

Network Requirements

SMART Audio Devices

1. Core network requirements

DHCP: A DHCP server must be available. DHCP is enabled by default on SMARTplayer and SMARTstreamer. Static addressing can be configured manually if required by the IT administrator.

Same local network: SMARTplayer / SMARTstreamer and the PC, tablet or smartphone used for configuration must be reachable within the same local network.

Multicast: Multicast must be enabled where network audio distribution is used. If IGMP Snooping is enabled on the network switches, a functioning IGMP Querier must be present in the relevant VLAN (for example on the router / Layer 3 switch or as an IGMP Snooping Querier). The IGMP Snooping and Querier configuration must ensure that multicast group memberships are maintained correctly and that required multicast traffic is forwarded to the NewTec SMART devices without interruption.

mDNS: mDNS must be permitted for local name resolution and device access via smartplayer.local / smartstreamer.local.

Continuous availability: Required network services and firewall rules should remain continuously available during operation.

2. Ports, protocols and traffic

Protocol	Port / Address	Direction / Scope	Purpose	Required
UDP	5353 / 224.0.0.251	Local LAN multicast	mDNS name resolution and discovery	Yes
UDP	42750	Local LAN broadcast	Discovery / localization of NewTec SMART devices	Yes
TCP	80 / 443	Local / outbound as applicable	HTTP / HTTPS access and communication	Yes
TCP	1443	Local / outbound as applicable	WebSocket communication	Yes
UDP	42735 / 239.10.140.21–239.10.140.31	Local LAN multicast	SMARTstream network-audio distribution	If used
ICMP	8.8.8.8	Outbound Internet	General Internet reachability test used by the SMART system	For Cloud / remote
ICMP	devconnewtec.nuvocloud.de	Outbound Internet	NewTec cloud backend reachability test. DNS resolution of the hostname must work.	For Cloud / remote
TCP / TTPS	443 / devconnewtec.nuvocloud.de	Outbound Internet	NewTec Cloud backend communication	For Cloud / remote

Important: For the ICMP test, use the hostname devconnewtec.nuvocloud.de (not the full http:// URL or IP). The hostname must resolve via DNS and respond to ping from the SMART device network.

3. Internet and NewTec Cloud

An Internet connection is not required for basic local commissioning. Internet access is required when external URL-based audio sources are used and for NewTec Cloud / remote service. For cloud-enabled installations, the SMART devices must be able to establish outbound HTTPS connections (TCP 443) to devconnewtec.nuvocloud.de. DNS resolution for this hostname must work. Firewall, proxy or security policies must not prevent the required TLS connection to the NewTec Cloud backend. Where firewall allowlisting is used, hostname / FQDN-based rules are recommended instead of fixed IP address rules.

The NewTec Cloud is available at cloud.newtec-audio.com. SMART devices are set up locally using the SMART App and connect to the NewTec Cloud for remote access and management.

4. Network segmentation / VLANs

If VLANs, routed subnets, ACLs or managed switches are used, the IT configuration must preserve the required device-discovery and multicast traffic. In particular, mDNS, UDP broadcast discovery and SMARTstream multicast traffic must not be silently filtered between devices that are expected to communicate.

Where possible, all NewTec SMART devices belonging to one installation should be placed in the same VLAN / broadcast domain. The customer's IT department is responsible for the correct configuration and operation of the network infrastructure required for the NewTec SMART system, including routing, multicast handling, mDNS and any required cross-VLAN communication.

