NAME
>   sane−pieusb − SANE backend for USB-connected PIE PowerSlide and Reflecta DigitDia/Crys-
>   talScan/ProScan slide scanners

DESCRIPTION
>   The **sane−pieusb** library implements a SANE (Scanner Access Now Easy) backend that provides access to
>   USB-connected PIE and Reflecta slide scanners.
>   At present, the following scanners should work with this backend:

```
Model:                    Status
------------------------- ------
PIE PowerSlide 3600       Untested
PIE PowerSlide 3650       Untested
PIE PowerSlide 4000       Untested
PIE PowerSlide 5000       Untested
Reflecta CrystalScan 7200 Untested
Reflecta ProScan 4000     Untested
Reflecta ProScan 7200     Untested
Reflecta DigitDia 3600    Untested
Reflecta DigitDia 4000    Untested
Reflecta DigitDia 5000    Untested
Reflecta DigitDia 6000    Ok
```

MULTIPLE SLIDES
>   Support for multiple slide scanners (like the PowerSlide or DigitDia series) is done by auto-advancing
>   ('Advance slide' setting) the slide after each scan.
>
>   However, for best results, it is recommended to do a preview for every slide since this sets gamma, bright-
>   ness, and contrast to optimal values.
>
>   Attention: SANE does not have an automatic landscape/portrait detection and re-orientation when scanning
>   multiple slides. You have to put all slides into one orientation first !

DIRT REMOVAL
>   If available, pieusb supports infrared scans for dirt detection and removal. This must be enabled via the
>   'Clean image' setting.

KNOWN PROBLEMS
>   The pieusb backend supports dirt removal based on infrared scan information. Since SANE does not pro-
>   vide post-processing in the backend, pieusb does the scanning and dirt removal during the setup phase. The
>   'scan' phase is only used to transfer the completed image. Therefore pieusb does not multi-thread making a
>   typical frontend appear as 'blocked'. Also cancel requests are only honored between scans.

ENVIRONMENT
>   **SANE_DEBUG_PIEUSB**
>>   If the library was compiled with debug support enabled, this environment variable controls the de-
>>   bug level for this backend. E.g., a value of 128 requests all debug output to be printed. Smaller
>>   levels reduce verbosity.

```
level   debug output
------- ------------------------------
 0      nothing
 1      errors
 2      warnings & minor errors
```

```
        5        additional information
        7        SANE api calls
        9        backend functions
       11        scanner functions
       13        usb functions
       15        image buffer functions
```

FILES

> *@CONFIGDIR@/pieusb.conf*
> > The backend configuration file
>
> *@LIBDIR@/libsane−pieusb.a*
> > The static library implementing this backend.
>
> *@LIBDIR@/libsane−pieusb.so*
> > The shared library implementing this backend (present on systems that support dynamic loading).

SEE ALSO

> sane(7)

CONTACT AND BUG-REPORTS

> Please send any information and bug-reports to:
> **Klaus Kämpf <kkaempf@suse.com>**

AUTHORS

> The pieusb backend is based on work by Jan Vleeshouwers, Michael Rickmann, and Klaus Kämpf