



# UDC 3500 Application Note

## UDC 3500 AS AN AUTO/MANUAL STATION

SEVERAL CUSTOMERS HAVE LEARNED THAT THE UDC 3500 IS AN EXCELLENT **AUTO - MANUAL** STATION FOR USE AS A HARD MANUAL BACK-UP BETWEEN A CONTROLLER AND THE FINAL CONTROL ELEMENT ON CRITICAL LOOPS.

- \* WHEN IN **AUTOMATIC**, THE UDC 3500 PASSES THE LOOP CONTROLLER'S OUTPUT DIRECTLY THROUGH TO THE CONTROL ELEMENT.
- \* WHEN PLACED IN **MANUAL** THE UDC 3500 OUTPUT CAN BE ADJUSTED TO PLACE THE CONTROL ELEMENT IN ANY DESIRED POSITION AND HOLD IT THERE.
- \* THE DIGITAL INPUT OPTION CAN BE USED TO REMOTELY PLACE THE UDC 3500 IN **MANUAL** MODE-IF DESIRED.

THE UDC 3500 SHOULD BE CONFIGURED AS FOLLOWS:

### SET-UP CONFIGURATION

#### TUNING

GAIN = 1.0  
RATE = 0  
MANUAL RESET = 0

#### CONTROL ALGORITHM

PD+MR

#### INPUT

ACTUATION = 4-20MA  
TRANSMITTER = LINEAR  
INPUT 1 HI = 100.0  
INPUT 1 LO = 0.0

#### CONTROL:

OUTPUT DIRECTION =DIRECT

#### LOCAL SP IS TO BE SET TO "0"

#### WIRING DATA

1. 4-20 MA OUTPUT FROM CONTROLLER IS TO BE WIRED TO UDC 3500 INPUT TERMINALS 35 AND 36.
2. UDC 3500 4-20 MA CONTROL OUTPUT, THERMINALS 5 AND 6 ARE TO BE WIRED TO FINAL CONTROL ELEMENT.