

To use the Global Caché IR Database, a personalized API key must be obtained by using OAuth to log in (use Facebook, Google, or Yahoo links on the landing page). Once logged in, use the "Get your database API key" button on the front page. This key allows API access to the database through any software contacting the database.

The Global Caché IR Database uses a hierarchical JSON structure over HTTP, where manufacturers located within the database are polled via URL as shown below:

HTTP/1.1 (GET)

<Base URL>/manufacturers

where:

<Base URL> is "http://irdatabase.globalcache.com/api/v1/" + yourApiKey

The following poll will return a series of name/value pair sets for each manufacturer in the database as shown below:

HTTP/1.1 (200 OK)

```
[
  {
    "Key": "<Manufacturer Key1>",
    "Manufacturer": "<Manufacturer Name1>"
  },
  {
    "Key": "<Manufacturer KeyN>",
    "Manufacturer": "<Manufacturer NameN>"
  }
]
```

where:

<Manufacturer Key#> is the normalized URL version of the manufacturer name

<Manufacturer Name#> is the manufacturer name in standard readable formatting

Once the manufacturer is selected, the manufacturer's key is used to poll for the device types associated with the chosen manufacturer as shown below:

HTTP/1.1 (GET)

<Base URL>/manufacturers/<ManufacturerKey>/devicetypes

where:

<ManufacturerKey> is the above key for the target manufacturer

A JSON structure is returned containing the device types associated with the polled manufacturer as shown below:

HTTP/1.1 (200 OK)

```
[
  {
    "Key": "<DeviceType Key>",
    "Manufacturer": "<ManufacturerName>",
  }
]
```

```
    "DeviceType": "<DeviceType>"
  }
]
where:
  <DeviceType Key> is the normalized URL version of the DeviceType
  <DeviceType> is the type of device, for example, "Cable"
```

Once the device type has been selected, code sets of that device type are polled with the URL below:

HTTP/1.1 (GET)
<Base URL>/manufacturers/<ManufacturerKey>/devicetypes/<DeviceTypeKey>/codesets
where:
 <DeviceTypeKey> is the specified device type key from the above request

A JSON structure is returned containing each of the available code sets for the specified device type within the specified manufacturer as shown below:

```
HTTP/1.1 (200 OK)
[
  {
    "Key": "<Codeset Key1>",
    "Manufacturer": "<ManufacturerName>",
    "DeviceType": "<DeviceType>",
    "Codeset": "<Codeset Value1>"
  },
  {
    "Key": "<Codeset KeyN>",
    "Manufacturer": "<ManufacturerName>",
    "DeviceType": "<DeviceType>",
    "Codeset": "<Codeset ValueN>"
  }
]
where:
  <Codeset Key> is the index value of the Codeset and is the same as the Codeset Value
```

At this point, the code set key is added to the URL string and is used to poll for the codes located within the specified code set as below:

HTTP/1.1 (GET)
<Base URL>/manufacturers/<ManufacturerKey>/devicetypes/<DeviceType
Key>/codesets/<Codeset>
where:
 Codeset is numeric index value of the chosen code set from the previous request

HTTP/1.1 (200 OK)

```
[  
  {  
    "Key": "<IRKey>",  
    "Manufacturer": "<ManufacturerName>",  
    "DeviceType": "<DeviceType>",  
    "Codeset": "<Codeset>",  
    "KeyName": "<IRCodeName>",  
    "IRCode": "<IRCodeData>"  
  },  
  { ... },  
  { ... }  
]
```

where:

{ ... } is another IR code entry within the code set

<IRCodeData> is a comma delimited ASCII string representation of the IR command with the following configuration:

Frequency,Repeat,Offset,Pulse Value1,Off Value1,Pulse ValueN,Off ValueN<Carriage Return>

This string is in the Global Caché IR format, with the "sendir" prefix, as well as the connector address and command ID values removed from the beginning. When using the above command with a Global Caché IR device, the values will need to be added to the beginning of the command for proper command execution.