

APPLICATION NOTE

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KEY WORDS: C-Bus, Touch Screens,
Infrared, IR

Title:	Using standard A/V Infrared codes with C-Bus touch screens
Products Applicable:	All C-Bus touch screens (Monochrome and colour)

Introduction

A lesser known but useful feature of C-Bus touch screens is their ability to recognise NEC infra-red codes, link them to a touch screen component and so action events on C-Bus.

NEC IR codes are an industry standard and are used by a number AV manufacturers, not only NEC. For example, companies such as Aiwa, Bose, Celestion, Denon, Hitachi, Mitsubishi, Onkyo, Panasonic, Samsung and Toshiba use NEC codes in some (not necessarily all) of their products.

NEC IR codes can be emitted by any generic IR remote control. For example, the Clipsal Universal IR Remote can be set to a NEC TV device, and then any IR code for this device can be linked on an event on the C-Bus touch screen. For example, using this technique any standard NEC IR code can be used to set a C-Bus lighting scene.



Typical generic IR remotes with on-board NEC codes

This approach can be extended to use any number of standard NEC IR codes with C-Bus touch screens. It is only limited by the touch screen memory and the number of available NEC codes (255 button codes for each of 255 manufacturer's codes).

These IR codes can be used to action C-Bus events on IR devices with customisable interfaces, such as Philips Pronto remotes, Pocket PC's and Palm devices.



Devices with customisable Infrared remote control interfaces

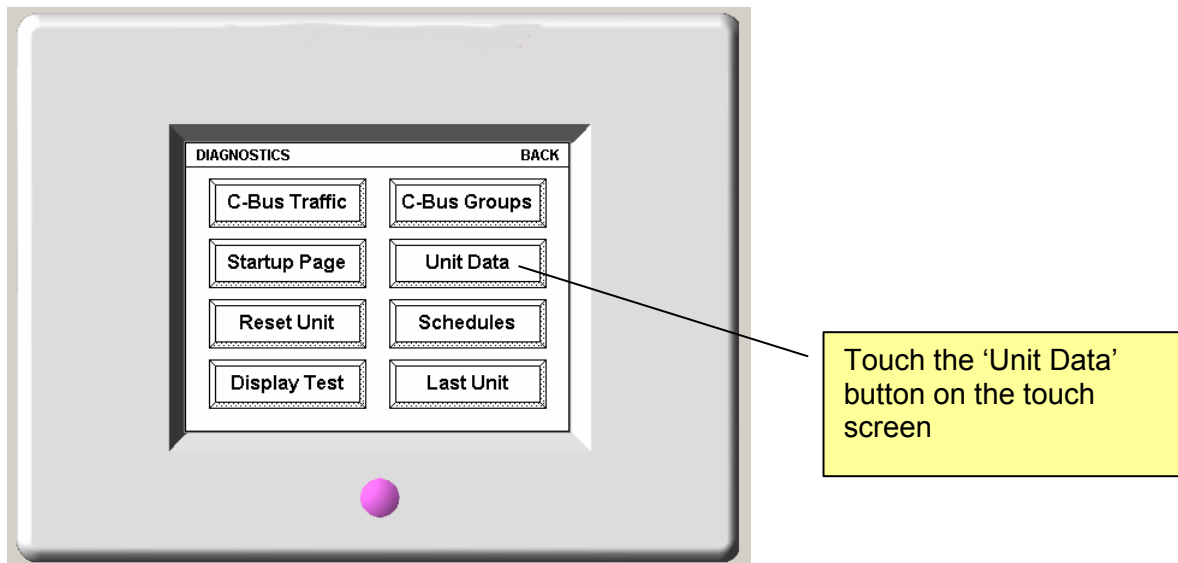
How to set up C-Bus Touch Screens to interface with NEC IR codes

Two straightforward steps need to be followed for C-Bus touch screens to interface with any combination of standard NEC IR codes.

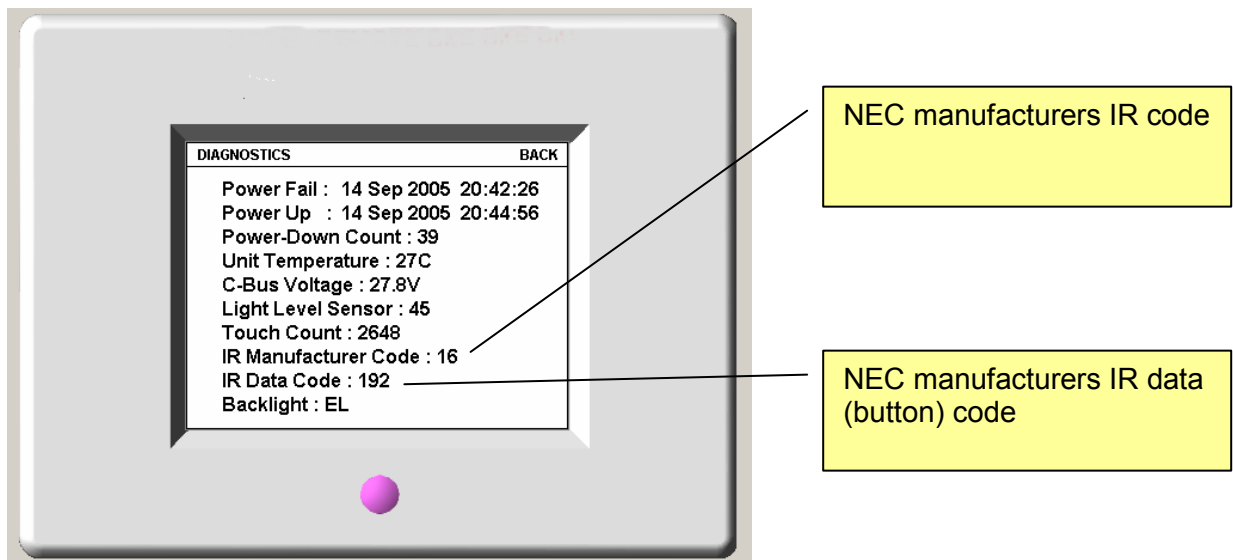
Step 1

The installer needs to establish what the manufacturers IR code and IR data codes are for IR remote buttons to be linked to the touch screen.

This is easily carried out by entering the Diagnostics page on an installed C-Bus Touch Screen, then from this page going to the 'Unit Data' page, as shown below.



The touch screen will now recognise the IR codes for any button pressed on a generic IR remote which has been set to NEC device. The touch screen will display the Manufacturers IR code and data code, as shown below.

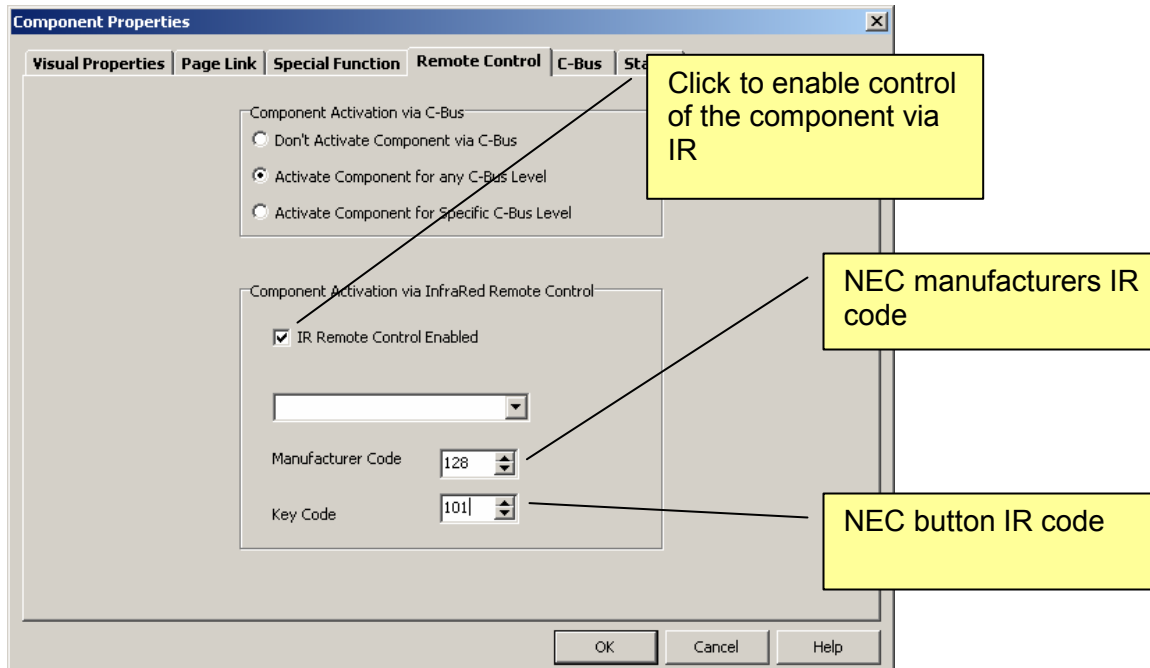


The installer should make a note of these codes.

Step 2

Set up the association between a touch screen component and a remote control key as follows.

- Create a touch screen component using Piced software, for example a button.
- Select the Remote Control tab from the Component Properties dialogue box.
- Select the 'IR Remote Control Enabled' check box.
- Enter the Manufacturer and Key codes established in Step 2 in the Component Properties dialogue box.



Note that a component can only be remote controlled if the page it is on is showing. To enable a component to be remote controlled regardless of which page is showing, place the component on a Theme Page and use that Theme Page for all pages in the project. This will ensure that the component is always available without having to copy it to every page.

Technical Support and Troubleshooting

For technical assistance call: 1300 722 247 (Australia)
0800 888 219 (New Zealand)

CIS web site: <http://www.clipsal.com/cis/>

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