Powerline Control Systems **TN No. 0001**

Technical Note

Subject: Preset Dim Implementation

Date: 4/2/95

All PCS products, the Multi-Modules, Lighting Modules and Smart Switches will respond to the defined PRESET DIM commands (see the TW523 specification).

The PRESET DIM command is in the form of :

Start Code/House Code/Number Code	Start Code/House Code/Number Code
Start Code/House Code/Function Code	Start Code/House Code/ Function Code

where the second sets of House Code/Function Code contain the following (9) bits:

H1	H2	H4	H8	D1	D2	D4	D8	D16
L1	L2	L3	L4	1	0	1	L5	1

The lighting level is determined by L5 L4 L3 L2 L1 where L5 is the MSB and L1 is the LSB. This would produce 32 distinct levels. We have decided to implement this command such that there are 30 distinct dim levels, from binary 00001 to 11110. We use the binary 11111 to equal full ON and the binary 00000 to equal full off. This information is contained in the X-10 TW523 technical note.

When one of our products receives a Preset Dim command the output ramps directly to the new level from the previous level . It does not go to full on or full off first. If the soft start featured is enabled, the output ramps gently to the new level. If the soft start feature is disabled the output goes instantaneously to the new level.

Use of these Preset Dim commands completely eliminates the problem of the controller having to keep track of the state of the lighting module. Now accurate, reliable and speedy scene lighting is not only possible but simple to implement.