

Loud Ringer, Auxiliary Ringer and Paging Recommendation

1.0 General

Loud Ringer

If a Norstar telephone set is located in a noisy environment such as a shop or warehouse, the telephone's ring may not be loud enough for it to be heard above the background noise. For these applications, Norstar telephones provide a loud ringer interface. The interface allows for the connection of a commercially available loud ringer (speaker/amplifier unit) designed to amplify audio signals for noisy environments. When the Norstar set rings, the signal will also be routed through the headset jack to the ringer.

In addition, external ringing can be generated through connection to the auxiliary ringer contacts on the Norstar KSU. These contacts can be operated through appropriate programming of the system.

Paging

Three types of paging announcements can be generated through the Norstar system: Internal, External and Internal/External. External pages can only be made if a speaker/amplifier unit is connected to the Norstar KSU.

2.0 Installation and Operation

A. Loud Ringer

Ringing signals are transmitted to the loud ringer via the middle two pins of the headset jack. The ringing signal is an audio signal only and must be input to the audio-in inputs on a loud ringer. To connect a loud ringer, use a two conductor cord and a baseboard connecting block to connect the headset jack (this jack is smaller than the

standard size) output to the input leads of the loud ringer (see attached diagram).

It is important to note that the Norstar telephone can provide ringing signals or headset operation based on the resistance across the two outside pins on the headset jack. Low resistance triggers headset operation and high resistance (open circuit) triggers ringing operation. If a four conductor cord is connected to the loud ringer (and if the outside pair is not properly taped and stored), the telephone may react as if a headset is attached and ringing signals will not be routed through the headset jack.

Once connected and powered up, the loud ringer will now ring along with the telephone. Ringing volume can be adjusted using the telephone's volume adjustment bar or the loud ringer's volume control.

B. Auxiliary Ringer

Auxiliary ringer contacts are provided through the Amphenol connector on the KSU. System programming allows for the contacts to be operated on line, set or system (night ringer) basis (see System Coordinator Guide). These contacts close during the ringing cycle and thus provide a low resistance path for detector circuitry (see attached diagram).

C. Paging

External paging can be activated from a Norstar set using feature 60, 62 or 63. The paging output is generated on a pair of the KSU Amphenol connectors (see attached diagram).

3.0 Interactions

A. Loud Ringer

The loud ringer will only receive ringing signals. Paging, background music, voice calls, attenuated ringing, error and warning tones will not be presented at the loud ringer. They will, however, be presented at the telephone's speaker.

The distance from the loud ringer and the Norstar set should be limited to 14 feet (4.25 meters) to prevent false triggering of the detection circuitry.

Because the loud ringer and the headset use the same jack, a set cannot be equipped with a headset when a loud ringer is connected.

While the Norstar telephones are one of the most robust of electronic telephones, when equipped with a loud ringer, they may be susceptible to radio frequency interference. If this occurs, a Radio Frequency Filter Kit is available for order from your Inside Sale Representative.

4.0 Recommended Loud Ringer, Auxiliary Ringer and Paging Unit

The Duet Plus (Part# 90001-825) manufactured by Algo Communication has been tested and is approved for use with Norstar Telephone sets and KSU.

This unit can provide a combination of Norstar features at one time.

The ringing signal from the headset jack can be connected to the audio input on the Duet Plus (jumpers J1 and J2-DET) or the auxiliary ringer contacts from the KSU can be connected to the relay input on the duet Plus. This scenario will allow both a loud ringer and auxiliary ring capability.

Or, the paging output from the KSU can be connected to the audio input on the Duet Plus (jumpers J1-HI and

J2-PAG) at the same time the auxiliary ringer contacts are connected to the Duet Plus. This connection scheme provides simultaneous paging and ringing.

5.0 Functional Description

See Product Description

6.0 Order Information

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