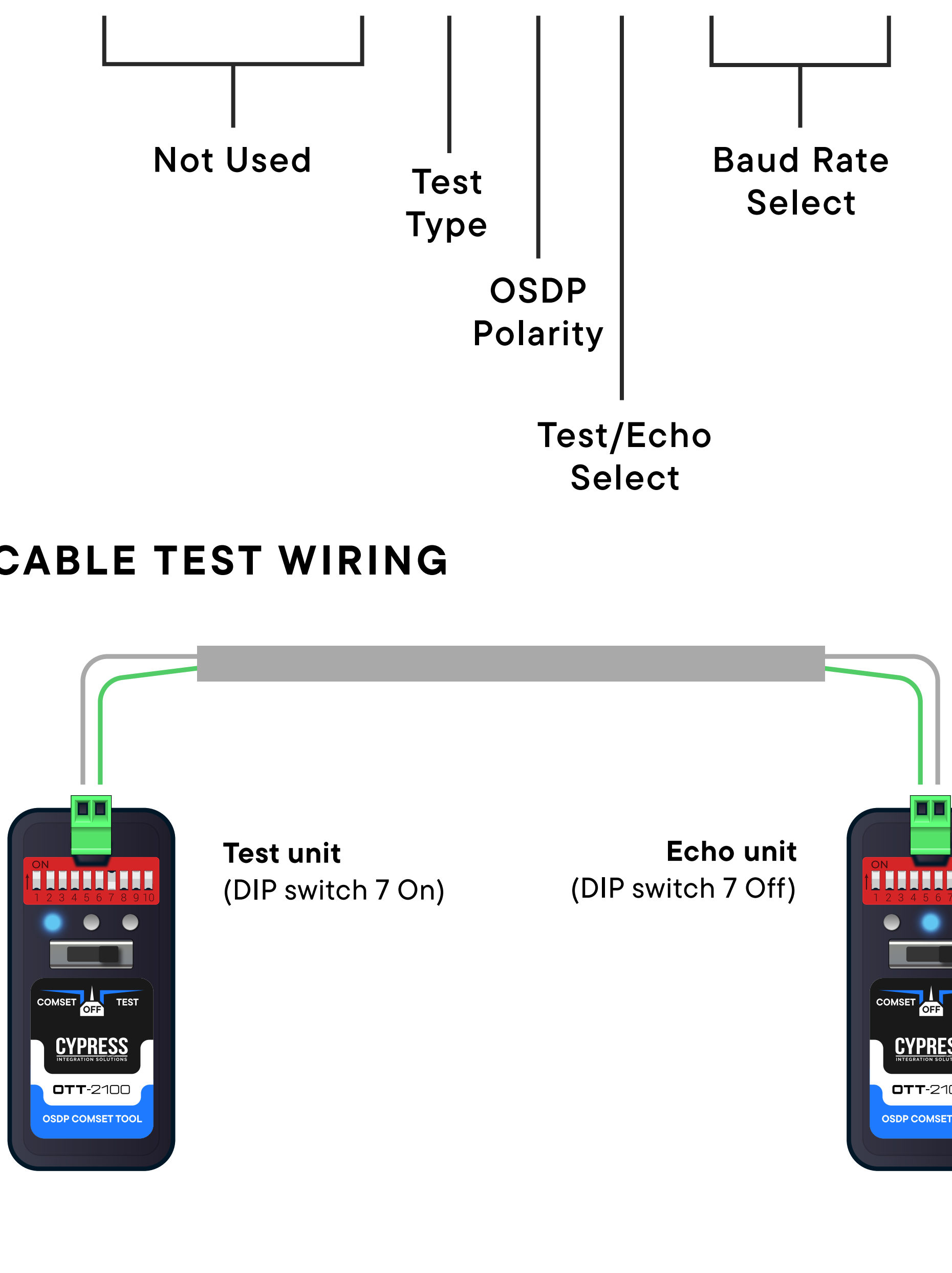


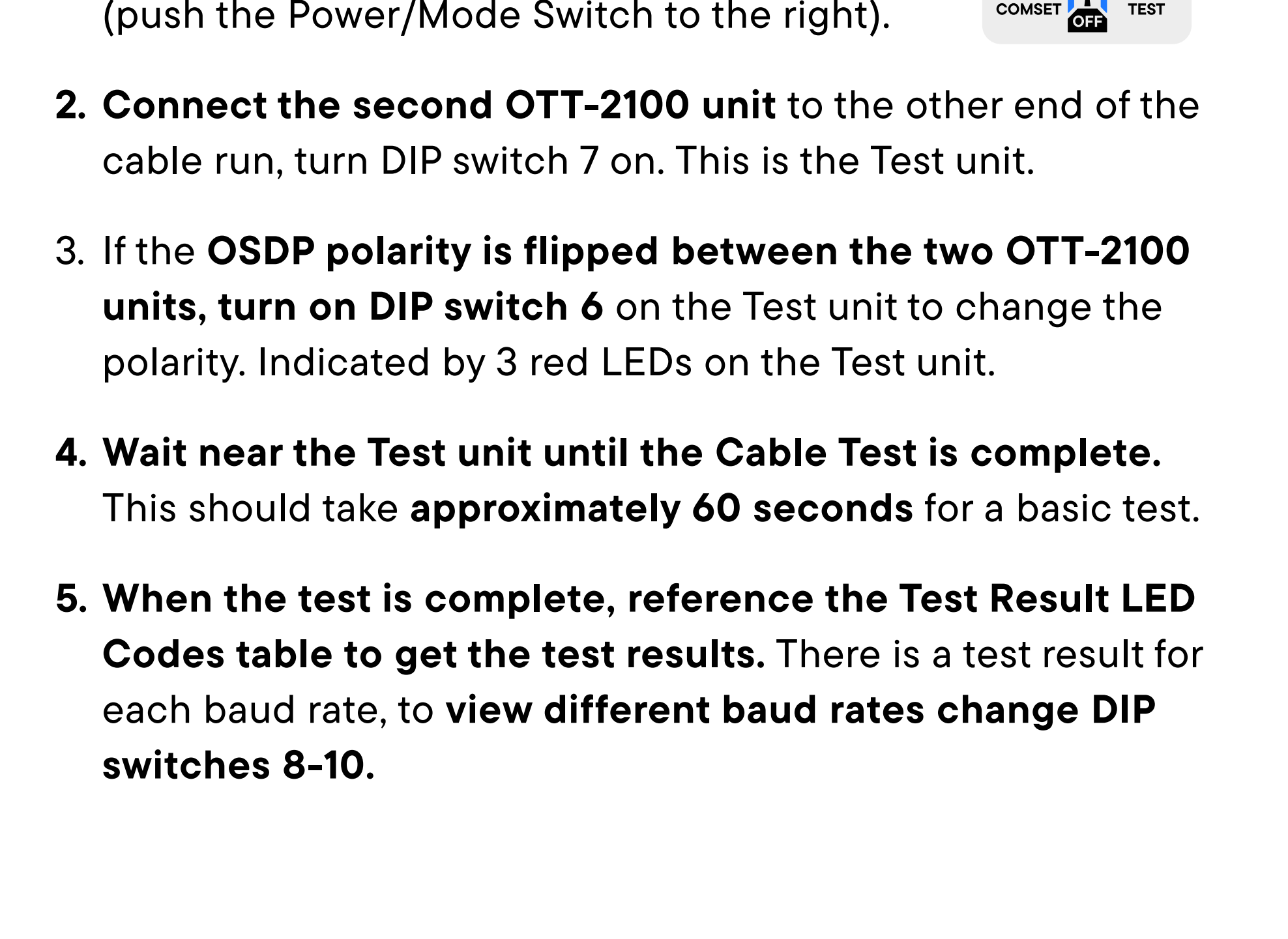
# OTT-2100-2

Sold as Pair of Devices

## Cable Test Procedure

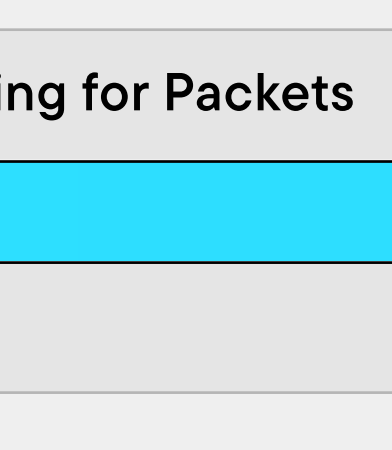


### CABLE TEST WIRING



### RUNNING A TEST:

1. **Power on the Echo unit in Test Mode** (push the Power/Mode Switch to the right).
2. **Connect the second OTT-2100 unit** to the other end of the cable run, turn DIP switch 7 on. This is the Test unit.
3. If the **OSDP polarity is flipped between the two OTT-2100 units**, turn on DIP switch 6 on the Test unit to change the polarity. Indicated by 3 red LEDs on the Test unit.
4. **Wait near the Test unit until the Cable Test is complete.** This should take **approximately 60 seconds** for a basic test.
5. **When the test is complete, reference the Test Result LED Codes table to get the test results.** There is a test result for each baud rate, to **view different baud rates change DIP switches 8-10.**



|   |   |   |                                               |
|---|---|---|-----------------------------------------------|
| ● | ● | ● | 0% Loss                                       |
| ● | ● | ● | 1% - 5% Loss                                  |
| ● | ● | ● | 6% - 10% Loss                                 |
| ● | ● | ● | 11% - 15% Loss                                |
| ● | ● | ● | 16% - 20% Loss                                |
| ● | ● | ● | 21% - 30% Loss                                |
| ● | ● | ● | 31% - 40% Loss                                |
| ● | ● | ● | 41% - 50% Loss                                |
| ● | ● | ● | Greater than 50% Loss                         |
| ● | ● | ● | Test Failed: cut in cable or flipped polarity |

## READING THE TEST RESULT LEDS:

The Test unit LED 1 will rapidly flash blue to indicate that it is performing the test. The test is complete when Test unit LED 1 is either solid green (test complete), or solid red (test failed). The

### READING THE TEST RESULT LEDs:

The Test unit LED 1 will rapidly flash blue to indicate that it is performing the test. The test is complete when Test unit LED 1 is either solid green (test complete), or solid red (test failed). The Echo unit LED 2 will flash blue during testing to indicate that it is listening for packets, the LEDs will not change state after the test is complete.

A failed test indicates that the Test unit did not receive any echoed OSDP messages from the Echo unit (no connection) or the OSDP polarity between the Test and Echo unit is reversed. To change the polarity on the Test unit, turn on DIP switch 6 and power cycle the unit to restart the test.

When the test is complete the Test unit will display the results on LEDs 2 and 3, as shown in the table below. The test results for one specific baud rate are displayed.

| Baud Rate | 8 | 9 | 10 |
|-----------|---|---|----|
| 9600      |   |   |    |
| 19200     |   |   | X  |
| 38400     |   | X |    |
| 57600     |   | X | X  |
| 115200    | X |   |    |
| 230400    | X |   | X  |

X = ON

### VIEWING RESULTS FOR EACH BAUD RATE

The test results are displayed per baud rate. The different results for each baud rate can be shown by changing DIP switches 8, 9, and 10. The displayed test results are changed in real time as the DIP switches are changed.

The table to the right shows how to set DIP switches 8, 9, and 10 to select the test results for the different baud rate.

# OTT-2100

Sold as Single Device

## COMSET Procedure

Use DIP switches **1-7** to select the desired OSDP address

Use DIP switches **8-10** to select the desired baud rate.

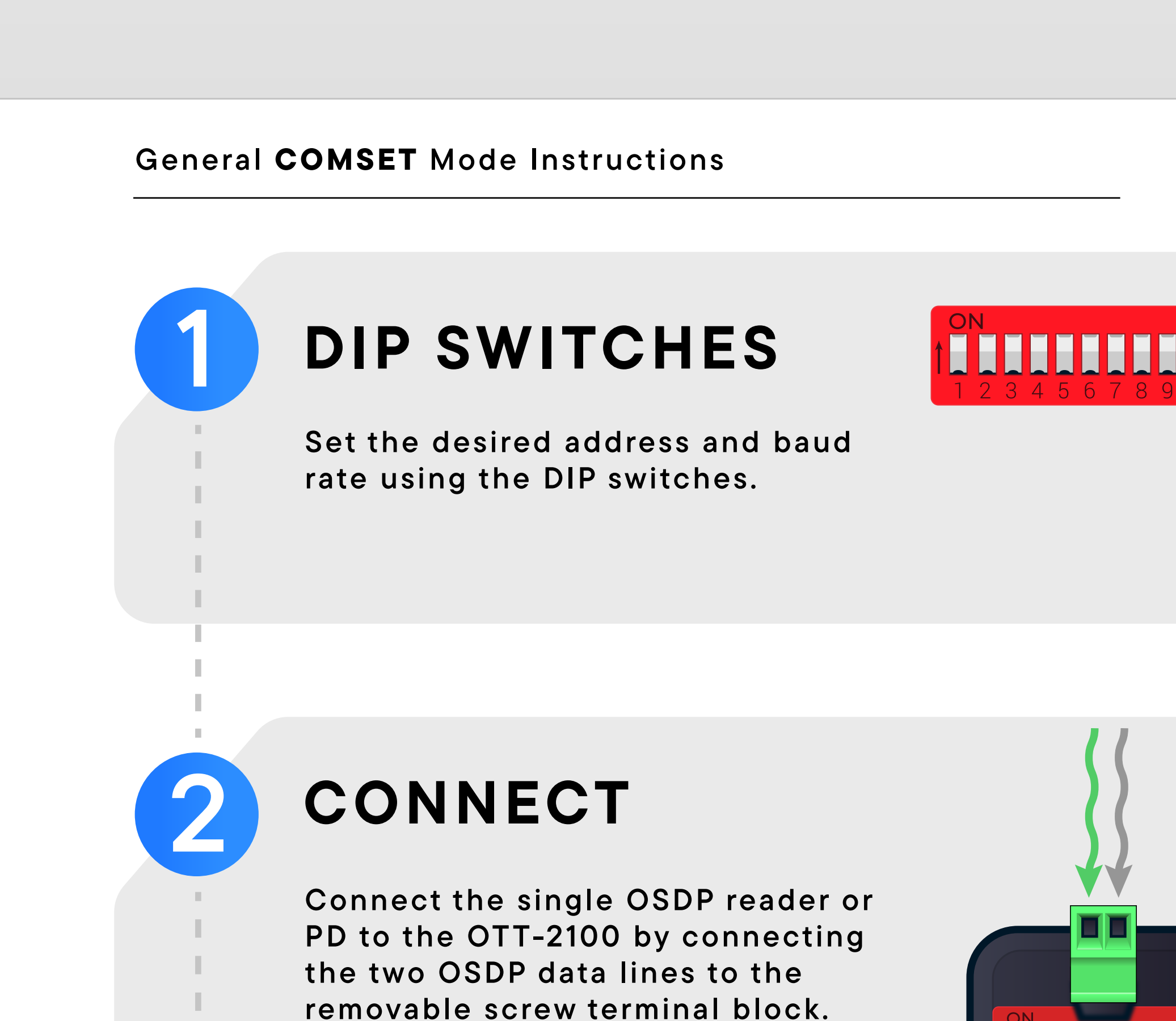


| Address | 4 | 5 | 6 | 7 |
|---------|---|---|---|---|
| 0       |   |   |   |   |
| 1       |   |   |   | X |
| 2       |   |   | X |   |
| 3       |   |   | X | X |
| 4       |   | X |   |   |
| 5       |   | X |   | X |

| Baud Rate | 8 | 9 | 10 |
|-----------|---|---|----|
| 9600      |   |   |    |
| 19200     |   |   | X  |
| 38400     |   | X |    |
| 57600     |   | X | X  |
| 115200    | X |   |    |
| 230400    | X |   | X  |

X = ON

## OTT-2100 COMSET Wiring Diagram

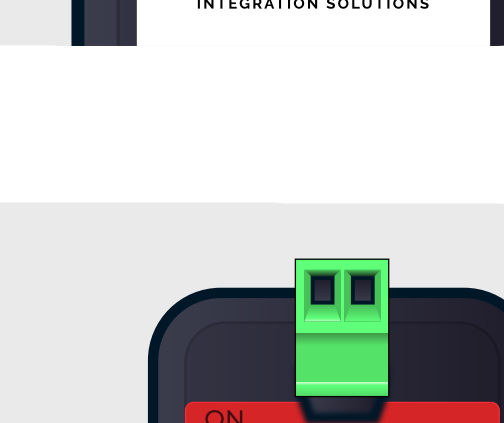


### General COMSET Mode Instructions

1

#### DIP SWITCHES

Set the desired address and baud rate using the DIP switches.



2

#### CONNECT

Connect the single OSDP reader or PD to the OTT-2100 by connecting the two OSDP data lines to the removable screw terminal block.

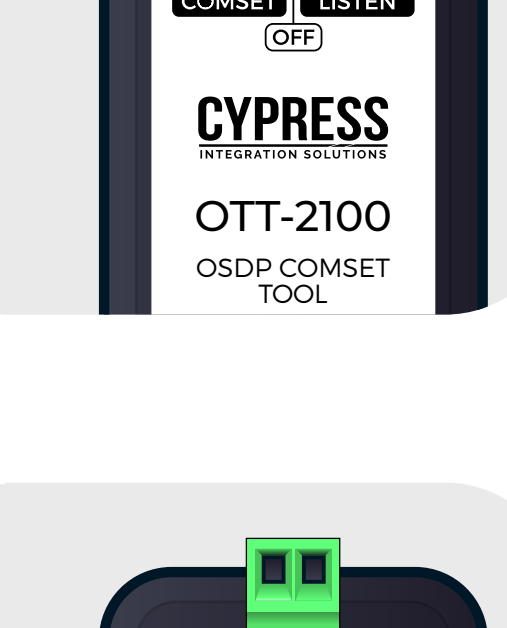
**The polarity of the OSDP data lines does not matter**, as the polarity switching feature will allow communication regardless of the polarity.



3

#### COMSET MODE

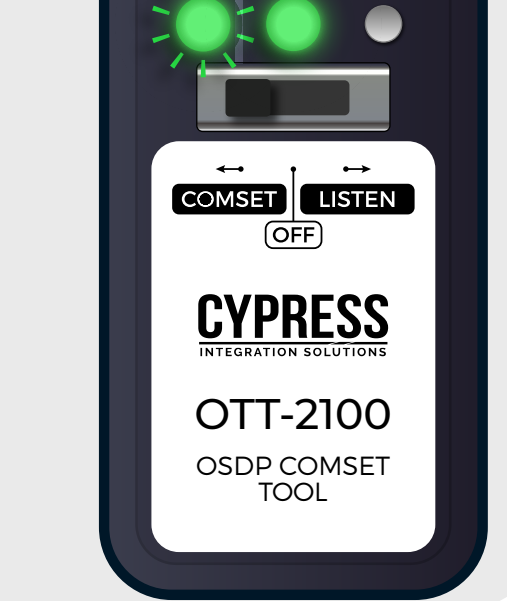
Turn the Power/Mode switch to the left position to power the OTT-2100 on in COMSET Mode.



4

#### ESTABLISH COMMUNICATION

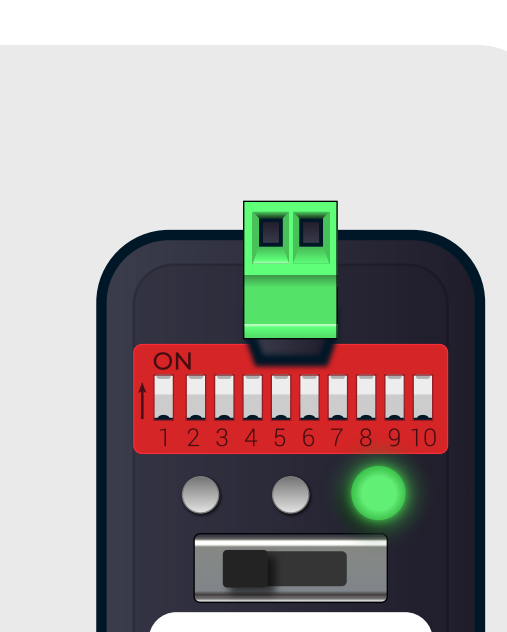
LED 1 will be **flashing blue** while the OTT-2100 is attempting to establish communication with the OSDP reader.



5

#### CONNECTION TO READER

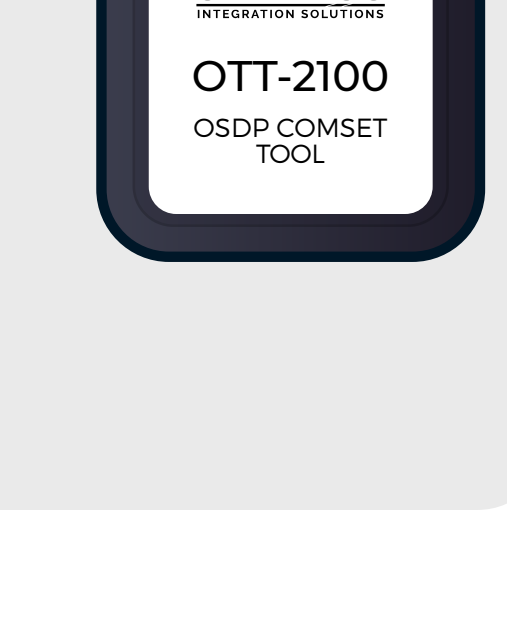
Once the OTT-2100 has established communication with the OSDP reader **LED 1** will be **flashing green**.



6

#### COMMUNICATING WITH READER

LED 1 will continue **flashing green** while communicating with the OSDP reader. Once the OSDP reader address and baud rate have been configured, **LED 2** will turn **solid green**.



7

#### COMMUNICATING WITH READER

After the address and baud rate have been configured the OTT-2100 will attempt to start a Secure Channel session with the OSDP reader.

**LED 3** will be **solid green** when communicating with the OSDP reader in a Secure Channel session with the default Secure Channel Base Key (SCBK).



| COMSET MODE |                  |                                                                             | LED TABLE |  |
|-------------|------------------|-----------------------------------------------------------------------------|-----------|--|
| LED         | LED STATE        | MEANING                                                                     |           |  |
| LED 1       | Green (Flashing) | Communicating with the PD                                                   |           |  |
| LED 1       | Blue (Flashing)  | Searching for PD                                                            |           |  |
| LED 1       | Red (Solid)      | Low battery voltage                                                         |           |  |
| LED 2       | Green (Solid)    | PD's address and baud rate have been set to the selected values             |           |  |
| LED 2       | Blue (Solid)     | PD accepted the new address, but rejected the new baud rate                 |           |  |
| LED 2       | Red (Solid)      | PD did not send COM reply after the COMSET command was sent (COMSET failed) |           |  |
| LED 3       | Green (Solid)    | PD has the default OSDP Secure Channel Base Key (SCBK)                      |           |  |
| LED 3       | Blue (Solid)     | PD has a custom OSDP Secure Channel Base Key (SCBK), not default            |           |  |
| LED 3       | Red (Solid)      | PD is not capable of Secure Channel sessions (rejects any attempt)          |           |  |