

OPTIR Touch General Data Sheet

1. Scope:

This document summarizes the general technical data of KEYTEC'S OPTIR Touch – the resizable IR touch screen.

2. Technology Overview:

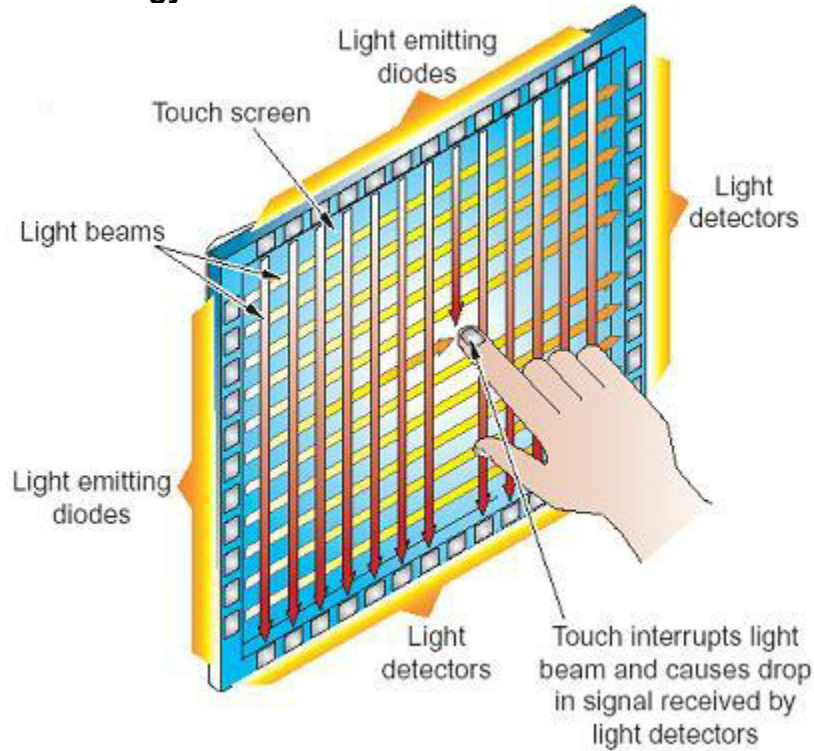


Figure 1.

3. Components:

Part Number	Function	Dimensions (mm)
IRT-A	Transmitter	130.8 x 39
IRR-A	Receiver	130.8 x 39
IRT-B	Transmitter	348.8 x 39
IRR-B	Receiver	348.8 x 39
IRCC	Corner	48 x 48
IRSC	Corner to controller	48 x 48
IR-CA	Controller for size up to 40"	100 x 50
IR-CB	Controller for size larger than 40"	100 x 50
IR-CP	Power supply for IR-CB	60 x 40 x 25
IR-C0	Cable	19 x 300

Pitch between 2 LED's: 5.45 mm.

See Figures 2, 3 and 4.

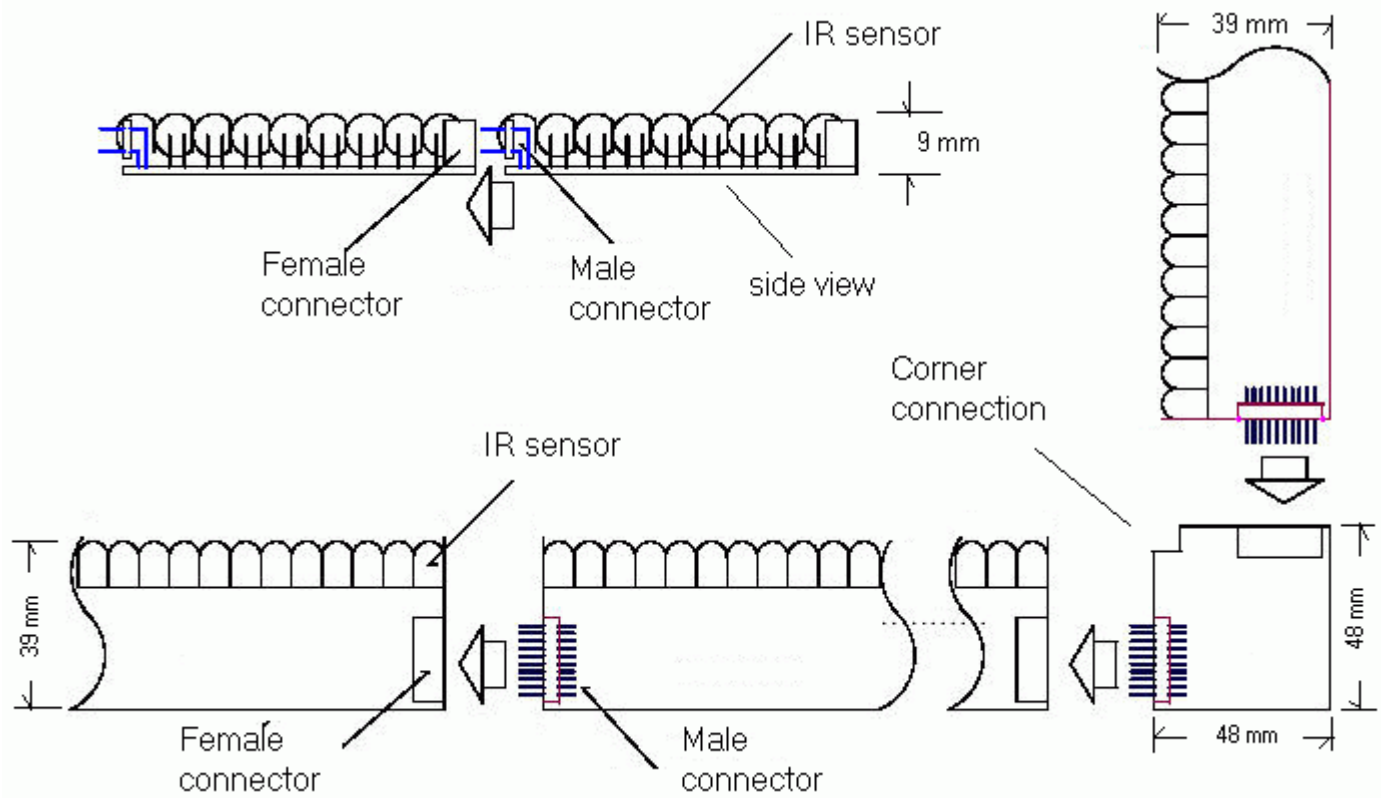


Figure 2.

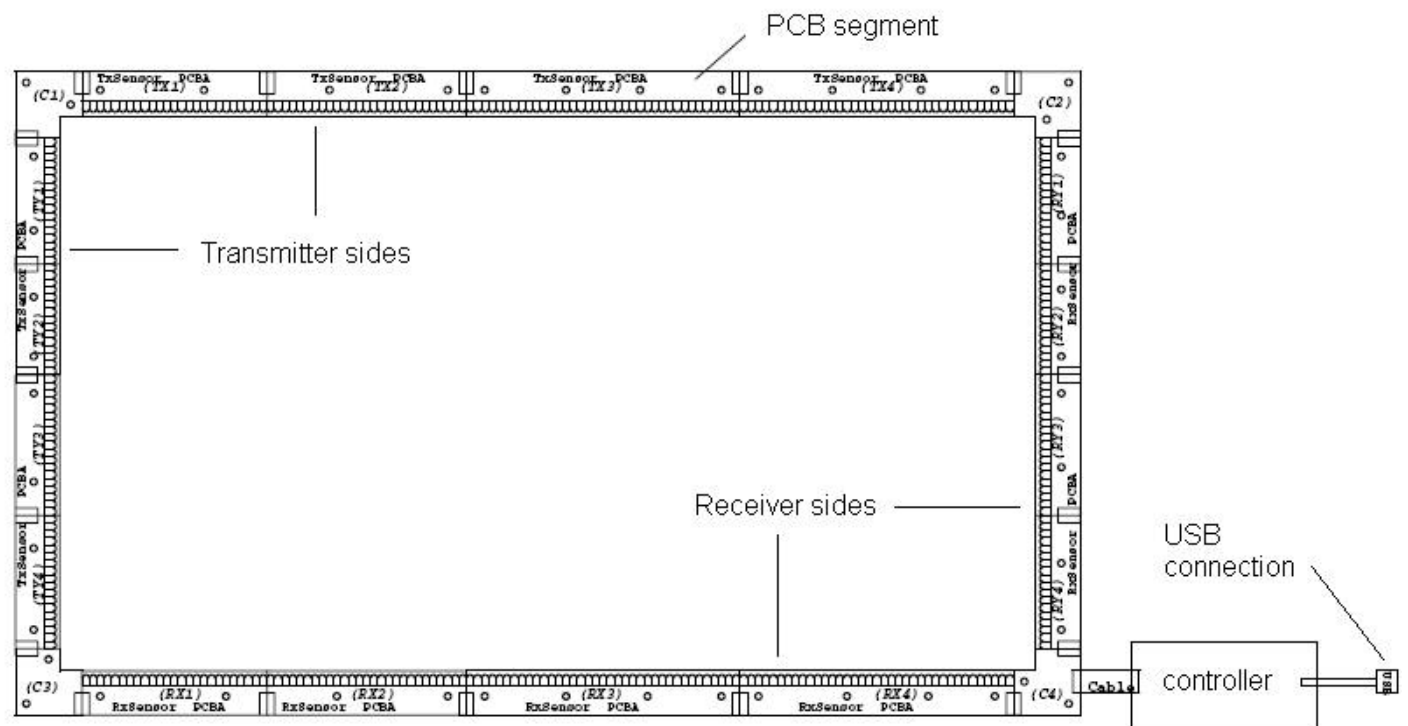
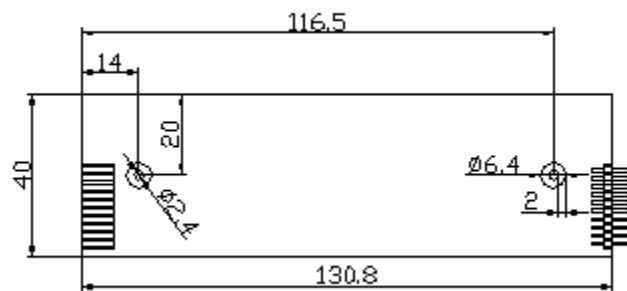
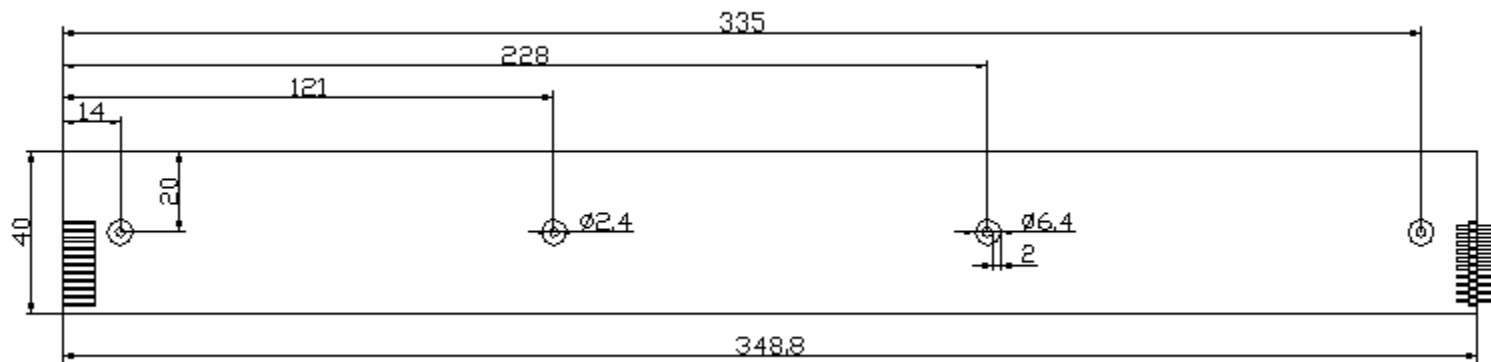


Figure 3.

IRT-A & IRR-A



IRT-B & IRR-B



IRCC & IRSC

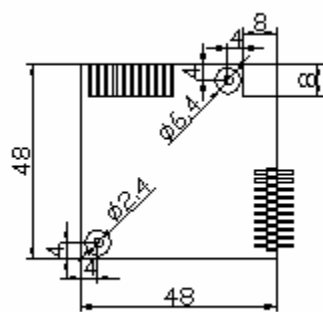


Figure 4.

4. Assembly Instructions:

- 4.1. Determine the number of segments you need for horizontal and vertical directions.
- 4.2. Place the needed segments on the mounting material (Plexiglas, wood or plastic frame, etc.) with LED's facing to the center. The receiver segment (blue LED) should be placed at bottom and right sides, and the transistor segments (clear LED) should be placed at top and left sides.
- 4.3. Connect the segments carefully without causing damage on the connectors. If a pin is bent, use a pair of tweezers to straighten it carefully.
- 4.4. Connect the IRCC corners according to the label – UL for upper left corner, UR for upper right corner, LL for lower left corner. IRSC is the special corner board, which is connected to the controller.
- 4.5. Make sure the connected segments are in straight line and form 90-degree angle between the horizontal and vertical assembly.
- 4.6. Example for a 42" (16:9 ratio) assembly:

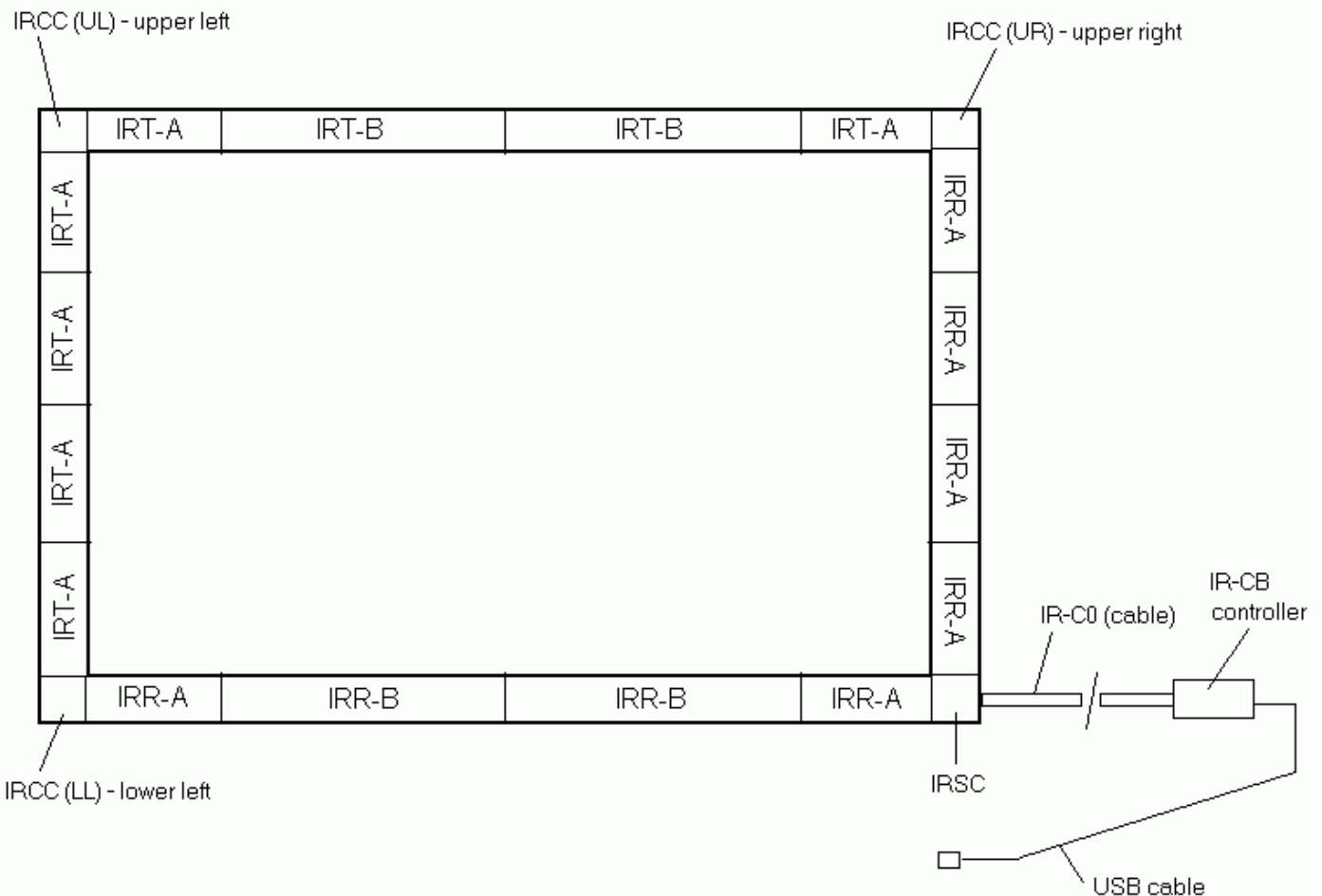


Figure 5.

- 4.7. Use the tape to secure the assembly, so they won't move during the mounting.
- 4.8. Drill holes through each mounting hole on the PCB, and fasten the PCB by screws to finger tight only.

5. Specifications:

- 5.1. Resizable range (active area): 130.8 x 130.8 mm to 1787.6 x 1787.6 mm.
- 5.2. Maximum resolution = 4096 x 4096
- 5.3. Recommended resolution (most stable resolution): depending on the size and aspect ratio. Please refer to KEYTEC'S IR worksheet.
- 5.4. Response time: 90-95 rps (response per second).
- 5.5. Operating temperature: 0 to 70 degree C.
- 5.6. Interface: USB 1.1 or higher.
- 5.7. Power: 5VDC, 200 mA (power supply included).
- 5.8. Operating system: Windows 2000, XP.
- 5.9. Driver: Windows mouse emulation.

6. Touch Screen Functions:

- 6.1. Screen touched = left mouse button clicked
- 6.2. Touch down and drag = left mouse button held down and dragged
- 6.3. Tap twice = left mouse button double clicked
- 6.4. Swap Button: Select 'once' to right-click for one touch, or 'always' to always right-click. Select minimize to reduce to system tray. Click in tray as a shortcut!