

NSR Series Security Radar SDK User manual



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Version history

Date	Version	Version description
2017-08-17	1.0.0	the 1st version of NSR Series Security Radar SDK user manual

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1 Brief introduction

Security radar SDK from Nanoradar NSR series is used to visit and control NSR series radar through internet. SDK is based on .Net 4.0, so that it applies to .Net 4.0 or above, and it is compatible with x86、x64.

1.1 SDK Recall Procedure

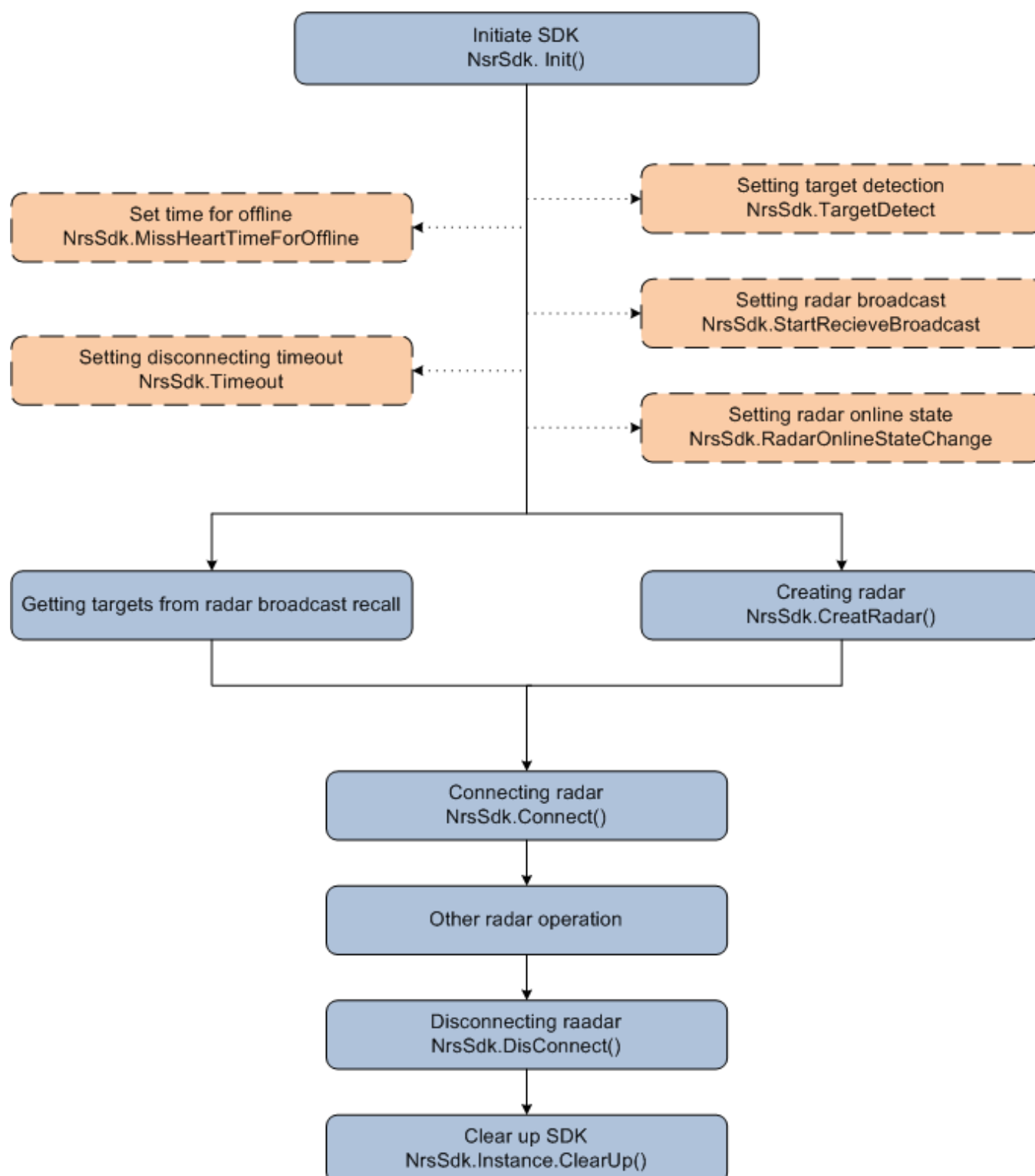


Figure 1.1 SDK recall procedure

Procedures in dashed box are optional.

- Initiate SDK(*NsrSdk.Init*): distributing SDK, initiating net module, Selecting TCP or UDP mode, Bind the local port (UDP mode),etc.,;
- Setting time for offline (*NsrSdk.MissHeartTimeForOffline Attributes*): Radar is considered to be offline when a number of heartbeat packets are lost;
- Setting disconnecting timeout(*NsrSdk.Timeout Attributes*):Gets or sets the time-out period in milliseconds for receiving radar responses;
- Setting target detection (*NsrSdk.TargetDetect*):When radar detects target;
- Setting radar broadcast (*NsrSdk.StartReceiveBroadcast*):Start radar broadcast reception;
- Setting radar online state (*NsrSdk.RadarOnlineStateChanged*):Happens when radar goes online\offline;
- Two ways for obtaining radar target (*NsrRadar Class*):
 - From radar broadcast recall parameters;
 - Use *NsrSdk.CreateRadar* to creat radar target.
- Connecting radar(*NsrRadar.Connect*): It is necessary to connect radar before any operation, or there would be abnormity; TCP mode, a radar supports up to 5 client connections at the same time, UDP mode, a radar only supports a client connection;
- Disconnecting radar(*NsrRadar.DisConnect*): Radar can be disconnected after use, radar is unavailable once it is disconnected, and using (*NsrRadar.Connect*) to connect radar again is not an option;



Note: during the TCP mode, radar is considered to be offline once TCP is disconnected, cannot be used after.




- Clear up SDK (*NsrSdk.CleanUp*):Clear up SDK, close up internet interface etc..

2 Interface Identification

2.1 NsrRadarSdk Namespaces

Namespace NsrRadarSdk contains the nsr radar SDK. NsrRadarSdkNamespaces including nsr radarSDK。

	Class	Implication
	NsrRadar	The nsr radar class, represent a true radar and implement its communication function.
	NsrSdk	Nsr sdk class, include global sdk function.

	Commissioned	Implication
	NsrSdk.RadarBroadcastDelegate	The function called when the sdk received radar's broadcast message.
	NsrSdk.RadarConnectionStateDelegate	The function called when radar's online/offline state changed.
	NsrSdk.TargetDetectDelegate	The function called when radar detect any target.

2.1.1 NsrRadar Class

The nsr radar class, represent a true radar and implement its communication function.

Inheritance hierarchy

System.Object
NsrRadarSdk.NsrRadar

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)










Grammar


C#

```
public class NsrRadar
```











The **NsrRadar** type exposes the following members.

Attributes

	Item	Implication
	DevAddress	Get the radar's device address.
	HeartTime	Get the radar's heart time.
	Ip	Get radar's ip address.
	MacAddress	Get the radar's mac address.
	MissHeartCount	Count how many heart messages are lost.
	Online	Indicate the radar's online state.
	Port	Get the radar's port.
	PtsAlarmAreaVertices	Get the radar's filter points.
	RadarEndPoint	Get the radar's endpoint.

	Type	Get the radar's type.
---	----------------------	-----------------------

Item

	Item	Implication
	Connect	Connect the radar, must call this function before operating the radar.
	DisConnect	Disconnect the radar.
	GetBuzzer	Get buzzer state.
	GetFilterCoordinate	Get the filter coordinates.
	GetHeartTime	Get heart time.
	GetStatus	Get status of the radar.
	SetBuzzer	Enable or disable the buzzer
	SetCoordinate	Set the coordinate filter.
	SetHeartTime	Set heart time.
	SetIpAddress	Change radar's network parameters.











References

[NsrRadarSdk Namespaces](#)

NsrRadar.NsrRadar Attributes

The NsrRadar type exposes the following members.

Attributes

	Item	Implication
	DevAddress	Get the radar's device address.
	HeartTime	Get the radar's heart time.
	Ip	Get radar's ip address.
	MacAddress	Get the radar's mac address.
	MissHeartCount	Count how many heart messages are lost.
	Online	Indicate the radar's online state.
	Port	Get the radar's port.
	PtsAlarmAreaVertices	Get the radar's filter points.
	RadarEndPoint	Get the radar's endpoint.
	Type	Get the radar's type.

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.DevAddress Attributes

Get the radar's device address.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public RVS_DeviceAddress DevAddress { get; }
```

Attributes Value

Type: [RVS_DeviceAddress](#)

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.HeartTime Attributes

Get the radar's heart time.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public int HeartTime { get; }
```

Attributes Value

Type: **Int32**

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.Ip Attributes

Get radar's ip address.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public string Ip { get; }
```

Attributes Value

Type: **String**

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.MacAddress Attributes

Get the radar's mac address.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public string MacAddress { get; }
```

Attributes Value

Type: **String**

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.MissHeartCount Attributes

Count how many heart messages are lost.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public long MissHeartCount { get; }
```

Attributes Value

Type: **Int64**

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.Online Attributes

Indicate the radar's online state.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public bool Online { get; }
```

Attributes Value

Type: **Boolean**

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.Port Attributes

Get the radar's port.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public int Port { get; }
```

Attributes Value

Type: **Int32**

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.PtsAlarmAreaVertices Attributes

Get the radar's filter points.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public PointF[] PtsAlarmAreaVertices { get; }
```

Attributes Value

Type: **PointF[]**

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.RadarEndPoint Attributes

Get the radar's endpoint.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public IPEndPoint RadarEndPoint { get; }
```

Attributes Value

Type: **IPEndPoint**

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.Type Attributes

Get the radar's type.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public RadarType Type { get; }
```

Attributes Value

Type: [RadarType](#)

References







[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.NsrRadar

The NsrRadar type exposes the following members.

Item

	Item	Implication
	Connect	Connect the radar, must call this function before operating the radar.
	Disconnect	Disconnect the radar.
	Equals	Determines whether the specified Object is equal to the current Object . (Inherited from Object)
	Finalize	(Overwriting Object.Finalize().)
	GetBuzzer	Get buzzer state.
	GetFilterCoordinate	Get the filter coordinates.
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object)
	GetHeartTime	Get heart time.
	GetStatus	Get status of the radar.
	GetType	Gets the Type of the current instance. (Inherited from Object)
	MemberwiseClone	Creates a shallow copy of the current Object . (Inherited from Object)
	SetBuzzer	Enable or disable the buzzer
	SetCoordinate	Set the coordinate filter.
	SetHeartTime	Set heart time.
	SetIpAddress	Change radar's network parameters.
	ToString	Returns a String that represents the current Object . (Inherited from Object)

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.Connect

Connect the radar, must call this function before operating the radar.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public bool Connect()
```

Returned Value

Type: **Boolean**

In tcp mode, return true if connecting successfully. Always return true in udp mode

Abnormity

Abnormity	Condition
RadarException	
RadarSdkNotInitException	Thrown when use the sdk without init it.
TimeoutException	Thrown when connection timed out.

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.DisConnect

Disconnect the radar.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public void Disconnect()
```

Returned Value

Type:

Abnormity

Abnormity	Condition
RadarSdkNotInitException	Thrown when use the sdk without init it.

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.GetBuzzer

Get buzzer state.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public bool GetBuzzer()
```

Returned Value

Type: **Boolean**

Return true if buzzer is enabled

Abnormity

Abnormity	Condition
TimeoutException	Thrown when request timed out.
RadarException	Thrown when get unknown errors.

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.GetFilterCoordinate

Get the filter coordinates.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public PointF[] GetFilterCoordinate()
```

Returned Value

Type: **PointF[]**

The filter coordinates

Abnormity

Abnormity	Condition
TimeoutException	Thrown when request timed out.
RadarException	Thrown when get unknown errors.

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.GetHeartTime

Get heart time.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public byte GetHeartTime()
```

Returned Value

Type: **Byte**

Heart time

Abnormity

Abnormity	Condition
TimeoutException	Thrown when request timed out.
RadarException	Thrown when get unknown errors.

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.GetStatus

Get status of the radar.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public bool GetStatus(  
    ref rvs_PARAM_STATUS frame  
)
```

Parameters

frame

Type: [NsrRadarSdk.NsrTypes.rvs_PARAM_STATUS](#)

The rvs_PARAM_STATUS struct that contains radar's status

Returned Value

Type: **Boolean**

Return true is succeeded

Abnormity

Abnormity	Condition
TimeoutException	Thrown when request timed out.
RadarException	Thrown when get unknown errors.

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.SetBuzzer

Enable or disable the buzzer

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public bool SetBuzzer(  
    bool enable  
)
```

Parameters

enable

Type: System.Boolean

Set true to enable the buzzer, or false to disable it

Returned Value

Type: **Boolean**

Return true if succeeded

Abnormity

Abnormity	Condition
TimeoutException	Thrown when request timed out.
RadarException	Thrown when get unknown errors.

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.SetCoordinate

Set the coordinate filter.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public bool SetCoordinate(
    PointF[] point
)
```

Parameters

point

Type: System.Drawing.PointF[]

The filter coordinates, must has 4 points

Returned Value

Type: **Boolean**

Return true if succeeded

Abnormity

Abnormity	Condition
TimeoutException	Thrown when request timed out.
RadarException	Thrown when get unknown errors.
ArgumentException	

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.SetHeartTime

Set heart time.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public bool SetHeartTime(
    byte seconds
)
```

Parameters

seconds

Type: System.Byte

Heart time value to be set

Returned Value

Type: **Boolean**

Return true if succeeded

Abnormity

Abnormity	Condition
TimeoutException	Thrown when request timed out.
RadarException	Thrown when get unknown errors.
ArgumentOutOfRangeException	

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

NsrRadar.SetIpAddress

Change radar's network parameters.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public bool SetIpAddress(
    IPAddress newIp,
    IPAddress netmask,
    IPAddress gateway
)
```

Parameters

newIp

Type: System.Net.IPAddress

New ip address

netmask

Type: System.Net.IPAddress

Net mask

gateway

Type: System.Net.IPAddress

Gateway

Returned Value

Type: **Boolean**

Return true if succeeded

Abnormity

Abnormity	Condition
TimeoutException	Thrown when request timed out.
RadarException	Thrown when get unknown errors.

References

[NsrRadar Class](#)

[NsrRadarSdk Namespaces](#)

2.1.2 NsrSdk Class

Nsr sdk class, include global sdk function.

Inheritance hierarchy

System.Object
NsrRadarSdk.NsrSdk

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)






Grammar

C#


```
public class NsrSdk
```





The **NsrSdk** type exposes the following members.

Attributes




	Item	Implication
	Instance	Get the unique instance of class NsrSdk.
	MissHeartTimeForOffline	Indicate the radar will go offline after losing how many heart messages.
	NetworkType	Get the working network protocol, Tcp or Udp.
	Port	Get the local port used by sdk.
	Timeout	Get or set the timeout(ms) for receiving message from radar.

方法

	Item	Implication
	CleanUp	Clean up all resource the sdk is using.

 CreateRadar	Instantiate a NsrRadar object by radar ip and port.
 Init	Initialize the sdk. Initialize sdk。
 StartReceiveBroadcast	Start receive radar broadcast messgae, and call the callback function when receive a broadcast messgae.
 StopReceiveBroadcast	Stop receive radar broadcast messgae.

事件

Item	Implication
 RadarBroadcast	Happens when the sdk received radar's broadcast message.
 RadarOnlineStateChanged	Happens when radar's online/offline state changed.
 TargetDetect	Happens when radar detect any target.






References

[NsrRadarSdk Namespaces](#)

NsrSdk.NsrSdk Attributes

The NsrSdk type exposes the following members.

Attributes

	Item	Implication
	Instance	Get the unique instance of class NsrSdk.
	MissHeartTimeForOffline	Indicate the radar will go offline after losing how many heart messages.
	NetworkType	Get the working network protocol, Tcp or Udp.
	Port	Get the local port used by sdk.
	Timeout	Get or set the timeout(ms) for receiving message from radar.

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.Instance Attributes

Get the unique instance of class NsrSdk.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public static NsrSdk Instance { get; }
```

Attributes Value

Type: [NsrSdk](#)

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.MissHeartTimeForOffline Attributes

Indicate the radar will go offline after losing how many heart messages.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public int MissHeartTimeForOffline { get; set; }
```

Attributes Value

Type: **Int32**

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.NetworkType Attributes

Get the working network protocol, Tcp or Udp.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public string NetworkType { get; }
```

Attributes Value

Type: **String**

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.Port Attributes

Get the local port used by sdk.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public int Port { get; }
```

Attributes Value

Type: **Int32**

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.Timeout Attributes

Get or set the timeout(ms) for receiving message from radar.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public int Timeout { get; set; }
```

Attributes Value

Type: **Int32**

References












[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.NsrSdk

The [NsrSdk](#) type exposes the following members.

Item

	Item	Implication
	CleanUp	Clean up all resource the sdk is using.
	CreateRadar	Instantiate a NsrRadar object by radar ip and port.
	Equals	Determines whether the specified Object is equal to the current Object . (Inherited from Object)
	Finalize	Allows an Object to attempt to free resources and perform other cleanup operations before the Object is reclaimed by garbage collection. (Inherited from Object)
	GetHashCode	Serves as a hash function for a particular type. (Inherited from Object)
	GetType	Gets the Type of the current instance. (Inherited from Object)
	Init	Initialize the sdk. Initialize sdk.
	MemberwiseClone	Creates a shallow copy of the current Object . (Inherited from Object)
	StartReceiveBroadcast	Start receive radar broadcast messgae, and call the callback function when receive a broadcast messgae.
	StopReceiveBroadcast	Stop receive radar broadcast messgae.
	ToString	Returns a String that represents the current Object . (Inherited from Object)

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.CleanUp

Clean up all resource the sdk is using.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public void CleanUp()
```

Abnormity

Abnormity	Condition
SocketException	

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.CreateRadar

Instantiate a NsrRadar object by radar ip and port.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public NsrRadar CreateRadar(
    string ip,
    int port
)
```

Parameters

ip

Type: System.String

Radar ip address

port

Type: System.Int32

Radar port

Returned Value

Type: [NsrRadar](#)

The radar class that created

Abnornity

Abnornity	Condition
RadarException	Thrown when the sdk hasn't been initialized.

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.Init

Initialize the sdk. initialization sdk。

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public void Init(
    int localPort,
    bool useTcp
)
```

Parameters

localPort

Type: System.Int32

local port to bind, this param is ignored if useTcp is true.

useTcp

Type: System.Boolean

indicate whether to use tcp or udp

Returned Value

Type:

Abnormity

Abnormity	Condition
ArgumentOutOfRangeException	Thrown when localPort is invalid.
SocketException	Thrown when bind port failed.

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.StartReceiveBroadcast

Start receive radar broadcast messgae, and call the callback function when receive a broadcast messgae.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public void StartReceiveBroadcast(
    NsrSdk.RadarBroadcastDelegate callback
)
```

Parameters

callback

Type: [NsrRadarSdk.NsrSdk.RadarBroadcastDelegate](#)

The callback function

Abnormity

Abnormity	Condition
RadarException	

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.StopReceiveBroadcast

Stop receive radar broadcast messgae.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public void StopReceiveBroadcast()
```

References




[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.NsrSdk

The [NsrSdk](#) type exposes the following members.

Items

	Item	Implication
	RadarBroadcast	Happens when the sdk received radar's broadcast message.
	RadarOnlineStateChanged	Happens when radar's online/offline state changed.
	TargetDetect	Happens when radar detect any target.

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.RadarBroadcast

Happens when the sdk received radar's broadcast message.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public event NsrSdk.RadarBroadcastDelegate RadarBroadcast
```

Value

Type: [NsrRadarSdk.NsrSdk.RadarBroadcastDelegate](#)

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.RadarOnlineStateChanged

Happens when radar's online/offline state changed.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public event NsrSdk.RadarConnectionStateDelegate RadarOnlineStateChanged
```

Value

Type: [NsrRadarSdk.NsrSdk.RadarConnectionStateDelegate](#)

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

NsrSdk.TargetDetect

Happens when radar detect any target.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public event NsrSdk.TargetDetectDelegate TargetDetect
```

Value

Type: [NsrRadarSdk.NsrSdk.TargetDetectDelegate](#)

References

[NsrSdk Class](#)

[NsrRadarSdk Namespaces](#)

2.1.3 NsrSdk.RadarBroadcastDelegate

The function called when the sdk received radar's broadcast message.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public delegate void RadarBroadcastDelegate(
    NsrRadar radar,
    ref RVS_PARAM_BROADCAST info
)
```

Parameters

radar

Type: [NsrRadarSdk.NsrRadar](#)

The radar that has been searched

info

Type: [NsrRadarSdk.NsrTypes.RVS_PARAM_BROADCAST](#)

Radar broadcast info

References

[NsrRadarSdk Namespaces](#)

2.1.4 NsrSdk.RadarConnectionStateDelegate

The function called when radar's online/offline state changed.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public delegate void RadarConnectionStateDelegate(
    NsrRadar radar,
    bool online
)
```

Parameters

radar

Type: [NsrRadarSdk.NsrRadar](#)

The radar that state has changed

online

Type: System.Boolean

Indicate whether the radar is going online

References

[NsrRadarSdk Namespaces](#)

2.1.5 NsrSdk.TargetDetectDelegate

The function called when radar detect any target.

Namespace:

[NsrRadarSdk](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public delegate void TargetDetectDelegate(
    NsrRadar radar,
    RVS_Target_List targetList
)
```

Parameters

radar

Type: [NsrRadarSdk.NsrRadar](#)

The radar the detected any target

targetList

Type: [NsrRadarSdk.NsrTypes.RVS_Target_List](#)




Target list








References


[NsrRadarSdk Namespaces](#)



2.2 NsrRadarSdk.NsrTypes Namespaces

Namespace `NsrRadarSdk.NsrTypes` contains types and structs that used by the SDK.
`NsrRadarSdk.NsrTypesNamespaces`. Including the use of class and structure of SDK.

	Class	Implication
	RadarException	Exception thrown when get error while using the radar sdk.
	RadarSdkNotInitException	Exception thrown when use the sdk without init it.
	RVS_Target_List	Radar target list class

	Structure	Implication
	RVS_PARAM_BROADCAST	Radar broadcast info
	RVS_PARAM_BUZZERSET	Buzzer state
	RVS_PARAM_COORDINATE	Filter coordinate
	RVS_PARAM_HEART	Heart time
	rvs_PARAM_STATUS	Radar status info, response for RVS_STATUSREADCOMMAND. Structure, RVS_STATUSREADCOMMAND, Structure
	rvs_RadarType	Radar's internal number
	RVS_RadarVersion	Radar version info

	interface	Implication
	IRvs_Target	Radar target info

	Item	Implication
	RadarType	Type of radar
	RVS_DeviceAddress	Radar device address

2.2.1 IRvs_Target interface

Radar target info

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar



C#

```
public interface IRvs_Target
```

The **IRvs_Target** type exposes the following members.

Attributes

	Item	Implication
	AxesX	X Direction coordinates (m)
	AxesY	Y Direction coordinates (m)
	AxesZ	Z Direction coordinates (m)
	AzimuthAngle	Target .Azimuth Angle (degree)
	Distance	Target Distance (m)
	ElevationAngle	Target Elevation Angle
	Id	Target id
	PeakEnergy	Peak energy (reserved)
	Snr	IRvs Target Snr (reserved)
	SpeedX	X Directional velocity (m/s)
	SpeedY	Y Directional velocity (m/s)
	SpeedZ	Z Directional velocity (m/s)
	Type	Target type (reserved)

	<u>X</u>	XDirection coordinates (m)
	<u>Y</u>	YDirection coordinates (m)
















References

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.IRvs_Target Attributes

The [IRvs_Target](#) type exposes the following members.

Attributes

	Item	Implication
	AxesX	X Direction coordinates (m)
	AxesY	Y Direction coordinates (m)
	AxesZ	Z Direction coordinates (m)
	AzimuthAngle	Target .Azimuth Angle (degree)
	Distance	Target Distance (m)
	ElevationAngle	Target Elevation Angle
	Id	Target id
	PeakEnergy	Peak energy (reserved)
	Snr	IRvs Target Snr (reserved)
	SpeedX	X Directional velocity (m/s)
	SpeedY	Y Directional velocity (m/s)
	SpeedZ	Z Directional velocity (m/s)
	Type	Target type (reserved)
	X	XDirection coordinates (m)
	Y	YDirection coordinates (m)

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.AxesX Attributes

XDirection coordinates (m)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float AxesX { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.AxesY Attributes

Y Direction coordinates （m）

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float AxesY { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.AxesZ Attributes

Z Direction coordinates （m）

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float AxesZ { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.AzimuthAngle Attributes

Target .Azimuth Angle (degree)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float AzimuthAngle { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.Distance Attributes

Target Distance (m)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float Distance { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.ElevationAngle Attributes

Target Elevation Angle

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float ElevationAngle { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.Id Attributes

Target id

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
uint Id { get; }
```

Attributes Value

Type: **UInt32**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.PeakEnergy Attributes

Peak energy (reserved)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float PeakEnergy { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.Snr Attributes

IRvs Target Snr (reserved)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float Snr { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.SpeedX Attributes

X Directional velocity (m/s)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float SpeedX { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.SpeedY Attributes

Y Directional velocity (m/s)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float SpeedY { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.SpeedZ Attributes

Z Directional velocity (m/s)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float SpeedZ { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.Type Attributes

Target type (reserved)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
uint Type { get; }
```

Attributes Value

Type: **UInt32**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.X Attributes

XDirection coordinates (m)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float X { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

IRvs_Target.Y Attributes

YDirection coordinates (m)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
float Y { get; }
```

Attributes Value

Type: **Single**

References

[IRvs_Target interface](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.2 RadarException Class

Exception thrown when get error while using the radar sdk.

Inheritance hierarchy

System.Object
System.Exception
System.ApplicationException
NsrRadarSdk.NsrTypes.RadarException
[NsrRadarSdk.NsrTypes.RadarSdkNotInitException](#)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

References

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.3 RadarSdkNotInitException Class

Exception thrown when use the sdk without init it.

Inheritance hierarchy

System.Object
System.Exception
System.ApplicationException
[NsrRadarSdk.NsrTypes.RadarException](#)
NsrRadarSdk.NsrTypes.RadarSdkNotInitException

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

References

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.4 RadarType

Type of radar

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public enum RadarType
```

Contents

Item	Value	Implication
Unknown	0	
NSR100	1	
NSR100W	2	
NSR50W	3	
NSR300W	4	
Laser	32	

References

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.5 RVS_Device Address

Radar device address

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public enum RVS_DeviceAddress
```

Contents

Item	Value	Implication
Unknown	0	
PC_ADDR	16	
RADAR_ADDR	64	
WVF_RADAR_100_ADDR	96	
WVF_RADAR_50_ADDR	112	
LASER_ADDR	128	
WVF_RADAR_300_ADDR	144	
BroadCast	255	

References

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.6 RVS_PARAM_BROADCAST Structure

Radar broadcast info

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)




Grammar

C#

```
public struct RVS_PARAM_BROADCAST
```

The **RVS_PARAM_BROADCAST** type exposes the following members.

Attributes

	Item	Implication
	DeviceType	Internal device type number
	FirmwareVersion	Firmware version
	MacAddress	Mac address




References

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_BROADCAST.RVS_PARAM_BROADCAST Attributes

The [RVS_PARAM_BROADCAST](#) type exposes the following members.

Attributes

	Item	Implication
	DeviceType	Internal device type number
	FirmwareVersion	Firmware version
	MacAddress	Mac address

References

[RVS_PARAM_BROADCAST Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_BROADCAST.DeviceType Attributes

Internal device type number

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public string DeviceType { get; }
```

Attributes Value

Type: **String**

References

[RVS_PARAM_BROADCAST Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_BROADCAST.FirmwareVersion Attributes

Firmware version

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public string FirmwareVersion { get; }
```

Attributes Value

Type: **String**

References

[RVS_PARAM_BROADCAST Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_BROADCAST.MacAddress Attributes

Mac address

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public string MacAddress { get; }
```

Attributes Value

Type: **String**

References

[RVS_PARAM_BROADCAST Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.7 RVS_PARAM_BUZZERSET Structure

Buzzer state

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)


Grammar

C#

```
public struct RVS_PARAM_BUZZERSET
```

The **RVS_PARAM_BUZZERSET** type exposes the following members.

Attributes

	Item	Implication
	IsOpen	Obtains or sets the buzzer's enable state


References

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_BUZZERSET.RVS_PARAM_BUZZERSET Attributes

The [RVS_PARAM_BUZZERSET](#) type exposes the following members.

Attributes

	Item	Implication
	IsOpen	Obtains or sets the buzzer's enable state

References

[RVS_PARAM_BUZZERSET Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_BUZZERSET.IsOpen Attributes

Obtains or sets the buzzer's enable state

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public bool IsOpen { get; set; }
```

Attributes Value

Type: **Boolean**

References

[RVS_PARAM_BUZZERSET Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.8 RVS_PARAM_COORDINATE Structure

Filter coordinate : filter regular coordinate points

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)



Grammar

C#


```
public struct RVS_PARAM_COORDINATE
```

The **RVS_PARAM_COORDINATE** type exposes the following members.

Attributes

	Item	Implication
	X	XDirection coordinates (m)
	Y	YDirection coordinates (m)

字段

	Item	Implication
	coordinateNo	No. Coordinate number


References

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_COORDINATE.RVS_PARAM_COORDINATE Attributes

The [RVS_PARAM_COORDINATE](#) type exposes the following members.

Attributes

	Item	Implication
	X	XDirection coordinates (m)
	Y	YDirection coordinates (m)

References

[RVS_PARAM_COORDINATE Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_COORDINATE.X Attributes

XDirection coordinates (m)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public float X { get; set; }
```

Attributes Value

Type: **Single**

References

[RVS_PARAM_COORDINATE Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_COORDINATE.Y Attributes

YDirection coordinates (m)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public float Y { get; set; }
```

Attributes Value

Type: **Single**

References


[RVS_PARAM_COORDINATE Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_COORDINATE.RVS_PARAM_COORDINATE 字段

The [RVS_PARAM_COORDINATE](#) type exposes the following members.

字段

	Item	Implication
	coordinateNo	No. Coordinate number

References

[RVS_PARAM_COORDINATE Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_COORDINATE.coordinateNo 字段

No. Coordinate number

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public byte coordinateNo
```

字段 Value

Type: **Byte**

References

[RVS_PARAM_COORDINATE Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.9 RVS_PARAM_HEART Structure

Heart time

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)


Grammar

C#

```
public struct RVS_PARAM_HEART
```

The **RVS_PARAM_HEART** type exposes the following members.

字段

	Item	Implication
	time	heart time value (s)

References

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_HEART.RVS_PARAM_HEART 字段

The [RVS_PARAM_HEART](#) type exposes the following members.

字段

	Item	Implication
	time	heart time value (s)

References

[RVS_PARAM_HEART Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_PARAM_HEART.time 字段

heart time value (s)

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public byte time
```

字段 Value

Type: **Byte**

References

[RVS_PARAM_HEART Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.10 rvs_PARAM_STATUS Structure

Radar status info, response for RVS_STATUSREADCOMMAND. 雷达状态 Structure, 雷达 RVS_STATUSREADCOMMAND 命令, 确认帧的内容 Structure

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)







Grammar

C#

```
public struct rvs_PARAM_STATUS
```

The **rvs_PARAM_STATUS** type exposes the following members.

字段

	Item	Implication
	addr	Radar address
	bee	Buzzer state
	heart	Heart time
	position	Filter coordinate
	radarTypeInfo	Radar internal number
	radarVerInfo	Radar version info







References

[NsrRadarSdk.NsrTypes Namespaces](#)

rvs_PARAM_STATUS.*rvs_PARAM_STATUS* 字段

The [rvs_PARAM_STATUS](#) type exposes the following members.

字段

	Item	Implication
	addr	Radar address
	bee	Buzzer state
	heart	Heart time
	position	Filter coordinate
	radarTypeInfo	Radar internal number
	radarVerInfo	Radar version info

References

[rvs_PARAM_STATUS Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

rvs_PARAM_STATUS.addr 字段

Radar address

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public byte addr
```

字段 Value

Type: **Byte**

References

[rvs_PARAM_STATUS Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

rvs_PARAM_STATUS.bee 字段

Buzzer state

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public RVS_PARAM_BUZZERSET bee
```

字段 Value

Type: [RVS_PARAM_BUZZERSET](#)

References

[rvs_PARAM_STATUS Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

rvs_PARAM_STATUS.heart 字段

Heart time

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public RVS_PARAM_HEART heart
```

字段 Value

Type: [RVS_PARAM_HEART](#)

References

[rvs_PARAM_STATUS Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

rvs_PARAM_STATUS.position 字段

Filter coordinate

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public RVS_PARAM_COORDINATE[] position
```

字段 Value

Type: [RVS_PARAM_COORDINATE\[\]](#)

References

[rvs_PARAM_STATUS Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

rvs_PARAM_STATUS.radarTypeInfo 字段

Radar internal number

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public rvs_RadarType radarTypeInfo
```

字段 Value

Type: [rvs_RadarType](#)

References

[rvs_PARAM_STATUS Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

rvs_PARAM_STATUS.radarVerInfo 字段

Radar version info

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public RVS_RadarVersion radarVerInfo
```

字段 Value

Type: [RVS_RadarVersion](#)

References

[rvs_PARAM_STATUS Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.11 rvs_RadarType Structure

Radar's internal number

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)


Grammar

C#

```
public struct rvs_RadarType
```

The **rvs_RadarType** type exposes the following members.

字段

	Item	Implication
	radarType	number value


References

[NsrRadarSdk.NsrTypes Namespaces](#)

rvs_RadarType.rvs_RadarType 字段

The [rvs_RadarType](#) type exposes the following members.

字段

	Item	Implication
	radarType	number value

References

[rvs_RadarType Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

rvs_RadarType.radarType 字段

number value

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public short radarType
```

字段 Value

Type: **Int16**

References

[rvs_RadarType Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

2.2.12RVS_RadarVersion Structure

Radar version info 雷达版本信息

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)




Grammar

C#

```
public struct RVS_RadarVersion
```

The **RVS_RadarVersion** type exposes the following members.

Attributes

	Item	Implication
	AlgorithmVersion	Algorithm version
	FirmwareVersion	Firmware version
	FpgaVersion	Fpga version




References

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_RadarVersion.RVS_RadarVersion Attributes

The [RVS_RadarVersion](#) type exposes the following members.

Attributes

	Item	Implication
	AlgorithmVersion	Algorithm version
	FirmwareVersion	Firmware version
	FpgaVersion	Fpga version

References

[RVS_RadarVersion Structure](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

RVS_RadarVersion.AlgorithmVersion Attributes

Algorithm version

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public string AlgorithmVersion { get; }
```

Attributes value

Type: **String**

References

[RVS_RadarVersion Structure](#)

[NsrRadarSdk.NsrTypes namespaces](#)

RVS_RadarVersion.FirmwareVersion Attributes

Firmware version

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public string FirmwareVersion { get; }
```

Attributes value

Type: **String**

References

[RVS_RadarVersion Structure](#)

[NsrRadarSdk.NsrTypes namespaces](#)

RVS_RadarVersion.FpgaVersion Attributes

Fpga version

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public string FpgaVersion { get; }
```

Attributes

Type: **String**

References

[RVS_RadarVersion structure](#)

[NsrRadarSdk.NsrTypes namespaces](#)

2.2.13 RVS_Target_List class

Radar target list class

Inheritance hierarchy

System.Object

NsrRadarSdk.NsrTypes.RVS_Target_List

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)



Grammar

C#

```
public class RVS_Target_List
```

The **RVS_Target_List** type exposes the following members.

Attributes

	Item	Implication
	TargetNum	Number of target in target list
	Targets	Target list



References

[NsrRadarSdk.NsrTypes namespaces](#)

RVS_Target_List.RVS_Target_List Attributes

The [RVS_Target_List](#) type exposes the following members.

Attributes

	Item	Implication
	TargetNum	Number of target in target list
	Targets	Target list

References

[RVS_Target_List class](#)

[NsrRadarSdk.NsrTypes namespaces](#)

RVS_Target_List.TargetNum Attributes

Number of target list

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public int TargetNum { get; set; }
```

Attributes value

Type: **Int32**

References

[RVS_Target_List class](#)

[NsrRadarSdk.NsrTypes namespaces](#)

RVS_ Target_ List. Targets Attributes

Target list

Namespace:

[NsrRadarSdk.NsrTypes](#)

Assembly:

NsrRadarSdk (in NsrRadarSdk.dll) Version: 1.0.0.0 (1.0.0.0)

Grammar

C#

```
public IRvs_Target[] Targets { get; }
```

Attribute value

Type: [IRvs_Target\[\]](#)

References

[RVS_Target_List_class](#)

[NsrRadarSdk.NsrTypes Namespaces](#)

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