



# UDC 3500 Application Note

## Switching between a Remote & Local Setpoint with a Digital Input

**Solution:** Specify a UDC 3500 with a Digital Input Option.

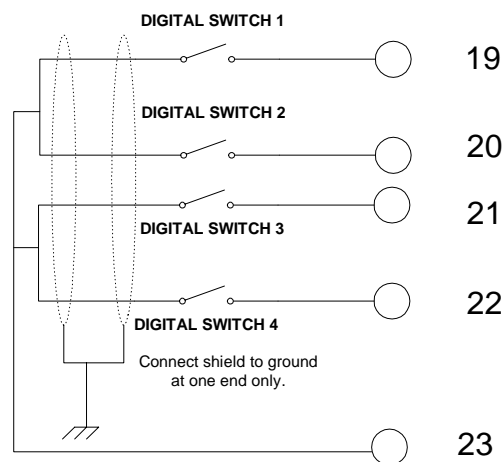
When a digital input is configured for **To LSP**, the UDC will switch from Remote SP to a Local SP with a contact or switch closure.

**Configuration:**

Setup – Control – RSP SRC is set to Input 1, 2, 3, 4, 5, IN ALG 1 or IN ALG 2.

Setup – Option – DIG INP 1 2, 3 or 4 is set to LSP

**Wiring :**



**Operation:**

1. Make sure that the Digital Input Switch is open and Remote SP is selected
2. Set the desired setpoint for Local SP using the Lower Display & arrow keys.
3. With the Digital Input Switch closed, SP will be displayed on the Lower display.
4. When the Digital Input Switch is re-opened the bar next to the left of the RSP will light, and the Remote SP will be the controlling setpoint.

**Notes:**

1. If the **Setpoint Select is enabled**, then someone can override the Digital Input by pressing the SP Select key.

A suggested correction is, prior to doing step 3 in the operation section, go to Tuning Group and set the Lockout to None. Keep pressing the Function key until **SP SEL** appears in the lower display. Set the Upper Display to **DISABLE**.

With the Setpoint Select set to disable, the unit can not be switched to Local SP by the keyboard.

2. A **different set of Tuning constants** can be selected when Local SP is selected. If Two sets of Tuning constants are selected under the Control section, then by using the **DIG 1 CMB** or **DIG 2 COMB** set to +**PID 2** then PID set 2 tuning values will be used when SP is selected.