

The Application Note is pertinent to the Unidrive Family

### Unidrive / UD73 Quick Setup for Profibus

**Scope** - This procedure applies to a Unidrive / UD73 combination using speed control and cyclic-data mappings set up by the default Unidrive “\*.GSD” file. Fieldbus start-stop control *requires* that sequencing “**Mode 4**” or “**Mode 3**” has been selected (#6.04 = 4 or 3). “**Mode 4**” is recommended and is the present default. This procedure also assumes that the Profibus Master and the Profibus Scanner have already been configured.

### Instructions

**Step 1 – Menu 8** Insure that any of the following parameter pointer locations do not values that conflict with Control Word control of the Unidrive. If a value of 6.29, 6.30, 6.31, 6.32, 6.33, or 6.34 is found in any of the following locations, set the value at that location to a value of zero (“0.00”).

Menu 8	If following value is found:	Then set to:
#8.10	6.29, 6.30, 6.31, 6.32, 6.33 or 6.34	0.00
#8.13	“ (same)	0.00
#8.16	“ (same)	0.00
#8.19	“ (same)	0.00
#8.21	“ (same)	0.00
#8.23	6.29, 6.30, 6.31, 6.32, 6.33 or 6.34	0.00

**Step 2 – Menu 20** Insure that the following Menu 20 parameters are set to the required values:

Menu 20	Value	Comment
#20.05	1 to 125	DP-Node ID, all nodes different
#20.01	121	Out Word 2 to #1.21
#20.02	408	Out Word 3 to #4.08
#20.03	201	In Word 2 from #2.01
#20.04	402	In Word 3 from #4.02
#20.06	9011	Out Word 1 to #90.11 Control Word
#20.07	9011	In Word 1 from #90.11 Status Word
Note that network data rate is automatically sensed from 1.5 Mbs to 9.6Kbs		
#20.11	48	16 to 992=Trip delay (ms) network loss,, 0=disable network loss
#20.13	0	Data endian format (0=big endian, 1=little endian)

**Step 3 – Menu 1** Insure that “**Digital Preset 1**” is selected as the speed reference source.

1. Check and set parameter #1.14 to a value of “3”.
2. Check and set parameter #1.15 to a value of “1”.

### Step 4 – Save and activate

1. Save Menu 1 through Menu 19 by setting #x.00 = 1000 and press the red “reset” button on the Unidrive.
2. Save the Menu 20 values by setting #17.19 = 1 (resets itself back to zero).
3. Activate this configuration by setting #x.00 = 1070 and press the red “reset” button on the Unidrive.

### Step 5 – Observe Normal Network Indications

1. Read Only Parameter #20.50 indicating network cycles per second, should not display zero value at this point.

**Author:** Jim Jeffers  
(716)-774-1193

**e-mail :** <mailto:jim.jeffers@emersonct.com>



**SCIGATE AUTOMATION (S) PTE LTD**

No.1 Bukit Batok Street 22 #01-01 Singapore 659592

Tel: (65) 6561 0488

Fax: (65) 6562 0588

Email: [sales@scigate.com.sg](mailto:sales@scigate.com.sg)

Web: [www.scigate.com.sg](http://www.scigate.com.sg)

Business Hours: Monday - Friday 8.30am - 6.15pm