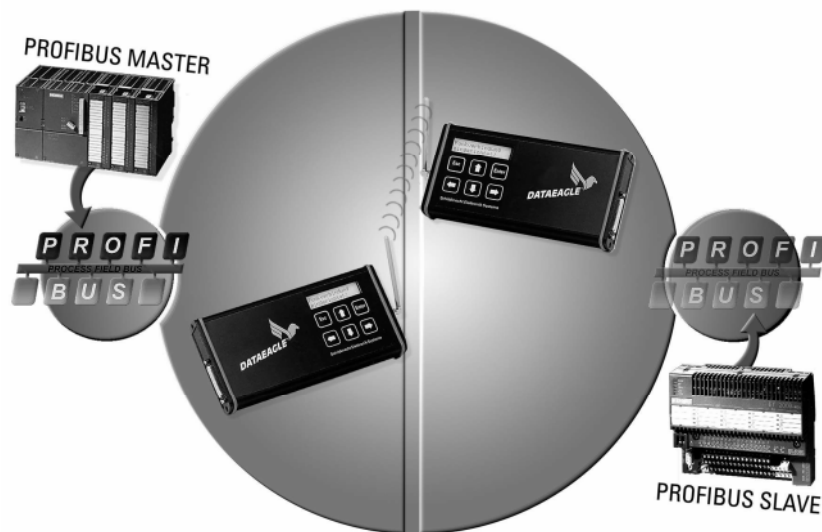


Quick Guide Data Radio System DATAEAGLE® 3XXX-A Series

These instructions will show you how to set the Profibus addresses at the radio modem.



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Applicable for all DATAEAGLE 3XXX-A „Wireless Profibus“ – as of July 1, 2010
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This quick guide represents an extract of the starting-up and assembly instructions

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1. Application of operating voltage

⇒ After application of the operating voltage the following message appears in the display

< - Idle - > P:aa S:bb F: cc	or	<<<< - - >>>> P:aa S:bb F: cc
---	----	--

- aa = partner address of the other radio modem.
- bb = own station address.
- cc = radio channel (only for DATAEAGLE 30xx,33xx)

As long as no Profibus participants are connected via cable, a data transfer does not yet take place, there appears the message “< - Idle - >”.

If the factory settings have not been changed and there is a wired connection to a Profibus DP Master, the radio modems try to start data transfer. If a data transfer takes place, there appears the message

<<<< - - >>>>
--

In the condition as supplied to the customer, the following messages will appear in the displays during data transfer:

Radio modem 1	Radio modem 2
<<<< - - >>>> P:01 S:02 F: 01	<<<< - - >>>> P:02 S:01 F: 01

Now the radio modems are in initial state and the user may carry out the necessary Profibus DP address settings.

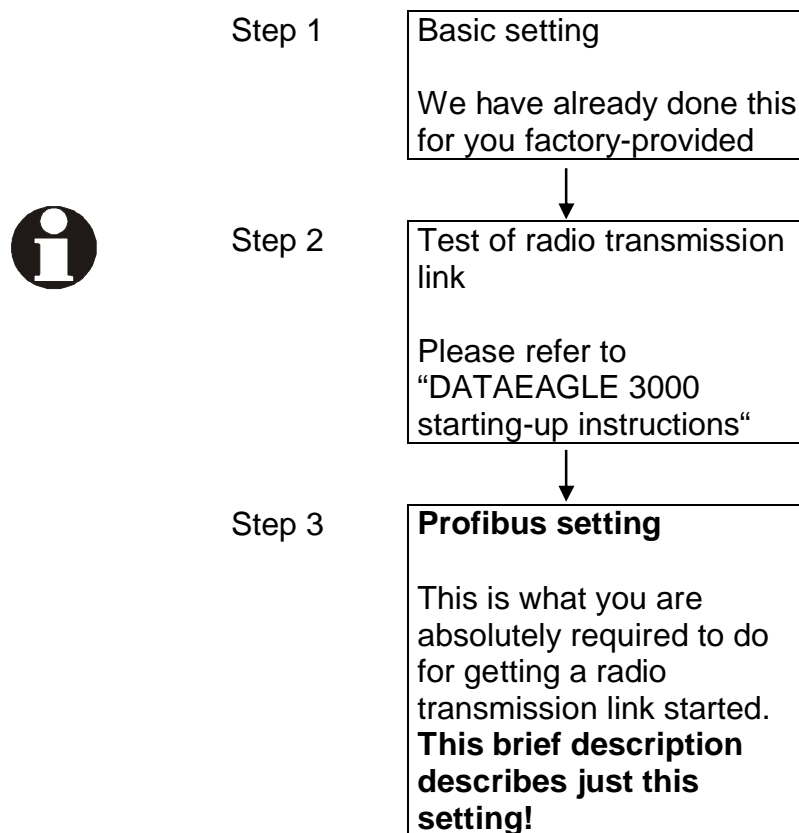
2. Settings

2.1. General

Since wireless data transfer is fully transparent for Profibus master and slave, no special settings in the control and hardware configuration are required.

2.2. Basic and Profibus settings

The following flow diagram shows at a glance which settings to carry out in which order:



2.2.1. Step 3 – Profibus settings

In the **DATAEAGLE Master**, Profibus participants have to be entered after the radio link is provided. In the following please find a description of the steps required for this.

☞ Call up the main menu at the DATAEAGLE master. For this purpose, please execute the following steps:

☞ Press the key **<arrow right>**.

⇒ In the display, the following message appears:

Password : 000

Factory-provided, the password is set to 000.

☞ Press the **<Enter>** key

☞ Press the key **<arrow right>** until the following message appears in the display:

**Change interface
driver?**

☞ Press the **<Enter>** key

⇒ The following message appears:

**Masterside
GC Time: 000x0,5s**

☞ Press the **<Enter>** key

⇒ The following message appears:

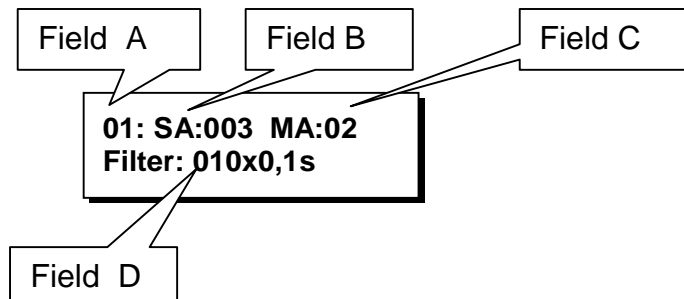
Diag.slave: 127 Diag.master: yy
--

For starting up, you are not required to implement the diagnosis slave into the control project. Entering the address 127 will deactivate the diagnosis slave. For this purpose, please use the key **<arrow right>** for getting to the numerical entry and change the values using the key **<arrow up/down>**. The master address (yy) is not evaluated at 127.

☞ Press **<Enter>**

⇒ The set addresses are taken over. The following message appears in the display:

Setting of Profibus address



Field A = Table position

All DP-addresses to be addressed via radio link are administered by DATAEAGLE in a table. For each table position a DP slave address may be entered. (refer to field B).

There exist four (DE3xx3, DE3xx5) or at the most seven table positions (DE3xx2). The user is free to choose the allocation of the DP-addresses to a table position, even "gaps" are allowed.

Field B = Bus addresses at the slave side

SA stands for Profibus slave-side address. Here the bus addresses of the participants are set that are to be addressed via the radio link.








Field C = Bus address of DP-Master

MA stands for Profibus master address. Here the bus address of the Profibus master(s) (several masters are possible) are set.

Field D = Filter time

The filter time helps to suppress short radio interferences.

Enter Profibus addresses

-  Place the cursor at field A.
-  Select an unused table position (e.g. 01) by choosing a value 01-04 or 01-07 using the keys **<arrow up>** and **<arrow down>**.
-  Place the cursor at field B.
-  Enter the requested DP-slave address by selecting the correct figure using the keys **<arrow up>** and **<arrow down>**. Use the keys **<arrow right>** and **<arrow left>** to put the cursor under the correct position.
-  Place the cursor at the field C and enter the address of the corresponding Profibus master.
-  Press **<Enter>**
- ⇒ The data is taken over and the cursor moves under the first position in field A.
-  Repeat these steps for the other Profibus addresses.







Only set those DP-addresses actually behind the radio link. All unused table positions shall be allocated to the bus address 127.

Setting filter time

Recommendation for starting up:

For starting up, we recommend to e.g. set a value "030" = 3 seconds. This will avoid an early activation of the filter.

-  Press the key **<arrow right>** as long as the cursor moves under the first position of the filter time.
-  Determine the filter time by selecting the correct figure using the keys **<arrow up>** and **<arrow down>**. Use the keys **<arrow right>** and **<arrow left>** to move the cursor under the correct position.
-  Press **<Enter>**.
- ⇒ The data is taken over and the cursor moves under the first position in field A.
-  Press **<ESC>**.

Now you have completed step 3 and carried out all Profibus settings required. The radio system is now ready for operation.

3. Technical data

Master side	
Profibus speed	Device type (as of 1.2010, all devices have the additional marking –A)
1,5Mbit	3002, 3102, 3702, 3003, 3103, 3323, 3413, 3703
500 kbit	3004, 3104, 3324, 3414, 3704,
187,5 kbit	3105, 3705
Interface	RS485 Profibus standard conform 9-pin SubD
Device type	Signal delay radio link (writing/reading 8Byte)
3002,3003	25 ms per Profibus participant after the radio link
3702,3703,3705	30 ms * number of DATAEAGLE radio receivers
3102,3103	50ms
3323,3413	100ms
Profibus address setting	At the Profibus slave and in the DATAEAGLE master
Bluetooth 2.4GHz 1-100mW	3702,3703,3704,3705
Proprietary 2.4GHz WLAN 100mW	3002,3003,3004
DECT 1.9GHz 250mW	3102,3103,3104,3105
869MHZ 869,412-869,912 MHz 1- 500mW	3323, 3324
400-470 MHZ 1000 mW	3413, 3414
Slave side	
Number of Profibus participants + radio receiver	Device type
7 DP addresses (+1diagnosis slave)	3002, 3702,
4 DP addresses (+1diagnosis slave)	3003, 3103, 3323, 3413, 3703, 3004, 3104, 3324, 3414, 3704
3 DP addresses (+1diagnosis slave) (only point-to-point)	3105, 3705
Interface	RS485 Profibus standard conform 9-pin SubD
Profibus speed	up to 1.5Mbit, carried out by master
Anschlussmöglichkeit	All Profibus standard slaves All Profibus Master OP,PG,AG