

# DataMagic

## New Function Description

DataMagic has eight functions. The Scanner allows a maximum of 10 Rules. Functions are described below.

Each Rule has the following structure:

Leading+RuleNo.+Action+Parameter1+ Parameter2

**Leading:** 9 indicates DataMagic

**RuleNo.:** 0~9 indicates Rule No. 0 ~ No.9

RULE List:



**Action:** 0~9,

0->Insert Front,



1->Cut Front,



2->Cut Back,



3-> Replace,



4->Keep Front,



5->Keep Back,



6-> Find & Cut Front,



7-> Find & Cut Back.



8->Insert Back,



9->Erase



**Parameter1:** Each function is indicated differently.

**Parameter2:** Each function is indicated differently.

- To erase all of the DataMagic setting values, just scan the \$%-9ZZ%% barcode below.



- To display all of the current related setting results, scan :



Program



(Displays DataMagic settings)

OR



(Displays Inserted Group settings)



## Example Data

Original Barcode Data: ARGOX89121121

Insert Group 1: ARGOX

Insert Group 2: argox

Insert Group 3: GOX

Insert Group 4: Tel:

**Insert Front:** In the original data, insert a group at a specified position from the front. Para1 specifies the insert position (starting from position 0). Para2 specifies the group to insert.

Example:

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE1	Insert Front	0	5	0	4	

RULE1 (Rule No.) Insert Front (Action) -- at the 5th position from the front (Para1) insert Group 4 (Para2).

Data : ARGOX89121121

Result : ARGOX**Tel:**89121121

Programming for the example above:



\*\$%+PR0\*

Program



\*90\*

RULE1



\*/0\*

Insert Front



\*/0\*



\*/5\*

Para1 (Two digits)



\*/0\*



\*/4\*

Para2 (Two digits)



Finish



\*%%\*



Exit



\*%\$\$\*

## Scan Utility Example

Scanner Setup

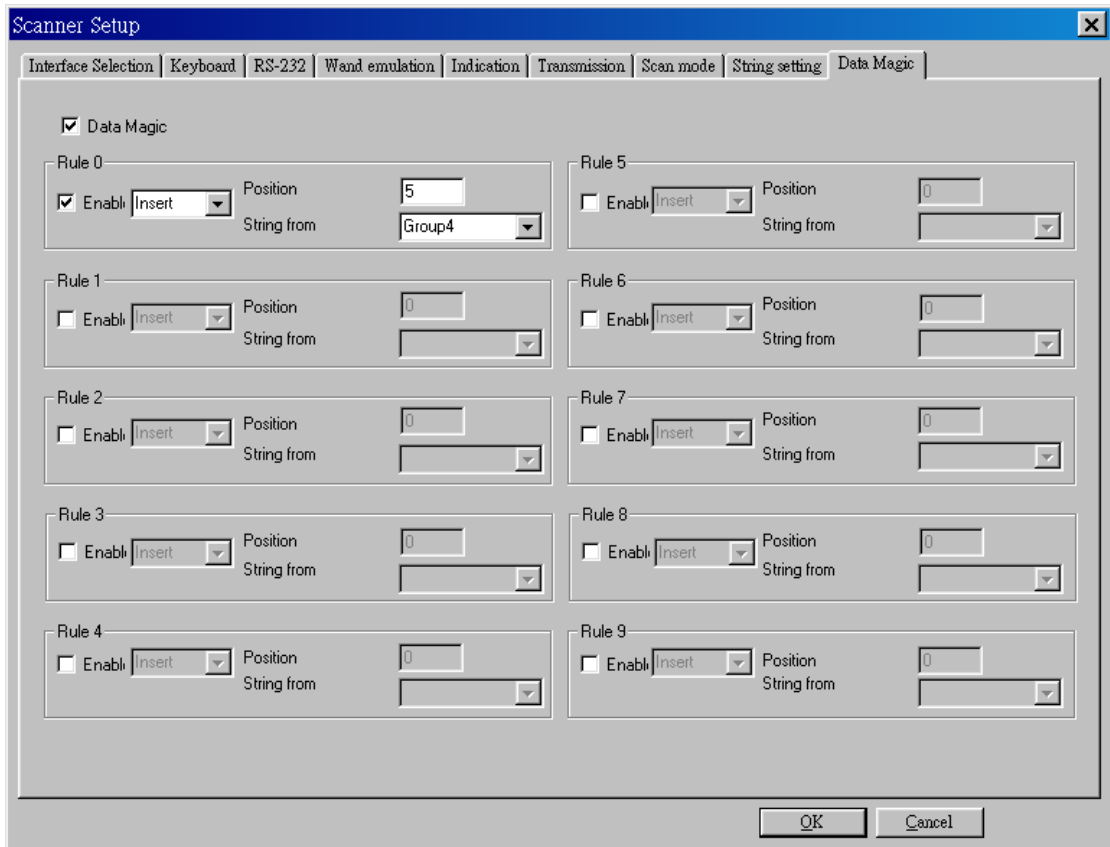
Interface Selection | Keyboard | RS-232 | Wand emulation | Indication | Transmission | Scan mode | String setting | Data Magic

String Setting

String setting

Prefix characters setting (No more than 12 characters)		Insert G7 characters setting (No more than 12 characters)	GROUP7
Suffix characters setting (No more than 12 characters)		Insert G8 characters setting (No more than 12 characters)	GROUP8
Preamble characters setting (No more than 12 characters)	PREAMBLE	Insert G9 characters setting (No more than 12 characters)	GROUP9
Postamble characters setting (No more than 12 characters)	POSTAMBLE	Insert G10 characters setting (No more than 12 characters)	GROUP10
Insert G1 characters setting (No more than 12 characters)	GROUP1	Configuration ID (No more than 4 characters)	ID
Insert G2 characters setting (No more than 12 characters)	GROUP2	GTIN ID (No more than 2 characters)	G
Insert G3 characters setting (No more than 12 characters)	GROUP3		
Insert G4 characters setting (No more than 12 characters)	TEL		
Insert G5 characters setting (No more than 12 characters)	GROUP5		
Insert G6 characters setting (No more than 12 characters)	GROUP6		

OK Cancel



**Cut Front:** From the front of the original barcode data, cut the data from the Para1 position to the Para2 position.

Example:

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE2	Cut Front	0	1	0	5	

RULE2 (Rule No.) Cut Front (Action) – cut from the front 1st position (Para1) to the 5th position (Para2).

Data : ARGOX89121121

Result : 89121121

**Cut Back:** From the back of the original barcode data, cut the data from the Para1 position to the Para2 position.

Example:

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE3	Cut Back	0	1	0	8	

RULE3 (Rule No.) Cut Back (Action) – cut from the back 1st position (Para1) to the 8th position (Para2).

Data : ARGOX89121121

Result : ARGOX

**Replace:** In the original data group, replace (Para1) with (Para2).

Example:

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE4	Replace	0	1	0	4	

RULE4 (Rule No.) Replace (Action) – replace Group1 (Para1) with Group4 (Para2).

Data : ARGOX89121121

Result : Tel: 89121121



**Keep Front:** From the front of the original barcode data, keep the data from the Para1 position to the Para2 position.

Example:

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE5	Keep Front	0	3	0	8	

RULE5 (Rule No.) Keep Front (Action) – keep from the front 3rd position (Para1) to the 8th position (Para2).

Data : ARG**OX891**21121

Result : GOX891

**Keep Back:** From the back of the original barcode data, keep the data from the Para1 position to the Para2 position.

Example:

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE6	Keep Back	0	3	0	8	

RULE6 (Rule No.) Keep Back (Action) – keep from the back 3rd position (Para1) to the 8th position (Para2).

Data : ARG**OX891211**21

Result : 891211

**Find & Cut Front:** From the original barcode data, find and cut Para1 and the data in front of it. With Para2 you can control whether to cut Para1.

Example:

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE7	Find & Cut Front	0	3	0	1	

RULE7 (Rule No.) Find & Cut Front (Action) -- find Group3, cut it and the data in front of it (Para1). Cut the Group3 data (Para2).

Data : ARGOX89121121

Result : **89121121**

If Para2 is "0" then don't cut Group 3,

Result : **GOX89121121**

**Find & Cut Back:** From the original barcode data, find and cut the data behind Para1. With Para2 you can control whether to cut Para1.

Example:

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE8	Find & Cut Back	0	3	0	1	

RULE8 (Rule No.) Find & Cut Back (Action) -- find Group3, cut it and the data behind it (Para1). Cut Group3 (Para2).

Data : ARGOX89121121

Result : AR

If Para2 is "0" then don't cut Group 3,

Result : ARGOX

## New Functions

**Insert Back:** In the original data, insert a group at a specified position from the back. Para1 specifies the insert position (starting from the back). Para2 specifies the group to insert.

Example:

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE0	Insert Back	0	9	0	4	

RULE0 (Rule No.) Insert Back (Action) -- at the 9th position from the back (Para1) insert Group 4 (Para2).

Data : ARGOX89121121

Result : ARGOX**Te**l: 89121121

**Erase:** Erase Rule

Example:

Program	RuleNo.	Action	Para1	Para2	Exit
	RULE0	Erase	None		

# 1. Multi-Condition Examples:

(1)

Original Barcode Data: 9908311234565678

If you wish to output: 78[TAB]AA0931[TAB]S/N :123456

(1) First set the content of Insert Group1~4.

1. Insert G1 :99
2. Insert G2 :AA
3. Insert G3 :0x09([TAB] ASCII Value)
4. Insert G4 :[TAB]S/N

(2) Set the Rules as follows

1. 9030102 (Replace 99 with AA)
2. 9100003 (At the first 0 insert [TAB])
3. 9200604 (At the sixth position insert [TAB] S/N)
4. 9350102 (Keep the first and second characters from the back)
5. 9440106 (Keep the first six characters from the front)
6. 95407012 (Keep the 7<sup>th</sup> to the 12<sup>th</sup> characters from the front)

2. Multi-Conditions Example:

Original Barcode Data: ARGOX89121121

If you wish to output: 89121121ARGOX

1. 9050108 (First keep the 1<sup>st</sup> to the 8<sup>th</sup> characters starting from the back)

2. 9140105 (Keep the 1<sup>st</sup> to the 5<sup>th</sup> characters starting from the front)

(2)

Original Barcode Data

UPCA barcode content: **471173407062()**

G1: (1173)

G2: ARGOX

G3: 1173

G4: 07062

*NAK02*

Set UPCA to open with EAN13

*6AJ01*

Output the barcode name

*6AI01*

Output the barcode length

*6AH01*

Output the barcode ID

*6AA01*

Output the Preamble

*6AB01*

Output the Postamble

*6AD04*

Set Insert G2 at the 4<sup>th</sup> position

*6AF08*

Set Insert G4 at the 4<sup>th</sup> position

Because of NAK02, subsequent settings must be set according to EAN13

*GAI24*

Set Insert G2 and G4

*GAF01*

Truncate leading at the first position

*GAG01*

Truncate ending at the first position

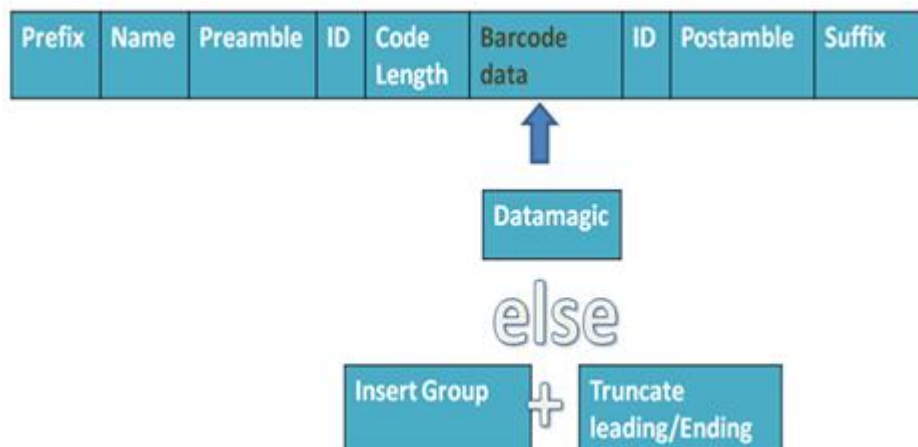
*8AA41*

Set the Prefix as 'A'

Since truncate has high priority, the result so far is:

**A(EAN-13)PREAMBLEF234711GROUP27340GROUP4706POSTAMBLE**

Please refer to the output sequence, the String setting/Transmission (Prefix/Suffix) content is explained.



*GAC01*

Since the output barcode is EAN13, the barcode options can open DataMagic functions.

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE1	Keep Front	0	1	0	3	

9060103

Keep data from 3<sup>rd</sup> to 6<sup>th</sup> character from the front as the first group

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE2	Keep Back	0	7	1	0	

9170710

Keep the 7<sup>th</sup> to 10<sup>th</sup> characters from the back as the second group

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE3	Insert Front	0	0	0	1	

9200101

Insert Group 1 at the 0 position in the front

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE4	Insert Back	1	1	0	2	

9381102

Insert Group 2 at the 11<sup>th</sup> position from the back



Program	RuleNo.	Action	Para1		Para2		Exit
	RULE5	Cut Back	0	6	1	1	

9410203

Cut the 2<sup>nd</sup> and 3<sup>rd</sup> characters from the back

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE6	Cut Front	0	2	0	3	

9510203

Cut the 2<sup>nd</sup> and 3<sup>rd</sup> characters from the front

Program	RuleNo.	Action	Para1		Para2		Exit
	RULE7	Cut Front	0	1	0	2	

9610101

Cut the 1<sup>st</sup> and 2<sup>nd</sup> characters from the front

DataMagic operates according to the positions in the original barcode data. The output results are:

**A(EAN-13)PREAMBLEF16(1173)ARGOX71173POSTAMBLE**