

# Keypad Controllers - Getting Started Guide



This guide covers the following products:

- SY-KP-4V
- SY-KP-6
- SY-KP-6V
- SY-KP-8V
- SY-KP-10

Thank you choosing to purchase this SY Keypad Controller. Your decision is important to us. The SY Keypad allows a user to easily control a range of media devices from a central point. Typically, these devices would include video projectors, large-format displays, AV switchers, audio amplifiers, projection screens, Blu-Ray players, and other associated devices.

## Contents

In the box are the following items:

- 1 x Keypad Controller
- 6 x 3 pin Screw terminal connectors
- 1 x Power Supply with 2 pin connector
- 2 x 3.5mm x 25 mm Screws
- 1 x SY-LS-01 Button legend sheet
- Clear Button Caps to match the Keypad
- Getting Started Guide

## Overview

The SY Keypad is configured using the SY Device Suite PC based software via USB to provide the desired functionality, thus allowing the Keypad to control the connected devices. The connected devices may be controlled by RS232, Infra-Red or via the Digital Output ports.

## Connections

### Power Supply

Your Keypad is supplied with a 12VDC 1A power supply terminated to fit the 12VDC connection. Connecting this power supply to any other port may damage the Keypad and will not be covered under warranty. It is possible to extend the 12V power cable over short distances up to a maximum of 10m.

### USB

The USB Program port is provided for connecting the keypad to a computer to facilitate firmware updates or to transfer a configuration file to or from a previously programmed keypad. The USB port also powers the Keypad during any of these operations.

### RS232 / Infra-Red

#### RS232

The following diagram Fig 1.1 shows the connections necessary to send and receive commands from the Keypad to the RS232 port on the device being controlled.

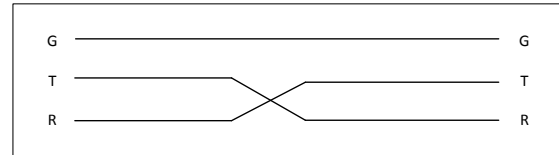


Fig 1.1

#### Infra-Red

The following diagram Fig 1.2 shows the connections necessary to send commands to the IR sensor on the device being controlled. The IR emitter must have direct line of sight to the IR sensor within the range specified in the manual for the device being controlled to ensure good reception of the IR beam.

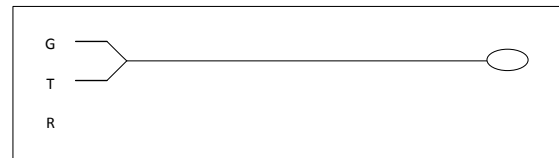


Fig 1.2

#### Output

The following diagram Fig 1.3 indicates the Output ports connected to a relay unit. The relays are activated when the Outputs are configured to go from OFF (Open) to ON (Closed) or ON (Closed) to OFF (Open). In the case of a screen this would allow Down (Port 1 ON / Port 2 OFF) and Up (Port 1 OFF / Port 2 ON) to be activated.

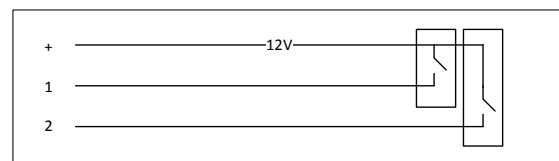


Fig 1.3

#### Input

The following diagram Fig 1.4 details how external contact closures are wired. These contacts can be motion detectors or room dividers, which can then trigger a Keypad action that can also be configured act on either the Open (High) to Closed (Low) state, or the Closed (Low) to Open (High) state.

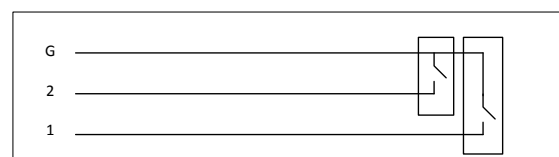


Fig 1.4

## Buttons Labels

A label sheet (SY-LS-01) is supplied with the Keypads to allow individual labelling each button in accordance with their programmed function. Additional labels can be prepared to allow customisation of the button labels if the desired symbol is not present on the standard label set. A template is available on the web site at [www.sy.co.uk](http://www.sy.co.uk)

## Device Suite

### System Requirements

The minimum system requirements for running Device Suite are:

- Intel® Pentium® 4, 1 GHz or AMD Athlon™ processor or above
- Microsoft® Windows 7 and higher
- Microsoft .Net Framework 4 or above
- 512 MB of RAM
- 100 MB of available hard disk space

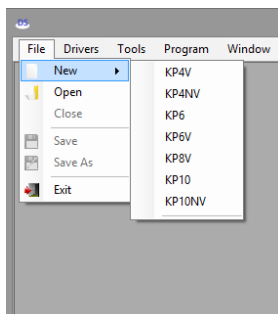
### Device Suite Software

The Device Suite is the software designed to allow configuration and setup of the KP series Keypad Controllers for connection and control of compatible devices.

Device Suite is the central software that manages the Drivers (RS232 and IR) Library, the Keypad setup and scripts which can then downloaded to the Keypad Controllers.

## Starting a New Project (6 Steps to a working system)

1. From the Menu bar select file and New. A list of available Keypad Controllers will be displayed. Select the Keypad to be configured.

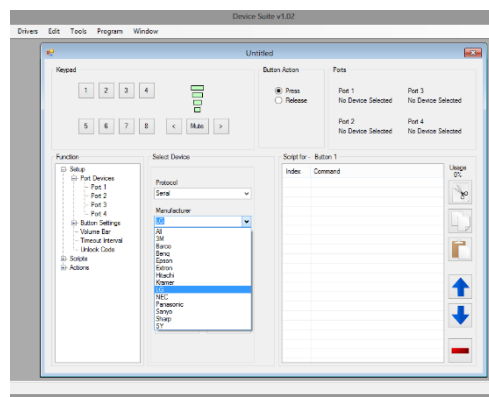


2. Open the Function / Setup / Port Devices list and attach the devices required to each Port 1 to 4.

3. Open the Function / Setup / Button Settings list and select the desired parameters for each button. If your driver includes Absolute Volume control commands this can be added to Keypad with the Function / Setup / Volume Bar. Click Select on the device required to have this functionality.

4. To add a command to a button select from Function / Actions / Device Control / Port (X). The Script Box on the right indicates the Button the Function within a device is being assigned to.

5. Button Feedback can be created or from the Button Properties and can be simulated or real if



configured through the Function / Scripts / Conditional menu.

6. From the Menu bar select Program, connect the Keypad via USB to the PC and select Download.

For full Device Suite operation and advanced functions please see our manual online at [www.sy.co.uk](http://www.sy.co.uk)

## Firmware

The firmware that resides on the Keypad Controllers can be updated from within Device Suite and downloaded through the USB Port. Firmware releases for updates and new functionality are available on the website at [www.sy.co.uk](http://www.sy.co.uk).

If you would like to get in touch regarding any comments or suggestions please contact us through the website at [www.sy.co.uk/contact](http://www.sy.co.uk/contact).