

TopSky plugin for EuroScope

- *version 2.2.1* -

Denmark

EuroScope | power of control

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1 Track presentation

The presentation of radar and flight plan tracks consists of the following elements:

- Aircraft position symbol
- History dots
- Prediction line
- Track label

1.1 Colors

Most of the track presentation coloring depends on the flight sector state. The states are as follows:

| Sector state name | Color name | Condition |
|----------------------|----------------|---|
| - Unconcerned | "Unconcerned" | Track will not enter the active sector |
| - Notified | "Concerned" | Track will enter the active sector (> 15 min) |
| - Coordinated | "Coordination" | Track will enter the active sector (< 15 min) |
| - Assumed | "Assumed" | Track is assumed |
| - Transfer Initiated | "Assumed" | Track is being transferred to the next controller |
| - Redundant | "Redundant" | Track has been transferred to the next controller but is still inside the active sector |

An unconcerned track can be highlighted based on rules (a combination of departure airport, route and arrival airport) defined in plugin data files. In this case it is drawn with "Informed" color.

Many track label fields have specific coloring rules to indicate various events. Refer to [Label fields description](#) for these. For the color definitions, refer to [Colors](#).

1.2 Aircraft position symbol

The position symbol is drawn at the latest known position of the aircraft. The color of the symbol is the flight sector color for an unselected track and "Track Highlight" for a selected one. A number of different symbols are available. To begin with, there are five basic shapes that tell what kind of track is in question:

- ✕ Flight plan track (position is not based on surveillance data but calculated by EuroScope)
- Coasted track (no position updates in over 30 seconds, position no longer reliable)
- Primary radar track
- ◇ Secondary or combined radar track (uncontrolled VFR flight)
- Secondary or combined radar track (other flight)

An indication of an SPI (transponder ident) can be added to either of the two last symbols. It draws a cross over the symbol and prints the text "SPI" above and to the right of the symbol:



Controlled secondary or combined radar track with Special Position Indication

For all the three radar position symbols, a divergence alert will be drawn in case of a RAM or CLAM alert. This is a circle drawn around the symbol (will not be drawn if SPI is active):



Controlled secondary or combined radar track with divergence alert

1.3 History dots

The history dots show the previous positions of the track. The number of displayed dots can be changed via the Track Control Window. The color of the dots is the flight sector color for an unselected track and “Track Highlight” for a selected one. History dots are not displayed for flight plan tracks.

1.4 Prediction line

The prediction line draws the predicted ground track of the aircraft, based on its current track and ground speed. It is a two color line, starting with “Track Default” at the position symbol and then alternating with “Track Highlight”, with every segment representing one minute of flying time. The length of the prediction line can be changed for all tracks via the Track Control Window, or for a single track via the PRL menu. The example below shows a selected track with 5 history dots and a 3-minute prediction line. Prediction lines are not displayed for flight plan tracks.



1.5 Track label

There are four types of track labels that can be displayed: *Standard*, *Reduced*, *Extended* and *Uncorrelated*. In addition, each label except the extended one has an *unselected* and a *selected* state, the *selected* state being shown when the mouse cursor is over the label.

Basically, the *Standard* label is shown for aircraft that are in or will enter the active sector and the *Reduced* label for aircraft that will not enter the active sector. The *Extended* label can be opened from the *Standard* or *Reduced* label and stays open as long as the cursor is within the label area. The *Uncorrelated* label is shown for radar tracks that aren't correlated with a flight plan.

The following descriptions show the positions of the data fields in the different labels of the set that is provided with the plugin and the available mouse click areas. The contents and any special coloring rules for the data fields are explained in [Label fields description](#). Note that an uncorrelated primary radar track will not show a label at all.

Data fields in grey color can be selected globally on/off via the Track Control Window, or for some of them, for individual tracks via the selected or *Extended* track label. In case of the CFL/PEL field, only the PEL display can be selected off.

1.5.1 Uncorrelated label

Unselected track

```
EMRG ALRT
TSSR IDENT
AFL a GS
```

Selected track

```
EMRG ALRT
TSSR (IDENT)
AFL (a) GS
(DSFL) (DHDG) (DIAS) (DMACH) (DRC)
```

1.5.2 Reduced label

Unselected track

```
V W EMRG ALRT S
MTCD CALLSIGN SI NRAC ATYP WTC TSSR
AFL a GS NPT ADES
```

Selected track

```
COM * V W M A + C TEL I S EMRG ALRT TEXT2
(MTCD) CALLSIGN SI NRAC ATYP WTC TSSR
AFL (a) GS NPT ADES
CFL
(DSFL) (DHDG) (DIAS) (DMACH) (DRC)
OP_TEXT [max 2 lines of text]
```

1.5.3 Standard label

Unselected track

```
COM V W R P Y M • • A + C TEL I S EMRG ALRT RI COORD NSSR CPDLC_E
CPDLC_W TEXT2
MTCD CALLSIGN PFREQ SI NRAC ATYP WTC TSSR
AFL a COPN/COPX GS NPT RFL PRFL ADES
CFL/PEL XFL AHDG ASP
```

Selected track

```
COM * V W R P Y M • • A + C TEL I S EMRG ALRT RI COORD NSSR CPDLC_E
CPDLC_W TEXT2
(MTCD) CALLSIGN (PFREQ) SI NRAC ATYP WTC TSSR
AFL (a) COPN/COPX GS NPT RFL (PRFL) ADES
CFL/PEL XFL AHDG ASP
(DSFL) (DHDG) (DIAS) (DMACH) (DRC)
OP_TEXT [max 2 lines of text]
```

1.5.4 Extended label

```
COM * V W R P Y M • • A + C TEL I S EMRG ALRT RI COORD NSSR CPDLC_E CPDLC_W TEXT2
(MTCD) CALLSIGN (PFREQ) SI NRAC ATYP WTC TSSR ASSR PSSR FLTID FLTADD
AFL (a) COPN/COPX GS NPT RFL (PRFL) ADES ADEP EOBT/ETD/ATD
CFL/PEL XFL AHDG ASP EET
(DSFL) (DHDG) (DIAS) (DMACH) (DRC) ALT1 ALT2
COMP_CS
FIELD15 [max 6 lines of text]
FIELD18 [max 6 lines of text]
MALRT OP_TEXT [max 2 lines of text]
OP_TEXT2
```

1.5.5 Mouse functions in track labels

| Data field | Left-click action | Right-click action |
|------------|--|---|
| * | Toggle units | |
| + | | Open extended label |
| A | | Open extended label |
| ADES | Open Flight Plan Window | Toggle display in unselected label |
| AFL | Open AFL menu | Toggle flight leg display |
| AHDG | Open AHDG menu / AHDG vector | Open CPDLC Current Message Window (if field includes "+") |
| ASP | Open ASP menu | Clear assigned ASP value |
| ASSR | Open ASSR menu | Send CPDLC "Squawk SSR" message |
| ATYP | Toggle aircraft type highlight | Toggle display in unselected label |
| C | Toggle inbound clearance flag | |
| CALLSIGN | Open Callsign menu | Open extended label |
| CFL/PEL | Acknowledge PEL highlight, Open CFL / COPN altitude menu | Toggle flight leg display |
| COORD | Open Tactical Transfer menu | Open Tactical Info Window |
| COPN/COPX | Open Waypoint menu | Toggle flight leg display |
| CPDLC_E | Open CPDLC Emergency Ack menu | |
| CPDLC_W | Acknowledge warning / Open CPDLC Pilot Late Acknowledgement menu | Open CPDLC Current Message Window (if field includes "+") |
| GS | | Toggle display in unselected label |
| I | | Open extended label |
| M | Toggle military coordination flag | |
| NPT | Open NPT menu | Open CPDLC Current Message Window (if field includes "+") |
| NSSR | Open ASSR menu | Send CPDLC "Squawk SSR" message |
| OP_TEXT | Edit OP-TEXT | |
| OP_TEXT2 | Edit OP-TEXT2 | |
| PFREQ | | Acknowledge monitoring indicator |
| PRFL | Open RFL menu | Open CPDLC Current Message Window (if field includes "+") |
| RFL | Open RFL menu | |
| SI | Open next controller menu | Toggle sector ID/freq display |
| TEL | Accept manual coordination | |
| TEXT2 | | Open extended label |
| TSSR | Open Callsign menu | Toggle mode S DAPs display |
| XFL | Open COPX altitude menu | Toggle flight leg display |

2 Flight lists

The ES default lists have the following items and functionality (some fields are deselected by default):

2.1 Sector In List (SIL) and Sector Exit List (SEL)

| Data field | Left-click action | Right-click action |
|------------|--|----------------------------------|
| U | Toggle units | |
| No | | |
| C/S | Open Callsign menu | |
| W | | |
| R | | |
| ETN | Open estimate popup | |
| PEL | Acknowledge PEL highlight, Open COPN altitude coordination list | Toggle flight leg display |
| COPN | Open Waypoint menu | Toggle flight leg display |
| CFL | Open CFL menu | Toggle flight leg display |
| XFL | Open COPX altitude coordination list | Toggle flight leg display |
| COPX | Open Waypoint menu | Toggle flight leg display |
| RFL | Open RFL menu | Open CPDLC Entire Message Window |
| ASSR | Open ASSR menu | Send CPDLC "Squawk SSR" message |
| ADEP | | |
| ADES | Open Flight Plan Window | Open ES flight plan dialog |
| SI | Open next controller popup list | |
| ATYP | Toggle ATYP highlight | |
| ETA | Open estimate popup | |
| STAR | Open STAR setup popup list | |
| ARWY | Open RWY setup popup list | |

2.2 Departure List

| Data field | Left-click action | Right-click action |
|------------|---|----------------------------------|
| U | Toggle units | |
| No | | |
| C/S | Open Callsign menu | |
| W | | |
| R | | |
| TIME | | |
| DSQ | | |
| CFL | Open CFL menu | Toggle flight leg display |
| XFL | Open COPN/COPX altitude coordination list | Toggle flight leg display |
| COPX | Open Waypoint menu | Toggle flight leg display |
| ADEP | | |
| ADES | Open Flight Plan Window | Open ES flight plan dialog |
| RFL | Open RFL menu | Open CPDLC Entire Message Window |
| ATYP | Toggle ATYP highlight | |
| ASSR | Open ASSR menu | Send CPDLC "Squawk SSR" message |
| AHDG | Open AHDG menu | Open CPDLC Entire Message Window |
| SID | Open SID setup popup list | |
| DRWY | Open RWY setup popup list | |
| SI | Open next controller popup list | |
| DEP | Open ground status popup list | |
| CLR | Open PDC Window | |

2.3 Arrival List

| Data field | Left-click action | Right-click action |
|------------|--------------------|--------------------|
| C/S | Open Callsign menu | |
| OP_TEXT2 | Edit OP-TEXT2 | |

2.4 Flight Plan List

| Data field | Left-click action | Right-click action |
|------------|--------------------------------------|----------------------------|
| C/S | Open Callsign menu | |
| R | | |
| ETO | Open estimate popup | |
| PEL | Open COPN altitude coordination list | Toggle flight leg display |
| ADEP | | |
| ADES | Open Flight Plan Window | Open ES flight plan dialog |
| STS | Open FP track status popup | |

3 Label fields description

Treatment of fields with no data

In the unselected track labels, a data field that contains no data will be blank. An exception to this is the AFL field which will display “AFL” when no altitude data is available for the track. In the selected and extended track labels a field with no data will still be displayed, usually displaying the field name (for example “AHDG”). Exceptions to this are all fields on line 0, the attitude indicator, FIELD15, FIELD18 and MALRT data fields. In flight lists, the display of a field with no data depends on the specific field.

Active and inactive indicators

Some of the indicator characters in line 0 of the track label have active and inactive states. In the inactive state the indicator is not shown on the unselected label, and on the selected and extended labels it is shown after the other indicators and in the normal flight sector color. For example when clicking the Inbound clearance indicator, it changes to inactive state. Clicking the inactive indicator in the selected or extended label will restore it to active state.

Data fields description and coloring

The table below describes the data fields used in the labels and flight lists and their coloring rules, if different from the normal flight sector colors.

| Data field | Description | Comments | Color |
|------------|-----------------------|---|--|
| • | Frequency | “•”, set from Callsign menu | Freq Indicator |
| • | Mark | “•”, set from Callsign menu | Information |
| + | Field 18 information | “+” if “RMK/” or “STS/” found in FPL remarks field | |
| * | Unit | “*” if label units are different from the other aircraft | If metric system units chosen: Warning |
| A | Manual alerts | “A” if Manual alert(s) active | Warning |
| a | Attitude indicator | Climbing: up arrow Descending: down arrow Level flight or unknown: blank | |
| ADEP | Departure aerodrome | ICAO code, 4 characters | |
| ADES | Destination aerodrome | ICAO code, 4 characters | |
| AFL | Actual Flight Level | <u>Nautical:</u> FL’s with 3 digits, altitudes “A”+ 2 digits, heights “E”+ 2 digits, in hundreds of feet <u>Metric:</u> FL’s with 5 digits, altitudes “M”+max 4 digits, heights “E”+max 4 digits, leading spaces added if necessary to make 5 characters total | AIW: AIW Intrusion Manually set: Warning Mark All: CARD Mark All S-Highlight: Warning |

| Data field | Description | Comments | Color |
|------------|-----------------------|---|--|
| AHDG | Assigned heading | <p>Assigned heading (“H”+ 3 digits) or direct point name.</p> <p><u>Unselected label:</u> Point name is not shown for unselected track if it is the same as the COPX</p> <p>If a heading clearance or request is in progress via CPDLC, displays “[heading]”, followed by “+” if the request or answer contains a reason (i.e. DUE TO something).</p> | <p>If a value is assigned and HOP: Proposition</p> <p>If a tactical coordination value is accepted but not set: Information</p> <p>If a CPDLC uplink message has been sent: CPDLC UM Clearance</p> <p>If a CPDLC downlink message has been received: CPDLC DM Request</p> <p>If controller timeout has expired following a CPDLC downlink request: CPDLC Controller Late</p> <p>If a CPDLC warning has been raised: color of the warning</p> |
| ALRT | Alert message | <p>“MSAW”, “APW”, “AIW”, “CLAM”, “RAM” or “DUPE” (in this priority order)</p> | <p>MSAW or APW: Warning</p> <p>AIW: AIW Intrusion</p> |
| ALT1 | Alternate aerodrome 1 | ICAO code, 4 characters | |
| ALT2 | Alternate aerodrome 2 | Second alternate can be set by inserting “ALT2/XXXX” (where XXXX is the aerodrome ICAO code) into the FPL remarks field | |
| ARWY | Arrival runway | Arrival runway identifier | <p>If manually assigned: Rwy Locked</p> |

| Data field | Description | Comments | Color |
|---|------------------------|--|--|
| ASP | Assigned speed | <p>Mach "M"+ 2 or 3 digits, in 1/100's of Ma, max "M999". "HS" for high speed clearance.</p> <p><u>Nautical:</u> Speed 2 digits, in 10's of knots, max "99"</p> <p><u>Metric:</u> Speed "K"+ 2 digits, in 10's of km/h, max "K99"</p> <p>If a speed clearance or request is in progress via CPDLC, displays "[speed]", followed by "+" if the request or answer contains a reason (i.e. DUE TO something).</p> | <p>If a value is assigned and HOP: Proposition</p> <p>If a tactical coordination value is accepted but not set: Information</p> <p>If a CPDLC uplink message has been sent: CPDLC UM Clearance</p> <p>If a CPDLC downlink message has been received: CPDLC DM Request</p> <p>If controller timeout has expired following a CPDLC downlink request: CPDLC Controller Late</p> <p>If a CPDLC warning has been raised: color of the warning</p> |
| ASSR | Assigned mode 3/A code | <p>4 digits. If no code assigned, shows TSSR code if available</p> <p>If a SQUAWK SSR message is in progress via CPDLC, displays the code in brackets, followed by "+" of the answer contains a reason (i.e. DUE TO something).</p> | <p>If different than TSSR: Warning</p> <p>If a CPDLC uplink message has been sent: CPDLC UM Clearance</p> <p>If a CPDLC warning has been raised: color of the warning</p> |
| ATYP | Aircraft type | Type with max 4 characters | If highlighted: Warning |
| C | Inbound clearance | "C" if ADES is one of the defined airports -> aircraft needs inbound clearance | Active state: Information |
| CALLSIGN (track labels) C/S (flight lists) | Callsign | <p>If more than one aircraft, suffixed by "+". If correlated to a primary track or to a secondary track with no ASSR code and a non-discrete TSSR code, suffixed by "**".</p> <p>If the flight is CPDLC connected, the callsign is displayed in brackets.</p> | <p><u>Priority order:</u> STCA alert: Urgency HOP in: Proposition Mark Own: CARD Mark Own Highlight: Warning Mark All: CARD Mark All S-Highlight: Warning</p> <p><u>If none of the above:</u> Notified: Coordinated Transfer in: Assumed Transfer out: Redundant</p> |

| Data field | Description | Comments | Color |
|------------|---|--|---|
| CFL | Cleared Flight Level | <p>“CA” if Clear for App flag set, “VA” if Visual App flag set, See AFL field for number format.</p> <p><u>Unselected label:</u> Not shown if equal to AFL</p> <p>If a level clearance is in progress via CPDLC, displays “[level]”, followed by “+” if the answer contains a reason (i.e. DUE TO something).</p> | <p><u>Departure list:</u> if CTR or FSS & CFL > PEL, for others if CFL > XFL: Warning</p> <p>If a CPDLC uplink message has been sent: CPDLC UM Clearance</p> <p>If a CPDLC warning has been raised: color of the warning</p> |
| CFL/PEL | Cleared Flight Level or Planned Entry Level | <p>PEL is shown for flights in “coordinated” and “ongoing coordination” states, CFL otherwise. “CA” if Clear for App flag set, “VA” if Visual App flag set, See AFL field for number format.</p> <p><u>Unselected label:</u> Not shown if equal to AFL and no ongoing coordination.</p> <p>If a level clearance is in progress via CPDLC, displays “[level]”, followed by “+” if the answer contains a reason (i.e. DUE TO something).</p> | <p><u>PEL:</u> Ongoing coordination: Proposition Change just before ETN: Info Coord Coordination refused: Warning</p> <p><u>CFL:</u> If a CPDLC uplink message has been sent: CPDLC UM Clearance</p> <p>If a CPDLC downlink message has been received: CPDLC DM Request</p> <p>If a CPDLC warning has been raised: color of the warning</p> |
| CLR | Clearance received flag | <p>Filled rectangle if clearance received, “R” if clearance requested via data link, “A” if waiting for answer from the aircraft for a sent data link clearance, Empty rectangle if no clearance received and no data link clearance in progress</p> <p>“R” and “A” are blinking when less than 2 minutes are remaining to timeout</p> | <p><u>“R”:</u> When request contains free text: Urgency Otherwise: Warning</p> <p><u>“A”:</u> When blinking: Warning</p> |
| COM | Communication type | <p>“r” if voice receive only “t” if text only</p> | Warning |

| Data field | Description | Comments | Color |
|------------|---------------------------|---|--|
| COMP_CS | ICAO RTF callsign | The decoded ICAO RTF callsign, “???” if not in database | |
| COORD | Coordination message | <p>“ROF” if a Request On Frequency message has been received from the next sector</p> <p>The last changed tactical coordination parameter value (AHDG, ASP or ARC)</p> | <p>Coordination</p> <p>Proposed: Proposition Rejected: Warning</p> |
| COPN | Entry point | A holding clearance is displayed if there is no coordination. It shows the holding point name + “ H” or for lat/lon point holdings, “POS H”. For a TSA Hold clearance, the area name is shown. | Ongoing coordination: Proposition Coordination refused: Warning |
| COPX | Exit point | <p>See COPN</p> <p><u>Departure list:</u> If logged in as CTR and flight not inside active sector, displays COPN</p> | Ongoing coordination: Proposition Coordination refused: Warning |
| COPN/COPX | Entry point or Exit point | COPN is shown for controlled flights in “coordinated” and “ongoing coordination” states, COPX in “assumed”, “transfer initiated” and “redundant”. For uncontrolled unconcerned tracks, FIR exit COP (FCOPX) is shown here. For more information see COPN. | Ongoing coordination: Proposition Coordination refused: Warning |
| CPDLC_E | CPDLC Emergency | CPDLC emergency messages: “SQ7500”, “[MAYDAY]”, or “[PAN]” | Urgency |
| CPDLC_W | CPDLC Warning | <p>CPDLC warning messages: “COMM FAIL” for network failure “<type> ERR” for message failure “<type> NOT CDA” for NOT CURRENT DATA AUTHORITY response “<type> UNA” for UNABLE response “<type> P LATE” for timeout “<type> SBY” for STANDBY response</p> <p><type> is the type of message: “COF” for communication transfer “CFL” for level clearance “DCT” for direct-to clearance “AHDG” for heading clearance “SSR” for SQUAWK SSR message “SQI” for SQUAWK IDENT message</p> | <p>“COMM FAIL”, “<type> ERR” or “<type> NOT CDA”: CPDLC Failed</p> <p>“<type> UNA”: CPDLC Unable</p> <p>“<type> SBY”: CPDLC Standby</p> <p>“<type> P LATE”: CPDLC Pilot Late</p> |
| DEP | Ground state | “PUSH”, “TAXI” or “DEPA” | |

| Data field | Description | Comments | Color |
|--------------|---|---|--|
| DHDG | Downloaded heading | Magnetic heading as downloaded from the aircraft via mode S DAPs. "H" + 3 digits. | |
| DIAS | Downloaded indicated airspeed | Indicated airspeed as downloaded from the aircraft via mode S DAPs. Not available on VATSIM. | |
| DMACH | Downloaded Mach number | Mach number as downloaded from the aircraft via mode S DAPs. Not available on VATSIM. | |
| DRC | Downloaded rate of climb/descent | Rate of climb/descent as downloaded from the aircraft via mode S DAPs. Not available on VATSIM. | |
| DRWY | Departure runway | Departure runway identifier | If the runway is not an active departure runway: Clearance flag not set: Proposition Clearance flag set: Information |
| DSFL | Downloaded selected flight level | Selected flight level as downloaded from the aircraft via mode S DAPs. Not available on VATSIM. | |
| EET | Estimated Elapsed Time | "HHMM" | |
| EMRG | Emergency | "HI" for squawk 7500, "CF" for squawk 7600, "EM" for squawk 7700 | Urgency |
| EOBT/ETD/ATD | Estimated Off-Block Time or Estimated Time of Departure or Actual Time of Departure | For a departed aircraft, shows the actual departure, otherwise the estimated departure time. "HHMM", both times taken from the FPL data | |
| ETA | Estimated Time or Arrival | "HHMM" | |
| ETN | Estimated Time over COPN or sector entry | "HHMM" | |
| FIELD15 | Speed/Level/Route | The flight plan field 15 data (TAS, RFL and route). Max 270 characters | |
| FIELD18 | Other information | The flight plan field 18 data (remarks). Max 270 characters | |
| FLTADD | Mode S transponder address | Mode S transponder hex address | |
| FLTID | Mode S Callsign value | Callsign as received via mode S | |
| GS | Ground Speed | <u>Nautical:</u> 3 digits, in knots, max "999". Optionally prefixed by "N". <u>Metric:</u> "K" + 3 digits, in km/h, max "K999" | |
| I | Flight information | "I" if OP-TEXT has data | |

| Data field | Description | Comments | Color |
|--|----------------------------|---|--|
| M | Military coordination | "M" if military coordination is required | Active state: Warning |
| MALRT | Manual alerts | Displays alerts entered via the Callsign menu | Warning |
| MTCD | MTCD indicator | "•" if aircraft has an MTCD problem | Urgency |
| NRAC (track labels) No (flight lists) | Number of aircraft | <p>Number from 2 to 99</p> <p><u>Extended label:</u></p> <p>"n" if 1</p> <p><u>Other label or flight list:</u></p> <p>blank if 1</p> <p>Number can be set by prefixing the aircraft type in the FPL by "X/" where X is the number (max 99).</p> | |
| NPT | Next route point | <p><u>DCT request or clearance via CPDLC is in progress:</u></p> <p>Displays the point name, followed by "+" if the request contains a reason (i.e. DUE TO something)</p> <p><u>Otherwise:</u></p> <p>Next point on the route</p> | <p>If a CPDLC uplink message has been sent: CPDLC UM Clearance</p> <p>If a CPDLC downlink message has been received: CPDLC DM Request</p> <p>If controller timeout has expired following a CPDLC downlink request: CPDLC Controller Late</p> <p>If a CPDLC warning has been raised: color of the warning</p> |
| NSSR | SSR warning | Displays ASSR if different from TSSR | <p>If a CPDLC uplink message has been sent: CPDLC UM Clearance</p> <p>If a CPDLC warning has been raised: color of the warning</p> |
| OP_TEXT | Flight information message | User entered text, stored in the flight strip | |
| OP_TEXT2 | OP-TEXT2 message | User entered text, stored in the scratchpad | |
| P | No P-RNAV capability | "P" if aircraft equipment is not indicating P-RNAV capability and destination has P-RNAV arrival procedures | Information |

| Data field | Description | Comments | Color |
|---------------------|-------------------------------------|--|---|
| PEL | Planned Entry Level | “CA” if Clear for App set, “VA” if Visual App flag set, See AFL field for number format. | Ongoing coordination: Proposition Change just before ETN: Info Coord Coordination refused: Warning |
| PFREQ | Pilot monitored frequency | Displays your primary frequency when transfer of communications was done via CPDLC using the MONITOR option | CPDLC DM Request |
| PRFL | RFL requested by pilot via CPDLC | Displays “[requested level]”, followed by “+” if the request contains a reason (i.e. DUE TO something) | If a CPDLC downlink message has been received: CPDLC DM Request If controller timeout has expired following a CPDLC downlink request: CPDLC Controller Late If a CPDLC warning has been raised: color of the warning |
| PSSR | Previous mode 3/A code | If not known, shows ASSR value. Otherwise format as ASSR field. | |
| R (track labels) | No B-RNAV capability | “R” if aircraft equipment is not indicating B-RNAV capability | Not approved: Urgency Unknown: Unknown |
| R (flight lists) | Flight rules | “V” if VFR, “Y” if first IFR and later VFR, “Z” if first VFR and later IFR | |
| RFL | Requested Flight Level | See AFL field for format <u>In flight lists:</u> If a RFL request is in progress via CPDLC, displays “[requested level]”, followed by “+” if the request contains a reason (i.e. DUE TO something) | <u>In flight lists:</u> If a CPDLC downlink message has been received: CPDLC DM Request If controller timeout has expired following a CPDLC downlink request: CPDLC Controller Late If a CPDLC warning has been raised: color of the warning |

| Data field | Description | Comments | Color |
|------------|---|--|---|
| RI | Release Indicator | <p>“F” fully released “C” released for climb “D” released for descent “T” released for turns Incoming release disappears 3 min after track is assumed, outgoing when track is no longer redundant.</p> | During transfer: Proposition |
| S | Mode S mismatch indicator | “S” if downloaded callsign is different than coupled flight plan callsign | Warning |
| SI | Sector Indicator | <p><u>Assumed track:</u> Next sector identifier or frequency. Displayed in brackets if a communications transfer is in progress via CPDLC, followed by “+” if the answer contains a reason (i.e. DUE TO something). In track labels the frequency display is forced on during a transfer via CPDLC.</p> <p><u>Other tracks:</u> Tracking controller identifier or frequency.</p> | <p><u>Priority order:</u> Outgoing HOP: Proposition Transfer out: Redundant Manually changed next sector: Warning Normal next sector: Coordination</p> <p>If a CPDLC communications transfer uplink message has been sent: CPDLC UM Clearance</p> <p>If a CPDLC warning has been raised: color of the warning</p> |
| SID | Assigned/planned SID | SID identifier | <p>If automatically assigned: Sid Star No Allocation If manually assigned: Sid Star Allocation</p> |
| STAR | Assigned/planned STAR | STAR identifier | <p>If automatically assigned: Sid Star No Allocation If manually assigned: Sid Star Allocation</p> |
| TEL | Manual coordination flag (EuroScope default item) | Displays a telephone symbol when ongoing coordination has been attempted with a controller not using EuroScope. Coordinate manually (using text messages, interphone, etc.) and then click the symbol to accept the coordination values. | ES Symbology dialog -> Datablock -> information |
| TEXT2 | OP-TEXT2 message | If more than 10 characters, then shows first 9 + “>” | |
| TSSR | Aircraft transponded mode 3/A code | 4 digits | |
| U | Unit | “*” if label units are different from the other aircraft | If metric system units chosen: Warning |

| Data field | Description | Comments | Color |
|---------------------|--------------------------|---|--|
| V | Flight rules | “V” if VFR, “Y” if first IFR and later VFR, “Z” if first VFR and later IFR | |
| W (track labels) | No RVSM capability | “W” if aircraft equipment is not indicating RVSM capability | Not approved: Urgency Exempt: Information Unknown: Unknown |
| W (flight lists) | Wake turbulence category | “J” for Super, “H” for Heavy, “M” for Medium, “L” for Light | |
| WTC | Wake turbulence category | “J” for Super, “H” for Heavy, “M” for Medium, “L” for Light <u>Unselected label:</u> Blank if “M” | If highlighted: Warning |
| XFL | Exit Flight Level | “CA” if Clear for App set, “VA” if Visual App flag set, See AFL field for number format. <u>Unselected label:</u> Not shown if equal to CFL/PEL and no ongoing coordination. <u>Departure list:</u> If logged in as CTR and flight not inside active sector, displays PEL | Ongoing coordination: Proposition Coordination refused: Warning |
| Y | No 8.33kHz capability | “Y” if aircraft equipment is not indicating 8.33kHz capability | Not approved: Urgency Exempt: Information Unknown: Unknown |

4 Colors

The following table shows the plugin defined colors (and where applicable, their EuroScope counterparts, which should be set the same for best results). The Usage column indicates where the colors are used (the list may not be complete). In the aircraft colors “Labels” means track labels and any lists where aircraft information is displayed, “Tracks” radar position symbols, history dots, prediction lines and divergence symbols.

All the EuroScope colors in the table can be found in the *Datablock* group in the *Symbology* dialog except the active and inactive sector backgrounds which are in the *Sector* group.

| Color name | Corresponding ES color | Default color | Usage |
|---|------------------------|---------------|---------------------------------------|
| Aircraft colors | | | |
| Assumed | assumed | | Labels, Tracks |
| CARD Mark All | | | Labels |
| CARD Mark Own | | | Labels |
| Concerned | | | Labels, Tracks |
| Coordination | notified | | Labels, Tracks |
| Freq Indicator | | | Labels |
| Info Coord | | | Labels |
| Information | | | Labels, Windows |
| Informed | | | Labels, Windows |
| Proposition | | | Labels |
| Redundant | redundant | | Labels, Tracks |
| Rwy Locked | | | Labels |
| Sid Star Allocation | | | Labels |
| Sid Star No Allocation | | | Labels |
| Suite Highlight | | | Labels |
| Track Default | | | Tracks |
| Track Highlight | | | Tracks (when selected) |
| Unconcerned | non concerned | | Labels, Tracks |
| Unknown | | | Labels |
| Urgency | | | Labels, CARD callsign STCA background |
| Warning | information | | Labels, Windows |
| CPDLC colors | | | |
| CPDLC Controller Late | | | Labels, Windows |
| CPDLC Discarded | | | Windows |
| CPDLC DM Request | | | Labels, Windows |
| CPDLC Failed | | | Labels, Windows |
| CPDLC Pilot Late | | | Labels, Windows |
| CPDLC Standby | | | Labels, Windows |
| CPDLC UM Clearance | | | Labels, Windows |
| CPDLC Unable | | | Labels, Windows |
| CPDLC Urgency | | | Labels, Windows |
| Aircraft related items on the radar screen | | | |
| AIW Intrusion | | | AIW alert related items |
| CARD Min Sep | | | CARD SEP Tool |

| Color name | Corresponding ES color | Default color | Usage |
|-------------------------------|----------------------------|---------------|---|
| Flight Leg | | | Part of flight leg without MTCD and SAP coverage |
| Heading Vector | | | Heading vector |
| Information FL | | | Part of flight leg with no MTCD or SAP problems |
| Potential FL | | | Part of flight leg with MTCD or SAP potential conflict |
| QDM | | | QDM vector |
| SEP Tool 1 | | | SEP Tool 1 |
| SEP Tool 2 | | | SEP Tool 2 |
| SEP Tool 3 | | | SEP Tool 3 |
| System Calculated TOC | | | TOC symbol on flight leg |
| System Calculated TOD | | | TOD symbol on flight leg |
| Urgency FL | | | Part of flight leg with MTCD or SAP conflict |
| Warning FL | | | Part of flight leg with MTCD or SAP risk |
| Map colors | | | |
| Active Map Type 1 | | | Active TSA map type 1 border |
| Active Map Type 2 | | | Active TSA map type 2 border |
| Active Map Type 3 | | | Active TSA map type 3 border |
| Active Map Type 4 | | | Active TSA map type 4 border |
| Active Map Type 5 | | | Active TSA map type 5 border |
| Active RD Infill Map | | | Active TSA map fill |
| Active Text Map | | | Active TSA map text |
| Map 1 | | | Auto-generated maps |
| Map 2 | | | Auto-generated maps |
| Map 3 | | | Auto-generated maps |
| Map 4 | | | Auto-generated maps |
| Map Hotspot | | | Map hotspots |
| Map Info | | | Range rings |
| Preactive Map | | | Pre-active map border |
| Preactive Text Map | | | Pre-active map text |
| Predisplay Map | | | Pre-display map border |
| Rwy App Line Inuse | | | Runway approach line for runways in use |
| Rwy App Line Not Inuse | | | Runway approach line for runways not in use |
| TSA Border Highlight | | | Highlighted TSA border |
| Window and menu colors | | | |
| Arm | | | Inactive window texts |
| Active Sector | active sector background | | Stack Manager Window, VAW |
| Background | | | Background |
| Border | | | Various lines in windows |
| BottomShadow | | | 3D effects in windows |
| CARD Conflict Number | | | CARD conflict numbers |
| CARD Time Vector | | | CARD time vectors |
| Field Highlight | active item background | | Selected field |
| Flight Highlight | detailed background | | Selected item |
| Foreground | list header | | Window titles, menu items, active texts, close/min/resize boxes, range marker |
| Global Menu Highlight | | | Highlighted items in the Global Menu |
| Inactive Sector | inactive sector background | | CARD and VAW background |
| Overflown | | | Overflown points in Complete Route Window |
| Potential | | | Potential conflicts in VAW |

| Color name | Corresponding ES color | Default color | Usage |
|---------------------|------------------------|---------------|--|
| Selected | | | Selected value or function |
| Selected Period | | | Active areas text in area window |
| SMW Level Band | | | AFL-CFL boxes in SMW |
| SMW Overflight | | | Overflight lines in SMW |
| SMW Overlap | | | Overlapping AFL-CFL boxes in SMW |
| SMW Overlap Box | | | Multiple same CFL's box in SMW |
| SMW Overshoot | | | Level bust AFL-CFL boxes in SMW |
| TopShadow | | | 3D effects in windows |
| Trough | | | Slider area background, active selections |
| TSA Active | | | Active areas background in area window |
| TSA Preactive | | | Pre-active areas background in area window |
| VAW Profile | | | Selected aircraft profile in VAW |
| VAW Sector Limits | | | Sector boundaries in VAW |
| VAW Track Position | | | Selected aircraft position in VAW |
| WM Active Fg | | | Active window title text |
| WM Bg | | | Window title bar background |
| WM Border | | | Window border line |
| WM Fg | | | Window texts |
| WM Frame | | | Window frame when dragging |
| Other colors | | | |
| Raw Video 1 | | | Raw radar video youngest plots |
| Raw Video 2 | | | Raw radar video |
| Raw Video 3 | | | Raw radar video |
| Raw Video 4 | | | Raw radar video |
| Raw Video 5 | | | Raw radar video |
| Raw Video 6 | | | Raw radar video |
| Raw Video 7 | | | Raw radar video oldest plots |
| Text Notes | | | Text notes |