# Metrologic®

# *MS9530 VOYAGER RF*

# *BASE STATION MANUAL*

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# *Introduction*

The Base Station is a interface decoder to which the Voyager RF is connected via RF. Its function is to receive data via RF from Vo yager RF and transmit it to the Host.

Therefore, the Base Station is the GateWay of the Voyager RF to the HOST

**It's very powerfull and fully-programmable**, because it combines the ultimate RISC processor technology with our software know-how.

# *Description*

## General characteristics

### Multi-function

The *Base Station* is an advanced communication interface that is capable of adapting the data format so that it transmits the data exactly as is required by a given application.

### Multi-interfaces

The *BASE STATION* integrates with the following popular interfaces:
1- Keyboard - wedge communication
2- RS232C (using the RS232 cable)
3- TTL Serial ASCII
4- TTL Wand Emulation
5- OCIA

### Multi-programming mode

The *Base Station* can be programmed in 2 ways:
1) Downloading a configuration using a PC Windows™ program
2) Bar codes menu

# Interface port

The following interfaces are integrated:

**a)  Keyboard - wedge emulation (using an Y-xx cable)**

>  The *BASE STATION* must be connected between
>  keyboard and terminal or PC with an "Y" cable.
>  Data is transmitted to the terminal in a format that
>  emulates signals from the terminal's keyboard.

**b)  RS232C (using the single/dual RS232C output cable, ref. M-01)**

>  The pin assignement of the DB25 female connector
>  single RS232 output cable is:
>
>  2- TX Output
>  3- RX Input
>  4- RTS Output
>  5- CTS Input
>  7- GND
>  13-  Vcc (DC.5v) Output/Input

---

c)   **TTL Serial ASCII**

The RJ45 output port pin assignement is:

4 - RX Input
8 - TX Output
6 - GND
7 - CTS Input

d)   **TTL Wand emulation**

The RJ45 output port pin assignement is:

5 - Vcc (DC 5v.) Input
6 - Ground
7 - Data Pen Bar Low
8 - Data Pen Bar High

## Physical characteristics

**Length:   85 x 83 x 86mm. Antenna Length: 182mm**
**Weight:   150g**
**Case:**          ABS.

# *Installation*

## Keyboard Wedge mode

The *Base Station* must be connected between the keyboard and the terminal with the "Y" cables series.

The list of terminals supported with the required cables is enclosed to this manual.

To install the *Base Station* in keyboard wedge mode follow these steps:

   1 - Turn off power to the terminal.

   2 - Install the correct *Base Station* cables plugging the 8 pins modular connector to the port labelled "interface".

   3 - Disconnect the keyboard from the terminal and plug the connectors of the *Base Station* cables in the keyboard and display.

   4 - Connect the power supply, if necessary. Power up the host. The *Base Station* will beep and after a short delay, will beep again.

   5 - Type on the keyboard to verify that the *Base Station* is transparent to the system.

   6 - Now, the *Base Station* is ready to work or, if necessary, to be configured. Please read *VoyagerRF Installation and User Guide* for details how to link Voyager RF to Base Station.

## RS232C Mode

The installation of the *Base Station* requires the M-01 cable and a power supply (figure 3). See page 2 - 5 for pin assigment.
To install the *BASE STATION* in RS232C Mode
follow these steps:

      1 - Turn off power to the terminal
      2 - Install the M-01 cable plugging the 8
pins modular          connector to the port.
        Plug the jack connector of the power supply.
      3 - Power up the terminal and configure RS232C *Base Station* parameters.

          NOTE: To update the configuration, *Base Station* should be powered off and on.

# *Configuration*

When you install *Base Station* for the first time, all of its parameters
are bset in the default position. If this configuration doesn't correspond
with your application, you must configurate it.

There are two main ways to configure a *Base Station* unit:

I)   Via the RS232 port of a IBM PC-AT, with the special Windows™
     based program.
     This user friendly software allows to updownload configurations to
     a large amount of *Base Stations* in a short time.
     No reader is required,  just this software and a RS232 cable
     (M-01 DB25/DB9)
      This ONLY applies to RS232 hardware configured *Base Stations*

II)  Via a BARCODE menu. The user must read bar codes to configure
     the *Base Station.* A bar code reader is required with one of the
     following interfaces: Laser, RS232 or Light pen emulation.

Once adjusted, the new parameters are saved in an Eprom (non
volatile memory) which keeps the parameters values even if power-off.

**Configuration**

# DOWNLOADING RS232 CONFIGURATION MODE

It is possible to configure the *Base Station* via a Windows™ PC program called "**BASESET**".

This program provides all the features of this manual without the need to use any reader, just simply connect the RS232 *Base Station* to the RS232 port of your PC (M-01 DB25/DB9 cable is required).

**"BaseSet"** allows to upload configurations from *Base Station* to PC, modify and download them again to *Base Station*.

**"BaseSet"** provides the posibility to download special configurations when large quantities of *Base Station*s require to be configured. Just simply fix your "Master" configuration and connect the *"Blank Base Station"* to the RS232 of your PC. After few seconds your *Base Station* will be configured.

All the possible explanations for the options in the *Base Station* program can be taken from this manual.

**"BaseSet"** is distributed free. Its aim is to make programming of the *Base Station* user-friendly.

**Configuration**

# BARCODE MENU

## STARTING BARCODE CONFIGURATION

If you want to configure the *Base Station* using barcode menus, install it in a terminal as described in "*Installation*". You then only have to scan the new desired parameters.
Please follow steps in "Installation and configuration Guide" to get a Base Station linked with Voyager RF.
The default parameters are mentioned all along the "Barcode Configuration" section with a "*" beside the corresponding bar code.

### *ENTER/EXIT Configuration*

The ENTER/EXIT configuration barcode should be read before starting configuration. Once you have changed all the parameters you need to read again this code in order to keep on working.

**ENTER/EXIT**

|||||||||||||||||

**SYSTEM COMMAND**

*Return to default*

This command returns the reader to the original default configuration

```
|||  ||||||  |||||
```

*Modify Parameters*

This command is used to test new parameters
temporarily without storing them in permanent memory. When you
power down the *BASE STATION*, it returns to the last set of
permanent parameters stored in memory.

```
|||  |||||||  |||
```

## *Update modified parameters*

This command stores in permanent memory the modifications done
with *"Modify Parameters".*



## *Recall last configuration*

This command returns the *BASE STATION* from modifications to the
last management stored parameters, without necessarily having to
power down the *BASE STATION*.



## *Display Prom version*

By scanning this label, the *BASE STATION* will display the prom
version.

## *Beeper activation*

Activate or deactivate the beeper.

**\* Activated**

**Not Activated**

## WEDGE PROGRAMMING

### *Terminal type*

To program a terminal type, *scan "terminal type"*, then scan the two digit terminal types in the appendix D from configuration list that corresponds to your terminal or PC.



### *Keyboard country type*

Scan the applicable keyboard country type label below that corresponds with your computer.

**\*  US**



**UK**



**German**



**French**



(.../...)

**Italian**



**Spanish**



**Norwegian**



**Belgian**



Interfaces

## *End of message control codes*

*BASE STATION* sends a control code after each message, which emulates a command key of the keyboard, allowing automatic entry data.

You can add any control character by reading *"User defined"* and then a code of the *"Control code table"* in Appendix B.

**\* Enter**

|||||||||||||||||||||||||||

**None**

|||||||||||||||||||||||||||

**Tab**

|||||||||||||||||||||||||||

**Field Advance**

|||||||||||||||||||||||||||

**Field Exit**

|||||||||||||||||||||||||||

**CR**

|||||||||||||||||||||||||||

**LF**

|||||||||||||||||||||||||||

**F1**

```
|||||||||||||||||||||||||
```

**F2**

```
|||||||||||||||||||||||||
```

**F3**

```
|||||||||||||||||||||||||
```

**F4**

```
|||||||||||||||||||||||||
```

**F5**

```
|||||||||||||||||||||||||
```

**F6**

```
|||||||||||||||||||||||||
```

Interfaces

**F7**

```
|||||||||||||||||||||||||
```

**F8**

```
|||||||||||||||||||||||||
```

**User Defined**

```
|||||||||||||||||||||||||
```

## Caps Lock activation

In order to transmit alphabetical characters in correct case, *BASE STATION* must be set for the caps lock position of the terminal keyboard to which it is interfaced. (BASE STATION will not check this option if Auto Caps Lock detection is active)

**\*  NOT Active**

**Active**

## Auto Caps Lock Detection

When it is impossible to determine the position of the Caps Lock, BASE STATION is able to detect its position automatically if this option is set. (Only available with AT and PS2 compatible).

**\*  NOT Active**

**Active**

## Alt Mode activation

When this mode is actived, the characters are sent to the keyboard like decimal codes.

For example: "A" letter is sent like ALT + 65.

**\* NOT Active**

**Active**

## *Numeric keypad activation*

When this mode is actived, the numeric characters are sent via the numeric keyboard.

**\* NOT Active**

**Active**

NOTE: The numeric keyboard should be active.

## *Control character activation*

"*Control Character Activation*" allows *BASE STATION* to send
characters below 20H with the following format:
If it is active, the character is sent to the keyboard like CTRL + X,
X is "A" for 00H, "B" for 01H, ...

*If "Control Character Activation"* is not active, *BASE STATION* will
send the received character to the keyboard like a control code.
For example, if 00H is received, it will emulate a "rigth arrow",  01H
will emulate a "left arrow", and so on. See appendix A.

**\*  NOT Active**



**Active**

## RS 232 OUTPUT

When this option is chosen, the decoded data is transmitted via
RS232. A special cable M-01 is required.



Interfaces

## WAND EMULATION

### *Same as read barcode*

When this option is chosen, the decoded data is transmitted like the read barcode.

||||||||||||||||||||||||||

### *Different as read barcode*

When this option is chosen, the decoded data is transmitted like Code 39.

||||||||||||||||||||||||||

### *High speed transmission*

*

||||||||||||||||||||||||||

### *Low speed transmission*

||||||||||||||||||||||||||

## BARCODE PARAMETERS

### *Minimum Length*
This option avoid to read barcodes with a length less than the user defined.

**NOTE**: When no minimum length checking is desired it should be fixed to 00.

**Minimum length**

## **RS-232 OUTPUT PARAMETERS**

### *Baud Rate*

A baud rate is a unit that measures the speed with which information is transfered. The baud rate of the *BASE STATION* must equal the baud rate of the RS-232 device. Select the rate that matches the device requirements.

**38400**

|||||||||||||||||||||||||

**19200**

|||||||||||||||||||||||||

**\* 9600**

|||||||||||||||||||||||||

**4800**

|||||||||||||||||||||||||

**2400**

|||||||||||||||||||||||||

**1200**

|||||||||||||||||||||||||

**600**

|||||||||||||||||||||||||

**300**

|||||||||||||||||||||||||

## Data Bits

RS-232 serial communication requires ASCII data to be transmitted in either 7 or 8 data bits. Select the option that matches the device requirement.

**\* 8 Data Bits**

**7 Data Bits**

## Parity

Parity is an additional bit that makes the number of bits in the ASCII code odd or even. The *BASE STATION*'s parity must match the RS-232 scanner or device.

**\* None**

**Even**

**Odd**

Others

## *Stop bits*

RS-232 serial communication requires one or two stop bits at the end of the data. Select the option that matches the device requirements.

**1 Stop bit**

||||||||||||||||||||||

\*   **2 Stop Bits**

||||||||||||||||||||||

## *RTS / CTS Output*

When this option is enabled, RTS / CTS hardware protocol is activated. *BASE STATION* will output a request to send (RTS) signal when it is ready to send any data and will wait for CTS before sending it.

**NOTE**: RTS/CTS is always active in the input port.

\* **Not Active**

||||||||||||||||||||||

**Active**

||||||||||||||||||||||

## ACK / NAK Output

When this option is enabled, ACK / NAK software protocol is activated.
**NOTE**: Disable XON/XOFF and RTS/CTS when this option is enabled

**\* Not Active**



**Active**



**\*BEL / CAN**
When this option is enabled, the Base Station will emit a beep
whenever a BEL( 07 Hex) character is received.If CAN (18 Hex)is
received the scanner will exit comunications loop silently. ACK / NAK
software protocol must be activated.

**Not active**



**Active**



## XON / XOFF Output
When this option is enabled, XON / XOFF software protocol is activated.
**NOTE**: Disable RTS/CTS and ACK/NAK when this option is enabled

**\* Not Active**



**Active**

## RS232 End of Message Control Code

This section will fix the End of Message control code character sent after data when RS232 output interface is selected.

You can add any control character by reading *"User defined"* and then a code of the *"Control code table"* in Appendix B.

**CR**

**LF**

**NONE**

**STX**

**ETX**

**User Defined**

Use the following barcodes to send [CR] [LF] when [CR] is selected as end of message control code when required

**CR -> CR LF**

**\* CR -> CR**

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## *DATA FORMAT*

BASE STATION is able to manage the decoded data in many different
ways using special features as *Preambles,Postambles,...*.

 The followed secuence is:

> 1º) Apply EDIT FUNCTIONS
> 2º) Apply CHARACTER SUBSTITUTION
> 3º) Add BARCODE/DEVICE IDENTIFIERS
> 4º) Add PREAMBLES
> 5º) Add POSTAMBLES
> 6º) Add END OF MESSAGE CONTROL CODES
> 7º) Add MOBIL ID

This way the data will be like this:

{Mobil ID}{Preambles} {Identifiers}{ EDITED Data}{Postambles}{End of Message}

The user should notice this to get the desired data.

![Metrologic]

When this option is enabled, a character: "1" to "5" will be added to the beginning of data to identify the Voyager RF which is sending data. This can be used by applications to identify which scanner is sending data to the Host.

 **\* Not Active**

**Active**

## *Preambles*

When this option is chosen, up to 8 programable prefix character can be added to the scanned data. To specify these characters read *"User Defined"* and then the hexadecimal value of each character in the numeric keypad, finally read *"End Selection"*. If you read 8 prefix is not necessary read *"End Selection"*. You can see the hexadecimal value of each character in Appendix C.

**\* None**



**User Defined**



## *Postambles*

If you choose this option, up to 8 programable suffix character can be added to the scannerd data. To specify these characters read *"User Defined"* and then the hexadecimal value of each character in the numeric keypad, finally read *"End Selection"*. If you read 8 postfix is not necessary read *"End Selection"*. You can see ASCII Table in the Appendix C.

**\* None**



**User Defined**



**Data Format**

## Character Substitution

Up to 3 scanned characters can be substitued by users defined characters. To do this, read *"Character Substitution 1"* , *"2"* or "*3*", then read the hexadecimal value of the character to be substitued and finally the hexadecimal value of the character to be transmitted in its place. Use the ASCII Table in Appendix C.

To *delete a character whenever it appears*, scan FFH as the hexadecimal value of the character to be transmitted.

To *remove a character substitution*, scan FFH as the hexadecimal value of the character to be substitued.

**Character substitution 1**

**Character substitution 2**

**Character substitution 3**

## *Character Substitution: Advanced*

BASE STATION allows the posibility to modify the defined character substitution in the following way only for PC AT interface:
> - Allows substitute one character by another character.
> - Allows substitute one character by a defined scancode.
> - Allows substitute one character by a defined scancode and

modifies the scancode as follows:  Ctrl + scancode, Alt+ scancode, Shift+ scancode.

Once the "Character Substitution i" characters has been defined it can be posible:

## Character Substitution

The substitution engine will consider that:
> - The value of the character to be substitued is its <u>ASCII</u> value.
> - The value of the character to be transmitted in its place is its
>   <u>ASCII</u> value.

The following barcodes should be used:

**Character/character
when substitution 1**



**Character/character
when substitution 2**



**Character/character
when substitution 3**



Data
Format

---

## Scancode Substitution

The substitution engine will consider that:
- The value of the character to be substitued is its <u>ASCII</u> value.
- The value of the character to be transmitted in its place is its <u>scancode</u> value.

The following barcodes should be used:

**Character/Scancode
when substitution 1**

**Character/Scancode
when substitution 2**

**Character/Scancode
when substitution 3**

## Scancode Modifiers

When scancode substitution is selected, the substitution engine will modify the transmitted scancode as follows:

**\*\* NO MODIFIER \*\***

**\*No modifier applied
when substitution 1**

**\*No modifier applied
when substitution 2**

**\*No modifier applied
when substitution 3**

![Metrologic logo]

**\*\* CRTL MODIFIER \*\***

**CTRL+Scancode
when substitution 1**

||||||||||||||||||||||

**CTRL+Scancode
when substitution 2**

||||||||||||||||||||||

**CTRL+Scancode
when substitution 3**

||||||||||||||||||||||

**\*\* ALT MODIFIER \*\***

**ALT+Scancode
when substitution 1**

||||||||||||||||||||||

**ALT+Scancode
when substitution 2**

||||||||||||||||||||||

**ALT+Scancode
when substitution 3**

||||||||||||||||||||||

**\*\* SHIFT MODIFIER \*\***

**SHIFT+Scancode
when substitution 1**

||||||||||||||||||||||

**SHIFT+Scancode
when substitution 2**

||||||||||||||||||||||

**SHIFT+Scancode
when substitution 3**

||||||||||||||||||||||

Data
Format

## Inter Character  Delay

The insertion of a delay between each character can sometimes avoid eventual errors when data is transmitted too quickly. The time specified represents the interim of time in between transmission of characters. It is possible too, to define one, read *"User Defined"* and then compose a value from 00 to 99, the duration of the delay is composed of a number of 5 ms. increments.
Example: A value of 05 will result in a delay of 25 ms.

**\* 0 ms**

**10 ms**

**20 ms**

**40 ms**

**80 ms**

**100 ms**

**User Defined**
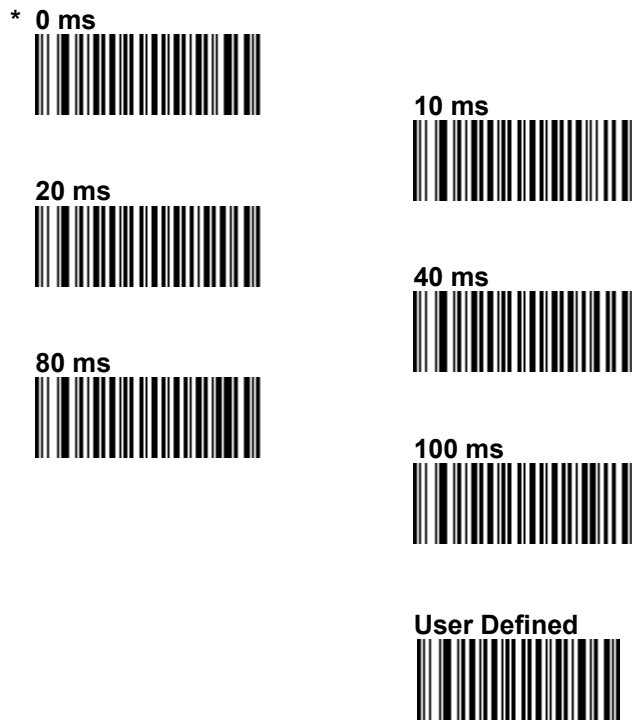
## *Editing Functions*

Editing functions allows manipulate the data before to be transmitted
by using basic functions.
BASE STATION allows to edit up to five different data at the same
time which are defined by its length and type (**Masks**).
Before fixing any mask parameter it is required that the user fixes the
desired mask.

## Remove all Masks
Remove all editing functions associated to all masks.



## Mask Selection
Always fix the desired mask before start fixing the mask definition and the
functions associated to it.

**Mask 1**



**Mask 2**



**Mask 3**



**Mask 4**



**Mask 5**



Data Format

---

## Remove one Mask

Select the mask you want to remove (MASK SELECTION) and
read the following barcode. All functions associated to this mask will be
removed as well as its data type and length definition.

**Remove one mask**

## Mask definition

Each mask is defined by its length and data type.Allways select the
desired mask in MASK SELECTION before defining "String length"
and "String type" parameters.

**String lenght**

**String Type**

## Mask Functions

These basic functions will allow the user to manipulate the decoded data.
Select the mask you want to work with (MASK SELECTION) and start
defining functions for that mask.

**Copy & Insert**

**Copy & Replace**

**Move & Insert**

**Move & Replace**

**Delete Character**

‖‖‖‖‖‖‖‖‖

**Insert Character**

‖‖‖‖‖‖‖‖‖

**Insert DELAY Char.**

‖‖‖‖‖‖‖‖‖

**Delete a Block**

‖‖‖‖‖‖‖‖‖

**Swap Character**

‖‖‖‖‖‖‖‖‖

## Delay of the "Delay Character"

This parameter defines the "Delay character" duration used by the Edit function "Insert Delay Char.". Using appendix D compose a value from 00 to 99. The duration of the delay is composed of a number of 5 ms. increments. Example: A value of 05 will result in a delay of 25 ms. in the position in which the "Delay char" is inserted.

**'DELAY CHARACTER' DELAY User Defined**

‖‖‖‖‖‖‖‖‖‖‖‖‖

Data Format

Editing functions is a group of basic functions:

**MASK DEFINTION FUNCTIONS:**

**Input String length**:

Fixes the length of the data.Barcodes with different
length that the defined will be transmitted normally.
When fixed a length the positions assigned to data
are: 123,... up to length.
When 'String Length' is defined the 'String Type' is fixed to
EDIT ALL TYPES. See 'String Type' for more information.
Scan two digits in the appendix D.

**Input String Type**:

It is possible to apply the editing functions  to a
defined barcode type, RS232 or Badge device.
'String Length' must be defined prior to 'String
Type' otherwise an error will result.
To fix the 'String Type' scan two digits from appendix D
using the table MASK-1:

| EDIT ALL TYPES | 00 |
|---|---|
| CODE 39 | 41 |
| TELEPEN | 42 |
| CODE 128 | 43 |
| ALL EAN | 45 |
| ALL UPC | 45 |
| CODABAR | 46 |
| CODE 93 | 47 |
| CODE 11 | 48 |
| 2/5I | 49 |
| MSI | 4D |
| PLESSEY | 50 |
| STANDARD 2/5 4BARS | 52 |
| STANDARD 2/5 6BARS | 53 |
| AMES | 58 |
| MATRIX 2/5 | 58 |

Table MASK-1

When EDIT ALL TYPES is selected no barcode type or device criteria is checked.

**Copy and Insert:** This function copies a character and inserts it in other place of the data.
Two lectures must be done:
- Position Origin: Scan two digits in the appendix D.
- Position Destination: Scan two digits in the appendix D.

For example, if the original label is 12A**B**3456 and we want to transmit the data 12A**B**34**B**56 then the origin should be 04 and the destination should be 07.Note that the new data has got one character more and the positions of the data are reassigned.

Data Format

**Move and Insert:** This function moves a character and inserts it in
other place of the data.Two lectures must be done:
- Position Origin: Scan two digits in the appendix D.
- Position Destination: Scan two digits in the appendix D.

For example, if the original label is 12A**B**3456 and we
want to transmit the data 12A34**B**56 then the origin
should be 04 and the destination should be 07.Note
that the new data has got the same number of
characters and the positions of the data are reassigned.

**Copy and Replace:** This function copies a character and replaces it
in            other place of the data.Two lectures must be done:
- Position Origin: Scan two digits in the appendix D.
- Position Destination: Scan two digits in the appendix D.

For example, if the original label is 12A**B**34**5**6 and we
want to transmit the data 12AB34**B**6 then the origin
should be 04 and the destination should be 07.Note
that the new data has got the same number of
characters and the positions of the data are reassigned.

**Move and Replace:** This function moves a character and replaces it
in other place of the data.Two lectures must be done:
- Position Origin: Scan two digits in the appendix D.
- Position Destination: Scan two digits in the appendix D.

For example, if the original label is 12A**B**34**5**6 and we
want to transmit the data 12A34**B**6 then the origin
should be 04 and the destination should be 07. Note
that the new data has got one character less and the
positions of the data are reassigned.

**Insert character:** This function inserts a character in a specific position of the data.Two lectures must be done:

- Position Destination: Scan two digits in the appendix D.
- Character to insert: Scan two digits in the appendix D.
See Appendix C
For example, if the original label is 12AB3456 and we want to insert the letter X (ASC 58) in the 4th position the origin should be 04 and the character to insert should be 58. The data will result as 12A**X**3456.Note that the new data has got one character more and the positions of the data are reassigned.

**Insert Delay:** This function inserts a transmission delay in a specific position of the data.One lecture must be done:
- Position Destination: Scan two digits in the appendix D.
For example, if the original label is 12AB3456 and we want to insert a delay between the 'B' and the '3' the destination should be 05.**This function must be the last one that is implemeted .**

**Delete a character:** This function removes a character from the data. One lecture must be done:
- Position of data to delete: Scan two digits in the appendix D.
For example, if the original label is 123**4**56 and we want to transmit the data 12356 then the position should be 04.Note that the positions of the data are reassigned.

**Delete a block:** This function removes a complete group of characters from the data.Two lectures must be done:
- Position Origin: Scan two digits in the appendix D.
- Position Destination: Scan two digits in the appendix D.
For example, if the original label is 12**AB**3456 and we want to transmit the data 123456 then the origin should be 03 and the destination should be 04.
Note that the positions of the data are reassigned.

Data Format

---

**Swap character:** Swaps the positions of two characters.

Two lectures must be done:

- Position first character: Scan two digits in the appendix D.
- Position second character : Scan two digits in the appendix D.

For example, if the original label is 1**2**345**6** and we want to transmit the data 1**5**342**6** then the position for first character should be 02 and for the second should be 05. Note that the new data has got the same number of character and the positions of the data are reassigned.

## EML

EML is a defined data format that allows the HOST to receive info about the BASE and Voyager which is sending data.

To be able to use this feature, the Base Station :
- Must be connected via RS232 to the Host System by using M-01 cable
- Must have EML feature activated.

### *EML Frame Data Packet description*

The following packet will be involved in the transmission between the base and the Host System:

*<START OF FRAME><BASE SERIAL NUMBER><VOYAGER ID><TYPE OF DATA><DATA><END OF FRAME>*

where ;

| | | |
|---|---|---|
| *<START OF FRAME>* | 1 Byte | Character 02Hex (STX). |
| *<BASE SERIAL NUMBER>* | 10 Bytes | Serial number of Base. This is used in case of several bases sends/request data from Host System.<br>Ie : « 123456789 » |
| *<VOYAGER ID>* | 1 Byte | Voyager Mobil identifier. It gives information of the Voyager involved in the transmission. |
| *<TYPE OF DATA>* | 1 Byte | Type of Packet information. |
| *<DATA>* | Undefined | Number of bytes. Data sent /received. |
| *<END OF FRAME>* | 1 Byte | Character 03Hex (ETX). |

**EML NOT ACTIVE**
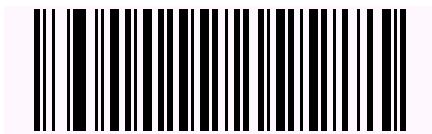
**EML ACTIVE**

### *EML Packets*

Actually there are the following defined EML packets:

## *DATA Packet*

Data sent from Base Station to Host when Voyager RF sends data to Base Station:

*<START OF FRAME> <BASE SERIAL NUMBER> <VOYAGER RF ID> <TYPE OF DATA> <DATA>*
*<END OF FRAME>*

where ;

              *<TYPE OF DATA>*           = 0x61 ("a")

## *ACK Packet*

- Acknowledge from Base Station to Host when Host sends commands to Base Station
- Acknowledge from Host to Base Station when Host found "Data Packet" in Data Base. When received, involved Voyager RF will perform no action.

*<START OF FRAME> <BASE SERIAL NUMBER> <VOYAGER RF ID> <TYPE OF DATA> <END OF*
*FRAME>*

where ;

              *<TYPE OF DATA>*           = 0x62 ("b")

## *NACK Packet*

Bad Acknowledge from Base Station to Host when Host sends bad commands to Base Station:

*<START OF FRAME> <BASE SERIAL NUMBER> <VOYAGER RF ID> <TYPE OF DATA> <END OF*
*FRAME>*

where ;

              *<TYPE OF DATA>*           = 0x63 ("c")

### SHORT BEEP Packet

Command from Host to Base Station after Host has processed Data Packet received from Base Station. When received, involved Voyager RF will emit a short beep:

***<START OF FRAME> <BASE SERIAL NUMBER> <VOYAGER RF ID> <TYPE OF DATA> <END OF FRAME>***

where ;
            ***<TYPE OF DATA>***        = 0x64 ("d")


### LONG BEEP Packet

Command from Host to Base Station after Host has processed Data Packet received from Base Station. When received, involved Voyager RF will emit a long beep:

***<START OF FRAME> <BASE SERIAL NUMBER> <VOYAGER RF ID> <TYPE OF DATA> <END OF FRAME>***

where ;
            ***<TYPE OF DATA>***        = 0x65 ("e")


### ERROR BEEP Packet

Command from Host to Base Station after Host has processed Data Packet received from Base Station. When received, involved Voyager RF will emit an error beep:

***<START OF FRAME> <BASE SERIAL NUMBER> <VOYAGER RF ID> <TYPE OF DATA> <END OF FRAME>***

where ;
            ***<TYPE OF DATA>***        = 0x66 ("f")

### RESET Packet

Command from Base Station to Host when Voyager RF timeout elpased due to Host delay answer while proccessing Data Packet received from Base Station:

*<START OF FRAME> <BASE SERIAL NUMBER> <VOYAGER RF ID> <TYPE OF DATA> <END OF FRAME>*

where ;
      **<TYPE OF DATA>**     = 0x67 ("g")

## EML Process

When EML is active, every time a Voyager RF reads a barcode, the Base Station will send "Data Packets" to Host (via Wedge or RS232) so that the Host will know which Base Station and Voyager RF is sending data.

Furthermore, the system provides a way to inform the Voyager RF if its data was found in Data Base by activating **EML Handshake** in Base Station. Process is as follows:
Voyager RF sends data to Base Station and a *"WAIT"* radio command is sent from Base to Voyager RF. After that, Base sends "*Data packet*" to Host and waits for "*EML Command*" from Host. When this one has been received, Base acknowledges it with a "*ACK Packet*" and transfers it to Voyager RF which perform the corresponding action.

If Host Delays its answer, Voyager will timeout and will consider an error transmission informing the Base Station that timeout (1 – 17 sec) has elapsed. (Please see Voyager RF Installation and User Guide to see how to configure the Voyager RF Handshaking timeout) Base will send "*RESET Packet*" to Host to inform of this situation and will answer with a "*NAK Packet*" to every command coming from Host until a new Data is received from Voyager RF.

Actually, the only possible "EML commands" that Host can send to Base Station are :
- "ACK Packet": Involved Voyager RF will make no action.
- "NAK Packet": Involved Voyager RF will make an ERROR beep.
- "SHORT BEEP Packet": Involved Voyager RF will make a SHORT beep.
- "LONG BEEP Packet": Involved Voyager RF will make a LONG beep.
- "ERROR BEEP Packet": Involved Voyager RF will make a ERROR beep.

Any other will be considered as "NAK Packet"

The only possible "EML commands" that Base Station can send to are :
- "ACK Packet": Received command from Host has been accepted.
- "NAK Packet": Received command from Host has NOT been accepted.
- "RESET Packet": Voyager RF timeout Elapsed.

EML Handshaking can only be used when Base Station is connected in RS232 to Host via M-01 cable and RS232 OUTPUT interface is selected.

Enabling EML Handshaking will automatically activate EML.

**EML HANDSHAKE NOT ACTIVE**
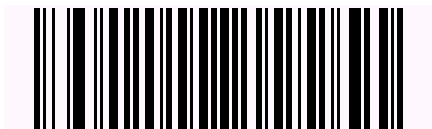


**EML HANDSHAKE ACTIVE**

# *Appendix*

## APPENDIX B

_____Control Codes Table_____

**RIGHT ARROW**

**LEFT ARROW**

**UP ARROW**

**DOWN ARROW**

**HOME**

**END**

**ENTER**

**SEND**

**BACKSPACE**

**TAB**

|||||||||||||||||||||

**LINE FEED**

|||||||||||||||||||||

**CLEAR**

|||||||||||||||||||||

**DEL**

|||||||||||||||||||||

**RETURN**

|||||||||||||||||||||

**FIELD +**

|||||||||||||||||||||

**FIELD -**

|||||||||||||||||||||

**FIELD EXIT**

|||||||||||||||||||||

**DUP**

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**RESET**

|||||||||||||||||||||

**BACK TAB**

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**ESC**

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**Metrologic**®

**F1**

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**F2**

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**F3**

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**F4**

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**F5**

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**F6**

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**F8**

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**F9**

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**F10**

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**Appendix**

**F11**

**F12**

**F13**

**F14**

**F15**

**F16**

**F17**

**F18**

**F19**

**F20**

**F21**

**F22**

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**F23**

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**F24**

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**ALT**

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**SHIFT**

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```

**CTRL**

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```

**ALT+F1**

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**ALT+F7**

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**ALT+F2**

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**ALT+F8**

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**ALT+F3**

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**ALT+F9**

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**ALT+F4**

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**ALT+F10**

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**ALT+F5**

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**ALT+F11**

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**ALT+F6**

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**ALT+F12**

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![Metrologic logo]

**SHIFT+F1**

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**SHIFT +F2**

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**SHIFT+F3**

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**SHIFT +F4**

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**SHIFT +F5**

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**SHIFT +F6**

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**SHIFT +F7**

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**SHIFT +F8**

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**SHIFT +F9**

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**SHIFT +F10**

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**SHIFT +F11**

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**SHIFT +F12**

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**CTRL+F1**

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**CTRL +F2**

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**CTRL +F3**

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**CTRL +F4**

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**CTRL +F5**

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**CTRL +F6**

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**CTRL +F7**

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**CTRL +F8**

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**CTRL +F9**

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**CTRL +F10**

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**CTRL +F11**

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**CTRL +F12**

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## APPENDIX C

**_____ASCII Code Table_____**

| | | **First Reading** | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** |
| **S** | **0** | NUL | DLE | SP | 0 | @ | P | ` | p |
| | **1** | SOH | DC1 | ! | 1 | A | Q | a | q |
| **e** | **2** | STX | DC2 | " | 2 | B | R | b | r |
| **c** | **3** | ETX | DC3 | # | 3 | C | S | c | s |
| **o** | **4** | EOT | DC4 | $ | 4 | D | T | d | t |
| **n** | **5** | ENQ | NAK | % | 5 | E | U | e | u |
| **d** | **6** | ACK | SYN | & | 6 | F | V | f | v |
| | **7** | BEL | ETB | ' | 7 | G | W | g | w |
| **R** | **8** | BS | CAN | ( | 8 | H | X | h | x |
| **e** | **9** | HT | EM | ) | 9 | I | Y | i | y |
| **a** | **A** | LF | SUB | * | : | J | Z | j | z |
| **d** | **B** | VT | ESC | + | ; | K | [ | k | { |
| **i** | **C** | FF | FS | , | < | L | \ | l | \| |
| **n** | **D** | CR | GS | - | = | M | ] | m | } |
| **g** | **E** | SO | RS | . | > | N | ^ | n | ~ |
| | **F** | SI | US | / | ? | O | _ | o | DEL |

## APPENDIX D

_____Numeric Keypad_____

**0**

**1**

**2**

**3**

**4**

**5**

**6**

**7**

**8**

**9**

Metrologic®

**A**

**B**

**C**

**D**

**E**

**F**

**End selection**
**RF MODE**

Appendix

**NOTES:**

# BASE STATION CONNECTION LIST
## June 1998



| PC or Terminal model | Num. | Cables | Notes |
|---|---|---|---|
| A PLUS 3477 | 03 | Y-06 | |
| ACER 1120/1133 | 01 | Y-01 | |
| ACER 1120SX | 01 | Y-02 | |
| ACER 530 Am 386 SXLV | 01 | Y-01 | |
| ADDX / NORMEREL AT MAX | 01 | Y-02 | |
| ADDX / NORMEREL NS 58 | 01 | Y-02 | |
| ADDX / NORMEREL S TURBO 2 | 02 | Y-01 | |
| ADDX / NORMEREL OP AT | 01 | Y-01 | |
| APPLE MAC CLASSIC | 04 | Y-04 | PWSR |
| APPLE MAC SE | 04 | Y-04 | PWSR |
| APPLE MAC SE/30 | 04 | Y-04 | PWSR |
| APPLE MAC CX | 04 | Y-04 | PWSR |
| APPLE MAC FX | 04 | Y-04 | PWSR |
| APPLE MAC SX | 04 | Y-04 | PWSR |
| APPLE MAC II | 04 | Y-04 | PWSR |
| APPLE MAC LC II | 04 | Y-04 | PWSR |
| APPLE MAC LC III | 04 | Y-04 | PWSR |
| APPLE MAC LC 465 | 04 | Y-04 | PWSR |
| APPLE MAC LC 495 | 04 | Y-04 | PWSR |
| APPLE MAC PERFORMA 450 | 04 | Y-04 | PWSR |
| APPLE QUADRA 800/840 | 04 | Y-04 | PWSR |
| APPLE QUADRA AV/900/950 | 04 | Y-04 | PWSR |
| APRICOT XEN I 386 | 01 | Y-01 | |
| AST 386  SX/20 | 01 | Y-01 | |
| AST BRAVO 4/33S | 01 | Y-01 | |
| AST BRAVO 4/66D | 01 | Y-01 | |
| AXEL IRIS PLATINE | 01 | Y-02 | |
| BULL HDS1 | 02 | Y-01 | |
| BULL BASE STATIONRAL 200/400 | 01 | Y-02 | |
| BULL BASE STATIONRAL 40/65/75/600 | 01 | Y-01 | |
| BULL BASE STATIONRAL 600 | 01 | Y-01 | |
| BULL QUESTAR 210 | 17 | Y-11 | PWSR |
| BULL QUESTAR 310 | 18 | Y-11 | PWSR |
| CANON PC A200 | 02 | Y-01 | |
| CARRY 1 | 01 | Y-01 | |
| COMMODORE 1935 386-25 | 01 | Y-02 | |
| COMMODORE 386-25 | 01 | Y-01 | |
| COMMODORE PC | 02 | Y-01 | |
| COMPAQ 286 E / 386 S | 01 | Y-02 | |
| COMPAQ 286/386 | 01 | Y-01 | |
| COMPAQ 36 XT | 02 | Y-01 | |
| PC or Terminal model | Num. | Cables | Notes |
| COMPAQ SLT 286 | 01 | Y-02 | |
| COMPAQ DESKPRO | 02 | Y-01 | |
| COMPAQ PROLINEA 386-25S/3-25 ZS | 01 | Y-02 | |
| COMPAQ 286/386 | 01 | Y-01 | |

| PC or Terminal model | Num. | Cables | Notes |
|---|---|---|---|
| COMPAQ 286E/386S | 01 | Y-02 | |
| COMPAQ 36XT | 02 | Y-01 | |
| COMPAQ DESKPRO | 02 | Y-01 | |
| COMPAQ DESKPRO 386S/XL450 | 01 | Y-02 | |
| COMPAQ SLT 286 | 01 | Y-02 | |
| COUGAR PC/AT/AT3 | 01 | Y-01 | |
| DATAPOINT 7322/7333/7373 | 01 | Y-01 | |
| DATAPOINT 7350 | 53 | Y-21 | |
| DECISION SYSTEMS INTERNATIONAL | 03 | Y-07 | |
| DELL 210/316 SX/433 L/486 P-33 | 01 | Y-02 | |
| DELL 320 N+ | 01 | Y-01 | |
| DONATEC PC | 02 | Y-01 | |
| DSI 3876 | 03 | Y-07 | |
| DSI 3877 | 03 | Y-07 | |
| DSI 3781 | 03 | Y-07 | |
| DSI 3986 | 03 | Y-02 | |
| EAGLE  PC | 02 | Y-01 | |
| ELONEX 325 X | 01 | Y-02 | |
| EPSON EQUITY 320 SX+ | 01 | Y-02 | |
| EPSON PC AX2 | 01 | Y-01 | |
| EPSON PC E | 02 | Y-01 | |
| ERGO SYSTEM | 01 | Y-01 | |
| ERICSSON PC | 02 | Y-01 | |
| FALCO 500 | 21 | Y-01 | PWSR |
| FALCO INFINITY PC | 07 | Y-01 | |
| FORCE F476/477M | 03 | Y-07 | |
| FORCE TM 1471W | 03 | Y-07 | |
| FORUM AT 286 | 01 | Y-01 | |
| FT 8700 | 47 | Y-09 | PWSR |
| FUJITSU FT8520 | 29 | Y-09 | PWSR |
| GOLDSTAR GS 317 | 01 | Y-02 | |
| GOUPIL G6 | 01 | Y-02 | |
| GOUPIL GOLF | 01 | Y-02 | |
| GOUPIL G5 386 / G40 | 01 | Y-01 | |
| HARRIS ADACOM  NV471 / NV472 | 03 | Y-01 | |
| HERMES H220 | 01 | Y-02 | |
| HP APOLLO 9000 715/33 IBM PC | 01 | Y-02 | |
| HP APOLLO 9000 735 IBM PC | 01 | Y-02 | |
| HP VECTRA 286/12 | 01 | Y-02 | |
| HP VECTRA 386/25 | 01 | Y-01 | |
| HP VECTRA 486VU/486VL/486-33 | 01 | Y-02 | |
| PC or Terminal model | Num. | Cables | Notes |
| HP VECTRA VL 5/100 S3 | 01 | Y-02 | |
| HP VECTRA VL 5/100 S4 | 01 | Y-02 | |
| HP VECTRA VL 5/90 S4 | 01 | Y-02 | |
| IBM INDUSTRIAL COMPUTER | 01 | Y-02 | |
| IBM PC/AT/AT3 | 01 | Y-01 | |
| IBM PS/2 8540 | 01 | Y-02 | |
| IBM PS/2 8560 | 01 | Y-02 | |
| IBM PS1 | 01 | Y-02 | |
| IBM PS2/30 H21-H31-H41 | 01 | Y-02 | |

| PC or Terminal model | Num. | Cables | Notes |
|---|---|---|---|
| IBM PS2/40/50/55/60/80 | 01 | Y-02 | |
| IBM PS2 56 | 14 | Y-02 | |
| IBM PSVP SERIE 6382/6384 | 01 | Y-02 | |
| IBM 3151 | 03 | Y-06 | |
| IBM 3152-010 | 03 | Y-06 | |
| IBM 3151-020 | 03 | Y-06 | |
| IBM 3153 | 03 | Y-16 | |
| IBM 316X | 03 | Y-07 | |
| IBM 3179 | 03 | Y-07 | |
| IBM 3180 | 03 | Y-07 | |
| IBM 319X | 03 | Y-07 | |
| IBM 3270 | 03 | Y-07 | |
| IBM 3471 | 03 | Y-06 | |
| IBM 3472 | 03 | Y-06 | |
| IBM 3476 | 03 | Y-06 | |
| IBM 3477 | 03 | Y-06 | |
| IBM 3486 | 03 | Y-06 | |
| IBM 3487 | 03 | Y-06 | |
| IBM 3489 | 03 | Y-06 | |
| IBM 4684 (W CONNECTION) | 01 | Y-02 | |
| IBM PC 330 | 01 | Y-02 | |
| IBM PC ET PC/XT | 02 | Y-01 | |
| ICL P415 GE / P420 GE | 01 | Y-02 | |
| ICL DRS 3000 | 01 | Y-02 | |
| ICL DRS M15 | 01 | Y-02 | |
| ICL DRS M40/M45/M55/M75/M95 | 01 | Y-02 | |
| ICL DRS M80 | 01 | Y-01 | |
| IDEA 276/277 | 03 | Y-03 | |
| IPC 386DX 33C | 01 | Y-01 | |
| IPC 5349 | 01 | Y-01 | |
| ITT XTRA | 02 | Y-01 | |
| KENITEC 486 SX-25 | 01 | Y-02 | |
| KIMTRON KT-70  PC/XT | 02 | Y-01 | |
| KONTRON ICU/IR | 01 | Y-01 | |
| KONTRON IPLITE 486 DX-33 LP | 01 | Y-02 | |
| KONTRON KAT 286 | 01 | Y-01 | |
| KONTRON INLITE 386SL-25 | 01 | Y-02 | |
| KONTRON KPR8/KPR10/KPR20 | 01 | Y-01 | |
| PC or Terminal model | Num. | Cables | Notes |
| KONTRON MARLIN | 01 | Y-02 | |
| LEANORD CHALLENGER 2 | 01 | Y-01 | |
| LEANORD TOWER 386 SX-16 | 01 | Y-01 | |
| MACDONNELL DOUGLAS | 50 | Y-20 | PWSR R5=1K Ohm |
| MAI DT 4315 | 01 | Y-02 | |
| MANNESMANN 9008 | 22 | Y-01 | |
| MANNESMANN KIENZLE 9008 | 22 | Y-01 | PWSR |
| MANNESMANN KIENZLE PC 920 | 01 | Y-01 | PWSR |
| MEMOREX PC 7000 | 02 | Y-01 | |
| MEMOREX TELEX 1471 | 09 | Y-01 | |
| MEMOREX TELEX 1472 | 09 | Y-01 | |
| MEMOREX TELEX 1191 | 09 | Y-01 | |

| PC or Terminal model | Num. | Cables | Notes |
|---|---|---|---|
| MEMOREX TELEX 1192 | 09 | Y-01 | |
| MEMOREX TELEX 1197 | 09 | Y-01 | |
| MEMOREX TELEX 1488 | 09 | Y-01 | |
| MEMOREX TELEX 1477 | 09 | Y-01 | |
| MITAC 3060 G | 01 | Y-02 | |
| NCR 3301 | 01 | Y-02 | |
| NCR 6/8 | 01 | Y-01 | |
| NCR 7901 / 7912 | 48 | Y-18 | PWSR |
| NCR PC  4I / 6I | 02 | Y-01 | |
| NIXDORF M35 | 02 | Y-01 | |
| NIXDORF M55 | 01 | Y-01 | |
| NOKIA DATA DT  215 / 326 / 336 | 01 | Y-01 | |
| NOKIA VDU 191B | 52 | Y-01 | |
| NOKIA VDU 471W | 01 | Y-01 | |
| NORMEREL AT MAX | 01 | Y-02 | |
| NORMEREL OP AT | 01 | Y-01 | |
| NORMEREL S TURBO 2 | 02 | Y-01 | |
| OCIA DTS | 20 | Y- | |
| OCIA NCR | 19 | Y- | |
| OLIVETTI CP 486 | 01 | Y-02 | |
| OLIVETTI M200 | 02 | Y-01 | |
| OLIVETTI M290S | 01 | Y-02 | |
| OLIVETTI M300 | 01 | Y-02 | |
| OLIVETTI M460 | 01 | Y-02 | |
| OLIVETTI PC PRO  386SX / 486SX | 01 | Y-02 | |
| OLIVETTI PCS 286 | 01 | Y-02 | |
| PC AT | 01 | Y-PC | |
| PC XT | 02 | Y-PC | |
| PC 1512 | 06 | Y-05 | |
| PC 1640 | 06 | Y-05 | |
| PHILIPS P3102 | 02 | Y-01 | |
| PHILIPS P3105 | 02 | Y-01 | |
| PHILIPS P3230/P3204/P3238 | 01 | Y-01 | |
| PHILIPS P33XX | 01 | Y-01 | |
| PHILIPS PC | 02 | Y-01 | |
| PC or Terminal model | Num. | Cables | Notes |
| PLANAR ELT 320-P1 IBM PC | 01 | Y-01 | |
| QUME QVT 61 | 10 | Y-08 | |
| QUME QVT-PCT | 10 | Y-08 | |
| REXON SUBMIT 1000 | 01 | Y-01 | |
| SANYO PC 16 | 02 | Y-01 | |
| SANYO PC 17 | 01 | Y-01 | |
| SHARP 7100 PC | 02 | Y-13 | |
| SHARP 7200 PC | 01 | Y-13 | |
| SIEMENS-NIXDORF PCD-H | 01 | Y-02 | |
| SIEMENS-NIXDORF 97801 | 05 | Y-01 | |
| SIEMENS-NIXDORF 97808 | 05 | Y-01 | |
| SIEMENS-NIXDORF M35 | 02 | Y-01 | |
| SIEMENS-NIXDORF M55 | 01 | Y-01 | |
| SIEMENS-NIXDORF OLD SM 9412 | 10 | Y-08 | |
| SIEMENS-NIXDORF NEW SM 9412 | 01 | Y-08 | |

| PC or Terminal model | Num. | Cables | Notes |
|---|---|---|---|
| SILICONGRAPHICS INDIGO 2 | 01 | Y-02 | |
| SPERRY UNIVAC PC | 02 | Y-01 | |
| SUN 350/360 | 45 | Y-14 | |
| SUN 370/380 | 45 | Y-15 | |
| SUN 410/420 | 45 | Y-15 | |
| SUN SPAC 5/10/15 | 45 | Y-15 | |
| SUNRIVER ST SERIES | 01 | Y-01 | |
| TANDON PCA 12 SL | 01 | Y-01 | |
| TANDON PCA 20 | 01 | Y-01 | |
| TANDON PCA 30 | 01 | Y-01 | |
| TANDON PCX 10 | 02 | Y-01 | |
| TANDON PCX 20 | 01 | Y-01 | |
| TANDON PLUS TM 7630 | 01 | Y-01 | |
| TANDY 1000 SL/2 | 02 | Y-01 | |
| TANDY 3000 | 01 | Y-01 | |
| TELEVIDEO AT | 01 | Y-12 | |
| TELEVIDEO PC | 02 | Y-12 | PWSR |
| THOMSON BASE STATIONROMEGA 16 | 02 | Y-01 | |
| TULIP AT COMPACT 2/3 | 01 | Y-01 | |
| UNISYS PCI 32/561 | 01 | Y-02 | |
| UNISYS PWT 120/1120 | 54 | Y-22 | R1=R2=220 OHM IN CABLE |
| UNISYS SVT 1120 | 54 | Y-22 | R1=R2=220 OHM IN CABLE |
| UNISYS TO 275 | 47 | Y-09 | PWSR |
| UNISYS TO 300 | 47 | Y-09 | PWSR |
| UNISYS UT 325 | 47 | Y-09 | PWSR |
| VERSAL 6477 | 02 | Y-01 | |
| VICTOR V286 M/S/C/A/VPC III | 01 | Y-01 | |
| VICTOR V286 P | 01 | Y-02 | |
| VICTOR V386 A/S/CX/MX/SX | 01 | Y-01 | |
| VICTOR VPC IIc VICKI | 02 | Y-01 | |
| **PC or Terminal model** | **Num.** | **Cables** | **Notes** |
| VISA MC2 | 46 | Y-09 | PWSR |
| VT 220/320/420 | 11 | M-09 | PWSR |
| VT 510 KBD PC | 13 | Y-02 | |
| VT 510 KBD VT | 12 | Y-02 | |
| WANG PC - 280 | 01 | Y-01 | |
| WYSE 160 ASCII | 42 | Y-09 | PWSR |
| WYSE 160 AT 85 | 43 | Y-09 | PWSR |
| WYSE 160 PC 102 KEYS | 41 | Y-09 | PWSR |
| WYSE 185 ES PC 103 | 44 | Y-09 | PWSR |
| WYSE 2012 | 01 | Y-01 | PWSR |
| WYSE 285 | 40 | Y-09 | PWSR |
| WYSE 325 | 29 | Y-09 | PWSR |
| WYSE 370 AT 85 | 39 | Y-09 | PWSR |
| WYSE 370 PC 102 KEYS | 38 | Y-09 | PWSR |
| WYSE DECISION 386SX-20/486SX-20 | 01 | Y-01 | |
| WYSE 120 IBM 316X | 28 | Y-09 | PWSR |
| WYSE 120/60/65 ANSI | 27 | Y-09 | PWSR |
| WYSE 120/60/65 ASCII | 25 | Y-09 | PWSR |

| | | | |
|---|---|---|---|
| WYSE 120/60/65 AT 84 KEYS | 26 | Y-09 | PWSR |
| WYSE 120/60/65 PC 102 KEYS | 24 | Y-09 | PWSR |
| WYSE 85/185 | 29 | Y-09 | PWSR |
| ZENITH 320 SX | 01 | Y-01 | |
| ZENITH AT Z 286 | 01 | Y-01 | |
| ZENITH Z 425 SX | 01 | Y-01 | |
| ZENITH Z SELECT 100 XXX | 01 | Y-02 | |
| ZENITH Z STATION 420 SN | 01 | Y-02 | |
| ZENITH Z STATION 500 | 01 | Y-02 | |

NOTES:

**PWSR** : Power supply required

## SAMPLES SHEET

**EAN 13**

1 234567 890128

**UPCA**

0 12345 67890 5

**EAN8**

1234 5670

**UPCE**

0 123456 5

**CODE 39**

MIC2

**CODE 128**

MIC2

**INTERLEAVED 2/5 (*)**

1234567890

**CODABAR (*)**

a123456b

**(*)** These barcodes are disabled by default.

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# QUICK START GUIDE

The following pages will help the user to program the BASE STATION with the most common used barcodes. Please refer to the manual for more details.

## _____Configuration with Voyager RF_____

To configurate the *BASE STATION* with Voyager RF device the ENTER/EXIT  configuration barcode should be read before starting configuration. Once you have changed all the parameters you need to read this code again in order to keep on working.
When you are in this mode a special "End selection RS232 MODE" must be used in the numeric keypad appendix D.

**ENTER/EXIT**



---

_____Return to default_____

This command returns the Base Station to the original default configuration

_____Terminal type IBM PC AT_____

Fixes Wedge interface to IBM PC AT

_____Terminal type IBM PS2 /56_____

Fixes Wedge interface to IBM PS2 /56

_____Terminal type IBM 31XX_____

Fixes Wedge interface to IBM 34XX – 31XX

_____Terminal type Digital VT 220/320/420_____

Fixes Wedge interface to Digital VT 220/320/420

_____Terminal type RS232 OUTPUT_____

Fixes interface to RS232 OUTPUT

## Keyboard country type

Scan the applicable keyboard country type label below that corresponds with your computer.

**\* US**

||||||||||||||||||||||||

**UK**

||||||||||||||||||||||||

**German**

||||||||||||||||||||||||

**French**

||||||||||||||||||||||||

**Italian**

||||||||||||||||||||||||

**Spanish**

||||||||||||||||||||||||

**Norwegian**

||||||||||||||||||||||||

**Belgian**

||||||||||||||||||||||||

# _____End of message control codes_____

_BASE STATION_ sends a control code after each message, which emulates a command key of the keyboard, allowing automatic entry data.

**\* Enter**

‖‖‖‖‖‖‖‖‖‖‖‖‖‖

**None**

‖‖‖‖‖‖‖‖‖‖‖‖

**Tab**

‖‖‖‖‖‖‖‖‖‖‖‖

**Field Advance**

‖‖‖‖‖‖‖‖‖‖‖‖

**Field Exit**

‖‖‖‖‖‖‖‖‖‖‖‖

**CR**

‖‖‖‖‖‖‖‖‖‖‖‖

**LF**

‖‖‖‖‖‖‖‖‖‖‖‖

## RS-232 PARAMETERS

# _____Baud Rate_____

This parameter applies to RS232 OUTPUT port of the BASE STATION.

**38400**

|||||||||||||||||||||||||

**19200**

|||||||||||||||||||||||||

**\* 9600**

|||||||||||||||||||||||||

**4800**

|||||||||||||||||||||||||

**2400**

|||||||||||||||||||||||||

**1200**

|||||||||||||||||||||||||

**600**

|||||||||||||||||||||||||

**300**

|||||||||||||||||||||||||

# _____Data Bits_____

This parameter applies to RS232 OUTPUT port of the BASE STATION.

**\* 8 Data Bits**



**7 Data Bits**



# _____Parity_____

This parameter applies to RS232 OUTPUT port of the BASE STATION.

**\* None**



**Even**



**Odd**



# _____Stop bits_____

This parameter applies to RS232 OUTPUT port of the BASE STATION.

**1 Stop bit**



**\* 2 Stop Bits**

## RTS / CTS OUTPUT

This parameter only applies to RS232 OUTPUT. CTS input line is required from the HOST before sending any data.

**\* Not Active**

**Active**

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The insertion of a delay between each character can sometimes avoid eventual errors due to a too quick transmission. The time specified represents the interim of time in between transmission of characters. It is possible too, to define one, read *"User Defined"* and then compose a value from 00 to 99, the duration of the delay is composed of a number of 5 ms. increments.
Example: A value of 05 will result in a delay of 25 ms.

**\* 0 ms**

**10 ms**

**20 ms**

**40 ms**

**80 ms**

**100 ms**