983.252	.000
	Intercept	2.267E7	1	2.267E7	183841.742	.000
	Bg	.000	0	.	.	.
	Model	8688137.318	1	8688137.318	70447.405	.000
	Display	2803803.620	2	1401901.810	11367.263	.000
	Bg * Model	.000	0	.	.	.
	Bg * Display	.000	0	.	.	.
	Model * Display	830531.223	2	415265.611	3367.164	.000
	Bg * Model * Display	.000	0	.	.	.
	Error	1.426E7	115638	123.328		
	Total	4.926E7	115644			
	Corrected Total	2.658E7	115643			
front	Corrected Model	8.589E6	5	1717738.269	20065.516	.000
	Intercept	4.668E7	1	4.668E7	545321.728	.000
	Bg	.000	0	.	.	.
	Model	2636261.243	1	2636261.243	30795.111	.000
	Display	5798897.147	2	2899448.574	33869.497	.000
	Bg * Model	.000	0	.	.	.
	Bg * Display	.000	0	.	.	.
	Model * Display	153532.956	2	76766.478	896.737	.000
	Bg * Model * Display	.000	0	.	.	.
	Error	9899362.767	115638	85.606		
	Total	6.517E7	115644			
	Corrected Total	1.849E7	115643			

a. R Squared = .464 (Adjusted R Squared = .464)

b. R Squared = .465 (Adjusted R Squared = .465)

Post Hoc Tests

Display

Multiple Comparisons

Distance
Bonferroni

Bg	(I) Display	(J) Display	Mean Difference (I-J)	Std. Error	Sig.
Behind	BigPro	Phone	-1.2032610E1	…	.000
		SmallP	-5.2984656E0	…	.000
	Phone	BigPro	1.20326103E1	…	.000
		SmallP	6.73414469E0	…	.000
	SmallP	BigPro	5.29846565E0	…	.000
		Phone	-6.7341446E0	…	.000
front	BigPro	Phone	-1.6105465E1	…	.000
		SmallP	-2.4750808E0	…	.000
	Phone	BigPro	1.61054659E1	…	.000
		SmallP	1.36303850E1	…	.000
	SmallP	BigPro	2.47508085E0	…	.000
		Phone	-1.3630385E1	…	.000

Based on observed means.
The error term is Mean Square(Error) = 85.606.

*. The mean difference is significant at the 0.05 level.

Multiple Comparisons

Distance
Bonferroni

Bg	(I) Display	(J) Display	95% Confidence Interval	
			Lower Bound	Upper Bound
Behind	BigPro	Phone	-1.2224111E1	-1.1841109E1
		SmallP	-5.4899669E0	-5.1069643E0
	Phone	BigPro	1.1841109E1	1.2224111E1
		SmallP	6.5426434E0	6.9256459E0
	SmallP	BigPro	5.1069643E0	5.4899669E0
		Phone	-6.9256459E0	-6.5426434E0
front	BigPro	Phone	-1.6265014E1	-1.5945916E1
		SmallP	-2.6346298E0	-2.3155318E0
	Phone	BigPro	1.5945916E1	1.6265014E1
		SmallP	1.3470836E1	1.3789934E1
	SmallP	BigPro	2.3155318E0	2.6346298E0
		Phone	-1.3789934E1	-1.3470836E1

Based on observed means.
The error term is Mean Square(Error) = 85.606.

Homogeneous Subsets