# Arcadia Central Station



Arcadia® Central Station is a scalable IP intercom platform integrating FreeSpeak® wireless and HelixNet® wired intercom user stations with Dante, 2-Wire, 4-Wire and GPIO interfaces. Arcadia features licensed capacity and an easy-to-use CCM browser interface for setup, configuration and system monitoring in a compact 1RU device.

- FreeSpeak Wireless Intercom with up to 40 beltpacks\* via up to 16 IP and/or 10 E1 transceivers on 2 splitters
- HelixNet Wired Intercom with up to 64 user stations using up to 24 HelixNet Enabled Channels\*
- Dante Audio Network Interface ports with up to 64 ports\*
- 2-Wire Powered Partyline, 4-Wire Audio Line-Level and GPIO Control Interfacing \* Requires sufficient number of Licensed Ports



### **Arcadia Connectors, Controls and Indicators**

#### Arcadia Host Name and Network Settings

Arcadia ships with a default Host Name that is visible when pairing FreeSpeak beltpacks and HelixNet user stations. The name can be found and edited in the Front Panel Menu: Host Settings>Host Name and CCM Hardware>Host.

Arcadia allows flexible assignments of system functions to its 4 LAN ports configured from CCM Hardware>Host>Network. By default, LAN1 is configured for Management/HelixNet and AES67 for FreeSpeak IP Transceivers in DHCP and defaulting to 169.254.... Link-Local IP addresses if a DHCP is not present.

#### Information on AES67 networks: AoIP Network Guide at Arcadia Central Station Knowledge Center (QR code). Note:

Clear-Com recommends use of DHCP addressing for FreeSpeak IP Transceivers and HelixNet User Stations.

#### Ensure that two different LAN ports are not on the same subnet or virtual LAN. Accessing the Arcadia CCM for System Setup, Configuration and Status Monitoring

Arcadia's CCM, Core Configuration Manager, allows easy setup, configuration and status monitoring of your system.

- 1. Connect Arcadia Central Station's Management port (Default: LAN 1) to a network along with your computer.
- 2. Front Panel: Use rotary controllers to navigate to: Networking>Management>IP Address.
- 3. Web browser: Enter the IP address from step 2.
- 4. Front Panel Menu: Use rotary controllers to navigate to: Administration>CCM Access>Default Password.
- 5. Web browser: Log In using the username ("admin") and the factory default password from step 4.

07 September 2022 PN: PUB-00018 Rev D





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### **Connecting FreeSpeak Transceivers**

#### Option 1 – E1 Transceivers directly connected via CAT Cabling

Connect an E1 transceiver to each Arcadia E1 RJ45 connector.

#### **Option 2– E1 Transceivers via Splitters and CAT Cabling**

Connect an FSII-SPL splitter to each of Arcadia's E1 RJ45 connector using and power the splitter. Connect E1 Transceivers using CAT cabling to the splitters.

#### **Option 3– E1 Transceivers via Splitters and Fiber Cabling**

From the CCM, navigate to **Hardware>Host>Wireless** tab and select FreeSpeakII Transceiver Ports: **Fiber**. Connect an FSII-SPL splitter to each of Arcadia's E1 SFP connector using HLI-MMFO (multi-mode) or HLI-SMFO (single-mode) SFP transceivers and power the splitter. Connect E1 Transceivers using CAT cabling to the splitters.

#### **Option 4 – IP Transceivers via AES67 Capable Network**

Connect an AES67 capable network to Arcadia's AES67 network (default: LAN 1) and all IP transceivers to AES67. Provide DHCP and power. From the CCM, navigate to **Hardware>Resources** and select **Add Resource**. Select **IP Transceivers** tab. **Select** the transceivers found on the network and **Add**.



Note: 1.9GHz IP and E1 Transceivers must not be used concurrently in the same RF coverage zone.

Clear-Com recommends shielded 24 AWG CAT 5E cables, or better, to connect transceivers.

For more information, see the Arcadia Central Station Knowledge Center (see QR code).

#### **Registering FreeSpeak Beltpacks**

**Option 1 – USB Registration at the Arcadia Front Panel** Connect the beltpack to be registered to the USB connector on the front panel of Arcadia. The beltpack will register.

## Option 2 – Over-The-Air (OTA) Registration using the Arcadia CCM

- 1. Navigate to CCM's Hardware>Resources and click Add Resource.
- 2. Click Start OTA Registration.
- 3. In the System Connect Menu on the FreeSpeak Beltpack, find the Arcadia Host Name/System ID and connect.



#### **Connecting to HelixNet User Stations**

Connect HelixNet User stations via network infrastructure to Arcadia's Management port (default: LAN1)

#### Option 1 – Pairing from the HelixNet User Station Front Panel Menu

From the HelixNet User Station Front Panel Menu select: **Network>Pair to Station** and connect either by entering the IP address of the Arcadia (Pair by IP) or selecting the Host Name of Arcadia (Pair by Name).

#### Option 2 – Pairing using the Arcadia CCM (only for HelixNet version 4.4 and higher)

From the CCM, navigate to Hardware>Resources>Add resource and select the Wired tab. Select the HelixNet User Stations found on the network and Add.

#### Pairing from CCM is not available unless the HelixNet User Station is running version 4.4 or higher.

For more information, see the Arcadia Central Station Knowledge Center (see QR code).



