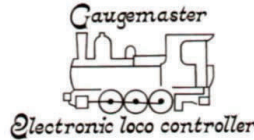


# PRODIGY ADVANCE - DCC23 6 pin Decoder



- MOBILE DECODER
- DCC PLUG AND PLAY
- 1 amp/2 amp PEAK
- 2 FUNCTIONS at 0.5 amps

## FEATURES

### SMOOTH OPERATION

THREE SPEED STEP SETTINGS – 14, 28 or 128 steps

PLUG AND PLAY - DCC 6 Pin NEM socket compatible

### ALL MODE PROGRAMMING

DECODER RESET CV - With or without speed table reset

MOTOR ISOLATION PROTECTION - To help prevent damage to your decoder

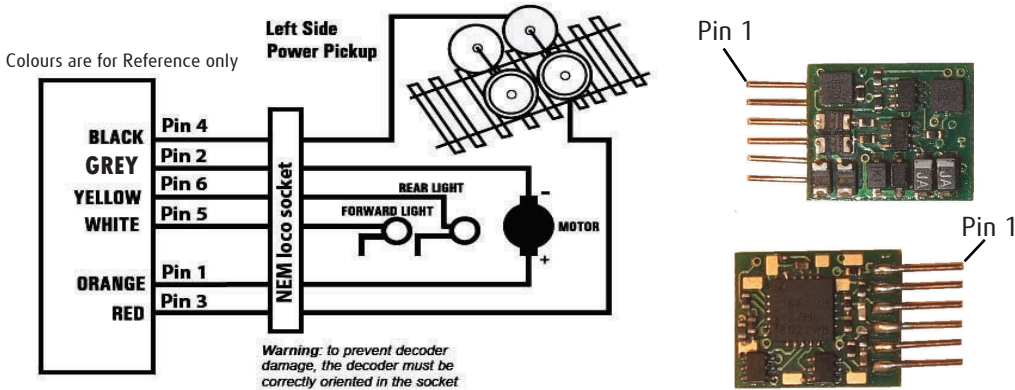
ADVANCED & UNIVERSAL CONSISTING

2 and 4 DIGIT ADDRESSING

DCC COMPATIBLE

## INSTALLATION INSTRUCTIONS

1. Carefully remove your locomotive's body from it's chassis. Please take note of the orientation of the body to make re-installation easier.
2. This decoder is compatible with a DCC 6 pin sockets. Remove the jumper plug from the loco DCC socket on the locomotive circuit board taking note of the number 1 pin socket, Ensure the number 1 pin is aligned with the number 1 socket and plug in the decoder.
3. Replace the locomotive body. You are now ready to run your locomotive. This decoder has a factory default setting of address 03. You can easily change this address and any other features you choose to, by using your PRODIGY ADVANCE system. If your locomotive is not DCC ready, then follow the diagram below for direct connection. Be certain that the locomotive brushes are isolated from ALL other connections to the locomotive other than the grey and orange wires from the decoder.



## POSTAL ADDRESS

**GAUGEMASTER** Controls Ltd  
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 West Sussex  
 BN18 0BN

## OTHER USEFUL CONTACT NUMBERS

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CV#	Feature	Default	Range
Addressing			
01	2 Digit Decoder Address	3	001-127
17	4 Digit Address Hi Byte	0	0128-9983
18	4 Digit Address Lo Byte	0	0128-9983
29	Configuration Register	6	
Acceleration & Deceleration			
03	Acceleration Rate	0	0 to 031
04	Deceleration Rate	0	0 to 031
Three Step Speed Table & Start Voltage			
02	Start Voltage	0	0 to 255
05	Maximum Voltage	0	0 to 255
06	Mid Point Voltage	0	0 to 255
Advanced Consisting			
19	Advanced Consist Address	0	
Function Remapping			
33-46	Function Remapping CVs	0	
Decoder Factory Reset			
08	Reset Decoder to Factory Default CV Values	0	Set CV8 to 8 to reset all CV Values.

## CV#29

Function	English Description	NMRA Bit meaning	Lenz Bit meaning	Decimal
Locomotive Direction	Normal Direction	NMRA Bit-0=0	Lenz Bit-1=0	0
	Reverse Direction	NMRA Bit-0=1	Lenz Bit-1=1	1
Headlight Location	14 Speed Step mode	NMRA Bit-1=0	Lenz Bit-2=0	0
	28 Speed Step Mode	NMRA Bit-1=1	Lenz Bit-2=1	2
Power Source Conversion	NMRA Digital Mode Only	NMRA Bit-2=0	Lenz Bit-3=0	0
	Analog Conversion Enabled	NMRA Bit-2=1	Lenz Bit-3=1	4
Speed Table	Use Decoder Defined Speed Curve	NMRA Bit-4=0	Lenz Bit-5=0	0
	Use User Defined Speed Table	NMRA Bit-4=1	Lenz Bit-5=1	16
Extended Addressing	127 address mode	NMRA Bit-5=0	Lenz Bit-6=0	0
	10,000 address mode	NMRA Bit-5=1	Lenz Bit-6=1	32