

NOTE #: 06-017 -1

DATE: 31 January 2006

APPLICATION NOTE

SHARING INTELLIGENT SOLUTIONS

KEY WORDS:

Title:	C-Bus Run On Timers
Products Applicable:	C-Bus

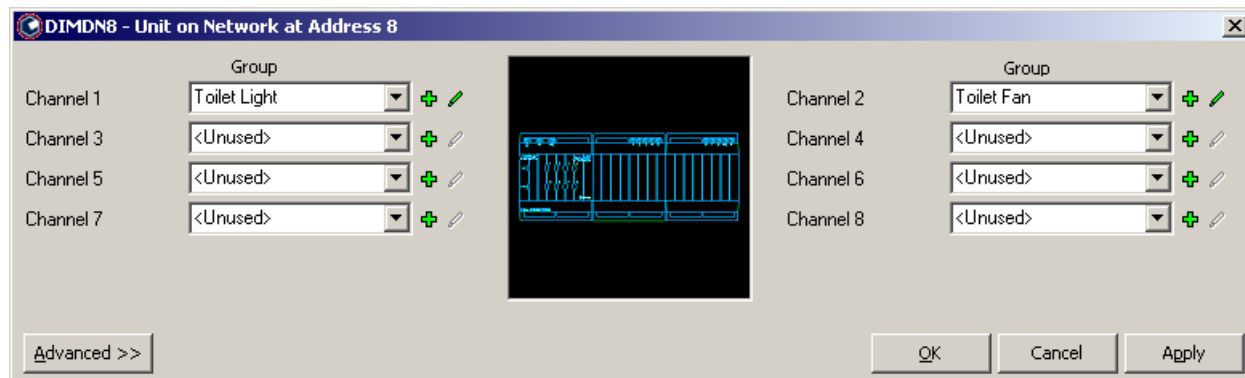
This Application Note documents how to setup run on timers in C-Bus. This is particularly useful in programming applications where lights and an exhaust fans turn on together, but turn off at different times.

Key Switch Run On Timer

This example will take a C-Bus 1 key input unit and configure a run on timer scenario.

Scan the C-Bus network. First of all program the output unit with the circuits you wish to control. For this example they will be: -

- Toilet Light
- Toilet Fan



Open the GUI for the input unit and click the advanced button. Select the Blocks tab and configure it as follows: -

Key Configuration

- Configure the key *function* to a Timer.

Block 1

- Enter Toilet Light into Block 1 Group.
- Set the *Timer 1* period for Block 1.
- Set the *Expiry* for the Block 1 timer to Off Key.
- Ensure *Keys using block* is selected for Block 1.

Block 2

- Enter Toilet Fan into Block 2 Group.
- Set the *Timer 1* period for Block 2 (this must be longer than the timer for block 1)
- Set the *Expiry* for the Block 2 timer to Off Key.
- Ensure *Keys using Block* is selected for Block 2.
- Set the *LED Assignment* to State/Timer on Block 2.

Save

- Save and Exit.

KEY1 - Unit on Network at Address 9

Key 1 Group: <Multiple> Function: Timer

Unit Identification | Global | Power Fail | Key Functions | **Blocks** | C-Bus Status

Block Assignments	Recall Levels	Timer	Keys using Block	LED Assignment
Group	Recall 1	Recall 2	Timer 1	Expiry
Block 1 Toilet Light	100%	100%	0h0m10s	Off Key
Block 2 Toilet Fan	100%	100%	0h0m20s	Off Key
Block 3 <Unused>	100%	100%	0h0m0s	Idle
Block 4 <Unused>	100%	100%	0h0m0s	Idle

Simple << OK Cancel Apply

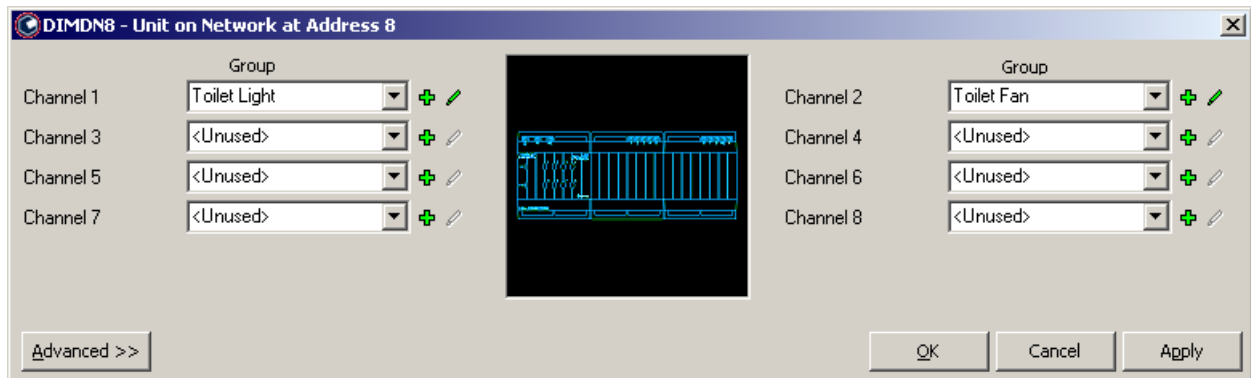
Operation: - When the key is pressed, both lights will turn on together. After 10 seconds the toilet light will turn off, while the toilet fan continues to run. After a further 10 seconds (20 seconds all up) the fan will turn off.

PIR Run On Timer

This example will take a C-Bus PIR input unit and configure a run on timer scenario.

Scan the C-Bus network First of all program the output unit with the circuits you wish to control. For this example they will be: -

- Toilet Light
- Toilet Fan



Open the GUI for the input unit and click the advanced button. Select the Blocks tab and configure it as follows: -

Block 1

- Enter Toilet Light into Block 1 Group.
- Set the *Timer 1* period for Block 1.
- Set the *Expiry* for the Block 1 timer to Off Key.
- Ensure *Keys using block* is selected for Block 1 (LI).

Block 2

- Enter Toilet Fan into Block 2 Group.
- Set the *Timer 1* period for Block 2 (this must be longer than the timer for Block 1)
- Set the *Expiry* for the Block 2 timer to Off Key.
- Ensure *Keys using Block* is selected for Block 2 (LI).
- Set the *LED Assignment* to State/Timer on Block 2.

Save

- Save and Exit.

SENPIRSS - Unit on Network at Address 6


Day-time Movement (LI)

Group: <Multiple> Function: PIR Day Move

Night-time Movement (DA)

Group: <Multiple> Function: PIR Night Move

☒ Use same response settings as 'Day-time Movement'



Sunset to Sunrise (SS)

Group: <Unassigned> Function: PIR Sunset

Security (SE)

Group: <Unassigned> Function: PIR Security

Sensor Enable/Disable

Group: <Unused> ☒ Enables ☐ Disables

Unit Identification | Global | Functions | **Blocks** | C-Bus Status

Block Assignments		Recall Levels		Timer		Features using Block				LED Assignment		
	Group	Recall 1	Recall 2	Timer 1	Expiry	LI	DA	SS	SE	1		
Block 1	Toilet Light	100%	100%	0h0m10s	Off Key	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Block 2	Toilet Fan	100%	100%	0h0m20s	Off Key	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	State/Ti		
Block 3	<Unused>	100%	100%	0h0m2s	Idle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Block 4	<Unused>	100%	100%	0h0m0s	Idle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			

Simple << OK Cancel Apply

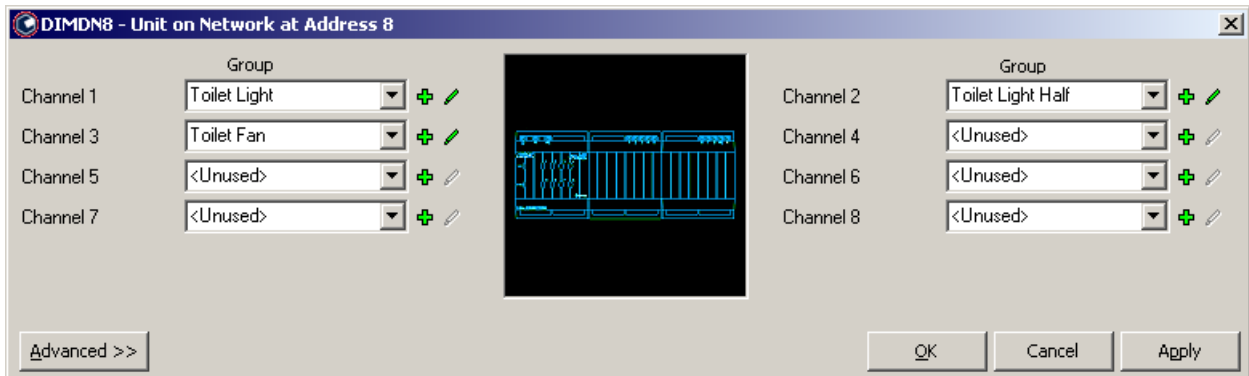
Operation: - When the PIR is triggered, both lights will turn on together. After 10 seconds the toilet light will turn off, while the toilet fan continues to run. After a further 10 seconds (20 seconds all up) the fan will turn off.

Run On Timer With Half Lights

This example will take a C-Bus PIR input unit and configure a run on timer scenario. This will also overcome any possible problems with Occupational Health & Safety.

Scan the C-Bus network First of all program the output unit with the circuits you wish to control. For this example they will be: -

- Toilet Light
- Toilet Light Half
- Toilet Fan



Open the GUI for the input unit and click the advanced button. Select the Blocks tab and configure it as follows: -

Block 1

- Enter Toilet Light into Block 1 Group.
- Set the *Timer 1* period for Block 1.
- Set the *Expiry* for the Block 1 timer to Off Key.
- Ensure *Keys using block* is selected for Block 1 (LI).

Block 2

- Enter Toilet Fan into Block 2 Group.
- Set the *Timer 1* period for Block 2 (this must be longer than the timer for Block 1)
- Set the *Expiry* for the Block 2 timer to Off Key.
- Ensure *Keys using Block* is selected for Block 2 (LI).
- Set the *LED Assignment* to State/Timer on Block 2.

Block 3

- Enter Toilet Light Half into Block 3 Group.
- Set the *Timer 1* period for Block 3 (this must be before the Block 1 turn off).
- Set the *Expiry* for the Block 3 timer to Off Key.
- Ensure *Keys using block* is selected for Block 3 (LI).

Save

- Save and Exit.

SENPIRSS - Unit on Network at Address 6


Day-time Movement (LI)

Group: <Multiple> Function: PIR Day Move

Night-time Movement (DA)

Group: <Multiple> Function: PIR Night Move

☒ Use same response settings as 'Day-time Movement'



Sunset to Sunrise (SS)

Group: <Unassigned> Function: PIR Sunset

Security (SE)

Group: <Unassigned> Function: PIR Security

Sensor Enable/Disable

Group: <Unused> ☒ Enables ☐ Disables

Unit Identification | Global | Functions | **Blocks** | C-Bus Status

Block Assignments		Recall Levels		Timer		Features using Block				LED Assignment		
	Group	Recall 1	Recall 2	Timer 1	Expiry	LI	DA	SS	SE	1		
Block 1	Toilet Light	100%	100%	0h0m10s	Off Key	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Block 2	Toilet Fan	100%	100%	0h0m20s	Off Key	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	State/Time		
Block 3	Toilet Light Half	100%	100%	0h0m5s	Off Key	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
Block 4	<Unused>	100%	100%	0h0m0s	Idle	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

Simple << OK Cancel Apply

Operation: - When the PIR is triggered, all three loads will turn on together. At the 5 second point, one of the lighting circuits (Toilet Lights Half) will turn off. This will indicate to anybody in the room, that the all the lights are about to turn off. After another 5 seconds the rest of the toilet lights will turn off (Toilet Light), while the toilet fan continues to run. After a further 10 seconds (20 seconds all up) the fan will turn off.

Technical Support and Troubleshooting

For technical assistance call: 1300 722 247 (Australia)
0800 888 219 (New Zealand)

CIS web site: <http://www.clipsal.com/cis/>

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