

Using a Magnet to Temporarily Inhibit Tachy Therapy or Change Tachy Therapy to Off

SUMMARY

A doughnut magnet may be used with Boston Scientific ICDs and CRT-Ds to temporarily inhibit tachy therapy or permanently prevent tachy therapy by changing the programmed Tachy Mode to Off (depending on device programming and feature availability).

Definition of terms used in this article:

Inhibit: Temporarily prevent initiation of tachy therapy while the magnet remains positioned. If magnet features are enabled, the Tachy Mode is Monitor Only during magnet application.

Tachy Mode: Programmable parameter that determines the availability of the tachy detection and therapy functions.

Programmable Tachy Mode options are:

- Monitor + Therapy
- Monitor Only
- Off

CRM PRODUCTS REFERENCED

All Boston Scientific ICDs and CRT-Ds

Products referenced herein may not be approved in all geographies. For comprehensive information on device operation, reference the appropriate product labeling.

CRT-D: Cardiac Resynchronization Therapy Defibrillator
ICD: Implantable Cardioverter Defibrillator

CRM CONTACT INFORMATION

United States & Canada

www.bostonscientific.com

Technical Services – U.S.
1.800.CARDIAC (227.3422)
Tech.Services@bsci.com

LATITUDE Clinician Support
1.800.CARDIAC (227.3422)
latitude@bsci.com

Patient Services
1.866.484.3268

International

www.bostonscientific-international.com

Technical Services – Europe
+32 2 416 7222
eurltechservice@bsci.com

Patient Services
001.651.582.4000 – International

If a programmer is not available and an ICD or CRT-D has been programmed to respond to magnet application, it may be possible to prevent shock delivery and perform limited programming function with a Model 6860 doughnut magnet.

- Tachy therapy (shock delivery) may be temporarily inhibited. This may be useful to avoid inappropriate shocks due to noise during an unrelated surgery or procedure.
- For some devices, the programmed Tachy Mode may be changed from Monitor + Therapy to Off (or vice versa).

Determine if Magnet Functions are Enabled

Position a doughnut magnet over the device and listen for tones (a beeping tone or long/constant tone).

- **If tones are heard:** Magnet functions are enabled (see Magnet Function 1 and 2).
- **If tones are NOT heard:**
 - The magnet may not be correctly positioned over the device.
 - The device may be programmed to ignore a magnet (in which case a programmer is required to inhibit tachy therapy or change the Tachy Mode).
 - The device may not be manufactured by Boston Scientific.

Magnet Function 1 - Temporarily Inhibit Tachy Therapy

Position a doughnut magnet over the device and listen for tones. Tachy therapy is inhibited as long as the magnet is correctly positioned over the device and tones are heard.

If after 30 seconds of magnet application, a **change** in tone occurs (i.e., from a beeping tone to a long/constant tone or vice versa) the device's Tachy Mode has been **reprogrammed/changed**¹ (see Magnet Function 2).

Magnet Function 2 - Change the Programmed Tachy Mode

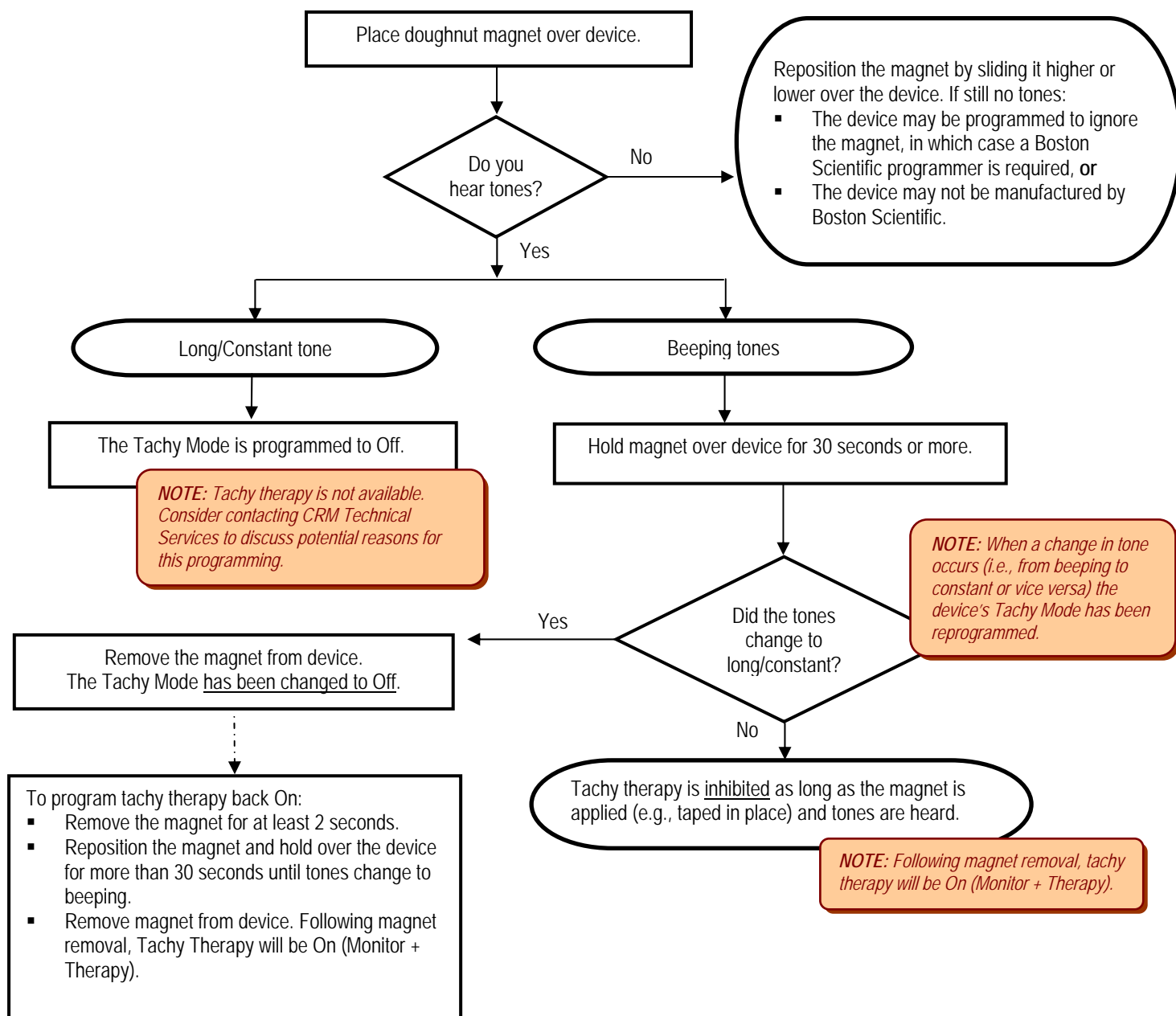
Position a doughnut magnet over the device and listen to tones for **more than 30 seconds**.

- **If a change in tone occurs:** (from a beeping tone to a long/constant tone or vice versa) the device's Tachy Mode has been **reprogrammed/changed**.¹ The type of tones heard indicate the programmed Tachy Mode and can be determined as follows:
 - **Beeping** tones indicate the Tachy Mode will be Monitor + Therapy upon magnet removal.
 - A **long/constant** tone indicates the Tachy Mode will be Off upon magnet removal.
- **If a change in tone does NOT occur:** The device's programmed Tachy Mode cannot be changed with a magnet (due to either feature availability or previous device programming). A programmer is required to permanently change the programmed Tachy Mode.

NOTE: If the Tachy Mode has been changed to Off¹, consider reprogramming the device back to Monitor + Therapy following the procedure.

¹If the Tachy Mode was changed with a magnet, the Tachy Mode can be changed back by removing the magnet for at least two seconds. Reapply the magnet for **more than 30 seconds** and listen for a change in tones (long/constant to beeping or vice versa). When the tones change, remove the magnet. The tones heard just prior to magnet removal indicate the programmed Tachy Mode.

Inhibit tachy therapy or change the Tachy Mode to Off in a Boston Scientific ICD or CRT-D using a magnet:



NOTES:

- Contact your local representative or Technical Services with questions regarding magnet use.
- Device responses described above are dependant upon available device features and programming.
- Unlike standard pacemakers, magnet application does not affect bradycardia pacing in an ICD or CRT-D.
- Advise patients to have their device checked whenever tones are heard.
- Boston Scientific issued a Product Advisory dated June 23, 2005, regarding important information for specific serialized devices within the following Models: H170/H173/H175/H177/ H179/H190/H195/ H197/H199/M155/M159/ M170/M175/M177/M179/H230/H235/H239. We recommended that physicians consider programming the Enable Magnet Use feature "OFF" in these devices. A programmer software upgrade has since been released, which identifies affected devices and warns clinicians when they attempt to enable magnet features in these devices. A serialized device lookup tool to determine if a device is affected by this product advisory is available at www.bostonscientific.com or www.bostonscientific-international.com.