



RECOMMENDED ACTION FOR FIELD MACHINES

- AT SETUP NEXT SERVICE CALL
 NEXT PM INFORMATION ONLY

GENERAL TECHNICAL BULLETIN

Bulletin # GENERAL #97	Model See Page 7	Date 02/28/14
Updated Serial Number N/N (CDN)		
Subject MFP/PRINTER THREE TIER COLOR COVERAGE BILLING		
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Multi Functional Products

The following pages will give examples and an understanding of how to set Three Tier Color coverage values so you can bill your customer accordingly based on toner usage.

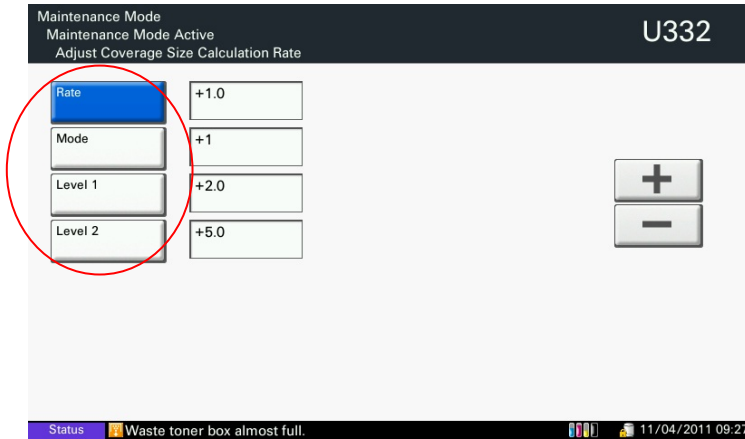
On Color MFP's Maintenance Mode 332 is used to track Toner Coverage to bill your Customer accordingly. Three levels of Toner Coverage will be displayed (Level 1, Level 2 and Level 3) on the Status Page. One count will be added to each paper size based on the percentage of coverage you set in U332.

Counters	Color			Monochrome B & W	Total
	Level1	Level2	Level3		
Copy	8179	6792	11087	0	36367
Printer	1900	5193	15527	-	50494
FAX	-	-	-	-	5
Total	10079	11985	26614	0	86866
Paper Size					
A3	2	0	0	0	2
B4	0	0	0	0	0
A4	609	8	261	0	928
B5	0	0	0	0	0
A5	0	0	0	0	0
Folio	0	0	0	0	0
Ledger	616	238	7116	0	10710
Legal	66	16	12	0	133
Letter	8782	11722	19141	0	74992
Statement	0	0	0	0	0
Banner 1	0	0	80	0	80
Banner 2	0	0	0	0	0
Other1	0	0	0	0	12
Other2	4	1	4	0	9
Scanned Pages					
Copy					4616
FAX					50
Other					10263
Total					14929

IMPORTANT

Maintenance Mode 260 (Selecting the timing for copy counting) will affect these counters. If Maintenance Mode 260 is set to **Feed**, all printed pages will count under **Level 3**. In order to have pages track accurately for all three levels, you must set Maintenance Mode 260 to **Eject**. Default is Eject.

When you enter U332 you have four settings as shown. (Rate, Mode, Level 1 and Level 2)



1. Rate (Size Coefficient)

This is the rate of coverage based on paper size.

The initial factory setting of "1.0" means that all coverage, regardless of size, will be converted into Letter size.

Only change this setting if your customer runs a large quantity of an odd size paper. Ledger size should be set if double count is turned off. Legal size will be counted at .3% higher coverage than Letter size paper.

Paper Size Name	Measurements (inch)		"Value" Conversion of Letter size
Ledger	11.000	17.000	2.0
Legal	8.500	14.000	1.3
Letter	11.000	8.500	1.0
Statement	8.500	5.500	0.5
Executive	10.500	7.250	0.9
International C4	11.772	12.756	1.6
International C5	6.378	9.016	0.6
Commercial #10	4.125	9.500	0.5
Commercial #9	3.875	8.875	0.4
Commercial #6-3/4	3.625	6.500	0.3

2. Mode

Mode set to "0" turns OFF all Levels so they do not show on the Status Page.

Mode set to "1" turns ON the Levels so you will see all three levels on the Status Page.

Regardless if they are set ON or OFF, they still count and store data. The Level Meters are just not visible on the Status Page.

3. Level 1 (Low Coverage Threshold Value)

Level 1 Tier can be set from 0.1% to 99.8% depending on what percent coverage you want the cut off for C/M/Y to be for that level based on Letter size Paper. **Default is 1%.**

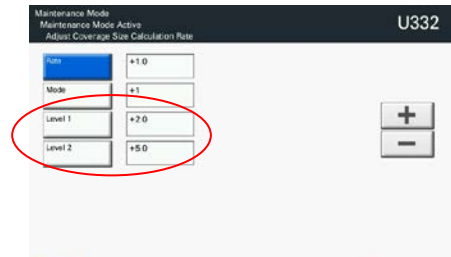
4. Level 2 (Middle Coverage Threshold Value)

Level 2 Tier can be set from 0.1% to 99.9% depending on what you want the cut off for C/M/Y to be for that level based on Letter size Paper. **Default is 2.5%.**

Example:

The U332 defaults are changed to the following:

Level 1 = 2%
Level 2 = 5%



Level 1 Setting: This equates to an average of 2% for each color (C/M/Y), for a total of 6% coverage.
Level 2 Setting: This equates to an average of 5% for each color (C/M/Y) for a total of 15% coverage.

- If the total C/M/Y averages 2% or less, the page counts under Level 1.
- If the total C/M/Y averages between 2% and 5%, the page counts under Level 2.
- If the total C/M/Y averages over 5%, the page would count under Level 3.

Example 1:

Cyan 2.3%, Magenta 2.3% Yellow 1%, Total 5.6 % coverage for all three colors. This would count under Level 1 because it is **below** 6% total coverage or averages 1.86% which is below the Level 1 setting of 2% in U332.

$$5.6\% \div 3 \text{ (C/M/Y)} = 1.9\%$$

If you are printing all Cyan with a total coverage of 5.6%. This would still count to Level 1 because you are below 6% total coverage or average 1.86%.

Example 2:

Cyan 2.1%, Magenta 2.3% Yellow 2%, Total 6.4 % coverage for all three colors. This would count under Level 2 because it is **above** 6% total coverage or averages 2.13% which is above the Level 1 setting of 2% in U332 and does not exceed the Level 2 setting of 5%.

Example 3:

Cyan 5.9%, Magenta 4.2% Yellow 5%, Total 15.1 % coverage for all three colors. This would count under Level 3 because it is **above** 15% total coverage or average 5.03% which is above the Level 2 setting of 5% in U332.

Why Would You Use This Feature?

Setting these values on your customers MFP will ensure that you bill your customer for the percentage of true color toner used. This is a huge benefit for your customer as it results in a big reduction in costs per print for low color usage. If your Customer is using a large number of high coverage prints, you can bill extra for the higher coverage.

You can set up three billing categories' based on toner coverage:

- The First Level can be used for documents with low toner coverage such as Letterhead or Spot Color.
- The Second Level can be used for normal day to day color documents.
- The Third can be used to bill for documents with high coverage.

Setting up a tiered billing approach allows you to properly charge your customer for true color toner usage.

The Status Page below shows Counts based on the settings of Level 1 at 2% and Level 2 at 5% for U332.

Counters	Color			MonoColor B & W		Total
	Level1	Level2	Level3			
Copy	8179	6792	11087	0	10309	36367
Printer	1900	5193	15527	-	27874	50494
FAX	-	-	-	-	5	5
Total	10079	11985	26614	0	38188	86866
Paper Size						
A3	2	0	0	0	0	2
B4	0	0	0	0	0	0
A4	609	8	261	0	50	928
B5	0	0	0	0	0	0
A5	0	0	0	0	0	0
Folio	0	0	0	0	0	0
Ledger	616	238	7116	0	2740	10710
Legal	66	16	12	0	39	133
Letter	8782	11722	19141	0	35347	74992
Statement	0	0	0	0	0	0
Banner 1	0	0	80	0	0	80
Banner 2	0	0	0	0	0	0
Other1	0	0	0	0	12	12
Other2	4	1	4	0	0	9
Scanned Pages						
Copy					4616	
FAX					50	
Other					10263	
Total					14929	

Letter Size shows the following:

8782: pages at 2% or below
 11722: pages are between 2% and 5%
 19141: pages are over 5%

The Status Page below shows Print Coverage for the Last Page printed K/C/M/Y (%) so you can check the calculated % of the last page printed.

Last Page K: 6.94 / C:28.41 / M: .31.76 / Y / 29.35

Print Coverage
Average (%) / Usage Page(A4/Letter Conversion)

Total		
K:	7.08	/ 87050.70
C:	4.91	/ 48622.00
M:	4.55	/ 48602.00
Y:	4.81	/ 48623.00
Copy		
K:	8.20	/ 36393.90
C:	3.46	/ 26085.90
M:	3.47	/ 26084.90
Y:	4.30	/ 26085.90
Printer		
K:	6.27	/ 50651.20
C:	6.58	/ 22536.10
M:	5.81	/ 22517.10
Y:	5.41	/ 22537.10
FAX		
K:	2.91	/ 5.60
Period	(- 11/04/2011 09:52)
Last Page K/C/M/Y(%)	6.94 / 28.41 / 31.76 / 29.35	

Printers

Setting Print Coverage parameters is a little different on a Color Printer. A PRESCRIBE Command is necessary to turn on the feature and make the settings. A PRESCRIBE command can be sent to the Printer using different methods. The recommended method is to create the command in Notepad and send it to the printer using ICLink or KYOCERA NET Direct Print. Print a status page and confirm the setting.

It is not necessary to be familiar with PRESCRIBE to apply one of these settings; however, Technical Services recommends attending our Classroom Training Course to understand the full benefits, create printing solutions and apply these settings using simple PRESCRIBE Commands.

When writing a PRESCRIBE command, it is important that the command string be written with correct spaces, commas, and correct case at the beginning. Except for the initial !R!, PRESCRIBE commands may be written in lowercase letters if preferred.

Setting the Coverage Counter ON/OFF.

Command Format String	!R! KCFG "TCCM",#;EXIT;
Parameter	0 = (Only One Step) Full Color Counter : Default Value 1 = Color Coverage Counter

Example 1:

```
!R! KCFG "TCCM",1;EXIT;
```

Note that the number sign was replaced by a ,1, (This command will change the Color counter to Three Tier and be displayed on the Status page)

Example 2:

```
!R! KCFG "TCCM",0;EXIT;
```

Note that the number ,1, was replaced by a ,0, (This is the initial default setting which will be the Full Color Counter.) If you intend to turn Three Tier OFF, this string will need to be sent.

Note the spacing after each character string, commas and semicolon after the EXIT. Every character is important.

Setting the Three Tier Parameters

You will set the break points for Level 1 and Level 2 using PRESCRIBE commands.

- Level 1 Tier: If the value is set to 20 (2%) for Level 1, all prints with a total C/M/Y average of 2% or less will be counted as low coverage.
- Level 2 Tier: If the value is set to 50 (5%) for Level 2, all prints with a total average between 2% and 5% coverage will be counted as mid coverage.
- Level 3 Tier: All prints with a total C/M/Y average over the Level 2 set value of 5% will be counted as high coverage and can be billed accordingly.

Note: The averages of CMY are calculated and applied to the correct count, based on the percentage of the setting.

Command Format String	!R! KCFG "STCT",#,#; EXIT;	
Parameter	Level 1 (Low Coverage)	!R! KCFG "STCT", 1 ,#; EXIT; The Level 1 value # can be set from 1 to 999, in 0.1% increments If the total C/M/Y averages 2% or less, the page counts under Level 1 as low coverage.
	Level 2 (Middle Coverage)	!R! KCFG "STCT", 2 ,#; EXIT; The Level 2 value # can be set from 1 to 999, in 0.1% increments If the total C/M/Y averages between 2% and 5%, the page counts under Level 2 as middle coverage.
	Level 3 (High Coverage)	If the total C/M/Y averages over 5%, the page would count under Level 3. High coverage.

Example 1:

Set the Low Coverage Value to 2%.

!R! KCFG "STCT",**1**,**20**; EXIT;

With reference to the Command format in the chart above. The First Number ,#, sign in our example is a **,1**, This references the Level 1 Tier we are setting.

The second ,#, sign references the coverage VALUE. Here we set Level 1 Tier to 2%, with the value **,20**,

If the second ,#, sign was set to ,100, low coverage would be 10%

Example 2:

Set the Middle Coverage Value to 5%.

!R! KCFG "STCT",**2**,**50**; EXIT;

With reference to the Command format in the chart above. The First Number ,#, sign in our example is a **,2**, This references the Level 2 Tier we are setting.

The second ,#, sign references the coverage VALUE. Here we set Level 2 Tier to 5%, with the value **,50**,

If the second ,#, sign was set to ,45, low coverage would be 4.5%

Level 3 Tier would show counts with a coverage of 5% or above.

Three Tier Color Count Support

MFP's	Printer's
3050ci/3550ci/4550ci/5550ci	ECOSYS P6021cdn/6026cdn
6550ci/7550ci	ECOSYS P6030cdn
3051ci/3551ci/4551ci/5551ci	
6551ci/7551ci	
2551ci	

Support for future Color Products will be announced in Technical Bulletin #1, NEW MODEL PRODUCT INFORMATION.

If you have questions regarding the information in this Technical Bulletin, please contact our Diagnostic Center toll free at 1-800-268-4735.