

Permanent link using the auto redial feature

1. Goal

The auto redial feature allows to automatically restart a link in case of an undesired loss. This document describes how to use it for maintaining a link permanently and automatically, and how to adjust the parameters related to this function.

One typical application is a permanent AoIP link between two codecs, in which it is required to keep the link active with no human intervention, and specifically reset the link after an interruption or a strong disturbance.

However, the function is also suitable for other types of network (POTS, ISDN). It can also help the user even in case the codec is controlled by an operator.

2. Concerned devices

Generally all AETA codecs feature the automatic redialing function :

- Scoop 5 range: Scoop 5, Scoop 5S, Scoop5 S-IP
- Scoopy+ range: Scoopy+, Scoopy+ S
- ScoopFone range (except ScoopFone HD)
- μ Scoop range
- ScoopTeam

Only the operating mode slightly depends on the product.

3. Basic principle

AETA codecs set up links more or less like telephone connections¹, with a “dialing” phase followed by a “call” towards a remote device. A link can also be terminated or “released” on request.

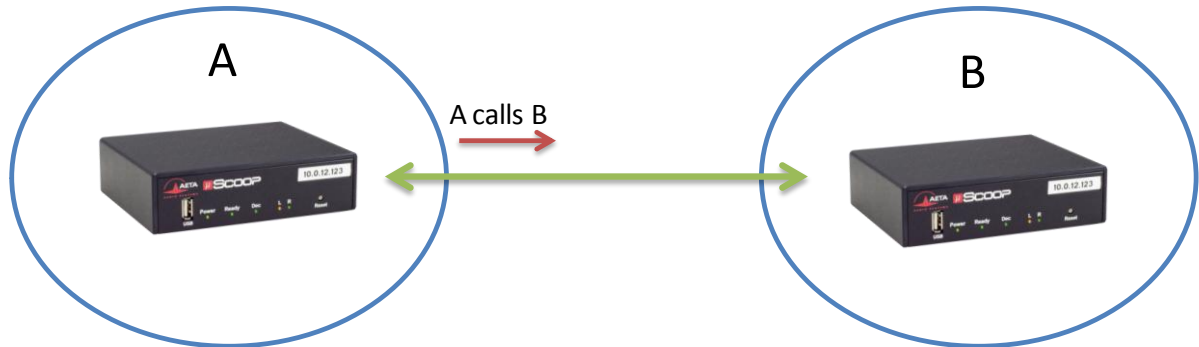
Whenever a permanent link is required, it is possible to make sure the link is held on by using the “auto redial” feature. When the feature is active and the codec is the caller party, it automatically retries to establish the link in case of an initial failure, or if an established link is lost for any other reason than a local release (i.e. release by the user himself). This especially covers the two following cases:

- Abnormal link loss due to an abnormal network event.
- Codec switched off or power failure during a link; in such case, the codec will automatically reconnect just after it is switched back on.

For a device that can operate as a double codec (Scoop5 and Scoop5 S ranges, ScoopTeam), the function can be used independently on each codec.

¹ Except for LL type links on the Scoop 5 product range, as these are inherently permanent links. This document is irrelevant for such use cases.

4. Setting up the permanent link



For a permanent link between A and B sites, the procedure is as follows:

- Install the codecs on each side of the link.
- “Call” from codec A to codec B to establish the connection.
- Activation of the “auto redial” function on the codec that made the call (codec A in our case).

(The order of the two latter actions has no importance)

From this moment, codec A will try to keep the link up by restarting a call in case the connection is interrupted.

For stopping the connection on purpose, it must be released on the caller codec (codec A). Otherwise, it will automatically try to restart it again.

5. Details on the function settings

The auto redial function is active on the codec that originates the call. Two available parameters influence its operation:

- **Number of redial attempts:** after an undesired link release or drop, the unit tries to recall the remote unit. This parameter is the number of attempts to restart the link. If this number is reached without success, the device gives up and stays idle. With the parameter set “Infinite”, the unit will never stop retrying to set the link.
- **Time before redial:** this is the wait time before recalling, after either a link loss or a failure to recall.

Be aware that a too short time can lead to repeated failures (or even worse, endless failures) instead of a faster link recovery. The best strategy is to leave enough time for the two units to be ready for a link restoration.

6. Examples of use and typical settings

The settings must be adapted depending on the type of transmission network, and especially depending on the kind of events or issues to be expected.

Example	Site A	Site B	Issues met	Recommended settings
AoIP link, STL type	Studio	FM transmitter	Link dropouts > 30 s Power failures in A or B	Number of calls: infinite Waiting time: 10 s
ISDN link to be secured	Studio	Studio	Undesired line losses	Number of calls: 10 Waiting time: 5 s

7. Annex: access to the settings depending on the product

This chapter only helps finding quickly the settings for the auto redial function. Refer to the product user manual for the operation principles and for the menu browsing.

7.1. Scoop 5 range

Access from the front panel: menu **Tools / Misc / Auto Redial**

Access through the embedded html pages: **MISC** tab, **AUTO REDIAL** frame.

7.2. Scoopy+ range

Access from the front panel: menu **Tools / Misc / Auto Redial**

Access through the embedded html pages: **MISC** tab, **AUTO REDIAL** frame.

7.3. ScoopFone range

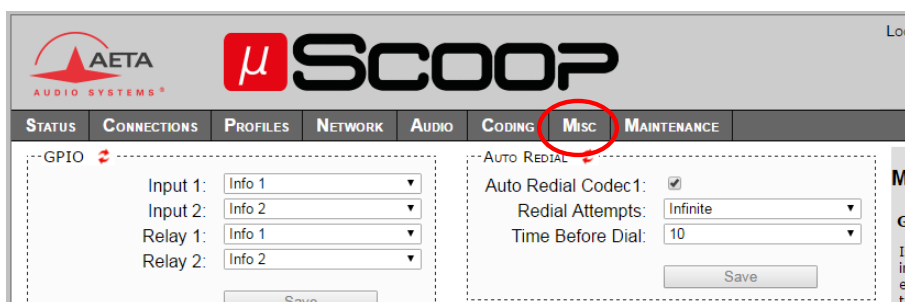
Access from the front panel (switch on/off only): menu **TOOLS / Auto Redial**

Access through the embedded html pages (all settings): **MISC** tab, **AUTO REDIAL** frame.

7.4. μ Scoop range

The μ Scoop is only controlled via its embedded html pages.

The function is managed on the **MISC** tab, **AUTO REDIAL** frame:



7.5. ScoopTeam

Access from the front panel: menu **Tools / Miscellaneous / Auto redialing**

Besides, the on/off switch is also available directly on the "Connection" page for each codec.

Access through the embedded html pages: **MISC** tab, **AUTO REDIAL** frame.