

- Ir for Cross on RIGHT Arrow
- Iu for Cross on UP Arrow
- Id for Cross on DOWN Arrow

#### 6. Display and External Controller Communication Flow

1. Add the target display board id in the commands.
2. Send command to display.
3. Read the Response immediately.

Note: If not handling the response coming from Display Board then add at least 100 milliseconds (100ms) between each command.

4. Command Response from Display Board:

1. Successful (Error = 0)
2. Unsuccessful → Error = X (here X is error number)

Note: If No Response from Display Board, it means command is not delivered to Display Board.

#### 7. X-axis and Y-axis of Display Boards

1. Single Tile Display: Starting X-axis is 32 and Y-axis is 32.
2. Single ROW 2 Tiles Display: Starting X-axis is 0 and Y-axis is 32.
3. Double ROW 4 Tile Display:
  - a. First ROW starting X-axis is 0 and Y-axis is 16.
  - b. Second ROW starting X-axis is 0 and Y-axis is 32.
4. Double ROW 4 Tile Display:
  - a. First ROW starting X-axis is 0 and Y-axis is 0.
  - b. Second ROW starting X-axis is 0 and Y-axis is 16.
  - c. Third ROW starting X-axis is 0 and Y-axis is 32.

#### 8. Single Tile Display Examples

- Up Arrow and 3 digit number text in GREEN color
  1. Send Command → IClid16)V → Clear Screen
  2. Read Response or DELAY 100 Milliseconds  
(Error = 0 is successful response others are error number)



1. Send Command → |C|id|6|\r → Clear Screen
2. Read Response or DELAY 100 Milliseconds
3. Send Command → |C|id|4|1|0-0- #G B1 #r 283|1|7|\r → Actual Message for 1<sup>st</sup> row
4. Read Response or DELAY 100 Milliseconds
5. Send Command → |C|id|4|1|0-16- #G B2 #d 153|1|7|\r → Actual Message for 2<sup>nd</sup> row
6. Read Response or DELAY 100 Milliseconds
7. Send Command → |C|id|4|1|0-32- #G B3 #d 233|1|7|\r → Actual Message for 3<sup>rd</sup> row
8. Read Response or DELAY 100 Milliseconds

12. Note: For any support reach us on +91-8130832704

3. Send Command → `/C/id/4/1/32-32-#G#u 253/1/7/\r` → Actual Message
4. Read Response or DELAY 100 Milliseconds

- **Down Arrow and 3 digit number text in Red color**

1. Send Command → `/C/id/6/\r`
2. Read Response or DELAY 100 Milliseconds
3. Send Command → `/C/id/4/1/32-32-#R#d148/1/7/\r`
4. Read Response or DELAY 100 Milliseconds

- **Cross with Up Arrow and FULL text in Red color**

1. Send Command → `/C/id/6/\r`
2. Read Response or DELAY 100 Milliseconds
3. Send Command → `/C/id/4/1/32-32-#R lu FULL/1/7/\r`
4. Read Response or DELAY 100 Milliseconds

#### 9. Single Row (2 Tiles) Display Example

- **Up Arrow and 3 digit number text in GREEN color**

1. Send Command → `/C/id/6/\r` → Clear Screen
2. Read Response or DELAY 100 Milliseconds
3. Send Command → `/C/id/4/1/0-32-#G #u #B 253/1/7/\r` → Actual Message
4. Read Response or DELAY 100 Milliseconds

#### 10. Double ROW (4 Tiles) Display Example

- **Up Arrow and 3 digit number text in GREEN color**

1. Send Command → `/C/id/6/\r` → Clear Screen
2. Read Response or DELAY 100 Milliseconds
3. Send Command → `/C/id/4/1/0-0-#GB1 #u 283/1/7/\r` → Actual Message for 1<sup>st</sup> row
4. Read Response or DELAY 100 Milliseconds
5. Send Command → `/C/id/4/1/0-16-#GB2 #u 153/1/7/\r` → Actual Message for 2<sup>nd</sup> row
6. Read Response or DELAY 100 Milliseconds

#### 11. Triple ROW (6 Tiles) Display Example

- **Mix Sign, text, digits in many colors**