

# APRS Display Symbols

The character after the latitude "N" in an APRS position report is a TABLE character and the character following the longitude "W" is the APRS symbol character. The TABLE character selects one of two symbol tables or may be used as a numeric overlay over some symbols as follows:

TABLE	RESULT
/	Primary symbol Table (Mostly stations)
\	Alternate symbol table (Mostly Objects)
0-9	Alternate NUMBERED symbol with 0-9 overlayed
A-J	Alternate NUMBERED symbol with A-J overlayed (!* also)

**ALTERNATE SYMBOL TABLE:** This alternate table consists of all of the weather symbols plus some new generic shapes for objects. Press F1-S in APRSdos to see these symbols. The numeral "3" is overlayed on those symbols which accept the NUMBERED overlays.

**OVERLAY SYMBOLS:** These symbols consist of the following shapes that can be overlayed with the numerals 0-9 and A-J (eventually A-Z). Select these from the OBJECTS-OVERLAY menu. These will only show on APRS78 or later.

CIRCLE, SQUARE, CAR, TRUCK, VAN, STAR(digis), DIAMOND(gates), Triangle

**SYMBOLS WITH STAND-ALONE GPS TRACKERS:** Since the stand-alone TNC trackers output the raw GPS data over the air, instead an APRS formatted position report, there are two methods for specifying the symbol type. First, by default SSID if no other vehicle data is available. See the table below.

SSID	SYMBOL
-0	Dot
-1	Ambulance
-2	Bus
-3	FireTruck
-4	Bike
-5	Yacht (sail)
-6	HELO
-7	Aircraft

-8	Ships (power)
-9	Car
-10	Motorcycle (Was a satellite in older versions)
-11	Balloons
-12	Jeep
-13	Rv
-14	Truck
-15	Van

These defaults can be user definable on a net by net basis. If your net must have different defaults, contact me.

Secondly, you may indicate the desired symbol character surrounded by braces {/\$} as the first 4 characters of the TNC BText. Once the BText has been received by a station, the mobile will then be displayed using the specified symbol. The advantage of this method is that more symbols are available than from the SSID convention. The disadvantage is that the symbol is not displayed until AFTER at least one BText is received. The old {\$} for only the primary table is still supported.

Symbol	PRIMARY SYMBOL TABLE (/)	ALTERNATE WX TABLE (\)
!	Police, Sheriff	EMERGENCY (!)
"	reserved (had been rain)	reserved
#	DIGI (white center)	NUMBERED STAR (green)
\$	PHONE	Bank or ATM (green box)
%	DX CLUSTER	
&	HF GATEway	NUMBERED DIAMOND
'	AIRCRAFT (small)	Crash site
(	CLOUDY	CLOUDY
)	(was Mic-Rptr moved to /m)	
*	SNOW	SNOW
+	Red Cross	Church
,	reverse L shape	
-	House QTH	
.	X	

/	Dot	
0	Numerical circle	NUMBERED CIRCLE
1	Numerical circle	
2	Numerical circle	
3	Numerical circle	
4	Numerical circle	all of these are available
5	Numerical circle	
6	Numerical circle	
7	Numerical circle	
8	Numerical circle	
9	Numerical circle	Gas Station (blue pump)
:	FIRE	Hail
;	Campground	Park/Picnic area
<	Motorcycle	ADVISORY
=	RAILROAD ENGINE	
>	CAR (SSID-9)	NUMBERED CAR
?	SERVER for Files	INFO Kiosk (Blue box with ? in it)
@	HURRICANE or tropical storm	HURICANE
A	Aid Station	NUMBERED BOX
B	BBS	Blowing Snow
C	Canoe	Coast Guard
D		Drizzle
E		Smoke
F		Freezing rain
G	Grid Square (6 digit)	Snow Shower
H	HOTEL (blue bed symbol)	Haze
I	Tcp-IP	Rain Shower
J		Lightening
K	School	

L	avail	Lighthouse
M	MacAPRS	
N	NTS Station	Navigation Buoy
O	BALLOON	
P	Police	Parking
Q	TBD	QUAKE
R	RECREATIONAL VEHICLE	Restaurant
S	SHUTTLE	Satellite/Pacsat
T	THUNDERSTORM	Thunderstorm
U	BUS	SUNNY
V	TBD	VORTAC Nav Aid
W	National WX Service Site	NWS site and W-R DIGI (green)
X	HELO (SSID-6)	Pharmacy Rx
Y	YACHT (sail SSID-5)	
Z	WinAPRS	
[	RUNNER	Wall Cloud
\	TRIANGLE (DF)	
]	PBBS	
^	LARGE AIRCRAFT	NUMBERED Aircraft
_	WEATHER Station (blue)	WX and W-R DIGI (green)
`	Dish Antenna	Rain
a	AMBULANCE	
b	BIKE	Blowing Dust/Sand
c	tbd	
d	Dual Garage (Fire dept)	DX spot by callsign
e	HORSE (equestrian)	Sleet
f	FIRE TRUCK	Funnel Cloud
g	Glider	Gale Flags
h	HOSPITAL	HAM store

i	IOTA (islands on the air)	
j	JEEP (SSID-12)	WorkZone (Steam Shovel)
k	TRUCK (SSID-14)	
l	Area Locations (avail)	Area Locations (box,circles,etc)
m	Mic-Repeater	MILEPOST with 2 digit display
n	Node	NUMBERED TRIANGLE
o	EOC	small circle
p	ROVER (puppy)	Partly Cloudy
q	GRID SQ shown above 128 miles	
r	ANTENNA	Restrooms
s	SHIP (pwr boat SSID-8)	NUMBERED SHIP/boat (top view)
t	TRUCK STOP	Tornado
u	TRUCK (18 wheeler)	NUMBERED TRUCK
v	VAN (SSID-15)	NUMBERED Van
w	WATER station	Flooding
x	xAPRS (Unix)	
y -	YAGI @ QTH	
z		
{		Fog
	reserved (Stream Switch)	
}	diamond (open with dot in center)	
~	reserved (Stream Switch)	

AREA SYMBOLS! You can define BOX/CIRCLE/LINE or TRIANGLE areas in all colors, either open or filled in, any size from 60 feet to 100 miles. Simply move the cursor to the location, press HOME, move the cursor to the lower right corner of the AREA and hit INPUT-ADD-OBJECTS-AREA. Enter the type of area, and color. NOTE that AREA shapes can only be defined by selecting the upper left corner first, then the lower right second. The line is an exception. It is still top to bottom, but the lower point can be to the left of the beginning point.

These AREAS are useful for real-time events such as for a search-and- rescue, or adding a special ROAD or ROUTE for a special event. Be cautious in using the color fill option, since all other objects in that area that occur earlier in your PLIST will be obscured. AND you do NOT know the order of other stations P-lists.

AREAS FORMAT: The new format for specifying special areas uses the CSE/SPD field to provide the additional information as follows:

```
$CSE/SPD... Normal Field description
lTyy/Cxx... Where: l (lower case L) is the symbol for "LOCATION SHAPES"
                  T is the Type of shape: 0=circle, 1=line, 2=ellipse
                                          3=triangle 4=box
                                          add 5 to these => color-in
                  C is the color from 0 to 15. For colors geater than
                  9, the / is replaced with a 1.
                  yy is the sqroot of the latitude offset in 1/100ths
                  xx is the sqroot of the longitude offset
```

These offsets are ALWAYS positive to the right and down, except for the special case of a lower right quadrant line, these are given the Type of 6 and are drawn down and to the left.

NEW NWS WX SYMBOLS: With the new Alternate WX symbols table in version 7.8, old versions of APRS will see just lettered circles instead of the new symbols. Those older users may toggle the WX-DISPLAYS-OTHERsymbols to ON, to properly display these alternate NWS symbols.

HURRICANES, TROPICAL STORMS and DEPRESSIONS: These symbols will be differentiated by colors red, yellos, and blue. Additionally a radius of Huricane and also Tropical storm winds will also be shown if the format detailed in [WX.HTM](#) is used.

SYMBOLS ON MAPS! APRS can also be permanently embedded in maps. To embed a symbol in a map, simply make the first four characters of the label be a # followed by the dual symbol character, followed by a hex number from 1 to F that indicates the color for the symbol. The remaining 8 characters can be used for a conventional label at the same location. An example are the VORTAC nav-aids in Alaska. The Anchorage VORTAC appears as ANC on all maps below 128 miles. The label entry is #VFANC,LAT,LONG,128.

## SUMMARY OF ALL RECENT SYMBOLS CHANGES

1. Moved all WX symbols to ALTERNATE table but still recognize both until primary table symbol is re-used.
2. In keeping with the idea of using the primary table where possible for active stations and the alternate table for OBJECTS, I also moved the following to the alternate table (again recognizing both until the primary is re-used:

- ! Emergency (/! reused for police station)
- L Lighthouse
- N Navigation Buoy (/N reused for NTS station)
- Q Quake or bulls eye
- V Vortac
- U sunny (Sunny was \$, but prefer that for ATM or BANK)

l area Locations

m Milepost (/m reused for Mic-Repeater)

NUMBERED ICONS: Permits NUMBERing specific ICON shapes with a set of numerals and letters. The permitted labels are 0-9, !, ?, \*, A-Z, and only the following alternate shapes will be numberable in this manner.

0 CIRCLE (does all of the existing lettered boxes, plus now numerals)

A BOX (does all the numbered circles, plus now letters)

# STAR (digipeaters)

& DIAMOND (gates)

> CAR

n TRIANGLE

s SHIP/BOAT

^ AIRCRAFT

u TRUCK (big)

v VAN

These labeled icons, then free up all of the primary ICONS 0-9 and A-J.

Recent Additions.

SYM PRIMARY	10 reusable WX, and 20 reusable letters/numerals
A Aid Station	Blue box with white letter A?
! Sheriff	Is a box with ! in it or a sheriffs badge?
H Hotel	Blue box with white Bed
C Canoe	canoe
g glider	hang glider triangle
w water H2O	box with H2O in it
t Truck stop	
N NTS traffic stn	ARRL diamond with NTS in it?
? APRS File server	

SYM ALTERNATE 53 available

` Rain	Had been QUOTES but was difficult to handle
: Driving Hail	back to back triangles
f Funnel cloud	Tornado symbol with FC on it
[ Wall CLOUD	?
\$ ATM	Green box with \$\$ in it
P Parking	Blue box with P
R Restaurant	Blue box with knife & fork
r restrooms	Blue box with figures
X Pharmacy	Rx

9	Gas	Blue box with gas pump (99.9 cents)
?	Info place	Blue box with ?

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