

Chapter 8

Digital and Analog Interfacing Methods

Lesson 9 Part d

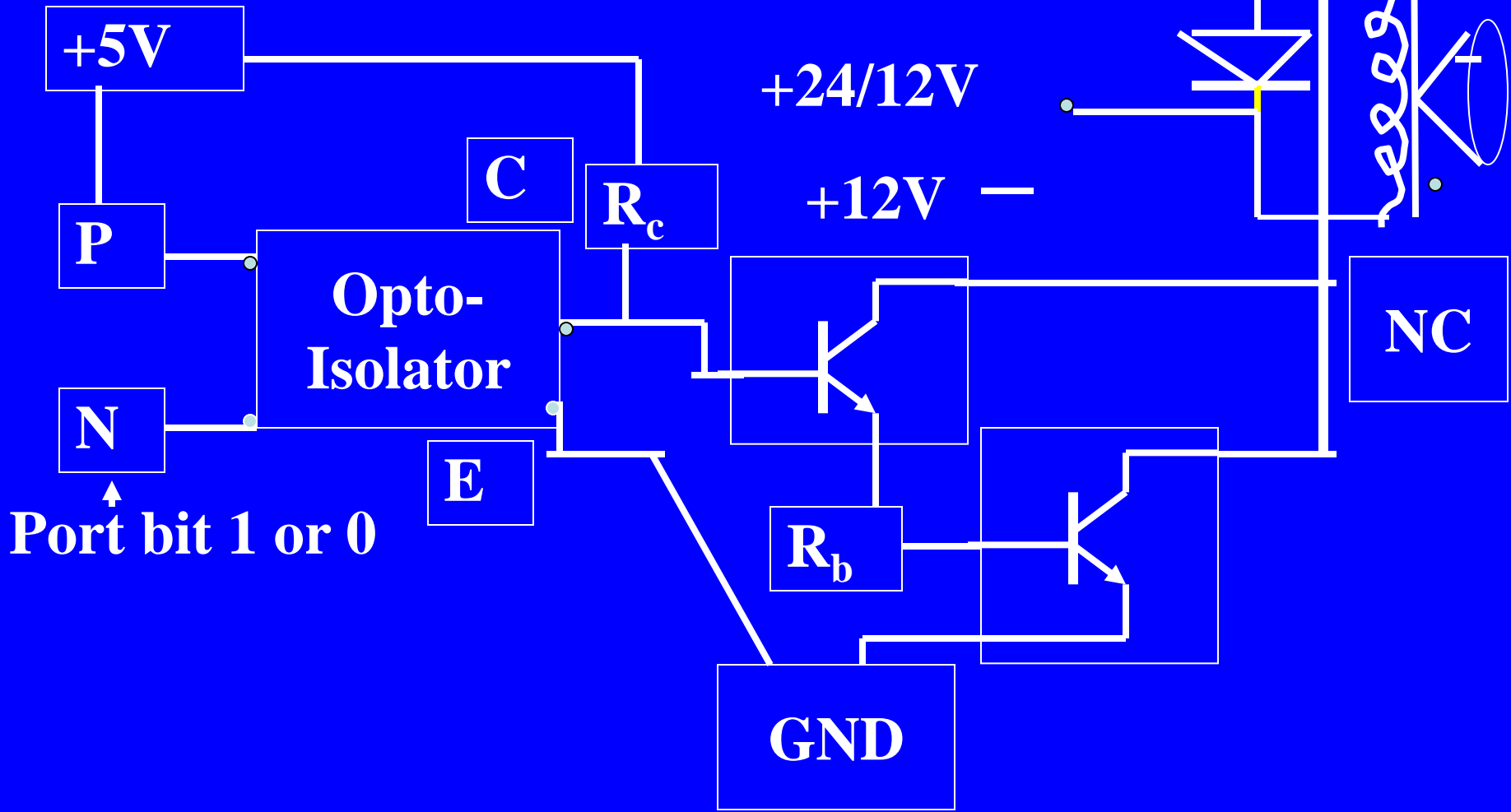
Loud Speaker and Music Play box Interfaces

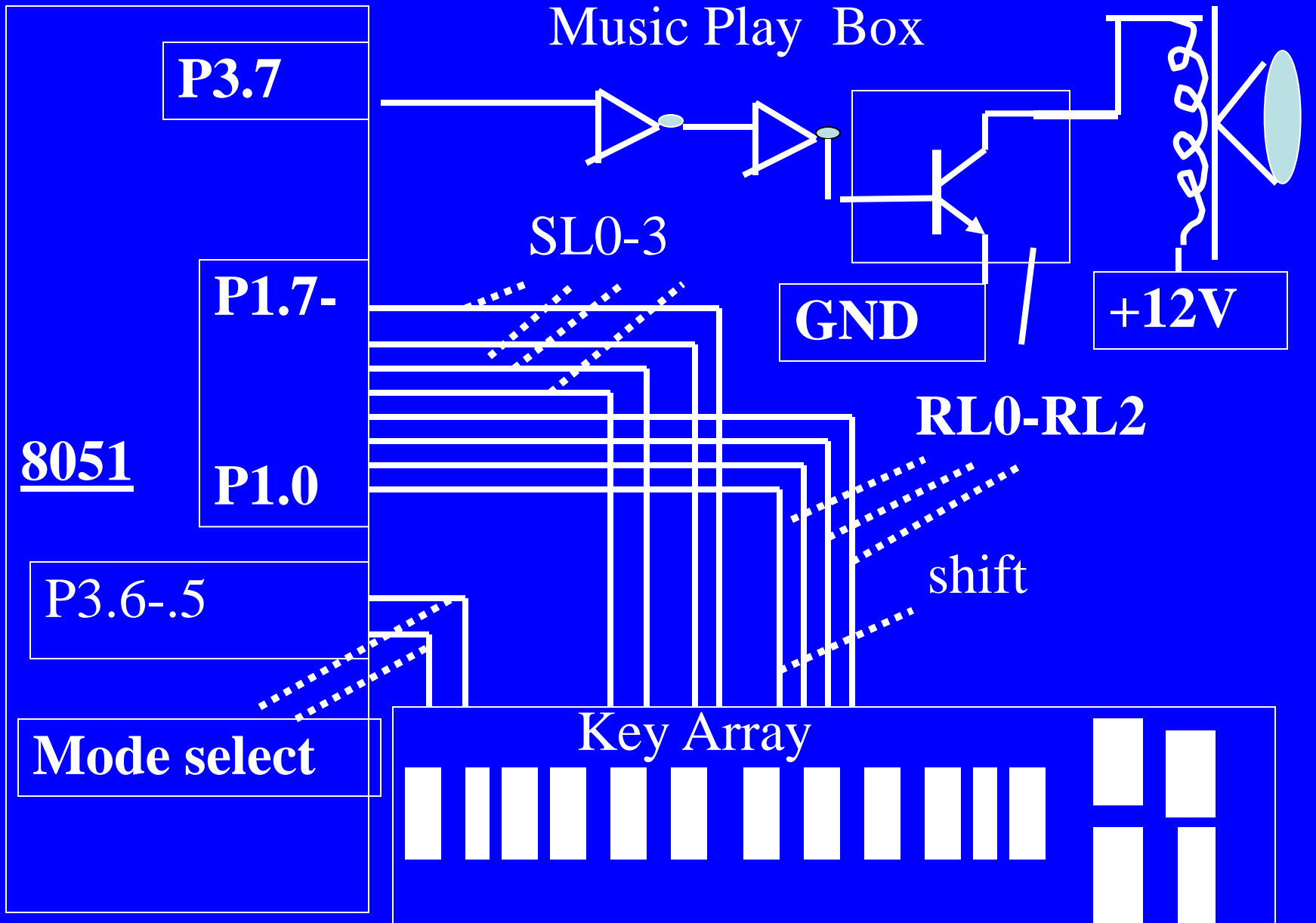
Coil Interface applications examples

- (i) a magnetic field generating solenoid coil, for example in an LVDT,
- (ii) a relay,
- (iii) a loudspeaker and
- (iv) a coil of stepper motor

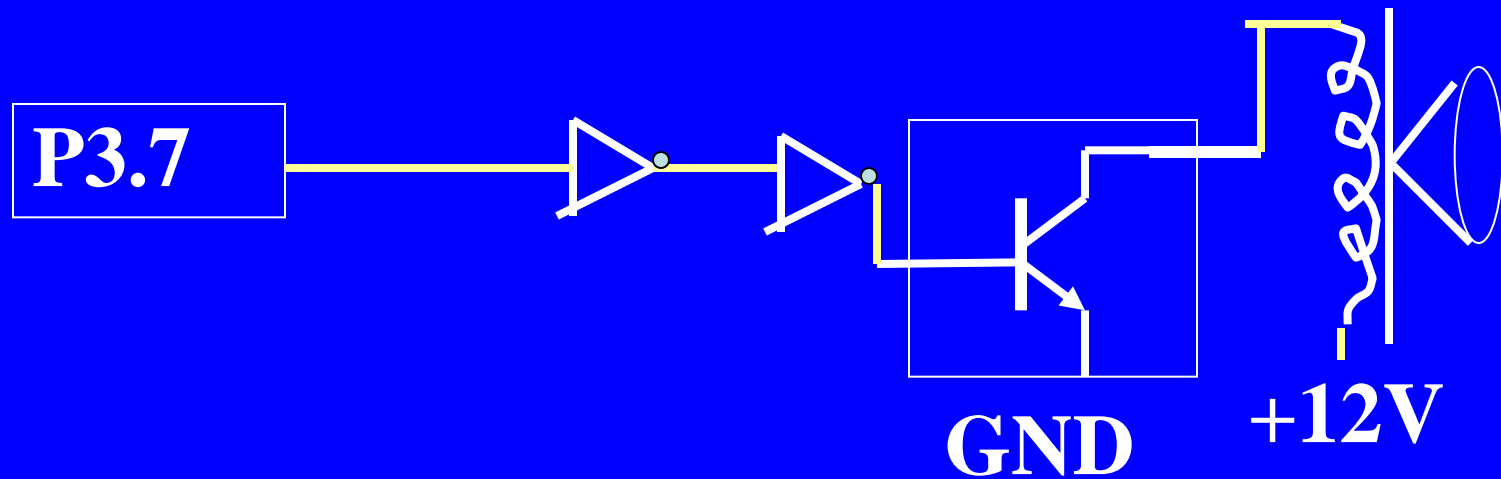
Loud Speaker Interface Circuit

Loud Speaker





Low Power Speaker



Music Play Box two interfaces

- **one for the keypad and**
- **other for the speaker**

Keypad Interface

Software for the keypad can be designed to work in various modes

Keypad Interface Modes

- Mode 1 musician mode
- Mode 2 stored music playing mode
- Mode 3 to define the note durations and generate the tunes for the different type of the musical instruments using the same interface

Speaker Interface

- **Loudspeaker Coil Interface**

Summary

We learnt

Music Play Box

- Mode select keys and play keys
- Speaker Interface
- Key-array Interface

End of Lesson 9 Part d

Loud Speaker and Music Play box Interfaces